



ANZAHPE
Australian & New Zealand
Association for Health
Professional Educators



OTTAWA2016
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**ANZAHPE2016**  
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19-23 March 2016
Perth Convention and Exhibition Centre
Western Australia

Abstracts

Welcome



from Ottawa Conference Co-founder

I am delighted to welcome participants from around the world to the 17th Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare

Professions here in Perth, Western Australia. When Ian Hart and I organised the first Ottawa Conference back in 1985 in the city of Ottawa, we hadn't thought that there would even be a second conference, but it soon became obvious that there was a real need for an international forum to facilitate the sharing of ideas and experiences in the assessment of clinical competence. Held biennially since 1985, we have been impressed by the growing number of participants, the countries represented, the number of abstracts submitted for each conference, and the standard of contributions.

Sadly Ian passed away in 2012 but he would have been proud and pleased at the continuing success of the Ottawa Conferences. In his memory, the Hart Family and AMEE are pleased to launch the Ian Hart Award for Innovation in Medical Education, and I will be talking more about this during the Conference.

We are pleased this year to have as our conference partners the Australian and New Zealand Association for Health Professional Educators (ANZAHPE) and believe the Conference has been strengthened as a result, bringing greater interprofessional content and broadening the Conference beyond the clear assessment focus of Ottawa conferences. Participants may choose to follow the Ottawa assessment streams, or attend the broader ANZAHPE sessions, or mix and match as they wish.

The Program Committees have worked hard to put together a range of topical sessions in many formats, to encourage exchange of ideas and discussion. We hope you will find the sessions stimulating and thought-provoking and that you will go home with new ideas to implement and to share with colleagues.

We have had great support from our other conference partner, EECW, who have managed the conference logistics and we have been impressed by their efficiency and friendliness. They have also put together a range of social events to make the most of this beautiful region of Australia.

We would like to thank all our sponsors and exhibitors, and particularly our Platinum Sponsor, NHS Education for Scotland for their support. We also gratefully acknowledge input from University of Western Australia and University of Notre Dame.

We wish everyone an enjoyable Conference.

Ronald Harden

Ottawa Conference Co-Founder
General Secretary, AMEE



from ANZAHPE President

On behalf of the Committee of Management of the Australian and New Zealand Association for Health Professional Education (ANZAHPE) I would like to extend the warmest of welcomes to

ANZAHPE members, AMEE members, old friends and new friends from across the globe who have travelled to the amazing city of Perth for this ground breaking meeting.

This is a time for doing the things we are passionate about, a time for connecting, exploring, challenging, learning and teaching, in a spirit of generosity and encouragement.

The Scientific Committees have assembled an impressive program of keynote addresses, oral sessions, workshops, posters and PeArLS. Over the next few days you will hear from presenters representing many different professions, discussing many different approaches to health professional education and the philosophical and theoretical drivers that underpin their work. Be prepared to be impressed with the quality and diversity of presentations.

ANZAHPE is delighted to have been able to work closely with AMEE to bring this meeting to fruition and we hope that this collaboration will strengthen existing ties and drive new collaborations into the future. Like AMEE, ANZAHPE, is an association of individual health professional educators with wide professional representation. Our membership is spread across Australasia and the Asia-Pacific region.

Over the next few days you will find that we are a friendly, informal and collegial group, who love learning from colleagues from different professions and different settings. If you would like to learn more about our association, please drop by the ANZAHPE booth in the conference exhibition.

I hope you have a wonderful time in Perth and I look forward to meeting you in person sometime during the event.

Warmest regards,

Monica Moran

President of ANZAHPE

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Session 2A

USE OF THE OSCE AND ITS FURTHER DEVELOPMENT AS A TOOL TO ASSESS COMPETENCY IN THE HEALTHCARE PROFESSIONS

Presenters:

Ronald Harden, AMEE, UK
Richard Fuller, University of Leeds, UK
Sydney Smee, Medical Council of Canada
Elizabeth Kachur, Medical Education Development, USA
Neel Sharma, National University Hospital, Singapore

This symposium will address a range of issues including using the OSCE for difficult-to-assess competencies, lessons learnt from running large scale OSCEs, the examinee's perspective, and a look at the exciting new development of sequential testing.

Session 2B

TIMELY ASSESSMENT OF JUNIOR DOCTORS' PRESCRIBING - ARE WE FAILING?

Author(s): Kennedy M¹, Haq I¹, Williams S², Okorie M¹

¹ Division of Medical Education, Brighton & Sussex Medical School, ² School of Pharmacy & Biomolecular Sciences,

University of Brighton

Presenter: Kennedy MB

Introduction:

Junior doctors, responsible for the majority of prescribing in NHS hospitals, were found to have the highest prescribing error rates. Assessing prescribing competence affords a degree of public reassurance, and can highlight where additional support may be required.

Aim:

To determine the approach to the assessment of prescribing in Foundation doctors in NHS hospitals in the South Thames Foundation School.

Methods:

An online questionnaire, available for completion from April to June 2013, was sent to the Leads for Prescribing and all F1 and F2 doctors in the region. Descriptive statistics were completed.

Results:

67% of NHS Trusts responded (n=10), 9 of which ran some form of prescribing assessment. 90% assessed prescribing in F1 doctors, compared to just 30% assessing F2 doctors. 50% of Trusts assess prescribing within a week of the junior doctors induction, and only 40% provide feedback of the assessment within this same time-frame. Just 3 Trusts impose prescribing restrictions on those failing the assessment.

124 junior doctors responded. 82% of F1s sat a prescribing assessment (n=57) in comparison to just 25% of F2s (n=14). Almost 40% of the junior doctors did not sit the prescribing assessment within the first week of their induction. Just 7% received immediate feedback, 31% got feedback the same week as the assessment, with 38% having to wait up to a month for feedback. 10% said they never received any feedback.

Conclusion/ Take-home message:

Prescribing should be assessed early in Foundation training, with an increased emphasis placed on F2 assessment due to them demonstrating the highest prescribing error rates.

Feedback provisions need to be timelier to allow doctors to identify where educational interventions may be required. This is imperative in Trusts, which do not impose restrictions on those who fail the assessment.

QUALITY CONTROL AND IMPORTANCE OF EUROPEAN POSTGRADUATE MEDICAL SPECIALTY ASSESSMENTS

Author(s) Mathysen D, Papalois V, Goldik Z

¹ Antwerp University Hospital, Department of Ophthalmology, ² Imperial College, ³ Lady Davis Carmel Medical Centre, Department of Anaesthesia and Intensive Care

Presenter: Danny Mathysen

Introduction

A careful literature review on postgraduate medical assessment methods has revealed that little seems to be published. Nevertheless, European postgraduate medical assessments are currently gaining popularity.

Methods:

The Council for European Medical Specialty Assessments (UEMS-CESMA) was created by the European Union of Medical Specialists (UEMS) in 2007 as a discussion platform between the various European Boards and Sections organising such European postgraduate medical assessments. Currently, UEMS-CESMA counts 50 affiliations, of which the majority of assessments allow recognised specialists and/or residents-in-training of both European and international countries.

These European postgraduate medical assessments are considered as excellence labels demonstrating that the candidate meets the European discipline-related standards. Given their high quality, many assessments are adopted by various European countries as being (partially) equivalent to or part of national final assessments in several specialties (still ongoing process). Harmonisation of assessment standards, which implies creation of quality and control mechanisms, has become

Results:

The results of the currently ongoing survey on harmonisation of European postgraduate medical assessments will be presented.

Conclusions:

As a measure of quality assurance, UEMS-CESMA is publishing guidelines, which will allow an opportunity for harmonisation, but will also presuppose a guarantee of a minimum quality level for candidates across different medical specialties participating in these assessments. Finally, UEMS-CESMA has effectively implemented an appraisal procedure for assessments.

Take-home message:

The results of the currently ongoing survey on harmonisation of European postgraduate medical assessments will be instrumental not only for the entire European medical community but also for all international medical doctors.

TRIANGULATING INFORMATION TO IDENTIFY AND SUPPORT STRUGGLING GP TRAINEES - EXAMPLES FROM A SCOTLAND DEANERY GENERAL PRACTICE TRAINING SCHEME

Author(s) Meiling Denney (1,2), Heather Peacock (1), Anthea Lints (1)

¹ NHS Education for Scotland, ² Royal College of General Practitioners

Presenter: Dr Meiling Denney

Introduction

In the UK differential pass rates exist for candidate sub-groups across a range of postgraduate medical exams. The judicial review involving the Royal College of General Practitioners highlighted the need to identify and reduce these differences wherever possible. Deaneries need to identify those at risk and support them, as failure to pass the MRCGP licensing exam has significant implications for the candidate, the deanery, and the patient population.

Methods:

Data from the MRCGP exam shows which candidate subgroups are at greatest risk of exam failure. Using these data and information from a variety of sources at local level enables trainees at risk to be offered additional support. Using examples from a Scottish deanery region we illustrate how to identify strugglers, and describe a variety of measures used to support them.

Results:

International medical graduates and black and minority ethnic candidates are at greatest risk. Additional data from scores from selection tests, analysis of engagement with the trainee e-portfolio, local knowledge fed into regular trainees-in-difficulty meetings were used to create an educational prescription for each struggling trainee.

Conclusion:

Although the methods used cannot guarantee an individual's success, the deanery has a duty to advance equality of opportunity between those who share a protected characteristic and those who do not. Early identification and ongoing appropriately targeted support give these trainees their best opportunity of success.

Take Home Message:

Triangulation of information helps to identify an individual trainee's strengths and weaknesses. Transparency of process and sharing information with trainees is part of increasing engagement with the support offered.

HOW TO PREVENT SUCCESSFUL CHALLENGE AGAINST A HIGH-STAKES POSTGRADUATE EXAMINATION: LESSONS FROM THE EXPERIENCE OF DEFENDING ALLEGATIONS OF UNLAWFUL DISCRIMINATION

Author(s) Wakeford R, Denney M

¹ University of Cambridge, ² Royal College of General Practitioners

Presenter: Richard Wakeford

Introduction:

In 2014 the Royal College of General Practitioners (RCGP) was subjected to formal legal challenge ('Judicial Review') in the High Court of England. The College's OSCE 'exit' examination for entry to independent practice was alleged as unfairly discriminatory to International Medical Graduates and to non-white UK graduates, and that the College had failed in a legal duty to work to minimise differential performance by legally-protected candidate sub-groups.

Methods:

We review this intimidating and expensive experience regarding the College's readiness regarding the measures taken, and what relevant research evidence could be provided on its fairness to candidates, including examiners, cases, role-players, and candidate information.

Results:

Results showed the importance of devoting resources to research into the assessments, especially regarding examiner fairness and differential sub-group performance, as well as the assessments' psychometrics.

Conclusions:

Data from College publications showed that these groups performed differentially, yet the College barely escaped censure, receiving judicial advice about future behaviour. Relevant ongoing research and quality management played a major part in the College's success. But attending to examiner panel representativeness, examiner training, taking legal advice as to what forms of challenge of assessments might be successful, and checking the constitution to ensure compliance with all its aspects, would have been additional preventive measures.

Take-home message:

Despite the law and legal requirements of examination bodies varying between countries and jurisdictions, general lessons can be drawn, especially for examinations in countries with active anti-discrimination legislation. Examiners should understand the relevant national legal expectations, and assessments should calculate and act on their quality statistics appropriately.

Session 2C

10 YEARS OF EXPERIENCE IN COLLABORATIVE ASSESSMENT: THE UMBRELLA CONSORTIUM FOR ASSESSMENT NETWORKS (UCAN)

Author(s): Brass K, Juenger J

¹ UCAN - Umbrella Consortium for Assessment Networks, ² UCAN - Umbrella Consortium for Assessment Networks

Presenter: Konstantin Brass

Introduction:

To face the future challenges in medical assessment, institutions need to work together more intensively. 10 work years ago, UCAN was initiated as such a cooperation project. Today, 60 schools and boards from 7 countries closely together, share their knowledge, combine and optimize their resources and engage in collaborative assessment research.

Methods:

In 2005, UCAN developed the ItemManagementSystem as a web-based platform for the authoring, sharing and reviewing of items and exams. Since 2007, exams can be delivered on computers or on scanner-readable sheets. Exams can be evaluated with test statistics and graded with customizable algorithms. In 2010, a Simulated Patients Database was added to administer the SP programs (role management, billing). Since 2012, OSCEs and since 2014 MCQ exams can be delivered on tablets. Currently, a comprehensive feedback tool is in development.

Results:

More than 250.000 items were authored by 6,500 colleagues. Best practice examples for reliable exams, assessment content and workflows are collected and used at the partner institutions. New items and exam formats are continuously developed. So far, over 5 million students were assessed successfully in 14,000 exams.

Conclusions:

10 years of cooperation in a collaborative network has proven to be an efficient way to face new challenges in medical assessment. Especially with the future requirements in the assessment of competencies, close tie-ups are highly recommendable.

Take-home message:

Assessment institutions should work together in order to tackle common challenges. 10 years of successful cooperation at UCAN proves this approach to be both *innovative and efficient*.

WORKPLACE BASED ASSESSMENT - GROWING A QUALITY FRAMEWORK TOGETHER - A REPORT FROM THE AUSTRALIAN COLLABORATION FOR CLINICAL ASSESSMENT IN MEDICINE (ACCLAIM)

Author(s): Karen D'Souza¹, James Kwan², Bunmi Malau-Aduli³, Peta-Ann Teague³, Wendy Hu²

¹School of Medicine, Deakin University, Australia; ²Medical Education Unit, School of Medicine, University of Western Sydney, Australia; and ³School of Medicine and Dentistry, James Cook University, Australia

Presenter(s): Karen D'Souza and James Kwan

Introduction:

Clinical assessment, particularly workplace based assessment (WBA), has not been the focus of multi-institution assessment collaborations. Despite widespread moves towards greater uptake of WBA to make clinically authentic assessment decisions in undergraduate medical programs, significant challenges remain in implementation and execution. Aim: to construct a quality framework for developing and implementing WBA in undergraduate medical programs grown from collaborative identification of challenges to best practice in clinical assessment.

Methods:

Donabedian's framework for quality improvement informed the method for developing a framework for ensuring WBA best practice. 17 Australian and New Zealand medical schools participating in a clinical assessment collaboration (ACCLAIM) are being surveyed to capture WBA current practices including tools used; blueprinting; practicalities; assessment outcomes (including psychometric analysis); WBA benefits and challenges. Survey results are thematically analysed and confirmed with respondent validation. Expert panels employing nominal group techniques will finalise and test the quality framework

Results:

Results suggest WBA is used summatively in Australian and New Zealand medical schools. Challenges in design and local execution of undergraduate WBA programs will be presented, with the WBA quality framework.

Conclusions:

Collaborative problem solving through development of an agreed quality framework suggests a design-based approach to common challenges will ensure change towards best practice in WBA occurs. Allowing and supporting engagement of assessment practitioners will ensure that recommendations and guidelines are locally relevant and feasible.

Take-home message:

Engaging stakeholders in the process of developing a context relevant quality framework for WBA will result in 'a problem shared is a problem halved'.

SHARED ASSESSMENT DRIVES INSTITUTIONAL LEARNING: THE SUCCESSFUL INTERNATIONALISATION OF A UK MEDICAL UNDERGRADUATE CURRICULUM IN MALAYSIA

Author(s): Steve Jones, Brian Lunn, David Kennedy, Kenny McKeegan, Roger Barton

Newcastle University, School of Medical Education, Newcastle University Medicine (NUMed) Malaysia

Presenter: Kenny McKeegan

Introduction:

There is an increasing interest in the internationalisation of medical curricula. However assessment results of different cohorts of students often differ with scores of those outside the “host country” often lower. In 2009 Newcastle University recruited its first students for a branch campus in Malaysia, which is led by experienced academic staff from the UK. The UK and Malaysian programmes both deliver the same outcomes and students sit identical summative assessments.

Methods:

A review of the outcome of successive cohorts in summative high stakes written assessments over time. Students sat two single best answer papers of 120 questions at the end of their first year. Staff development on teaching and assessments was led by experienced academic staff recruited from the UK. Assessment questions were set initially in the UK and in recent years also by faculty based in Malaysia. Results between cohorts in the UK and in Malaysia were compared over time.

Results:

Scores in the first cohorts at NUMed were significantly (10%) lower than those of UK cohorts. Over 6 years the scores have converged and in 2015 the mean score of students based in Malaysia overtook that of the cohort in the UK.

Conclusions:

Many factors have led to the convergence of the results of assessments following internationalisation of a UK medical undergraduate programme including; staff recruitment and development, shared question writing, standard setting, strong academic leadership and devolving assessment roles to the branch campus.

Take-home message:

Assessment drives the learning of institutions when curricula are internationalised but it takes several academic cycles for the results of cohorts of students to converge.

'WARTS AND ALL' - HOW WE REALLY FEEL ABOUT COLLABORATING ON CLINICAL ASSESSMENT: A REPORT FROM THE AUSTRALIAN COLLABORATION FOR CLINICAL ASSESSMENT IN MEDICINE (ACCLAiM)

Author(s): Karen D'Souza¹, Bunmi Malau-Aduli², Claire Heal², David Garne³, J Nicky Hudson⁴, Richard Turner⁵, Peta-Ann Teague² on behalf of the Australian Collaboration for Clinical Assessment in Medicine (ACCLAiM)

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Presenter: Karen D'Souza¹

Introduction:

The ACCLAiM consortium, established in 2010, collaboratively benchmarks clinical performance and quality assures Objective Structured Clinical Examinations (OSCEs) in early and late clinical years in 17 medical schools in Australia and New Zealand. Participation in any collaboration has associated benefits and costs, particularly in consuming staff time. This study was conducted to examine the advantages and disadvantages of participating in ACCLAiM.

Methods

An online survey was administered to lead representatives from participating schools, to collect data on ACCLAiM activities (benchmarking results, quality assurance, shared station development, online examiner training, networking); the reasons for collaborating/benefits gained/change to OSCE practice resulting from the collaboration; main issues with quality assurance and benchmarking; and areas for improvement. Survey responses were thematically analysed.

Results

The benefits of ACCLAiM participation include development of OSCE best practice; reassurance of a consistent clinical standard of students; networking opportunities; and informally sharing OSCE stations and assessment practices outside of the collaboration. Challenges include the process of shared station development, ensuring station fidelity, and time spent 'collaborating' (preparing, executing, communicating, feedback).

Conclusions

National clinical assessment collaborations have previously been relegated to the 'too hard' basket but the ACCLAiM consortium has demonstrated that this is not the case. The benefits (learning, confirming, sharing, networking) of the collaboration far outweigh the challenges.

Take-home message

Assessment collaborations are hard work! Strong collaborations should retain the flexibility to listen to the feedback of their participating members, and the freedom to create additional learning and sharing opportunities to turn the 'cost' into an 'investment'.

FREQUENCY OF ERRORS IN AN INTERNATIONAL SAMPLE OF COLLECTED OSCE STATIONS INCLUDING TYPE AND POSSIBLE EFFECT.

Author(s): K Brochie¹, L. Sweet², S Bullock³, G Somers³,

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Presenter: Dr Kathy Brochie

Introduction:

The presence of station-level errors in the Objective Structured Clinical Examination undermines the validity of high-stakes clinical skills assessment. An expensive undertaking in any health professional education program, it is essential that OSCE stations perform as expected providing a valid and reliable assessment. Removal of errors prior to the assessment should form part of a quality improvement cycle and may benefit from a structured approach. A tool for identifying errors has been created using an iterative design-based research approach involving testing against a database of OSCE stations. The majority of stations donated to the collection had been used in actual OSCE examinations and included both undergraduate and vocational level stations sourced from Australia, Europe and North America.

Methods:

A tool for identifying errors has been created and compared against a small database of OSCE stations for evaluation and revision. The "OWSAT" OSCE writers and reviewers' analysis tool was used to explore the frequency of errors in a random collection of stations. The identification of errors was further analysed for type and effect.

Results:

Multiple errors were identified within the stations in the database where the majority of stations contained flaws in the wording. Analysis indicated errors affecting validity, reliability, feasibility and educational impact.

Conclusions:

The use of the tool in the recognition of station level flaws identified multiple frequent errors in OSCE stations. The validity of clinical skills examinations may benefit from a structured approach to error identification.

Take-home message:

A structured approach may enable OSCE station-level error identification.

Session 2D

SETTING STANDARDS: A HISTORICAL ANALYSIS OF ASSESSMENT STANDARDS IN MEDICAL EDUCATION

Author(s): Whitehead C^{1,2,3,4}, Rangel C^{1,3}, Cartmill C¹, Martimianakis T^{1,3,6}, Kuper A^{1,3,5}

¹ University of Toronto, ² Women's College Hospital, ³ Wilson Centre for Research in Education, ⁴ Department of Family and Community Medicine, ⁵ Department of Medicine, ⁶ Department of Paediatrics

Presenter: Dr Cynthia Whitehead

Introduction:

By understanding its history, the medical education community gains insight into the nature of its assessment practices. We conducted a Foucauldian critical discourse analysis (CDA) of the journal *Medical Education* for its 50th anniversary. We drew upon critical social science perspectives to examine unstated assumptions that underpin and shape assessment tools and practices.

Methods:

We used Foucauldian CDA to examine the journal *Medical Education* over its 50-year history. CDA emphasizes the importance of language, and the ways that words shape and are shaped by assessment practices and priorities. We used an iterative methodology to organize the data set, and focused particular analytic attention on the editorial pieces in the journal.

Results:

One particularly dominant discursive tension across the timespan of the journal was that of a persistent drive for standardization of assessment tools and simultaneously a continued questioning of the desirability of standardization. This tension was particularly apparent in terms of a quest for universality in assessment versus the recognition of the importance of local contexts.

Conclusions:

Standardized assessment approaches are positioned as a way to achieve social accountability in medical education by providing clear metrics and measures of learner achievement. At the same time, there is ongoing recognition that not every important aspects of medical education can be standardized; rather, there are contextual, subjective and social elements that must somehow be captured.

Take-home message

Medical educators must learn to balance the tension between an attempt to standardize appropriate assessment tools and the recognition of limits to standardization.

THE VALUE OF DATA EXPERTISE: RECIPE FOR ENHANCING MEDICAL EDUCATION

Author(s): Manjunathan S, Subramaniam R, Bandipalayam P

East Kent Hospitals University Foundation Trust

Presenter: Sriaswini Manjunathan

Introduction:

Providing **quality teaching** has always been a quintessential requirement for doctors in training, as stipulated by General Medical Council. EKHUFT (the Trust) undertook a review of current provision, with a view to improving previous years' poorer results (40%). A Senior Information Analyst was specifically employed to support this **Assessment & Feedback Project**.

Methods:

- **Review** existing data collected on teaching and feedback, identifying data gaps/deficits.
- Developed **new datasets** to inform assessment process on quality of teaching and feedback involving **educational faculty, education commissioners and trainee doctors**.
- **Implemented** the new dataset as part of Information Governance, involving **400** trainees for a period of 5 months.
- Data was gathered and **analysed** with reference to agreed quality metrics and curriculum.
- A detailed **drilldown** mechanism of the Visual analytic data (consisting of key vital specific components) informed a comprehensive and **targeted assessment and feedback**.
- Results were shared using **Infogram** and **dashboarding** techniques
- The medical educators designed **Action plans** as a resultant of this in-depth analysis.
- The present programme was reassessed using the **local survey** results.

Results:

Teaching: 95% improvement

- 67% said sessions were curriculum mapped
- 48% saw speaker improvement
- Increase in attendance due to protected teaching time

Feedback:

- New Feedback Workshops were developed, delivered to trainees
- 67% were happier with feedback from trainers
- 50% more trainers improved their feedback mechanism

Overall Satisfaction: 36% overall satisfaction score improvement

Conclusion:

To continuously improve medical education, detailed data analysis prepared by expert analyst is essential to improving quality of teaching and feedback.

APPLYING VALUE ADDED METHODOLOGY TO MEDICAL EDUCATION

Author(s): Gregory S, **Patterson F**, Irish B

¹ Health Education England, ² University of Cambridge

Presenter: Prof Fiona Patterson

Introduction:

Internationally there is increasing emphasis of improving the quality and effectiveness of healthcare education. Value added methodology (VAM) has been used in mainstream education to assess differential attainment. The authors believe that this methodology can be applied to healthcare education and that so doing will enable evaluation of large-scale educational interventions and also enhance accountability and transparency.

Methods:

Anonymised selection (entry) and licensure examination (exit) data for UK GP specialty trainees was tested using regression analyses. Scores at entry level were obtained from a clinical knowledge test, situational judgement test and a selection centre including clinical consultations and scores at exit level from the Applied Knowledge Test of the Membership of the Royal College of General Practitioners (MRCGP) licensure examination. This work is now also being applied to other medical specialties.

Results:

We demonstrate differential changes in trainee attainment between English regions, which are independent of entry ability. For three provider regions these differences achieved significance ($p < 0.05$) and for others attainment was lower than predicted.

Conclusions:

Value-added methodology may be a significant development in enhancing transparency in healthcare education and of evaluating interventions. Its introduction in mainstream education was controversial. This presentation is offered as proof of concept and to stimulate debate.

Take-home message:

Value-added methodology as applied in mainstream education can be applied to healthcare education.

EXAMINER SEVERITY: AWARENESS AND RE-CALIBRATION

Author(s): Sturman N, Wong A, Zhang J, David M

University of Queensland

Presenter: Dr Nancy Sturman

Introduction:

Differences in examiner severity are a problem for clinical assessment. Examiner training has not been shown to improve inter-rater reliability. However it is plausible that if outlier examiners were more cognisant of their relative leniency or stringency ("severity") in comparison to other examiners, they would successfully recalibrate their ratings.

Methods:

The intervention in this study was the provision to examiners of marking data which compared their ratings of medical students undertaking General Practice clinical case examinations. Examiners estimated their own severity on a visual analogue scale pre and post intervention. These estimates were compared with actual severity (based on the marking data) using a Pearson's correlation.

A generalisability study was performed to measure the variance due to examiners, and a bootstrapping analysis was performed to detect any difference between pre-intervention "hawks" and "doves" in the direction of change in their ratings, pre and post intervention. A focus group was conducted to explore examiner attitudes to the intervention.

Results:

There was no evidence that the intervention improved either examiner reliability, or examiner awareness of their severity, in subsequent examinations. Participants in the focus group were enthusiastic about receiving and discussing the marking data, but suggested a simpler presentation in future. Responses suggested that examiner judgments are complex, and that "re-calibration" is likely to be difficult over a single iteration of the intervention.

Conclusion & Take Home Messages:

Examiners appreciate receiving and discussing marking data, but may not be able to use it to "recalibrate" their severity.

DEVELOPMENT OF THE ASSESSOR GOVERNANCE FRAMEWORK AT THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO (CANADA)

Author(s): Harris N

The College of Physicians and Surgeons of Ontario

Presenter: Nanci Harris, B.Sc.N. M.L.I.S.

Introduction:

Since 1980, medical regulation in Ontario has been supported and strengthened by physician assessment. Beginning in 2010, CPSO physician assessors were organized into specialty networks and a framework was developed to ensure consistent, high quality assessor recruitment, training and evaluation.

Methods:

In 2010, CPSO created a new staff position to support 550+ physicians who conduct 2600 assessments annually. This position led to development of an Assessor Governance Framework that describes the values and criteria by which assessors are recruited, trained and evaluated. New assessor training includes e-Learning modules, 1:1 instruction, newsletters, webinars, ongoing feedback, and engagement in evaluation and process improvement activities.

To evaluate the new model, ongoing feedback has been collected from staff, assessors and committee-members to identify opportunities for improvement.

Results:

Since 2010, 325 assessors have been trained. An analysis of stakeholder feedback indicated:

- assessors better understand CPSO processes and feel more confident;
- improved consistency in assessor reports;
- increased positive feedback from assessed physicians; and
- more engaged assessors.

Identified opportunities for improvement include increasing assessor engagement and training.

Conclusions

The assessor network and governance framework have collectively improved assessor performance. Even long-term assessors (recruited pre-2010) evaluated the new training as useful. Future initiatives include expanding training and engagement opportunities for assessors, including how to better provide practice-improvement feedback to assessed physicians.

Take-home message

Standardized training and engagement of physician assessors has improved assessor performance. Building on these findings, the CPSO plans to increase the breadth of training with a focus on facilitating feedback around practice-improvement.

BETTER JUDGEMENT: THE SERENDIPITY OF TRAINING ASSESSORS ABOUT JUDGEMENT BIASES

Author(s): Schmidt L, Schuwirth L, King S

Flinders University, School of Medicine, Health Professional Education, Australia

Presenter: Dr Lisa Schmidt

Introduction:

Human judgement is the method for ensuring valid assessment in certain areas but it is subject to judgement biases. Biases are not prejudices, instead, they are misrepresentations in the assessor's mind of what occurred during the assessment exercise. Any bias might impact on an assessor's judgement of a student and shift grades up or down which implies that biases are bad and we should try to train assessors to avoid them; but should we and can we? Biases seem to enable a reduction of cognitive load and may therefore be useful in making judgements, especially in the real-world, complex environment of practice-based assessment. The purpose of this study is to better understand the value of our perspective on biases in assessment.

Methods:

During assessor training workshops on judgement biases, participants submitted written scripts describing scenarios in which particular biases may influence their assessment. These scripts were analysed using discourse analysis. The training package is available at www.flinders.edu.au/better-judgement.

Results:

Participants were able to use the language they had gained from the training to articulate their judgement and discuss assessment with their colleagues.

Conclusions:

Our analysis of the data collected so far indicates that the language that people acquire through the training is what is empowering – both in terms of their judgement and in terms of teaching teams being able to discuss assessment.

Take-home message:

Assessors should be trained about judgement biases, not to 'train-out' biases, but to enrich assessors' language and ability to articulate their decision.

Session 2E

DEVELOPING PROFESSIONALISM AMONGST MEDICAL INTERNS WHO HAVE TAKEN PART IN OPEN DISCLOSURE AFTER MEDICATION ERROR: FEEDBACK THAT AVOIDS 'FACEBOOK REFLECTION'

Author(s): Lane A, Roberts C

¹ University of Sydney, ² University of Sydney

Presenter: Dr Andrew Lane

Open disclosure is a policy stating doctors should apologise for errors, discussing them with the harmed parties. Many junior doctors take part in open disclosure without any formal training or experience. By referencing the theoretical frameworks, apology by Slocum et al, and 'thinking fast and slow' by Kahnemans, a Phenomenological study of medical interns who had been involved in open disclosure was conducted. Ten medical interns were purposively sampled, and the data was analysed using Interpretative Phenomenological Analysis, which identified three super-ordinate themes. One super-ordinate theme was labelled 'Rationalisation of medical error', which described how the interns rationalised error in three different ways. The theme 'Error is in the eye of the beholder' described rationalisation of their observations. The interns demonstrated lack of knowledge and clinical reasoning when conceptualizing their clinical practice. The theme 'Apologetic justification' described rationalisation of their thoughts. The interns justified and defended accepted errors using diffusion and distortion of responsibility. The theme 'Softening the blow' described rationalisation of their language. The interns utilised euphemistic language and discourse markers. Their observations, thoughts, and actions demonstrated unconscious incompetence, however with facilitation they developed conscious incompetence, and with further guidance progressed through conscious competence to unconscious competence. Rationalisation led to generalization of error and apology concepts, whilst critical reflection led to contextualization. Expert mentorship by clinical supervisors and medical educators is required to instil the personal desire to develop reflective competence: reflecting with the right people, at the right time, in the right manner, and therefore avoiding 'Facebook reflection'.

HOW SAFE ARE YOUR NEWLY EMPLOYED DOCTORS? IS ADOPTION OF ROUTINE FORMATIVE PATIENT SAFETY ASSESSMENTS OF CLINICAL COMPETENCE NECESSARY?

Author(s): Bird B ¹, Jolly B ², Holt T ³, Griffiths D ⁴, Williams A ⁵

¹ Monash University, ² University of Newcastle, ³ Fulbright Commission, ⁴ Monash University, ⁵ Monash University

Presenter: Ms Beverley Bird

Introduction:

Adverse event related morbidity and mortality for patients admitted to hospitals in developed countries remains at 10% worldwide ^{1,2,3}. Significantly, adverse events are linked to clinical management including infection control, clinical judgement and decision-making, treatment errors, communication and documentation lapses.

Monitoring of the competence and safety of newly employed doctors in Australian hospitals through work-based assessment (WBA) has been traditionally considered as the role of their clinical Unit's assigned supervisor. Such monitoring is ad hoc, irregular and task focussed.

The patient safety mini-CEX (PSMC) has been seen as readily adaptable to discreet or complex clinical encounters and appears well aligned to assessors' cognitive frameworks.

Methods:

Three cohorts of International Medical Graduates (N = 107) newly in, or seeking employment in public hospitals in Victoria, participated across 476 individual or group encounters for testing of the PSMC in OSCE, fully immersive simulation, and work-based assessment settings. Experienced clinical assessors and facilitators provided post-encounter individual and group formative feedback.

Results:

Analysis of the findings from the OSCE and Simulation cohorts (N = 98) suggested that between 15.6% and 44.2% of these cohorts were not competent across eleven of the thirteen PSMC clinical items (Competency Items) common to both the OSCE and simulation encounters.

Between 30 and 35 % of the simulation cohort were unsatisfactory with respect to 10 domains of clinical practice. Reliability modelling yielded a Cronbach's Alpha of .937 for salient items. Post PSMC interactive feedback sessions were critical to supporting participants' future clinical performance.

Conclusions:

The findings suggest that team performance, self-appraisal and demonstration of professional behaviour require that the safety of patients in acute care settings should be addressed within a general medical competency framework⁴. PSMC assessments of clinical competence appear to support the development of these general competencies.

Take-home message:

Integration of PSMC assessments into WBA schedules for newly employed doctors offers clinical supervisors and hospitals reliable and transparent measures of the safety and competence of the junior medical workforce. The formative feedback component provides for open discussion and encourages participants to be active learners of what makes safe practice.

COGNITIVE DISPOSITION TO RESPOND AMONG JUNIOR DOCTORS IN THEIR FIRST POST GRADUATE YEAR

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Presenter: Dr Shivesh Prakash

Introduction:

Up to 74% of human errors in healthcare arise due to cognitive factors, rather than deficits in technical skills or knowledge. These involve faulty thought processes and subconscious biases [cognitive disposition to respond (CDR)] and have been shown to contribute to patient injury by means of missed/wrong diagnoses and treatment. Currently, there is no data around relative frequencies of various CDRs amongst junior doctors in their first post graduate year and how do they change as they accrue experience.

Methods:

We retrospectively reviewed 70 simulation recordings on 25 interns through the year 2014. The CDRs studied, included: Anchoring, Confirmation bias, Premature closure, Search satisficing, Over confidence, Commission bias and Omission bias. A Likert scale based questionnaire was used to record occurrence of various CDRs.

Results:

The most common CDRs were Search Satisficing (90%), Premature closure (78.6%) and Anchoring (75.7%). The odds of occurrence of various CDRs did not change with time during internship, despite significant gain in teamwork and leadership skills. The occurrence of confirmation bias and Anchoring were associated with a longer time to reach the diagnosis.

Conclusions:

Cessation of diagnostic thought process errors such as Search satisficing and Premature closure were the commonest CDRs. There was no change in the prevalence of various CDRs with the clinical experience gained during internship.

Take-home message:

Faulty CDRs are highly prevalent amongst junior doctors in their first postgraduate year. These can be studied using simulation. Prospective studies are needed to explore utility of simulation to help doctors recognize their faulty CDRs and help mitigate them.

LESSONS LEARNED THROUGH PATIENT SAFETY FOCUSED FORMATIVE ASSESSMENT FEEDBACK: THE EXPERIENCE OF FIVE COHORTS OF IMGs

Author(s): Bird B ¹, Holt T ², Jolly B ³, Griffiths D ⁴, Williams A ⁵

¹ Monash University, ² Fulbright Commission, ³ University of Newcastle, ⁴ Monash University, ⁵ Monash University

Presenter: Ms Beverley Bird

Introduction:

The positive influence of constructive formative feedback as a component of assessment of clinical competence is well documented ^{1,2}.

Methods:

Five cohorts of IMGs (N = 90) with a mean age range of 25 – 34 years and one to three years clinical experience in their countries of origin (55%) participated in 212 High Fidelity Simulation (HFS) or Workplace Based Assessment (WBA) encounters during the testing and refinement of a Patient Safety mini-CEX (PSMC) WBA tool. All participants were recently employed or seeking employment in a Victorian metropolitan hospital.

Interactive formative feedback and discussion followed each clinical assessment session. In addition, participants were invited to provide written feedback.

HFS cases included diagnosis & management of Pneumothorax, Anaphylaxis, Unconscious Patient and VF Arrest. WBA presentations included medical, surgical and acute mental health encounters.

Results:

Simulation participants appreciated engagement in the 'real-life' common ED encounters and felt more prepared for working in Australian clinical environments. Common feedback themes included the opportunity to become familiar with complex routine and emergency procedures, equipment, and working in clinical teams. Further teaching and facilitated engagement in fully immersive patient safety PSMC simulation and formative WBA encounters were requested, together with pre-simulation opportunities to undertake prior theoretical and clinical revision. Specific requests included guidance in the treatment of acute asthma and animal bites. The rationale associated with these requests was to gain the confidence and competence to practice safely within the Australian health care system.

Conclusion:

Investment in HFS formative assessments of complex acute hospital presentations and facilitated supervised workplace experience provides prospective and newly employed IMGs with the knowledge, clinical management skills and confidence to practice competently and safely in a range of familiar and unfamiliar clinical environments.

Take Home Message

Investment in pre or early employment facilitated simulation competency assessments would benefit IMGs, their employing hospitals and patients from a patient safety perspective.

1. Norcini
2. Boud & Molloy (2013)

Session 2F

EVALUATING OUTCOMES OF THE JAMES COOK UNIVERSITY (JCU) MEDICAL SCHOOL: POSITIVE IMPACTS ON WORKFORCE FROM THE FIRST DECADE OF GRADUATES

Author(s): Tarun Sen Gupta, Torres Woolley, Sarah Larkins, Robin Ray

College of Medicine & Dentistry, James Cook University Townsville QLD, Australia

Presenter: Prof Tarun Sen Gupta

Introduction:

The James Cook University (JCU) medical school, the first medical school based in northern Australia, recently celebrated its 10th graduating cohort. With a mission to enhance local workforce, JCU's admissions policy, curriculum, placements and staffing profile have a strong rural and regional focus. This study describes early impacts of the school's graduates on the northern Australian medical workforce, including positive associations between location of postgraduate practice and the admissions policy and extensive rural clinical experiences.

Methods:

Data on hometown origin and clinical school site was obtained from administrative databases, while postgraduate practice location and specialty training was obtained from personal contact and the Australian Health Practitioner Regulation Authority website.

Results:

60% of all graduates (n=924) originated from rural or remote centres, mostly in northern Australia. In 2015, after ten graduating cohorts, 52% were practising in non-metropolitan Australian towns, many as general practitioners or rural generalists – a pattern of practice very different to other Australian graduates. Greater proportions of graduates from rural/remote hometowns practise in rural/remote locations compared to metropolitan-origin graduates. In addition, preferentially selecting rural and remote students from northern Australia over metropolitan students from southern Australia does not significantly reduce the overall academic performance of graduating cohorts, while 2 years of mandatory attendance in northern rural clinical schools appears to promote rural and remote medical workforce recruitment and retention.

Conclusions:

JCU's first 10 graduate cohorts substantially contribute to rural and regional medical workforce in northern Australia. These findings support further investment in rural and regional medical education.

Take-home message:

Program evaluation should take account of the outcome of interest –the mission of the school – and evaluate accordingly. "Count what counts!"

HEALTH EDUCATION AND TRAINING INSTITUTE'S RESPONSE TO THE MEDICAL PORTFOLIO PROGRAMS REVIEW

Author(s): Rice L, Brown A, Llewellyn A

Health Education and Training Institute, Medical Portfolio, Australia

Presenter: Ms Louise Rice

Background/Issues:

The Health Education and Training Institute (HETI) supports education and training for excellent health care across the NSW Health system in Australia. The Medical Portfolio Programs Review was commissioned by the Chief Executive of the Health Education and Training Institute in 2012. The report put forward 39 recommendations that would build upon and improve the current support for the delivery of education and training in NSW. This paper will present how HETI has responded to the review to date.

Methods:

The recommendations were analyzed and themed into 6 programs of work then used program logic to identify the outputs and outcomes that should be delivered in the short, medium and longer term across four key areas: equipping doctors for patient centred care, producing the right kind of specialists, providing the right learning environment, and equipped and supported faculty. The larger programs were incorporated in the Medical operational plans with appropriate prioritisation.

Results/Discussions:

The Medical Portfolio identified a need to re-align its staffing resources in order to better support the new program and project work. This has meant a matrix structure which is more able to support the four key areas across the training continuum through prevocational to vocational training.

The program logics although initially useful were overtaken by more detailed project plans. The biggest challenge has been ensuring the new work and the opportunities presented by the review findings were appropriately prioritised.

Conclusion/Take-home message:

External evaluation of a number of interrelated programs is a complex process to complete. Implementation of the subsequent recommendations is made easier if the recommendations are broken down into meaningful outcomes which link to an organisation's strategic and operational plans.

HAVE WE MADE A DIFFERENCE TO PREPAREDNESS TO PRACTICE? : A 10 YEAR COHORT STUDY OF MEDICAL GRADUATES

Author(s): Barr J, Ogden K, Horder M, Woodroffe J

Launceston Clinical School, School of Medicine, University of Tasmania

Presenter: Ms Jenny Barr

Introduction:

The Launceston Clinical School has provided medical students with ten years of a patient-centred learning focus in its programming. Work readiness is featuring prominently in university graduate outcome expectations alongside employer institution expectations. This cohort study seeks to ascertain our medical graduate perceptions specifically examining preparedness for practice from a patient-centred view.

Methods:

We adapted a validated self-rated preparedness survey, used by the Peninsula Medical School, UK in a similar retrospective study. The survey gathers past student perceptions of preparedness for practice across a number of different areas. We modified it for this study with specific questions related to students' preparedness for patient-centred practice added to the original 39 item questionnaire. Qualitative responses were also collected. Medical graduates from 2005 to 2014 (n= 370) were invited to complete the survey, where contact could be made.

Results:

Results from the study will be presented.

Conclusions:

The study provides a valuable snapshot of a decade of preparing doctors for practice. The anticipated differences over time will be of significance to our educational team for determining what areas of practice students feel well prepared for more than others and how these perceptions correlate to changes in the programming over ten years. Any findings that directly relate to patient-centred practice preparedness will be a contribution to future planning and change within medical education for patient-centred learning.

Take-home message:

This piloted survey could be used by other Universities with distributed medical schools to determine internal comparisons for quality and equity of learning curriculum planning purposes.

STUDENTS' PERCEPTIONS TOWARDS ASSESSMENT: A SINGLE INSTITUTION STUDY

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Presenter: Prof Masood Anwar

Introduction:

The existing school education in Pakistan promotes selective study, learning by rote and emphasis on getting higher marks. These students when exposed to reformed integrated curriculum designed to promote deep learning and different methods of assessment have to struggle hard. At IIMC reformed integrated curriculum and new methods of assessment were introduced in 2009. This study was performed to assess their perceptions towards assessment in order to make it more effective.

Materials and Methods:

A questionnaire was prepared for this study. The questionnaire had three parts; 5 questions recorded the study effort by the students, 8 questions recorded students' perceptions towards formative assessment and 15 questions dealt with perceptions towards summative assessment. All students of 2nd to 5th year were included in the study.

Results:

Only 27% students performed same amount of study regularly whereas 73% put more effort near the assessment. Almost 50% students still performed selective studies for the assessment.

Majority (60-80%) opined that formative assessment stimulated learning and were useful in preparation for summative assessment. More than 75% students took formative assessments regularly and up to 60% students were not satisfied with the feedback provided.

More than 50% students were satisfied with the general atmosphere, structure and conduct of summative assessment. More than 70% put in more effort near the assessment. Almost 90% were contented with MCQs and OSCE/OSPE.

Conclusion:

Responses about study efforts, formative assessment summative assessment have revealed significant change in learning behaviour of students over 5 years and liked formative assessment.

ASKING THE RIGHT QUESTIONS, STRIVING FOR RIGHT ANSWERS: REVIEW OF A RENEWED YEAR CURRICULUM EVALUATION PROCESS FOR UNDERGRADUATE MEDICAL STUDENTS

Author(s): Sargeant S, Bishop J, McLean M

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Presenter: Prof Michelle McLean

Introduction:

Medical students are requested to complete several program evaluations throughout their curriculum journey. It is therefore unsurprising that evaluation becomes a fatigued exercise for them, and can leave educators with hollow or unconstructive feedback resulting in minimal positive pedagogical change. This paper documents structural changes in the questions posed, data management and reporting to students.

Methods:

Students provided group-based feedback for 10 blocks throughout the second year of their undergraduate medical program. Feedback was sought at the end of each subject block, (a period of 3-4 weeks) and covered a variety of teaching formats. Students were specifically asked to nominate key learning experiences for future cohorts, suggest improvements and state perceived skills acquired. Responses were thematically analysed within a framework of content, delivery and assessment.

Results:

Feedback revealed how students made linkages between subject blocks, scientific disciplines and psychosocial elements of the curriculum. These perceived reported linkages increased in frequency during the year, alongside commentaries on group-work processes. Students appreciated multimedia delivery and stated how they integrated newly acquired communication skills with different subjects. Observations of global, indigenous and public health featured prominently.

Conclusions:

A group-based, interval contingent subject block evaluation strategy - alongside timely meetings student cohorts to review their comments, - enables a clearer perspective of learning as a continuous endeavour, rather than singular views on subject difficulty and tutor performance.

Take-home message:

Curriculum improvement depends well-constructed feedback. This is maximised by continually reviewing evaluation practice, to ultimately give meaningful responses to students.

Session 2G

LINKING WORK-BASED ASSESSMENT WITH THE QUALITY OF STUDENTS' EXPERIENCES OF LEARNING

Author(s): Matthew S¹, Taylor R¹, Ellis R²

¹ Faculty of Veterinary Science, The University of Sydney, ² Sydney eLearning, The University of Sydney

Presenter: Dr Susan M Matthew

Introduction:

Assessment of student performance during work-based placements needs to be authentic to motivate and reflect high quality, career-relevant learning outcomes. The quality of students' experiences of learning can be evaluated using phenomenography. Links between students' conceptions of and approaches to clinic-based learning and their achievement on work-based assessment measures indicate whether this assessment reflects meaningful components of the student learning experience.

Methods:

Undergraduate veterinary students completing 10 months of work-based placements were invited to participate in the study (N=100). Each workplace rotation was evaluated using a Supervisor Report Form which assessed student performance against criteria relevant to performance as a new graduate veterinarian. The quality of students' conceptions of and approaches to clinic-based learning were evaluated using phenomenography. Relationships between these components of students' experiences of clinic-based learning and achievement were investigated using quantitative statistical analyses.

Results:

A response rate of 93% was obtained. Results showed that student achievement on the Supervisor Report Form was linked to the quality of their conceptions of and approaches to clinic-based learning.

Conclusions:

Investigation of students' conceptions of and approaches to clinic-based learning can be used to evaluate the extent to which work-based assessment tools reflect the quality of students' experiences of learning. The results can be used to improve the quality of these tools.

Take-home message:

Comparing student achievement on work-based assessment with analysis of students' conceptions of and approaches to clinic-based learning using phenomenography gives insight into the extent to which this assessment reflects meaningful components of the student learning experience.

PILOTING WORKPLACE-BASED ASSESSMENT (WBAS) ACROSS GEOGRAPHICALLY DISPERSED TRAINING CENTRES FOR EMERGENCY MEDICINE.

Authors: Spooner C, Lawson M, Byrne C

The Ardnell Group

Presenter: Ms Claire Spooner

Introduction:

Coordinating the implementation of a new assessment initiative in a geographically dispersed training programme creates logistic and consistency challenges. A key component in the successful change management strategy of the Australasian College for Emergency Medicine to implement summative Workplace-based Assessments (WBAs) across Australasia was the conduct of an extended voluntary pilot and formal evaluation period.

Methods:

The pilot was planned for a designated 13-week evaluation data collection period within the training year. Evaluation methods comprised an online survey, phone interviews and focus groups with trainees, supervisors and employers.

Results:

Of the 130 training sites, 75% volunteered to participate and submit evaluations. Key factors for success and practical strategies for implementation were identified which were promulgated in preparation for full rollout of a summative WBA system. In particular, broad clinical opinion on acceptability of the cognitively aligned rating scale was canvassed and refinements made.

Learning points were varied and included adopting a flexible approach to WBAs in which both scheduling and opportunistic assessments occurred. The pilot also highlighted the importance for stakeholders (including allied health staff) to be informed and engaged from the outset.

Conclusion:

Whilst extensive planning and development had occurred with multiple stakeholders, the pilot identified that changes were required prior to formal roll-out. These extended across all aspects of instrument design, system, policy, training and assessment governance.

Take Home message:

A formal pilot and associated evaluation was critical to finessing a planned WBA system. A formal pilot and associated evaluation was critical to finessing a planned WBA system. This supported a successful bi-national implementation with well-prepared assessors, trainees and employers; high level buy-in, feasibility and acceptability.

WORKPLACE-BASED ASSESSMENT PROCESSES IN EVOLUTION ACROSS POSTGRADUATE MEDICINE IN AUSTRALASIA: A SIX YEAR LONGITUDINAL REVIEW OF ALL MEDICAL SPECIALTIES

Author(s): Mary Lawson, Claire Spooner, Claire Byrne

The Ardnell Group

Presenter: Ms Mary Lawson

Introduction:

Internationally, workplace-based assessment (WBA) has experienced unprecedented growth in medical education. Limited comparative information exists on uptake and implementation processes across postgraduate specialties. In this 6-year review, data was collected from all postgraduate colleges across Australasia charting development of WBAs as assessment modalities and identifying trends.

Method:

Baseline data was collated (2009) using open-source information. This was verified with College officers. In 3 subsequent rounds, data were updated using varied methodologies including web-review and verification by educational leads in structured sessions or follow-up phone calls. The last review occurred in 2015.

Results:

All colleges now incorporate some component of WBA in their assessments. The majority report the assessments are used formatively for feedback although, amongst this group, data show that assessments are required for training progression. A programmatic assessment approach is not prevalent. Data indicates a shift from a development period of piloting using single-instruments to more formalised stages where suites of assessment instruments are adopted. Variation of approach and implementation is apparent.

Conclusion:

Growth has been significant with minimal uniformity across specialties. Impact on workplaces should be considered where multiple groups and disciplines intersect, potentially competing for assessment space. This may be a particular issue for more general specialties and have a sizeable impact if not considered for workforce and policy perspectives. A coordinated cross-disciplinary and holistic perspective is required across training levels.

Take home message:

WBAs have increased in frequency and formality of use in the postgraduate environment across specialties. Such trends should be explored for workforce impact.

DEVELOPMENT AND VALIDATION OF WORK-RELATED COLLABORATION AMONG DOCTORS AND NURSES SCALE (WCDNS) IN CHINESE GENERAL AND SPECIALIST PUBLIC HOSPITALS

Author(s): Johnston Janice ¹, Xu Richard ¹, Fang Li ², Dan Li ², Chong Liu ², Yilan Hu ²

¹ The University of Hong Kong, ² Guangzhou 8th people hospital, Guangzhou, China.

Presenter: Dr Janice Johnston

The professional roles of nurses and doctors is invariably entwined and inseparable. Inter-professional collaboration in an environment with ambiguous job boundaries and non-unanimous work goals is challenging and further exacerbated in a rapidly developing economy when traditional lines of authority and decision-making is rapidly changing. Existing instruments that measure doctor-nurse collaboration were mostly designed for western healthcare institutions only.

A 26-item paired design questionnaire on a 4-point rating scale - the Work-Related Collaboration among Doctors and Nurses Scale (WCDNS) is developed, back-translated and validated to evaluate doctor-nurse collaboration that is culturally and psychometrically oriented to a Chinese healthcare environment.

The WCDNS was validated in Guangzhou 8th People's Hospital (comprising a general district and specialist infectious disease hospital) where 398 doctors and nurses participated in the cross-sectional study. Principal component analysis was applied for data reduction and factor extraction of the questionnaire. Three factors, namely work-related autonomy, work-related skills and work-related relationships were identified.

Overall, younger employees and nurses tend to be more collaborative than doctors. The general district hospital staff had more positive work-place collaboration scores as compared to the specialist hospital. Doctor-nurse collaboration was negatively associated with working hours, employee depression and number of patients under care.

The WCDNS has satisfactory consistency (overall Cronbach alpha=0.83), test-retest reliability, and construct validity. It is a highly potential tool in evaluating doctor-nurse collaboration in public hospitals in China. Future research is to be done to establish whether effective collaboration reduces workplace stress and depression symptoms to improve workplace productivity and efficiency.

SIMPLE ASSESSMENTS TO FOCUS TRAINING ON PRACTICE NOT COMPETENCE

Author(s) Lucie Byrne-Davis¹ Ged Byrne² Marie Johnston³ Chris Armitage⁴ & Jo Hart¹

¹ Manchester Medical School, University of Manchester, ² Health Education England (North), ³ University of Aberdeen, ⁴ Manchester Centre for Health Psychology, University of Manchester

Presenter: Dr Lucie Byrne-Davis

Introduction:

The intended learning outcomes of health professional education may or may not include behaviours. Defining educational outcomes in terms of intended practice change, i.e., specifying the behaviours that professionals perform that need to be changed, would make the pathway from education to change in practice much clearer. Educators do not usually assess learners or evaluate education using self-report of usual behaviours or predictors of behaviours. However, several self-report methods are good predictors of behaviour and we would, therefore, advocate their use in assessment and evaluation of education and training. There is a strong evidence base that self-reported usual behaviour, behavioural intention, behavioural expectations and self-efficacy are all associated with usual behavior. The use of these assessments was trialled in two CPD/CME courses in Uganda and UK.

Methods:

Volunteering Project on Child Protection Recognition and Response and Emergency Obstetric Training, respectively. We identified key behaviours, developed and piloted assessments of self-efficacy, perceived control, behavioural expectation and stage of change of practice. These replaced standard satisfaction evaluations.

Results:

99 doctors, dentists, nurses, midwives and other health-workers took part in CPD/CME and 98% completed, pre and/or pre and post course assessments. The educators reported: a) not having necessarily considered behavioural outcomes, and b) some findings about the behaviour of the learners were unexpected.

Conclusions/Take home message:

Assessments of proxies for behaviour are not routinely used but are feasible and acceptable, not burdensome and can help educators think about the practice and practice change of the learners.

IMPROVING FEEDBACK TO JUNIOR MEDICAL OFFICERS IN THE PAEDIATRIC EMERGENCY DEPARTMENT

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Children's Hospital at Westmead, NSW AUSTRALIA – Paediatric Emergency Department

Presenter: Dr Scott Schofield

Introduction:

Work based assessments (WBAs) are widely used for Australian postgraduate trainees in vocational training programs. They improve training, facilitate interaction between supervisors and trainees, can be used as a form of assessment and ultimately improve patient care. Until June 2015 the Paediatric Emergency Department (PED) at the Children's Hospital at Westmead (CHW) facilitated only WBAs mandated by the Royal Australasian College of Physicians (RACP) and Australasian College of Emergency Medicine (ACEM) for vocational trainees. Amongst the junior medical staff in the PED are postgraduate year (PGY) 2 trainees. As the most junior doctors in the department, it was thought that PGY2 trainees would benefit from a formal WBA process, yet were not being given this opportunity. It was hypothesised that introducing a formal WBA process for PGY2 trainees would provide an opportunity for formal supervision and feedback, allow PGY2s to identify and reflect upon self-directed learning goals, and provide a resource of valuable objective assessments for each trainees term supervisor.

Methods:

A WBA in the form of a daily shift evaluation was designed and piloted for use with the PGY2 trainees. The daily shift evaluation prompts the trainee to identify a focus for feedback for the shift and provides the supervisor the opportunity to rank the trainee in each of 7 domains as well as provide specific feedback related to these domains or the identified focus for feedback. An education package was provided for trainees and supervisors explaining the WBA process. A roster was created for PGY2s to complete an average of 10 WBAs during their 10 week rotation in the PED. Trainees and supervisors were asked to complete a survey at the conclusion of each WBA process and at the end of the term. Results of the surveys were collected and analysed at the end of each term.

Results:

After the first term following introduction of the WBA process for PGY2 trainees, the median time spent for feedback after each shift was 10 minutes. One hundred percent of trainees agreed or strongly agreed that the supervisor had adequate time to provide feedback, the identified shift focus was achievable, feedback specifically related to the shift focus was received and overall, the process was useful in providing feedback. Seventy-eight percent of supervisors agreed or strongly agreed that the trainee identified a useful and achievable shift focus and that there was adequate time to provide feedback. Over 90% of supervisors reported that the WBA overall, was useful in providing the trainee with feedback.

Conclusion/Take-home Message:

The introduction of a daily shift report style WBA for PGY2 trainees in the Paediatric Emergency Department was well received. It was reported to be time efficient, allow trainees to identify useful and specific areas of focus and be useful in providing trainees with feedback.

Session 2H

A COMPETITIVE ARMS RACE": A LINGUISTIC ANALYSIS OF MEDICAL SCHOOL ADMISSIONS DEANS' TALK ABOUT SELECTION AND WIDENING ACCESS

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Presenter: Prof Jennifer Cleland

Introduction:

Selection is the first assessment in medical education and training. Although driven by policy and investment in many countries, efforts to minimise social and economic barriers into medicine have had mixed success. Using linguistic analysis to identify how key stakeholders think about widening access (WA) to medical school can provide insight into how they conceptualise and act with respect to this real-life problem (1). Our study explores Admissions Deans' attitudes towards selection and WA through analysing interview talk.

Methods:

We carried out qualitative interviews with Admissions Deans and/or Admissions staff from 24 of the 32 UK medical schools. The content analysis of this data is published separately (2). This paper reports a secondary linguistic analysis, the aim of which is to identify participants' use of metaphor and idiom, and hence what such language reveals about their thinking and beliefs about the topic (3, 4).

Results:

Preliminary analysis revealed several over-arching metaphors associated with negative and positive perspectives towards selection and WA: COMPETITIVE SPORT (e.g., "kicking political footballs"), INFANTILISATION (e.g., "spoon-feeding") and BARRIERS (e.g., "hurdles"). Frequent idioms included MOTION (e.g., "mountain to climb") and OBSCURITY (e.g., "a grey area"). Interestingly, a number of idioms described applicants as PREY (e.g., "rabbits in the headlights") and WEAK (e.g., "falls by the wayside").

Conclusions:

This empirical study of linguistic data sheds light on Admissions Deans' thinking and attitudes towards selection and WA to medicine. Figures of speech such as OBSCURITY and PREY highlight power struggles, lack of clarity and complex selector-applicant relationships.

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IMPROVING ACCESSIBILITY AND DIVERSITY THROUGH DELIBERATE TEST DESIGN

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Program for Educational Research & Development, McMaster University

Presenter: A/Prof Kelly Dore

Introduction:

Improving accessibility for prospective applicants from lower socioeconomic status to address social accountability has been widely recommended. Incentivizing potential applicants to apply is achievable by lower cost testing and altering how the traditionally disenfranchised perceive their level of competitiveness. Different perspectives in test design and new technologies are evaluated for impact on cost, perceived competitiveness, and hence accessibility.

Methods:

Using situational judgment testing (SJT) as basis for comparison, three aspects of test design were examined. (1) Test setting - mean for common test-centre standardized test versus online SJT costs were calculated. (2) Test security - costs of extreme versus moderate test security levels, and arguments for each, were evaluated. (3) Test weighting - applicant number increases over four years at one school (McMaster) introducing highly-weighted non-cognitive SJT versus mean increase at the five other Ontario schools without that change, were compared.

Results:

(1) Test setting - Common test-centre standardized tests' mean fee is \$260 USD, even ignoring ancillary travel/accommodation costs, versus \$30 USD for online SJT. (2) Test security - Extreme test security (video-capture, cornea/thumbprint/facial recognition scans, online proctoring, typing signature) is technologically achievable at higher applicant cost - \$80 USD, but cheaper, moderate test security remains highly defensible. (3) Test Weighting - Over four years, applicant number increased 67% at McMaster versus mean of 21% at the other schools.

Conclusions:

Cheap testing is feasible online. Cheaper, moderate test security is sufficient. Highly weighting personal characteristics measures broadens the applicant pool.

Take-away Message:

Deliberate test design and implementation can markedly improve access and diversity.

MATCHING MATRIX: SELECTING APPLICANTS FOR MEDICAL SCHOOL IN ORDER TO MEET SOCIETAL NEEDS

Author: Fleming B

Associate Dean, Admissions, Faculty of Medicine, University of BC

Presenter: Mr Bruce Fleming MD, FRCP(C)

Introduction:

The MD Undergraduate Program at the University of British Columbia in Western Canada has a 10 year history of distributed medical education. One of the recently developed primary sites for medical education is in a northern community in a sparsely populated part of the province. Traditionally, BC has been challenged by a shortage of primary care physicians in rural and remote practise locations. In addition, there has been an historical under-representation of applicants to medical school with First Nations backgrounds.

The current entering class of 288 medical students are chosen from over 2300 applicants each year. Using a scoring system that helps identify applicants with a likelihood of succeeding in the program and eventually choosing to practice in underserved communities, 32 applicants within the overall pool are chosen as suitable for a rural stream of medical education. These applicants move to our northern, distributed site for their instruction. In addition, the Faculty of Medicine at UBC has targeted up to 5% of the incoming class for applicants with First Nations backgrounds using a separate, comparable selection system to identified applicants suitable for this stream.

Methods:

Scoring systems, rationale and the selection process employed for each of the streams in the program will be outlined.

Results:

Outcome data will be presented. This will include the post-graduate career choices and locations chosen by the graduates of specialized streams. Lessons learned will be highlighted.

Conclusions:

The creation of specialized streams within the admissions process has had success in terms of recruitment and retention of applicants who succeed in the MD Undergraduate Program. Early results support the creation of these streams. There has been a distinct trend towards an increase in the number of graduates with First Nations heritage. In addition, there has been an increase in the number of graduates with an interest in living and providing care in rural and remote communities in Western Canada.

Take-home message:

Targeted selection in the admissions process can help to address the challenges of underserved populations.

ADMISSION INTERVIEWS FOR SELECTION INTO AN AUSTRALIAN PHYSIOTHERAPY PROGRAM: THE RELATIONSHIP BETWEEN INDIVIDUAL COMPONENTS OF THE INTERVIEW AND APPLICANTS' SUBSEQUENT PERFORMANCE

Author: Edgar S

School of Physiotherapy, The University of Notre Dame Australia

Presenter: Mrs Susan Edgar

Introduction:

The admission interview is growing in popularity for selection of health professional students as educators try to promote selection measures that identify non-cognitive characteristics, including resilience, motivation and communication skills. A previous study highlighted the relationship between admission interview score for entry into an Australian physiotherapy program and clinical performance. Interview score had a significant relationship with performance in three of six clinical placements; more than any other admission criteria. This is the first study to determine the relationship between individual interview components and performance for physiotherapy students in Australia.

Methods:

This retrospective observational study included four year groups for the analysis of relationships between interview components and subsequent performance. Regression analyses were used to predict student performance from overall and component interview scores, academic ratings on entry and demographics.

Results:

The Achievement sub-section score at interview was significantly associated with performance throughout the four year program including Year 1 GPA ($r=0.324$; $p=0.008$) and overall GPA ($r=0.328$; $p=0.010$).

Conclusions:

The analysis of admission interview components is necessary to develop an understanding of those applicants who are more likely to succeed through course. Those applicants who scored higher on questions related to the process of achieving goals or contributions, went on to perform at a higher level. It can be proposed that higher performance in this subsection may identify those applicants who enter the course with improved resilience.

Take-home message:

Creating an admission interview which more accurately identifies resilience characteristics remains challenging but is desirable for health professional programs.

WHAT DO SELECTION INTERVIEWS TELL US ABOUT MEDICAL STUDENTS?

Author(s): Ray R, Lindsay D

James Cook University, College of Medicine and Dentistry, Australia

Presenter: Dr Robin Ray

Introduction:

James Cook University (JCU)'s undergraduate medical program purposively selects and educates medical graduates prepared to work as doctors in rural and remote locations. This study aimed to explore the possible impact of selection interview scores on successful progression through the MBBS course.

Methods:

Statistical data were collected retrospectively from 1479 students entering the MBBS from 2006-2014. Correlations and chi-square analyses were performed on non-academic variables such as gender, age, rurality expressed as ASGC-RA, interview scores, and academic variables including tertiary entrance scores expressed as overall position (OP), overall grades in years 1-5, and MSAT and OSCE scores in Years 3-5.

Results:

Data analysis revealed that applicants with OP 2 consistently performed better at interview than the higher academic score OP1 applicants. High interview scores were positively correlated with a high standard in the first two years of the course, but had little or no relationship to the clinical assessments in Years 3-5. While scoring high enough overall for entry, applicants who scored lower for motivation were over represented in fail grades. Applicants from urban backgrounds scored higher on interview than rural students. However, the rurality factor declined over Years 2 to 4, to be indistinguishable by Year 5.

Conclusions:

Selection interview results correlate well with academic scores as an indicator of a student's ability to manage in the early years of medical course.

Take-home message:

Interview scores are a useful predictor of successful course progression and may also be useful for identifying at-risk students.

THE CORRELATION OF MULTIPLE MINI INTERVIEW (MMI) WITH MINNESOTA MULTIPHASIC PERSONALITY INVENTORY (MMPI) AS A TOOLS FOR MEDICAL STUDENT SELECTION

Author(s): Irasanti S¹, Akbar I², Rahmawaty I³

¹ Faculty of Medicine, UNISBA, Biomedic, ² Faculty of Medicine, UNISBA, Physiology, ³ Faculty of Medicine, UNISBA, Physiology

Presenter: Mrs Siska Nia Irasanti

Introduction:

Criteria and tools for the selection are important to choose and predict academic and professional performance of medical students, especially In Faculty of Medicine UNISBA. The multiple mini interview (MMI) is an [interview](#) format that uses many short independent assessments. The Minnesota Multiphasic Personality Inventory (MMPI) is the most widely used and researched [standardized psychometric](#) test of adult [personality](#) and [psychopathology](#). Next to academic achievements, the ability of a candidate to adjust and live and study effectively in a new academic and cultural environment of Faculty of Medicine UNISBA depends on many features of the new environment and the student's personal qualities and capabilities, among others are interpersonal and communication skills.

Methods:

Pre-admissions data were matched for first year students who entered UNISBA Faculty of medicine in 2014. Correlations were used to select variables with Spearman correlation test analysis. 36 first year's students was participated.

Results:

The Multiple Mini Interview (MMI) was correlated positively with Minnesota Multiphasic Personality Inventory (MMPI). The result show significant correlation and moderate relationship with $p = 0,026$ ($p \leq 0,05$) and correlation coefficient ($r_s = 0,37$).

Conclusions:

The Multiple Mini Interview (MMI) and Minnesota Multiphasic Personality Inventory (MMPI) are useful for medical student selection processes.

Take-home message:

The combination or single use of Multiple Mini Interview (MMI) and Minnesota Multiphasic Personality Inventory (MMPI) can be used as a tools for medical students selection.

Session 2I

ASSESSMENT OF TRANSFORMATIVE LEARNING USING STUDENT REFLECTION ON GLOBAL HEALTH ELECTIVES

Author(s): Davies D¹, Hafler J², Maley M³, Margolis C⁴, Pemba S⁵, **Rohrbaugh R**², van Schalkwyk S⁶

¹ University of Warwick, ² Yale University, ³ University of Western Australia, ⁴ Ben-Gurion University, ⁵ Tanzanian Training Centre for International Health, ⁶ Stellenbosch University.

Presenter(s): David Davies, Janet Hafler, Carmi Margolis,

Background:

Global health (GH) education is an important area in medical schools that aim to prepare future doctors for practice in communities of wide cultural diversity. Education leaders are calling for standardised strategies for GH assessment and a consensus definition of the GH curriculum in electives. Many schools look at reflective writing by the student, done either during elective at the away site or once back in the home site, for evidence of a transformed worldview and a deep understanding of different cultural values about health.

In this interactive workshop we will explore transformative learning in electives and consider the role of the assessment of reflection as evidence of personal transformation.

Intended outcomes:

By the end of the workshop participants will be able to:

- describe different approaches to the assessment of reflection
- discuss the importance of a transformed world view as a desired outcome of GH electives
- propose how the assessment of transformative learning might influence GH electives

Structure:

1. Welcome, introductions, plenary presentation - Transformative learning in GH electives: overview of strategies for using reflection as an assessment tool. (30 minutes).
2. Facilitated small group discussion allowing participants to share experiences of GH assessment. Question: How might student reflection be used as a reliable assessment method? How can it be assessed objectively? (40 minutes)
3. Small group report back to the whole group; discussion and conclusions (20 minutes).

Who should attend:

Anyone with an interest or responsibility for assessing GH electives or interest in assessment of student reflection and transformative learning.

Level of workshop:

Intermediate.

Session 2J

DESIGNING ASSESSMENT SYSTEMS FOR LEARNING

Author(s): Dr Andrew MJ Linn¹ MBBS, FRACGP, Dr Margaret L McKenzie² MD, Dr Elaine Dannefer² PhD

¹ School of Medicine, University of Adelaide, ² Cleveland Lerner College of Medicine, Case Western Reserve University

Presenter(s): Dr Andrew MJ Linn MBBS, FRACGP, Dr Margaret L McKenzie MD

Background:

Assessment of learning in health professions education has traditionally taken form as a barrier to progression, or for confirmation that sufficient learning has been achieved to meet required quality standards. Increasingly, it is recognised that assessment can also play an important role in promoting and enhancing the learning experience. Through utilisation of a systems-thinking approach, these assessment goals may be met concurrently, primarily by placing greater emphasis on immediate and continuous feedback. The overall design as well as the components of an assessment system to support learning will be considered. Bridging theory and practice, the workshop will provide practice guidelines and interactive, application exercises.

Intended Outcomes:

Participants will be able to identify key components and processes of an assessment system designed to promote learning, and will have engaged in applying design guidelines to develop an assessment system that supports learning.

Structure:

We will provide a brief overview of assessment for learning, examples of assessment systems that support learning, and system design guidelines. Participants will then work through a case study in small groups to develop an assessment system that accomplishes defined learning goals. Participants will then use design guidelines to outline an assessment system to promote learning in their educational programs. The workshop will conclude with a review of guidelines for developing assessment for learning.

Who should attend:

Program directors, assessment coordinators, and education leaders interested in assessment strategies to promote learning.

Level:

Intermediate

Session 2K

WORK-PLACE BASED ASSESSMENT: BENCH-MARKING THE 'GOOD ENOUGH' EPORTFOLIO

Author(s): Edwards J¹, Mamelock J², Blitz J³

¹ GP Dean, Health Education Thames Valley, ² Deputy Dean Primary Care and Public Health, Health Education North West, ³ Division of Family Medicine and Primary Care; Stellenbosch University

Presenter(s): Dr Jill Edwards, Dr Jane Mamelock, Professor Julia Blitz

Background:

The licensing examination for specialty training in general practice in the UK comprises of three components, one of which is Workplace-Based Assessment (WPBA). A similar assessment package operates in South Africa for Family Medicine (FM) training. WPBA needs to be, for the licensing examination, defensible. This is because it tests highly significant areas of performance that cannot be adequately tested elsewhere. It depends upon educational supervisors making consistent judgements. There is concern about the reliability of subjective judgements by assessors in non-standardised settings. Assessor bench-marking is an essential part of both formative and summative assessment when a programme is striving to achieve sound assessment practice.

This workshop, led by UK and South African national experts in WPBA and quality management examines the concepts of 'bench marking' and the 'good enough' ePortfolio.

Intended outcomes:

Participants will gain an appreciation of the strengths and weaknesses of the WPBA tools used in GP specialty / FM education. By examining real ePortfolios they will begin to calibrate their own benchmarks as to what

Background:

The WPBA tools in action: theoretical principles of WPBA

Small group work: bench-marking exercise

Naturally occurring evidence – what else should an ePortfolio contain.

Small group work

Plenary

Who should attend:

All trainees and educators involved in, or wanting to learn more about, WPBA

Level of workshop (intermediate):

Prior experience of using an ePortfolio and assessment in the workplace would be an advantage

Session 2L

HELPING OR HINDERING? FEEDING BACK ON ASSESSMENT

Author(s): MacDonald J, Allery L

Postgraduate Medical and Dental Education, Cardiff University, Wales, UK

Presenter(s): Janet MacDonald, Lynne Allery

Background:

Learners should have clearly defined goals and receive regular and appropriate information on their performance, however, the ways in which feedback is given, received and interpreted is multifaceted. A number of studies have explored the quality of feedback provided to students to determine principles for formative assessment. Giving and receiving feedback can be fraught with difficulties and this workshop seeks to help equip participants with some of the necessary skills and techniques to address the potential difficulties and challenges, ensuring a supportive, developmental and educationally robust learning encounter.

Intended outcomes:

Identify and further develop strategies for giving effective feedback.

Analyse own and others feedback skills

Give feedback to support performance development

Structure:

In this highly interactive workshop, participants will be provided with the opportunity to engage with a variety of assessment scenarios in order to explore a range of successful feedback strategies. The group will have the opportunity to discuss the nature of this feedback and the potential impact on learners along with reflection and consideration of how this approach may be applied to own teaching practise.

Who should attend:

Anyone involved in teaching and assessing learning who provides formative or summative feedback.

Level of workshop:

Introductory and intermediate levels

Session 2M

ASSESSING THE INTANGIBLE: A STRUCTURED FRAMEWORK FOR MEANINGFUL ASSESSMENT OF DIFFICULT-TO-MEASURE COMPETENCIES.

Author(s): Writer H¹, Ladhani M², Acker A³

¹ University of Ottawa, Department of Paediatrics, ² McMaster University, Department of Paediatrics, ³ Queen's University, Department of Paediatrics

Presenter(s): Hilary Writer MD FRCPC, Moyez B. Ladhani MD FRCPC, Amy Acker MD FRCPC

Background:

Medical educators are tasked with completing assessments of learners at various learning stages across multiple clinical contexts for a variety of different competencies. Widespread adoption of competency based medical education curricula necessitates rigorous assessment of knowledge, skills and attitudes on a frequent and comprehensive basis in order to determine the learner's readiness to progress through each curricular developmental stage. While assessment of knowledge is relatively straightforward, meaningful assessment of other skills and behaviours such as advocacy, collaboration, and professionalism, can be challenging across the learning continuum. With the objective of equipping participants with a structured framework of validated assessment methods and tools, this workshop will employ a highly interactive case-based approach towards meaningful assessment of the 'intangible' in medical education.

Intended outcomes:

At the end of this workshop, participants will be able to i. identify those competencies for which assessment is challenging ii. access and use a variety of resources for multi-modal assessment of intrinsic competencies iii. Design a meaningful blueprint for assessment of these competencies for a variety of curricula and learners.

Structure:

Highly interactive case-based workshop. A brief didactic session will identify challenging areas of assessment and review available assessment methods and tools. This will be followed by small group practice using a combination of author- and audience-generated case-based scenarios. A **final large** group discussion will share approaches to the scenarios and consolidate an assessment framework.

Who should attend:

Medical educators involved in assessment across all levels of medical education.

Level of workshop:

Intermediate

Session 20

CURIOSITY & COMPLEXITY: PROMOTING CONDITIONS FOR EFFECTIVE ASSESSMENT IN MEDICAL & HEALTHCARE EDUCATION

Authors: Price J⁴ESMCLRPP, Sturmberg J², Mennin S³, Martin⁴ C, Kissling B⁵

¹ Brighton & Sussex Medical School, ² Monash University, ³ Mennin Consulting, ⁴ Trinity College, ⁵ Swiss Society for General Medicine

Presenters: Jim Price, Joachim Sturmberg, Stewart Mennin, Carmel Martin, Bruno Kissling

Background:

Curiosity is something we observe with admiration in young children. It is foundational for exploration, learning and knowledge generation. Recently the notion of “curiosity”¹ has entered the medical education literature, though it remains under-theorised,^{2,3}. In this workshop we will explore the nature of curiosity, how we can explain it and whether it can enhance our thinking and actions as teachers and facilitators, particularly in the realm of assessment. Can curiosity be interdependent with assessment in health professional education? If so, how might we implement such a strategy?

Systems and complexity sciences offer a way to explore curiosity as generative for deep learning, and using this theoretical context, and the notion of ‘simple rules’, we will explore the relationship of ‘judgement to curiosity’⁴ in formative and summative settings.

Intended outcomes:

This workshop will examine how medical educators can tap into students’ inherent curiosity to inform assessment and how curiosity might be a prerequisite to problem identification and wise action. Extending this, we will explore how ‘standard setting’ might be viewed as ‘fit for function’ rather than as a fixed concept. A recently published ‘Complexity Toolkit’ for educators⁵ will serve as a starting point for the development of assessment strategies for health professionals at all levels of expertise.

It is intended that the insights and recommendations from the workshop will be published as proceedings with communal authorship to broaden the discourse and facilitate further adoption in health professional education programmes; (we will be planning to record the session to capture all the output with the intention of a collaborative publication in ensuing months).

Structure:

Small & larger group work on:

¹ ‘a strong desire to learn or know something’ (mass noun) or ‘an unusual or interesting object or fact’ (Oxford Dictionaries 2015)

² Dyche, L. and R. M. Epstein (2011). “Curiosity and medical education.” *Medical Education* 45(7): 663-668.

³ Roman B, Kay J. Fostering curiosity: using the educator–learner relationship to promote a facilitative learning environment *Psychiatry* 2007;70 (3):205–8.

⁴ Eoyang, G. H. And Holladay, R. (2013) *Adaptive Action: Leveraging uncertainty in your organization* Palo Alto, CA: Stanford University Press

⁵ Price J.M. Haynes P. et al (2015) ‘The Policymakers’ Complexity Toolkit’ in Geyer R. & Cairney P. (eds) ‘*Handbook on Complexity & Public Policy*’ Chapter 7; Cheltenham; Edward Elgar Publishers

- *The notion of 'curiosity'? "How do you understand curiosity"? "How does it inform medical and health education and more specifically assessment strategies?"*
- *Patterns that emerge from similarities and differences of participants experiences identified and clarified.*
- *Brief overview of complexity/systems thinking, models of complexity in health/healthcare/education & assessment; toolkit overview.*
- *Framework for applications of curiosity in assessment*

Who should attend:

Aimed at all levels of health educators interested in new approaches to assessment in medical & health education.

Level of workshop:

Open to all

Session 2P

MAKING THE RIGHT DIAGNOSIS: THE CRITICAL FIRST STEP IN LEARNER REMEDIATIONV

Author(s): Dupras D¹, Bonnes S¹, Edson R², Chin-Garcia C², Cosco D³, Schneider J³

¹ Mayo Clinic College of Medicine, ² California Pacific Medical Center, ³ Emory University School of Medicine

Presenter(s): Denise Dupras, MD, PhD· Sara Bonnes, MD· Randall Edson, MD· Catherine Chin-Garcia, MD· Dominique Cosco, MD· Jason Schneider, MD

Background:

Underperforming learners have been identified across the continuum of medical training, from medical school through advanced training and even into practice. These learners are found in all specialties of medicine. While these numbers are small, their remediation consumes extensive institutional resources. Because of the extensive time and effort involved in remediation efforts, it is critical to identify the root of the performance issue in order to facilitate a successful outcome. Studies of remediation have shown that the majority of struggling learners have multiple deficiencies, and thus, it is imperative to correctly identify the needs of the learner in order to formulate an evidenced-based plan for remediation.

Intended outcomes:

After attending this workshop participants will be able to:

1. Diagnose the learner in order to customize an effective remediation plan.
2. Develop a system to determine the underlying causes of poor performance in learners
3. Understand the components of remediation: competencies, diagnosis, plan and reassessment.

Structure:

The 90-minute session will be divided into a short introductory didactic session that includes background and review of relevant literature, followed by presentation of three cases based on actual trainees, illustrating the challenge of making the right diagnosis and its importance in guiding remediation. After each case, there will be interactive small and large group discussion. Participants will be provided with a bibliography of resources.

Who should attend:

Faculty and educational leadership involved in evaluation, assessment, and remediation of learners.

Level of workshop:

Intermediate to advanced.

Session 2Q

THE STUDENT ROLE IN PARTICIPATORY FEEDBACK

Author(s): Joy R Rudland

Presenter: Joy R Rudland

University of Otago, Otago Medical School, New Zealand

Background:

Current feedback models/guidelines have been described as an “educator-driven, one-way process” (Archer 2010) placing the onus on the interaction of giving/receiving constructive feedback on the teacher. This may create passivity in the student and runs counter to active student-centred and self-regulated learning. Furthermore, it assumes feedback can only occur when a supervisor makes it happen; yet we know that learners receive feedback in many ways in many different contexts. A recent model placed students at the heart of the feedback process (Rudland et al 2012).

This workshop considers how students are encouraged or inhibited to participate in feedback and to considers strategies to actively support the role of the learner in the role of feedback.

Intended outcomes:

- Recap of what is known about feedback and the models that exist to support it
- Consideration of the role of the learner in feedback
- Generation of ideas of how to promote greater student autonomy in seeking and responding to feedback.

Structure:

The workshop will start with a short period of introductions and to set the scene for the workshop. The session will then consider what makes effective feedback; ensuring that all participants are at a similar level of understanding. The emphasis will then shift to looking at why students may fail to participate effectively in feedback; reflecting on the role of the teachers as just one element of the feedback process. This again will be an interactive session. The final component of the workshop session will explore how we might practically promote greater student autonomy in participatory feedback?

A variety of techniques will be used to ensure that participants are engaged and participating at all times.

Who should attend:

Curriculum planners and clinical teachers responsible for organising or giving feedback to students.

Level of workshop (introductory/intermediate/advanced):

Session 2R

MOBILE DEVICES (BYOD) BASED ONLINE PRE-CLASS INFORMATION DELIVERY AND IN-CLASS ASSESSMENT AND EVALUATION APP IN MEDICAL EDUCATION: A PILOT STUDY

Authors(s): Qing Ping¹, Yao Xun¹, Jiang Jin¹, Yu Qi²

¹ Department of Academic Affairs, West China School of Medicine, Sichuan University, ² Huaxi-Yiyo Laboratory for Mobile Medical Education Technology, Sichuan University

Presenter: Qing Ping and Yao Xun

Introduction:

Clinical care is increasingly moving towards information technology-based and team-based models. Medical education is now moving towards more portable means of education such as TED, podcast/itunes U, MOOCs, and some mobile educational apps. In Flipped classroom model, pre-class preparation, in-class assessment and evaluation are time and manpower costly to develop. We developed an app to integrate the information delivery, in-class assessment and in-time evaluation after the class as well as some other information publish and interactions.

Methods:

Wifi network was upgraded and classrooms were rebuilt with wired connections for every seat to ensure stable intensive online exam and evaluation. 125 teachers and students from 6 majors were enrolled with a BYOD strategy to the trial use of the app and their perceptions were surveyed.

Results:

Of the 125 participants surveyed, the majority of mobile devices they owned were androidphone (83%), Windows laptop (65%), ipad (34%) and iphone (22%). 46% use the app for course information enquiries compared to 30% using a traditional course timetable. Students like using a laptop (32%) more to do online quizzes compared to paper (24%), clicker (24%) and the app (20%). 58% like using the app to do teaching evaluation compared to website based evaluation (33%) and paper based evaluation (9%). All five main functions of the APP are ranked (5-scale like) as Resources (3.6), course information enquiry (4.2), evaluation (3.7), quiz (3.9) and courseware (4). 80% think the app is easy to use and helpful. 51% reported application error occurred. The app is overall scored 3.5 out of 5.

Conclusions:

The mobile app have the capacity to enhance the information delivery, in-class quiz and in-time elaborate two-way feedback.

Take-home message:

OATS - A WEB-BASED PLATFORM FOR OBJECTIVE ASSESSMENT OF TECHNICAL SKILLS

Author(s): Carlsen C

Aarhus University Hospital, Aarhus, Denmark

Presenter: Ms Charlotte Green Carlsen

Introduction:

Assessment of skills is fundamental of the competency-based curriculum. In Denmark a certain number of assessments in specific skills are now mandatory during surgical specialist training.

We developed a free web-based platform OATS to host assessment forms in all surgical procedures. The mandatory assessment form is the "Objective Structured Assessment of Surgical Skills" developed by Reznick and colleagues.

Results:

Before entering the operation room (OR), the trainee log on to the web-based platform to create "an event". The event is described with procedure code, i.e. appendectomy, location, and name of the supervisor. The supervisor receives an email to remind to fill in the form. The e-mail contains a link that opens the specific procedure. After completing the procedure, the supervisor fills in the assessment form either together with the trainee or later. If the trainee is an independent performer, he or she may upload a video recording of the performance to be assessed by a rater.

The video upload option makes it possible to avoid bias from a rater present in the OR for independent performers or to have second opinions by other raters.

The forms are stored in the platform and used by trainees to make a graph of their assessments in each procedure. The teaching hospitals can be compared individually.

To our knowledge, no other free web-based platforms exist to collect and store trainees assessment forms with video recordings throughout a specialist training course.

Take-home message:

OATS hosts assessments for surgical trainees including video recordings.

'CRISIS CHECKLIST' MOBILE PHONE APPLICATION- CAN IT IMPROVE THE TREATMENT OF AN ACUTELY UNWELL PATIENT IN A PRE-HOSPITAL SETTING?

Author(s): Foreman T¹, Mitra S²

¹ Cardiff University School of Medicine., ² Anaesthetics Department, Ysbyty Gwynedd

Presenter: Mr Thomas Foreman

Abstract:

The purpose of this study was to test whether the recently created 'Crisis Checklist' mobile phone application by 'Galactig' for use in a hospital environment, was suitable for use during emergencies in the pre-hospital setting. The study was conducted at Pwelli ambulance station in North Wales. A scenario of septic shock was created using Gaumard's high fidelity 'Paediatric Hal 5 year®' as a patient. Two groups of three paramedics were asked to treat the patient. One group used the 'Crisis Checklist' mobile phone application, one group treated the patient without the use of the 'Crisis Checklist' application. The times that various treatments from both groups were given were recorded and compared to assess whether the 'Crisis Checklist' application had an effect on treating the patient faster. The group of paramedics that used the application had twenty minutes prior to the scenario to familiarise themselves with the application. Results showed that some treatments were given quicker using the application and feedback from the participants was positive. The application allowed for a more structured approach to treating the patient. However, this application has been made for use in the hospital setting. The results and feedback obtained show that the application has potential for use in the pre-hospital setting. We concluded that with restructuring to suit pre-hospital emergencies, the 'Crisis Checklist' application could lead to faster and a better structured approach to treating a patient before transfer to hospital.

IMPLEMENTING INTERACTIVE RUBRICS- A MORE EFFECTIVE METHOD OF ASSESSING PSYCHOMOTOR SKILLS

Author(s): Camberos P, Hruby R, Helf S, Thrush G

Western University of Health Sciences, College of Osteopathic Medicine of the Pacific, United States

Presenter: Ms Patricia Camberos

Introduction:

We will share our experience and how the implementation of interactive rubrics resulted in a dynamic testing tool that was more exacting and clearly understood by graders and the students. Use interactive rubrics, categorized in each dimension, supplied essential data that immediately reported a clear representation of student performance and areas for improvement.

Methods:

The department underwent a major project to convert all paper practical examination rubrics to an electronic format, followed by testing and training of graders, and full implementation for all practical examinations. The addition of categories to each dimension of the interactive rubric created an opportunity to measure learning objectives enabling the department to review the curriculum and make improvements driven by assessment data.

Results:

Graders quickly record scores via handheld tablet in a fast-paced, multi assessment environment. The addition of categories returned a robust exam summary that could be pulled apart to give meaningful feedback on a granular level to impact student learning. Assessor reporting gave insight on grader trends, individually and as a whole, leading to a unified and more objective grading process. Use has quickly expanded to other departments within the university to efficiently grade group projects, essays, and electronic SOAP notes.

Conclusions:

The use of an electronic rubrics for psychomotor skills testing provides a marked advantage over paper-based rubrics in areas such as: more efficient use of testing time, more focused and meaningful feedback to students, and the ability to gather and analyze actionable measurements for use in curriculum development and teaching improvement.

AGGREGATING AMBIENT STUDENT TRACKING DATA FOR ASSESSMENT

Author(s): Topps D¹, Ellaway R¹, Downes A², Meiselman E³

¹ University of Calgary, ² Advanced Distributed Learning, ³ University of Michigan

Presenter: Prof David Topps

Introduction:

Most educational assessments to date have been highly dependent on subjective factors with their attendant biases. Data-driven metrics around learner activities provide more accurate and objective assessment of performance improvement and quality indicators. There is rapidly increasing interest just now in the field of learning analytics.

Methods:

We have even been able to construct learning designs with useful pathways and metrics around ethics and professionalism, which are notoriously difficult to measure objectively. Tracking learner activities in fine detail, including question responses, pathways chosen, time on task for each node, and counter scores, all stored in a Learner Record Store (LRS).

Results:

Some researchers are skeptical of the value of such low level metrics. We have striking examples of maladaptive learner behaviours being identified and tracked through use of these metrics in OpenLabyrinth. Early detection was very helpful in pointing the learners on a more productive learning path. Simple lightweight protocols like the Experience API (xAPI) are much more practical for connecting learning tools, than predecessors such as SCORM.

Conclusions:

Federated collation of data from multiple sources into the LRS affords network analysis of propinquity, reciprocity and concordance metrics.

Take-home message:

Quality improvements that arise from these metrics can be directed at learning resources and processes, as well as learner and teacher performance.

DEVELOPING THE REFLECTIVE WRITING OF FIRST YEAR MEDICAL STUDENTS USING QM+, A NEW VIRTUAL LEARNING ENVIRONMENT

Author(s): Hayfron-Benjamin M¹, Cooke S¹

¹ Barts and the London School of Medicine and Dentistry, ² Barts and the London School of Medicine and Dentistry, Queen Mary, University of London

Presenter: Dr Siobhan Cooke, Maria Hayfron-Benjamin

Introduction:

Medicine in Society is a longitudinal early patient-contact module delivered by primary-care physicians and non-medical tutors in the community. As part of assessment, students are asked to write brief reflections on each of 12 themed day. Tutors provide formative feedback during the 6 month placement and a final summative grade.

Methods:

Using QM+, a new VLE, all students upload all reflections so they can be seen by *their* tutors only. Tutors give feedback online, students can only see their own work and feedback. The module convenor has oversight of all student written submissions and tutor feedback. Students and tutors have been surveyed to determine satisfaction with electronic management of the written task and quality of feedback.

Results:

Data from four tutor and four student surveys over two years has demonstrated that the use of the VLE for this assessment is acceptable to students and tutors. Tutors have noted that student expectation of feedback has been raised. **Tutors want more guidance on providing feedback.**

Conclusions:

The online assessment has been very acceptable to students, however they would like more feedback.

User-friendliness of the interface is very important to tutors.

The facility to follow students longitudinally is valued.

Tutors would like more guidance on the feedback they give students

Take-home message:

A VLE can foster links between geographically-spread tutors and faculty. Samples of student work and the feedback given can be used as examples to help tutors recognise work at different standards, and provide constructive feedback to students to help them improve their reflective writing.

ASSESSING THE DIAGNOSTIC AND THERAPEUTIC COMPONENTS OF CLINICAL REASONING

Author(s): Gruppen L ¹, Stojan J ²

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Presenter: Larry D. Gruppen PhD

Introduction:

Clinical reasoning, a complex cognitive task, integrates diagnostic and therapeutic decision making. This study explores how medical students integrate baseline diagnostic probabilities with new test information to revise therapeutic decisions.

Methods:

171 students were given a case of a woman with a 20% probability of a mixed viral/ bacterial infection. They were asked to indicate whether they would treat with antibiotics, not treat, or order additional testing to determine treatment. Students were then told that additional testing was performed, with half given a positive result and half a negative result. They were instructed to calculate how the result changed the probability of a mixed infection and make a final treatment decision based on the new result.

Results:

Based on a 20% probability, 12.3% of students wanted to treat, 17.5% did not and 66.1% wanted additional testing. Of the students given a positive test result, 64% decided to treat, 3% decided not to, and 32% wanted additional testing. After a negative test result, 63% decided not to treat, 7% decided to treat and 29% wanted additional testing.

Conclusions:

Students may be accurate in their interpretation and use of diagnostic information but still vary in therapeutic decisions because of individual differences in treatment threshold probabilities. Such thresholds are likely to be quite fluid at this training stage, but little is known about how these thresholds evolve with education or experience.

Take-home message:

Effective clinical reasoning is made up of multiple sub-skills, each of which needs to be assessed to identify reasoning problems in learners.

INSTRUCTIONAL VIDEOS INDUCING PROCESS-GOALS INCREASE NOVICES LUMBAR PUNCTURE PERFORMANCE, COMPARED TO TRADITIONAL VIDEO DESIGN, A RANDOMIZED TRIAL

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Presenter: Mikael Johannes Vuokko Henriksen, MD and PhD-fellow

Introduction:

Instructional videos are gaining increasing popularity, and seem to provide conceptual understanding of medical procedures. However, research in the design of videos is scanty and shows divergent results. Application of Self-regulated-Learning (SRL) principles in Simulation Based Education can be beneficial, but the effect of inducing process goals in instructional videos is unknown. This study explored the effect of integrating process-goals in instructional videos for the Lumbar Puncture (LBP) procedure.

Methods:

Randomized, single blind, trial. Newly graduate doctors without previous LBP experience was randomly assigned to one of three interventions.

- 1) Intervention-video (IV): Video design based on SRL-principles inducing process-goals
- 2) Control-Video (CV): Video design based on traditional design and storyline.
- 3) Written control (WC): Text-instruction including illustrations.

Trainees' learning was assessed by rating their performance of LBP immediately after the intervention. A standardized patient in addition to the phantom where used for assessment of technical as well as non-technical skills. Performances were video-recorded and assessed by three content experts, using a previously validated LBP Assessment Tool.

Results:

110 doctors were included and randomized to one of the three groups.

Preliminary results:

There was a significant higher score among IV trainees, mean 43,0 (SD 6,4), compared to CV trainees, mean 40,8 (SD 5,1) and WC trainees, mean 38,9 (SD 6,1), P = 0,021.

Conclusions:

Designing videos based on SRL principles inducing process-goals improves novices' lumbar puncture performance. Instructional videos are superior to text instructions as pre-training intervention.

Take-home message:

Instructional videos should include process-goals for the procedure illustrated.

SCRIPT eLEARNING: A MULTI-METHOD EVALUATION

Author(s): Coleman J ¹, Brooks H ², Thomas S ³, Blackwell N ⁴, Hughes E ⁵, Marriott J ⁶, Hodson J ⁷, Ferner R ⁸.

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Presenter: Prof Elizabeth Hughes

Background:

The GMC EQUIP study (2009) recommended that enhanced training in prescribing and therapeutics should be available to Foundation trainees in the UK. In response to this, Health Education West Midlands commissioned the development of SCRIPT eLearning.

Summary of Work:

We are conducting a multi-method evaluation of SCRIPT to ensure it is achieving its intended objectives. We are investigating trainees' attitudes towards SCRIPT and the impact of SCRIPT on trainees' knowledge, clinical prescribing behaviours and organisational outcomes. We are considering individual, temporal, and environmental factors in our analyses.

Results: Using secondary data extracted from the content management system, we have found that suboptimal learning behaviours (e.g. skipping over module content) are exhibited by some trainees and that these are influenced by a number of factors (e.g. time of year). We are currently undertaking focus groups to explore trainees' attitudes towards SCRIPT and their perceived impact of SCRIPT on their prescribing behaviours, the findings from which will be presented at the conference.

Discussion and conclusion:

The SCRIPT eLearning programme is not always used as intended. The results from our focus groups will help us to gain further insight into potential reasons for trainees' suboptimal learning behaviours, and whether or not trainees believe SCRIPT helps their prescribing in clinical practice regardless. Our evaluation will help to provide recommendations for future developments of the programme and its integration into the Foundation training curriculum.

Take-home messages:

It is important to evaluate eLearning programmes to help ensure they are effective in achieving their intended objectives.

KNOWLEDGE APPLICATION OF BASIC OBSTETRICS PROCEDURE: SURANAREE UNIVERSITY OF TECHNOLOGY (SUT) MOBILE CONTENT IN PRECLINICAL MEDICAL STUDENTS

Authors: Nimkuntod P¹, TONGDEE P¹, Annanon N¹, Srisawat S², Saewong P¹, Minkhunhot C¹

¹ Institute of Medicine, Suranaree University of Technology, ² The Center for Educational Innovation and Technology, SUT

Presenter: Pornnip Nimkuntod

Introduction:

Suranaree University of Technology (SUT) multimedia programs have emerged into preclinical medical student's program, there is not clear evidence that such a movement can improve medical students learning.

Methods:

To assess learning outcome knowledge application in preclinical medical students' performance and confidence to performing in Leopold maneuver with mobile content compare with traditional lecture in classroom. Paired T test was used to analyze.

Results:

All 60 preclinical medical students completed the Leopold maneuver in obstetrics clinical skills training. Knowledge increase after traditional classroom lecture and mobile content. Significant increase knowledge in lecture compare with SUT mobile content between before and after training ($p=0.008$), the completeness of the contents ($p=0.027$), knowledge of teaching is clear ($p=0.011$) and answer questions in class ($p=0.038$). Mobile content increased confidence and knowledge that can be applied to the reality, knowledge to preparation of procedure and interpretation but no statistically significant when compare with classroom lecture.

Conclusions:

SUT mobile content increased both knowledge and confidence in ability to perform Leopold maneuver, when compared with classroom lecture at the end of introduction to clinical medicine but no statistical difference in interpretation. Interpretation after Leopold maneuver was perform with medical staff to check accuracy and feedback to medical students.

Take-home message:

Mobile content reported increased confidence and knowledge that can be applied and interpretation in Leopold maneuver no difference with classroom lecture.

Keywords: Preclinical medical student, Classroom lecture, Mobile content

Session 2S

EVALUATING THE EFFECTIVENESS OF AN EXTENDED BASIC SCIENCE CURRICULUM IN INTERNATIONAL MEDICAL STUDENTS.

Authors: Bell G, Wilson P

Trinity School of Medicine, St. Vincent and the Grenadines

Presenter: Guinevere H Bell, Ph.D

Introduction:

In January 2013, the Individualized Learning Plan (ILP) was introduced that allows students to follow an individualized path through the basic science curriculum.

Methods:

The Admissions Committee uses pre-matriculation data to identify and recommend an ILP for students, but enrollment is not mandatory. Academic data, including board exams, of ILP students is compared with students who follow the standard basic science curriculum.

Results:

Enrollment in ILP significantly reduces failure rate in the basic sciences. 100% of students recommended for ILP, but who opted-out, failed at least one course in the basic science curriculum. Failure rate was significantly reduced to 14% in students who met criteria, but who followed the ILP plan. Further, we found an 11% failure rate in students who opted to enroll in ILP but who did not meet criteria.

Conclusions:

We have identified a portion of potential physicians that are benefiting from an individualized learning plan in the basic science years of medical school. By allowing students to learn the basic sciences at their own pace, we are eliminating academic failures and succeeding in producing academically strong future physicians.

Take-home message:

Individualized learning plans can be used to overcome the relationship between low pre-MD academic data and the risk of failure in the MD program.

AN OBSTETRICS AND GYNAECOLOGY SIMULATION PROGRAM IN CLINICAL SKILLS FOR MEDICAL STUDENTS: A PRE-TEST POST-TEST EVALUATION

Author(s): Kumar A¹, Nestel D², Wallace E¹

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Presenter: Kumar A

Introduction:

Simulation based education can be used to teach core obstetrics and gynaecology hands-on examination skills and enhance students' knowledge, hence, offering a link between theory and practice. However, it is difficult to assess how much learning has been acquired through the simulation program. Hence, we undertook this study to assess the impact of learning core clinical skills by medical students using a pre-test and post-test design.

Methods:

The workshop consisted of a brief pre-reading document, a lecture, a video demonstration and a hands-on skills learning package. All students were assessed before and after the intervention and results analysed under clinical and educational domains. The educational categories compared through the pre-test post-test design were procedural skills, knowledge and clinical application and the clinical categories were the three stages of labour, and gynaecology skills including speculum and bimanual palpation.

Results:

247 medical participated in the simulation workshops over the 12-month study period. The average improvement in learning across all 23 questions was 36.5% (SD 11%) for medical students. There was a significant difference ($p < 0.001$) in the performance of medical students in all domains of questions, that is knowledge, clinical application and clinical skills.

Conclusion: Overall improvement in test performance was observed to be significant for medical students across all educational and clinical domains. Simulation programs are helpful in learning procedural skills but can also be used to improve theoretical knowledge and apply these to a clinical setting.

COMPARISON OF ACADEMIC ACHIEVEMENT IN CLINICAL PHASE BETWEEN THE JOINT MEDICAL PROGRAM (SWU - UON) AND THE REGULAR MEDICAL PROGRAM

Author(s): Paritakul P, Choomchuay N, Thongsaard W, Wongwandee M

Faculty of Medicine, Srinakarinwirot University, Thailand

Presenter: Panwara Paritakul

Introduction:

The Faculty of Medicine, Srinakarinwirot University offers two curricular programs for Doctor of Medicine degree. The regular medical program recruits students from admission test regulated by the Consortium of Thai Medical school, and all the courses were taught at Srinakarinwirot University (SWU), Thailand. The Joint Medical program (SWU-UoN) recruits students directly from Thai and International high schools and the students' study three years of biomedical sciences at the University of Nottingham, UK and then return to SWU to complete their medical degree.

Methods:

We compare the academic achievement of 5th-year students of the two programs for the academic year 2014. Outcome variables were students' five years cumulative grade point average (CGPA) and the National License Examination step2 (NLE step2) scores. The NLE step2 is a paper-based 300 multiple choice questions covering clinical science subjects.

Results:

There was no statistically significant difference between the regular program (N= 116) and the joint medical program (N= 12) in terms of students' CPGA and NLE scores (3.30 versus 3.42, p 0.20, and 190.3 versus 186.0, p 0.47 respectively)

Conclusions:

Despite the difference in the courses content and studying culture during preclinical years. The students' academic performance in the clinical phase does not differ between the SWU regular medical program and the SWU – UoN medical program

Take-home message:

The difference in the curricular design and study environment during pre-clinical years may not affect the academic achievement during clinical years.

TO STUDY THE EFFECTIVENESS OF SMALL GROUP TEACHING IN A MEDICAL MUSEUM SESSION

Author(s): Sivakumar A, pazhayanur Venkateswaran S

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Presenter: Anupa Sivakumar

Introduction: Small group teaching is popular for almost three to four decades in medical education. It is considered as one of the best practices in higher education. Students are seen highly motivated. At our university, the most common method of small group teaching is done through medical museum sessions (MMS).

Methods: 53 students of chiropractic semester 2 were involved in this study. They were divided into 7 groups with three groups having 8 students each. The teaching learning setting was in the medical museum with all necessary learning resources. Students were asked to undergo a pre and posttest OSPE. Feedback on the MMS was collected using a structured questionnaire.

Results: The mean scores of pre and posttest were 4.78 and 7.37 respectively. The comparison of the pre and post test results showed the better performance by the students after the small group learning. 60% of the students slightly agreed that the session was clear, easy to understand, well organized, engaging and interesting. 53% of the students strongly agreed that the session was interactive and content related.

Conclusion: students found the MMS to be a very effective teaching and learning tool and this is evident from the feedback obtained from the students.

Take home message: feedback from students is a very important tool to assess the effectiveness of small group teaching which can be used to further develop these sessions and rectify any mistakes.

Key words: medical museum sessions, interactive, feedback.

SCENARIO-BASED COURSES UTILIZING MANNEQUINS IN LEARNING OUTCOME OF MEDICAL STUDENTS

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Institute of Medicine, Suranaree University of Technology

Presenter: Pattama Tongdee

Introduction: Scenario-based courses with mannequin has emerged into preclinical medical students for more realistic simulation.

Methods: To assess obstetrics learning outcome in medical students' performance and confidence in Leopold maneuver in scenario base course. All of them received standard OSCE guide for prior to perform maneuver. Questionnaires were used to assess confidence and evaluate the Leopold maneuver before and immediately after the session. Paired T test was used to analyze different in knowledge and confidence between those instructional media and mannequin.

Results: All 60 medical students completed the Leopold maneuver in scenario-based obstetrics training. Performing the maneuvers with obstetrics mannequin between before and after training better than Suranaree University of Technology (SUT) mobile content ($p=0.013$). First maneuver: Fundal Grip ($p=0.001$), second maneuver: Lateral grip ($p=0.049$), third maneuver: Pawlick's grip ($p=0.040$), but not statistical significant in fourth maneuver: Pelvic grip ($p=0.117$). Significant increase knowledge of indications, contraindications and complications in procedure ($p=0.032$), preparation before training ($p=0.027$) but no difference of interpretation of Leopold maneuver.

Conclusions: Scenario-based courses utilizing mannequins increase learning outcome for confidence in ability to performing Leopold maneuver when compared with SUT mobile content and knowledge of indications, contraindications before procedure and complications but no statistical difference in interpretation.

Take-home message

Obstetrics mannequin with scenario-based courses reported beneficial to learn obstetrics skills in a minimal risk environment and increases confidence, knowledge that can be applied in Leopold maneuver.

Keywords: Preclinical medical student, Mannequin, Mobile content

COMPARISON OF STUDENT RESEARCH PROGRAM AND CURRICULUM IN KOREAN MEDICAL SCHOOLS

Author(s): Park Y

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Presenter: Yonchul Park

Abstract:

In 21 century, ability to understand up to date medical knowledge including recent journals \is certainly necessary. In other words, research competencies are essential requirements for medical students.

By comparing several major medical schools research programs and curriculums, we found that all schools have formal curriculum of student research programs although there are differences in type. But several limitations were found. Which are 'overfree curriculum', 'lack of curriculum articulation' and 'insufficient human resources'.

Introduction:

In 21 century, capacity for acquiring new medical knowledge with critical thinking is must needed for the students. And for critical thinking, ability to understand up to date medical knowledge including recent journals and not only its result but also its method and limitation is certainly necessary. In other words, research competencies are essential requirements for medical students.

Methods:

We compared three medical schools in Korea to compare the research programs and curriculums

Results:

All three schools have formal curriculum of student research programs although there are differences in type. Only one school had continuous curriculum for several semesters. And two schools curriculums have excessive autonomy of the professors which have less regulations for guiding students. And very few professors are in charge of these curriculums. Which can be said sa 'overfree curriculum', 'lack of curriculum articulation' and 'insufficient human resources'.

Conclusions:

Korean medical schools have formal curriculum of student research programs although there are differences in type.

Take-home message:

Research curriculum is essential requirements for medical students. And development of a good curriculum is needed

BALANCE OF LIFE IN CLINICAL YEARS OF MEDICAL STUDENTS : VACHIRA PHUKET MEDICAL EDUCATION CENTER

Author(s): Choovate A, Santisant B, Thadakul N

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Presenter: Mr Anuchit Choovate

Introduction:

Medical students in clinical practice years are usually under pressure. Management for quality of life, stress, and discontinuation of medical education were different in each year. The purpose of this study is to evaluate quality of life of our medical students and find out imbalance or their life in order to provide assistance them promptly.

Methods:

Medical students in clinical year at Vachira Phuket medical education center were enrolled in a cross-sectional study. Each student completed questionnaire of time management in six aspects which consist of education, family relationship, social life, personal health, leisure activities and entertainment and religion activities. Data were presented with radar graph in each year group, and analyzed with ANOVA and LSD at a significance level of 0.05.

Results:

The 5th year medical student had the highest quality of life average overall score. (61.44% ; SD= 9.1). The 6th year had the lowest average overall score (55.24% ; SD 11.1) with statistical significance(P=0.033). Analysis with LSD in each aspect found that year six medical student had significantly lower score in social life aspect than other years (50.33 % ; P=0.005) and in leisure activities than year five (38.17 % ; P=0.002)

Conclusions:

The 5th year medical student had the best balance of life in clinical year at Vachira Phuket medical education center. While the 6th year medical student had worse quality of life in social life and leisure activities than other years.

Take home message:

The staff should encourage the 6th year medical students in social life and leisure activities for improvement their quality of life.

EVALUATION OF SOAP NOTES OF KOREAN MEDICAL STUDENTS

Author(s): Seo J², Kong H¹, Park J², Woo H², Im S³, Kim D¹, Roh H⁵, Oh Y⁴

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Presenter: Hyun-Hee Kong

Background:

A subject-objective-assessment-plan (SOAP) note is a documentation method employed by physicians to create a patient's chart but there was no study for evaluating SOAP notes of medical students in Korea. In this study, we evaluated the SOAP notes of third-year medical students in Korea.

Methods:

A total of 95 SOAP notes of third-year medical students attending five medical schools were evaluated. Records of the patient's name, date and student's signature, language (Korean or English), use of medical terms, and diagnosis were assessed. The association of each S, O, A, and P were scored into four grades (excellent, good, average, and poor). And we assessed how many students wrote work-up, treatment, and supportive plan.

Results:

No recording of patient's name, date, and student's signature were observed in 4.2%, 3.2% and 36.8% of students. Most of students (74.7%) described the patient's symptoms in Korean. Only 14.7% of students used appropriate medical terms. The proportion of students who found out correct clinical diagnosis was 68.4%. Grades of association of SOAP were 1.1%, 24.2%, 46.3% and 28.5% in excellent, good, average and poor. One fourth of students mixed recording of symptoms and signs. The plans of work-up, treatment and supportive are were described in 58.9%, 56.8%, and 13.7% of students.

Conclusion:

Our results showed that most students used in native language in medical record and were not good to describe the SOAP notes. This evaluation of SOAP notes

COGNITIVE CAPACITY RESERVE (CCR), PRACTICE BASED ERUDITION (PBE) AND FISH: A LEARNING-CENTRED APPROACH

Author(s): Currie G, Forrest K, Strkali M, Eyers T, Kiat H, Cartmill J

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Presenter: Prof Geoff Currie

Introduction:

Traditional didactic medical teaching creates a disconnect between basic sciences and clinical subjects and this has given way to more integrated, student-centred approaches which rely on self-directed learning. In a student-centred approach to learning, the provision of resources alone does not provide encouragement for students to develop requisite knowledge and skills. Moreover, knowledge and skills are a fraction of the learning outcomes; the powerful learning of the hidden curriculum is perhaps the greater preparation for the real world post-graduation.

Methods:

The Faculty of Medicine and Health Science (FMHS) at Macquarie University sought to reverse engineer and re-imagine an educational model for medicine and health sciences drawing on the strengths of existing models, addressing their shortfalls and recognising the power of the hidden curriculum.

Results:

The FMHS has produced a **learning-centred** environment driven by practice based outcomes. **Practice based erudition** (PBE) engages through real world cases, scenarios, problems using evidence based approaches and engages with the hidden curriculum. PBE connects theory, knowledge and skill through an authentic real world context to create rather than consume knowledge. A key outcome is enhanced cognitive capacity and development of **cognitive capacity reserve** (CCR). A matrix is presented that allows a consistent framing of the learning opportunities including engaging in the hidden curriculum. The acronym FISH is at once **Flexible, Innovative, Scholarly and Holistic**.

Conclusions:

The FMHS has developed a novel learning-centred educational model for medical / health education that seeks to establish PBE and CCR through exposure to an experience that is FISH.

Take-home message:

Innovation in medical and health education demands flexibility, mobility, learning-focussed environments tailored to outcomes and capabilities and should not undervalue the hidden curriculum.

THE RIGHT TIME TO LEARN: COMPARISON OF SCORES BETWEEN PRECLINICAL AND CLINICAL MEDICAL STUDENTS IN A FORENSIC MEDICINE COURSE

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Presenter: Wisarn Worasuwanarak MD

Introduction:

Studying forensic medicine requires background medical knowledge and the ability to apply it to a legal case. Medical students of different levels of medical knowledge, therefore, would likely have different performances in forensic medicine. However, different medical curricula in Thailand deliver this course at different stages of medical study, some in the clinical while others in pre-clinical years. This raises questions about differences in learning effectiveness.

Objectives:

To compare student performance in a forensic medicine course of students in two curricula that deliver the subject at different levels, one pre-clinical (third-year) and another clinical (fifth-year).

Methods:

This study was a 5-year retrospective study comparing MCQ scores in a forensic medicine course of third-year and fifth-year medical students of different medical schools who were taught by the same instructors using similar contents and were evaluated by an examination of similar difficulty.

Results:

There were 1,063 medical students in the study, with 782 being fifth-year clinical students and 281 being third-year pre-clinical students. The average score of fifth-year medical students was 76.09%, compared to 62.94% in third-year students. The difference was statistically significant ($p < 0.001$; t-test).

Conclusions:

Scores of students studying forensic medicine in their third year were significantly lower than those who studied in the fifth year. Teaching forensic medicine during the pre-clinical years may be too early and students may not understand the clinical contents well enough.

Take-home message:

Attention should be paid to ensure adequate clinical background before teaching forensic medicine, especially in pre-clinical students.

CUMULATIVE GRADE POINT AVERAGE PREDICTS COLLEAGUE SATISFACTIONS TO MEDICAL GRADUATES

Author(s): Tiansri K, Subhaluksuksakorn P, Aobklangwarit K, Yimsabai R

Institute of Medicine, Suranaree University of Technology

Presenter: Kulsiri Tiansri

Introduction:

Learning outcomes of medical educations can presented in many ways. Colleague satisfaction survey is one of many tools to evaluate our graduates' outcome. This study aimed to assess correlation of cumulative grade point average (GPAX) and colleague satisfaction of our medical graduates.

Methods:

A colleague of our medical graduates completed a questionnaire on satisfaction to the graduates on 6 domains: morality, knowledge, cognitive skills, communication skills, technological skills and overall performance. The satisfaction scores were evaluated by rating scale divided in 5 levels. Data was analyzed by Pearson correlation test to assess between GPAX and colleague satisfaction scores.

Results:

There were 677 participants who evaluated our 84 graduates. The average colleague satisfaction scores of all 6 domains were 3.90 – 4.04. The GPAX had a significant positive correlation with colleague satisfaction scores on morality, knowledge, cognitive skills and technological skills (p-value = 0.011, 0.001, 0.007 and 0.007 respectively) but was not correlated with colleague satisfaction scores on communication skills and overall performance. Increasing GPAX 1 point probably increase the morality satisfaction scores 0.254 point. (p-value < 0.001)

Conclusions:

High GPAX graduates will have high colleague satisfaction scores on knowledge, cognitive skill, technological skills and morality. The colleague satisfaction scores on communication skills and overall performance do not correlated with GPAX.

Take-home message:

The doctor should be believable performance with good communication skills. Improvement of performance and communication skills especially in high GPAX students is a challenge for our institute.

EVALUATION OF A NEW PROCESS ENLISTING VOLUNTEER JUNIOR ACADEMIC TITLE HOLDERS TO PROVIDE QUALITATIVE FEEDBACK ON A YEAR 2 SCHOOL OF MEDICINE ASSESSMENT HURDLE

Author(s): Clarey S, Fitzmaurice L, Brotchie K

Griffith University School of Medicine

Presenters: Susan Clarey and Liz Fitzmaurice

Introduction:

A Case Report about a patient seen during Hospital Based Clinical Training (HBCT) is a written Clinical Skills hurdle assessment Introduction in Year 2 of Griffith University MD Program.

In previous years, students have been given a result of either satisfactory or unsatisfactory according to a marking rubric with no qualitative feedback on their performance.

In 2015 alumni from Griffith University Medical School have been engaged to mark the reports using the rubric and to offer the students qualitative feedback. Many of these alumni are now working in rural and regional areas.

The Academic Title Holders (ATH's) will be instructed to forward any failed or borderline reports to Academic Staff for final determination and advice to students about resubmission.

Method:

The experience of marking and the attitudes of ATH's to the marking process will be explored using an electronic survey. Exploration of providing student feedback, any challenges, the impact of the workload and their own reflection will be included.

Qualitative information from students will be sourced using group discussions generated at the end of a PBL session, including the quality of the feedback provided and whether this met the students' learning needs.

Results:

Alumni have already shown enthusiasm and a readiness to be involved in this task.

Evaluation of the process of moving away from a binary summative assessment to a qualitative feedback on performance will be completed by September 2015..

Conclusions:

The use of alumni ATH's to improve an assessment process was evaluated.

Take home message:

Delegating meaningful tasks to volunteer Academic Title Holders who are geographically dispersed can be a positive experience for all parties concerned.

EVALUATION OF STUDENT PREPAREDNESS DURING EARLY CLINICAL PHASE: EFFECT OF INTRODUCING PRE-CLINICAL PHASE HOSPITAL ROTATION POSTINGS

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Presenter: Chow W

Session 2T

EMPOWERING STUDENTS TO BECOME PATIENT CENTRED DOCTORS. AN EVALUATION OF THE IMPACT OF THE HEALERS ART COURSE IN AN AUSTRALIAN MEDICAL SCHOOL

Author/s Anderson, K*, Thomson J, Haesler E.

Australian National University Medical School.

Introduction The Healer's Art (HA), an elective medical school course developed by Rachael Remen through the Institute for the Study of Health and Illness (ISHI, CA, USA) was introduced at the Australian National University Medical School in 2010. Delivered to first year students it aims to affirm humanistic qualities in medicine and empower students to continue to value these qualities as they progress through their medical career. Now in its sixth year we have been able to look at the impact as our early participants have now become junior doctors.

Purpose: This presentation will explore the impact of the Healer's Art course and look at its effect six years later. Qualitative interview data will be presented from current junior doctors who have undertaken the course to clarify in what way it has sustained them and enhanced their patient centred-ness.

Results: *"Being in the first group to have participated in The Healer's Art program, and having the opportunity to explore topics of humanism in medicine, I can honestly say that it has had a positive influence on my doctoring. I feel more comfortable and confident in my patient-doctor relationships and find myself taking a more holistic approach to my patient care."* Resident medical officer, Canberra Hospital

Discussion: Junior doctors who have undertaken the Healer's Art describe it as having a lasting effect on their confidence and compassion as junior doctors. It has helped them to affirm their role as "healers" and survive the hidden curriculum in medicine.

ARE WE FOSTERING PATIENT-CENTRED ATTITUDES IN MEDICAL STUDENTS? ANSWERS FROM AN OBSTETRICS AND GYNAECOLOGY ROTATION

Author/s

Tregonning A¹, Carmody D¹, Carr S²

Institute

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Introduction

Effective patient-centred care has been shown to have important benefits in patient satisfaction and improved health outcomes. These outcomes include psychological adjustment, the understanding and adherence to treatment, symptom resolution and pain control.

Purpose

To explore how one Obstetrics and Gynaecology curriculum may facilitate the development of patient-centredness in medical students and what factors may influence the students' attitudes to patient-centredness.

Questions for exploration

Is patient-centredness best developed through clinical placements that role model the practice of patient centred care?

Method

This year-long descriptive mixed methods study was conducted with 180 Year 5 medical students (of a six year undergraduate program) undertaking a 10 week obstetrics and gynaecology term at the University of Western Australia.

Students completed the Patient-Practitioner Orientation Scale (PPOS) at the beginning and end of the placement. Student focus groups were used to explore the determinates in the students' learning influencing attitudes towards patient-centred care.

Results

Preliminary analysis identifies small shifts in students' patient centeredness behaviours and attitudes. The students identify a range of factors for this change that relate to the clinical immersion offered in the attachment, the role modelling displayed and the culture of the learning environment. The complete findings from the thematic analysis will be presented.

Discussion

The development of patient-centred care attitudes in students is facilitated by clinical placements that model the patient focused care and challenges students to reflect on the skills that promote a patient-centred practice.

YOU SAY PATIENT, YOU MEAN...

Author/s

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Institute

¹ Clinical Assistant Professor, Dept of Pediatrics, Faculty of Medicine, UBC, ² Professor, Faculty of Medicine, The University of British Columbia

Introduction/background:

While the existence of patients is often simply assumed, without them physicians and the health care system would not exist. Although we have extensively studied and theorized physicians and the health care system itself, defining who and what a patient might be remains largely uncharted territory.

Purpose/objectives:

- To use a Butlerian (2006) lens to understand how the patient role is constructed through discourse
- To understand how demands such as curricular design, care provision and workplace-based training may foreground different aspects of the patient role in interactions with physicians

Issues/questions for exploration or ideas for discussion:

- Are there other discourses shaping the patient role?
- How can we work with trainees to help them to understand the roles that the patient inhabits?
- Can we use discussion about patient discourses to encourage reflection in trainees about the discourses that shape them as physicians?

Results:

Several operative discourses are at play in defining the patient role, including: *sick person-as-patient*, *patient-as-educational commodity*, *patient-as-disease category*, *patient-as-person-making sense of illness experience* and *patient-as-marginalized actor*.

Discussion:

Individuals uniquely embody a discursively constructed patient role, performing it in myriad ways. This performance is nonetheless limited by the horizons of what the role has been historically and the identities it makes possible. The above discourses may all be operating simultaneously in the same training context. We must train ourselves to mindfully tack back and forth across them and consider training our learners to cultivate this *reflective* positioning themselves. Further, medical professionals must consciously develop *reflexive* insight about how their own social, cultural and historical traditions have positioned their understanding of patients.

References

Butler J. *Gender Trouble: Feminism and the Subversion of Identity*, New York: Routledge Classics 2006.

ARTS AND HUMANITIES: "SO WHAT" IN THE UNDERGRADUATE MEDICAL CURRICULUM?

Author/s

Fessey C, Boursicot K

Institute

¹ St. George's Medical School University of London, ² Lee Kong Chian School of Medicine

Title

Arts and humanities: "so what" in the undergraduate medical curriculum?

Introduction

Doctors encounter diversity in practice and the self-directed curriculum ought to support this. We recently expanded options to include literary criticism, history, philosophy and the visual arts. These options have created strong demand and inspired students and staff to transform their self-directed learning experiences in MBBS.

Purpose/objectives

Humanities challenge taken for granted perspectives and student evaluations show that engagement strengthened their insights on self and other. Senior students valued an opportunity to get off the conveyor, expand horizons and analyse predispositions more critically, to 'think outside the box'. Most students reported surprise, an increased cultural awareness and some an 'inner artist'.

Issues and questions for discussion

- What kind of doctors will this enable us to produce and why is that important
- What the students said
- Resources, faculty volunteering and payments
- Criterion based assessment scheme to anchor the diversity
- Sustainability

Results

- Evidence on options and curriculum approaches- a pictorial format
- Student course evaluation data all years for MBBS – tables and pictures

Discussion

Students reported their choices engendered a clearer awareness of culture and new propensities for its creation –an inner artist revealed! Options were fun and students deepened meta-cognitive awareness of their preferences for learning and for using knowledge in transformative ways. They built dark rooms, sketched during elective attachments and constructed novel mediums to exhibit i.e. video presentations on enhanced hand and eye coordination. We share some of this evidence of a developing cultural creativity and engagement.

'COMPASSION...THE FIRST EMOTION DITCHED WHEN I AM BUSY'

Author/s

Ms. Lorna Davin – PhD Candidate UQ SOM

Medical Education Officer, King Edward Memorial Hospital, WA

Co-authors:

Prof Jill Thistlethwaite - Principal Supervisor. (Adjunct Prof) UTS

Dr Emma Bartle – Associate Supervisor, UQ.

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A/Prof Di Eley – Associate Supervisor, UQ

Institute

¹ University of Queensland, ² King Edward Memorial Hospital, ³ University of Technology Sydney

Background

A considerable body of literature exists addressing the transition of medical students and junior doctors to practice, yet researchers continue to question, how, for some, their humanistic attributes erode over time.

Purpose

This thesis asked junior doctors – ‘how have you learned to express compassion for your patients when working in the clinical context?’ Reflecting the interpretative nature of this longitudinal study, narrative was generated from eight medical students using reflective journals and unstructured interviews as they transitioned to their first year of medical practice.

Issues

The interns’ stories illustrated how they struggled to maintain their aspirations to be compassionate doctors when confronted with the complexity and competing demands of practice. Emotional vulnerability emerged as the overriding theme framing their learning trajectories.

Results

The interns’ reflections uncovered a previously untold narrative of how compassion, a pro-social moral emotion, was substituted for a more reductionist safety ethic where patient care became a reified act of patient management.

Discussion

Medical educators need to promote a culture where safe, engaged connection replaces detached concern, and self-compassion, awareness and understanding are cultivated to guard against contempt and cynicism.

Session 2U

THE ATTITUDES OF AUSTRALIAN MEDICAL STUDENTS TO THE INCORPORATION OF HEALTH IMPACTS OF CLIMATE CHANGE IN THE MEDICAL SCHOOL CURRICULUM: SURVEY RESULTS FROM FOUR UNIVERSITIES

Author(s): Horton G¹, Magin P¹, Blashki G², Pond D¹

¹ The University of Newcastle, ² The University of Melbourne

Presenter: Dr Graeme Horton

Introduction/background:

Medical curricula need to be shaped by the determinants of health and there are calls from peak health authorities for the health impacts of climate change to be included. A humanist approach to curriculum development takes into account the value systems, perspectives on scientific evidence and problem-solving capacity of stakeholders.

Purpose/objectives:

All medical students at four Australian universities were sent a survey in 2013 to explore views on the health impacts of climate change in the medical curriculum.

Issues/questions for exploration or ideas for discussion:

Students were asked about the threats to health posed by climate change, the role of doctors in addressing them and what methods of learning about climate change would be most beneficial.

Results:

82.7% of the 283 respondents (RR=8.7%) agreed that it is important that Australian medical students are educated about the health impacts of climate change. Those agreeing were more likely to be female ($p<0.01$), speak a language other than English at home, ($p<0.05$) and less concerned that the inclusion would cause a reduction in basic science teaching ($p<0.01$). 76.3% of respondents agreed that climate change topics have the potential to add interest to public health, with seminars and ethical debates considered most beneficial.

Discussion:

There is student interest in climate change as it relates to medical education. Medical curriculum developers need to consider differing perspectives within the student body when planning and delivering learning experiences in this area.

IMPACT OF A COURSE IN MIND-BODY MEDICINE ON MINDFULNESS, PERCEIVED STRESS AND EMPATHIC CONCERN IN MEDICAL STUDENTS

Authors: Haramati A¹, Harwani N², Motz K³, Graves K⁴, Amri H², Harazduk N³

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Presenter: Prof Aviad Haramati

School of Medicine, ⁴ Dept of Oncology, Georgetown University Medical Center

Background:

Medical students exhibit declines in empathy and high rates of burnout. Yet curricula lack interventions that foster mindfulness, which can improve empathy and decrease burnout. Our goal was to determine whether participation in a mind-body medicine (MBM) course would enhance mindfulness and affect students' stress and empathy.

Summary of Work:

Georgetown University School of Medicine offers an 11-week course to expose first-year medical students to mind-body approaches (e.g. meditation and guided imagery). The sessions also include sharing openly and listening without judgment. Two groups of first year medical students (n=118) completed the surveys before and after the course. Instruments included: *Perceived Stress Scale* (PSS), *Freiberg Mindfulness Inventory* (FMI), *Positive and Negative Affect Scale* (PANAS), and the *Interpersonal Reactivity Index* (IRI).

Summary of Results:

Significant increases ($P < 0.001$) were observed in mindfulness (FMI), positive affect (PANAS) and empathic concern (IRI), while declines were seen in perceived stress (PSS) and negative affect (PANAS). Furthermore, the changes in perceived stress and affect were significantly correlated ($P < 0.001$) with improvements in mindfulness.

Conclusions:

Participating in a MBM course is effective in enhancing traits such as mindfulness, positive affect and empathic concern, while reducing students' perceived stress and negative affect. Further, the mindfulness level was an important predictor for the changes in perceived stress.

Take Home Message:

Fostering mindfulness through an experiential MBM course may decrease student stress and enhance emotional intelligence. Such curricular interventions may promote better physician-patient communication and improve the quality of health care.

PROFESSIONALISM IN MEDICAL SCHOOL CLERKSHIP: DEVELOPING SELF LEARNING MODULES (SLM)

Author(s): Byszewski A^{1,2}, Petit D¹, Lochnan H^{1,2}, Bilodeau A^{1,3}, Hendelman W¹, Yang H^{1,4}, Stodel E⁵, Forgie M^{1,2}

¹ Faculty of Medicine, University of Ottawa, ² Department of Medicine, The Ottawa Hospital, ³ The Montfort Hospital, ⁴ Department of Anaesthesia, The Ottawa Hospital, ⁵ Principal - Learning 4 Excellence

Presenter: Dr Anna Byszewski

Introduction/background:

A national survey of professionalism curricula in the 17 Canadian medical schools conducted in 2007 and again in 2012 confirmed that most schools do not include formal instruction in professionalism during clerkship. Once in clinical rotations, professionalism is taught by informal role modelling.

Purpose/objectives:

Content for a clerkship curriculum was developed based on professionalism concerns raised in the National Graduation Questionnaire, and as well a needs assessment of medical students at the University of Ottawa.

Issues/questions for exploration or ideas for discussion:

A key challenge identified is that clinical clerks are frequently dispersed geographically, indicating the need for a learning modality that permits distance and independent learning. The goal of this project was to develop 4 self learning modules (SLM) which would be available on-line for students to complete during clerkship.

Results:

Four mandatory on-line SLM were developed, each with a specific theme and objectives: 1) Mistreatment and Disruptive Behavior in the Learning Environment 2) Communication 3) Ethics/Consent Issues and 4) Boundary Issues. Each SLM consists of a pre-test and post -test, as well as several cases relevant to the theme and links to resources and pertinent policies.

Discussion:

A formalized professionalism curriculum with explicit messages can promote students to develop attributes necessary in developing professional identity in the clinical milieu. This framework can assist other schools to ensure professionalism attributes are emphasized during clerkship, in using a flexible on-line format.

WHERE ARE OUR GRADUATES NOW? THE INFLUENCE OF CURRICULA ON THE CAREER AND LIFE PATHWAYS OF GRADUATES.

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Presenter: Ms Jackie Herkt.

Introduction/background:

The researchers used the occasion of our 1000 registrable graduate, to frame a survey, to which we attempted to recruit as many graduates as possible. Curriculum reviews are normally undertaken related to current practice, future practice expectations, and utilise the results of recent graduate evaluations. Although there have been some retrospective reviews there are few published reviews undertaken over extended periods of a graduates practice experience. A research project was set up to capture this data.

Purpose/objectives:

This presentation will discuss the findings and encourage others to look at the impact of education on the careers of health professional graduates. It is anticipated that the findings from this research and research similar to this could be used to shape future curriculum, priorities and the diversity of career pathways of future students.

Results:

Over 540 participants completed aspects of the ethically approved anonymous online survey. Questions were asked related to; current work situations, clients and interventions, professional development and practice opportunities. The survey also sought to establish the impact of the knowledge gained from the undergraduate education programme on practice and life as a whole.

Discussion:

This presentation will provide insights into the impact of the education programme on graduates, lives and career pathways. It will indicate that whilst we prepare graduates for a known health career that over time this knowledge contributes in many ways to the graduate, and the community in which graduates work and live.

WRESTLING WITH STIGMA - CHANGING MEDICAL STUDENTS ATTITUDES ABOUT MENTAL HEALTH SERVICE USERS?

Author(s): Gordon S¹, Ellis P^{1,2}, Huthwaite M¹, Gallagher P²

¹ Department of Psychological Medicine, University of Otago, Wellington, ² Medical Education Unit, University of Otago, Wellington

Presenter: Prof Pete Ellis

Introduction/background:

Levels of stigma against mental health service users increase during medical students training. In contrast, contact with service users decreases stigma in the general population. We hypothesize that a service-user led programme focusing on practical application of the recovery model and engagement with service users in recovery, rather than acute distress, will reduce medical students' level of stigma and increase positive perspectives on mental health.

Methods:

A service-user led collaborative process established key learning outcomes to increase understanding of, and skills in, promoting recovery.

Penultimate year psychiatric attachments now include up to 35% spent in service-user led NGOs, actively involved in discussions with service users, reflecting on these, and in service-user led sessions on principles and application of recovery theory. Attitudes are assessed before and after the attachment, and at 3 months.

Results:

Results from the 2015 year will be presented.

Conclusions:

We anticipate similar levels of stigma at outset to previous cohorts, and lower levels subsequently. Our previous efforts to reduce stigma among medical students have been only transiently effective. We hope this substantive commitment to engagement with service users will be more enduring.

Take-home message:

Stigma against those experiencing mental distress is unacceptably high among health professionals. Innovations to reduce this are required to improve the health, and health care experience, of mental health service users. Active engagement with mental health service users in recovery offers one such approach.

LONGITUDINAL TRACKING OF SELF-REPORTED STUDENT EMPATHY FROM PRE-MED TO YEAR 1 MEDICINE

Author(s): Wu C, Humphreys L, Chan K

School of Medicine, Griffith University, Gold Coast Campus, QLD

Presenter: Mrs Linda Humphreys

Introduction/Background:

Delivering compassionate patient-centred care is a core value of the medical profession and research has highlighted empathy in doctors as a personal quality that has positive effects on patient care and clinical outcomes alongside increased physician job satisfaction and reduced levels of burnout. However, empathy in medicine is challenging and has been seen to decline over time during medical training in some cases.

Purpose/Objectives:

This research seeks to track self-reported student empathy following completion of a pre-medicine undergraduate Human Skills for Medicine course and as students transition through First Year Medicine Communication Skills and History training.

Method or Issues for exploration/ideas for discussion:

Davis' Interpersonal Reactivity Index questionnaire was the self-reporting tool used for empathy measurement, completed at the commencement and end Human Skills for Medicine training in 2014, and at 3 timepoints as students progressed through Year 1 of Medical School in 2015. Paired t-tests were used to analyse results.

Results:

Preliminary findings showed no significant differences in overall mean empathy scores after completion of Human Skills for Medicine Training. However, female students showed a marginal but statistically significant increase in the IRI-PT and the IRI-EC subscales and males showed no change.

Discussion:

Whilst three months of undergraduate Human Skills for Medicine training showed no major impact on overall self-reported empathy it is of interest to continue to track student empathy to see how medical school training impacts and whether any changes are sustained. It is also useful to further investigate the gender differences indicated from preliminary results.

Session 2V

THE TEACHING OF PROFESSIONALISM: WHY IS IT SO HARD?

Author: Wilson I

University of Wollongong

Presenter: Prof Ian Wilson

Introduction/background:

Recent research, including a BEME report has emphasised the difficulties in defining and teaching professionalism. All medical schools do teach professionalism but there is no evidence to support one method that is superior to the other.

Purpose/objectives:

This presentation will explore the different conceptions of professionalism and how these conceptions do not provide guidance on the best method of teaching.

Issues/questions for exploration or ideas for discussion:

Professionalism has been described as a series of behaviours or something inherent in the person. Each of these descriptions results in a different pedagogy. Neither pedagogy nor a middle path results in successful outcomes. Is there a problem with the conceptions of professionalism or is there something about medical education that undermines the effectiveness of the current pedagogies?

Results:

This presentation will explore the impact of the hidden curriculum on students and their understanding of professionalism. The hidden curriculum is a powerful influence on students and doctors in training. It has a significant impact on professional identity and thus on the overall culture of medicine.

Discussion:

Is it possible to overcome the impact of the hidden curriculum and change the culture of medicine? This presentation will explore options.

Session 2W

INTERPROFESSIONAL PROFESSIONAL EXPERIENCE (IPE) PLACEMENTS - PLANNING FOR THE FUTURE WORKFORCE PHARMACISTS IN GENERAL PRACTICE

Authors: Todd A¹, Radford J¹, Ogden K¹, Marlow A², Woodroffe J¹, Bull R³, Mirkazemi, C⁴, Dienaar R⁴, Gardner T¹

¹ Launceston Clinical School, School of Medicine, University of Tasmania, ² Faculty of Health Science, University of Tasmania, ³ School of Health Sciences, University of Tasmania, ⁴ School of Pharmacy, University of Tasmania

Presenter: Dr Jess Woodroffe

Background:

Providing patient centred care for people living with complex chronic conditions is best achieved through a team based approach. Pharmacists play a key role in primary health care, most notable in the quality use of medicines. Most undergraduate health students are educated in discipline specific programs with limited exposure to authentic interprofessional educational opportunities. Careful curriculum planning is required to ensure IPE placement activity is considered the norm rather than the exception. Similarly, developing assessment criteria that is sensitive to individual discipline requirements whilst acknowledging the nature of the IPE activity is important.

Purpose:

Assessing undergraduate performance domains in a non-discipline specific work integrated learning environment (WIL) requires relevance to all disciplines and new assessment methods for preceptors. Based on existing nursing and medical student programs, a WIL model for pharmacy students in General Practice is being planned at the University of Tasmania. This poster will show the results of mapping Entrustable Professional Activities (EPAs) and their underlying competencies.

Discussion:

This paper is based on one core question: If clinical supervision is provided by another discipline, is there a way to ensure the clinical supervisor has an effective core assessment tool for all students that can be mapped back to discipline specific competencies that meet discipline assessment requirements?

Take home message:

The development of valued assessment tools to be used by GPs or pharmacist supervisors, to enhance this curriculum innovation, is the next stage in development.

CHANGES IN SELF-REGULATED LEARNING DURING THE FIRST CLINICAL YEAR

Author(s): Cho K¹, Marjadi B², Langendyk V³, Hu W⁴

¹ School of Medicine, University of Western Sydney, ² School of Medicine, University of Western Sydney, ³ School of Medicine, University of Western Sydney, ⁴ School of Medicine, University of Western Sydney

Presenter: Mr Kenneth Cho

Introduction/background:

Self-Regulated Learning (SRL) is the ability of learners to proactively select and use different strategies to reach learning goals. With the need for physicians to be life-long learners, there has been a push to promote SRL. But SRL cannot be assumed to develop automatically in the clinical environment. Numerous authors have suggested learners are not always successful in developing their own strategies and physicians may be unskilled at certain aspects of self-regulation.

Purpose/objectives:

To describe the changes in SRL during the first clinical year. To identify factors associated with changes, including order of early clinical attachments, previous clinical exposure, student-reported supervisor evaluation and academic achievement.

Issues/questions for exploration or ideas for discussion:

- Are the observed changes an adaptive survival mechanism?
- Can SRL profiles of students be used to identify successful adapters and to assist strugglers?

Results:

146 survey responses from students at the beginning, and during their first clinical year (n=73). After 10 weeks, students had decreased levels of metacognition ($p<0.001$), increased levels of extrinsic goal orientation ($p<0.007$), self-efficacy ($p<0.001$) and usage of rehearsal as a learning strategy ($p<0.3$).

Discussion:

Results suggest students make cognitive and behavioural adaptations to the clinical environment within their first 10 weeks. We will present results from multi-linear regression and qualitative analysis to further explain these changes.

STRATEGICALLY IMPLEMENTED POSTGRADUATE GLOBAL HEALTH EDUCATION PROGRAM IN A MEDICALLY UNDERSERVED AREA IN JAPAN

Author: Gomi H

Mito Kyodo General Hospital, University of Tsukuba

Presenter: Dr Harumi Gomi

Introduction:

Needs to develop physicians in clinical infectious diseases have been increasing in Japan due to the emergence of global outbreaks. The Center for Global Health, Mito Kyodo General Hospital (with approximately 270 beds), University of Tsukuba has been launched since 2014. The area is known to have lowest number of medical doctors per population in Japan. This is a self-reflection to evaluate the quality of the postgraduate subspecialty educational program.

Methods:

Evaluation of the training program was performed by referring to the requirements (16 items) of the Infectious Diseases Society of America. Each item was evaluated on a scale of 0-2 (0: not met, 1: partially met, 2: met). Strengths, weaknesses, opportunities, and threats of the program were also evaluated.

Results:

The total score was 21 (out of 32). Strengths identified were the mixture of cases, efficient consultation services, collaboration with general medical services, while weaknesses identified were less experience with HIV/AIDS, transplant, sexually transmitted diseases, tropical diseases.

Conclusion:

Self-reflection was useful for the quality assurance of the postgraduate global health education program in Japan. The diversity of patients should be improved by collaboration with institutions nationally and internationally.

Take home message:

Further improvement and evaluation are needed to establish global health education program in a medically underserved area in Japan.

DELIVERING ON SOCIAL ACCOUNTABILITY:

CANADA'S NORTHERN ONTARIO SCHOOL OF MEDICINE

Author: Strasser R

Northern Ontario School of Medicine

Presenter: Prof Roger Strasser

Introduction:

Northern Ontario in Canada is geographically vast and has a chronic shortage of health professionals. Recognizing that medical graduates who have grown up in a rural area are more likely to practice in rural settings, the Government of Ontario decided in 2001 to establish the Northern Ontario School of Medicine (NOSM) with a social accountability mandate to contribute to improving the health of the people and communities of Northern Ontario. This paper reports on outcomes in relation to NOSM's social accountability mandate.

Methods:

NOSM and the Centre for Rural and Northern Health Research (CRaNHR) used mixed methods that include administrative data from NOSM and external sources, as well as surveys and interviews of students, graduates and other informants.

Results:

92% of all medical students come from Northern Ontario with the remaining 8% from remote rural parts of the rest of Canada. 62% of NOSM graduates have chosen family medicine (predominantly rural) training with almost all the others (33%) training in other general specialties. NOSM offers residency training in family medicine and in eight other major general specialties. 94% of the doctors who completed undergraduate and postgraduate education with NOSM are practising in Northern Ontario.

Conclusion:

There are signs that NOSM is successful in graduating doctors who have the skills and the commitment to practice in Northern Ontario or other rural underserved areas; and that the rural distributed community engaged school is having a largely positive and pervasive socio-economic impact on Northern Ontario.

PERCEIVED BARRIERS TO THE IMPLEMENTATION OF NOVEL EDUCATIONAL MODELS IN THE WORKPLACE: AN EXAMPLE FROM PEER LEARNING

Author(s): Tai J¹, Canny B², Haines T^{2,3}, Molloy E¹

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Presenter: Dr Joanna Tai

Introduction/background:

An “ideal” peer learning activity matrix was developed through interviews and observations of students on clinical placements, to encourage productive peer learning in clinical settings. “Real world” limitations however frequently intervene: anticipating these and developing strategies may increase the success of educational innovations.

Purpose/objectives:

To highlight perceived barriers to change in educational methods in the workplace setting, semi-structured interviews were held with local educational leaders, using the peer learning activity matrix as an exemplar.

Qualitative data were thematically analysed to develop a series of related considerations and strategies.

Issues/questions for exploration or ideas for discussion:

How can we promote successful implementation of an educational innovation?

What factors should be considered in a clinical setting, compared with a pre-clinical learning context, when it comes to changing teaching and learning approaches?

Results:

Three themes were identified as impacting student and clinical teachers’ readiness to take on peer learning: culture, epistemic authority, and patient centred care. Participants identified that both students and educators needed to upgrade their skill-set, and be aware of the various ‘cultures’ that may prohibit new ways of learning in order for successful peer learning interactions to take place.

Discussion:

The considerations for implementation identified in this study, developed within a peer learning context, may have broader applicability to educational interventions. A “real world” approach which recognises potential pitfalls, hurdles and barriers may improve the success of new ideas, activities, or processes. The framework of strategies elicited within this study may address these barriers.

TEACHING BRIEF MOTIVATIONAL INTERVIEWING TO THIRD YEAR MEDICAL STUDENTS IMPROVES CONFIDENCE, KNOWLEDGE AND SKILLS IN HEALTH BEHAVIOUR CHANGE CONVERSATIONS

Author(s): Arora B, Edwards E, Nielson T, Brazil V, Stapleton P

Bond University

Presenter: Ms Bharti Arora

Introduction/background:

There is some evidence for including behaviour change counselling in medical curricula. Support for teaching brief motivational interviewing however, has not been rigorously tested. Some studies have omitted appropriate control conditions, and other work has not allowed for direct observation of skill transfer.

Purpose/objectives:

We examined the efficacy of teaching brief motivational interviewing to third year medical students using a 2 h workshop, followed by 3 x 2 h, practical training blocks using simulated patients. We used a quasi-experimental approach and improved the pre-post design with the inclusion of a waitlist control group.

Issues/questions for exploration or ideas for discussion:

Sixty two students volunteered. Knowledge (MIKAT) and confidence (MI Confidence Scale) was measured at pre- and post-training, and at 3-month follow-up. Skills (BECCI) were assessed during each practical training block.

Results:

Data were analysed using repeated measures ANOVA. Brief motivational interviewing knowledge and confidence significantly improved from pre to post (both $p < .050$) and remained significantly improved at 3-month follow-up (both $p < .050$), relative to controls (who were not trained) whose knowledge remained unchanged. Skills assessed during the simulated patient interactions indicated a significant improvement across the three practical training blocks ($p < .050$).

Discussion:

Our findings suggest that third year medical students can learn brief motivational interviewing skills and knowledge within a relatively short period of time. Future directions for teaching behaviour change counselling skills are discussed.

Session 2X

DEPTH OF FIELD: A REFLECTIVE LEARNING RESOURCE FOR HEALTH PROFESSIONS EDUCATORS

Author(s): Brand G, Etherton-Beer C, Saunders R, Dugmore H

The University of Western Australia

Presenter: Dr Gabrielle Brand

Facilitator/s: Dr Gabrielle Brand & Associate Professor Christopher Etherton-Beer

Background:

Changes in the higher education environment have increased the focus over the past decade on how educators might begin to teach and develop reflective skills in health professions students. In addition, changing professional requirements demand that students are adequately prepared to practice in today's complex health care systems, including responding to changing demographics of population ageing. To promote development of reflective practitioners with positive perceptions toward older people, the authors developed a "Depth of Field: Exploring Ageing" digital, reflective learning resource that uses photographs, narrative and small group work to enhance the reflective capacity in health professions students.

Workshop outcomes:

This workshop will showcase the reflective learning resource. Participants will have the opportunity to engage with the resource in small groups and provide feedback. The workshop is targeted at health professions' educators who are interested in using visual methodologies to enhance reflective practice.

Proposed Outline:

The interactive workshop will commence with outlining the background to the resource, including the importance of embedding reflective learning in health professions' curriculum. It will then lead participants through the innovative, consumer driven, reflective learning resource that uses documentary style photographs and audio-narrated film of 14 older WA people. The session will encourage participants to engage with the photographs, to pause, explore, reflect and share their own experiences by constructing shared storylines in small groups. The qualitative data from the pilot conducted with UWA nursing and medical students will be discussed, including how the use of visual images provides a valuable learning space for reflection. Workshop participants will have the opportunity to explore and consider ways in which they can embed/integrate visual methodologies as a catalyst to encourage individual and/or collective reflection in students.

REFLECTION ROUNDS: FOSTERING INNER PERSONAL GROWTH AS PART OF PROFESSIONAL FORMATION OF STUDENTS:

Author(s): Puchalski C¹, Blatt J¹, Huggard P²

¹ George Washington University, ² Auckland University

Presenter: Christina Puchalski

Purpose:

Health care system stresses can undermine the humanity of patient-clinician relationships. Patients are deprived of compassion and the honoring of their values. Clinicians burn out, losing touch with their true, “authentic” selves. The inner development of students can counter such deficiencies.^{1,2,3} Inner development, the responsibility of medical educators, is essential to *professional formation* -- a process in which students develop their own inner resources in order to address others’ suffering. It results in a “deepening commitment to the values and dispositions of the profession into habits of the mind and heart.”⁵

We developed *Reflection Rounds* as a way to provide this type of formation. Piloted in 18 US and Canadian medical schools, Reflection Rounds provides clinical students with a safe place within mainstream rounding culture to explore the emotional and spiritual effect of their patient interactions. (Spiritual is broadly defined as meaning/connectedness.) The purpose of this workshop is to provide participants with the preparation necessary to adapt Reflection Round for use in their home institutions.

Workshop Outcomes:

Participants will be able to:

1. Describe the Reflection Rounds approach to nurturing healthcare students’ inner formation
2. Perform a Reflection Rounds session within this workshop
3. Formulate strategies to incorporate Reflection Rounds into their home curricula

Proposed Outline:

15 min Introduction: Structure, theory and objectives of Reflection Rounds and the Spirituality and Health Competencies that inform the rounds.

60 min Practice: Participants in small groups conduct reflection rounds guided by workshop leaders.

15 min Discussion: Participants consider how they might implement G-TRR in their home institutions

Session 2Y

EMBEDDING NUTRITION INTO HEALTH EDUCATION: STRATEGIES AND DIRECTION

Author(s): Caryl Nowson¹, Sumantra Ray², Pauline Douglas³, Eleanor Beck⁴, Lauren Ball⁵, Gina Ambrosini⁶, Jennifer Crowley⁷, Robyn Perlstein¹,

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Presenter(s): Prof Caryl Nowson and Sumantra Ray

Background:

A key priority for addressing nutrition-related health issues is supporting medical and health care professionals to take an active role in promoting the importance of healthy eating to patients. However, medical and healthcare students across the world consistently report inadequate nutrition education and subsequently lack of knowledge and skills to include nutrition in usual practice. A collaborative group, with an established steering committee, has just been formed: The Australia and New Zealand NNEdPro Network. The Network aims to strengthen the nutrition education and competence of medical and healthcare professionals in Australia and New Zealand through innovation in research, resource development and delivery of learning opportunities. The partnerships facilitated through the Network will assist in the development of initiatives to embed nutrition into medical education, allied health and nursing education in Australia and New Zealand. This workshop aims to welcome interested medical practitioners, nurses, allied health professionals, educators and curriculum designers to the Network, generate important ideas about the priorities for the Network, and strategies to achieve its goals.

Intended outcomes:

- Development of a set of priorities for the Australia and New Zealand NNEdPro Network
- Collation of ideas from educators from University stakeholders interested in developing in nutrition teaching and curriculum initiatives in medical education, allied health and nursing.

Structure:

- Overview of NNEdPro Network in Australia and New Zealand and its key aims and objectives
- 30 minute "speed mentoring" workshop: five minute rotations at different topic stations to discuss development of priorities and activities for the ANZ NNEdPro Network

Who should attend?

Medical practitioners, nurses, allied health professionals, educators and curriculum designers

Level of workshop:

Intermediate

COULD THE USE OF ENTRUSTABLE PROFESSIONAL ACTIVITIES ENHANCE THE ASSESSMENT OF INTERPROFESSIONAL PRACTICE?

Author(s): Radford J, Woodroffe J, Gardner T, Marlowe A

University of Tasmania

Presenter(s): A/Prof Jan Radford, Dr Jess Woodroffe, Dr Toby Gardner, and A/Prof Annette Marlowe

Introduction/ Background:

While there is growing evidence pointing to the importance of interprofessional education, learning and practice in undergraduate healthcare training, a continual dilemma for educators is how such activity can best and most meaningfully be assessed both within and across disciplines. Drawing on many years of experience in designing and evolving clinical programs to deliver interprofessional practice (IPP) and learning (IPL) opportunities to healthcare undergraduates, we present the key issues we have been grappling with around assessment of students.

Purpose/Objectives:

Drawing on more than 10 years of learning and curriculum design, including qualitative and quantitative student and clinical facilitator program evaluation data within our Integrated Care and Residential Aged Care Facility teaching program, we explore the key issues surrounding the assessment of IPP. We propose the use of interprofessional competencies and capabilities as entrustable professional activities (EPAs) as a guide in moving forward. This presentation aims to 'unpack' the ongoing issues faced by educators who wish to implement meaningful IPL and IPP opportunities for students, to share experiences and learning. By doing this we can explore, situate and better place assessment at the centre of undergraduate learning opportunities that are focussed on better equipping students for interprofessional practice and workplace learning.

Issues for exploration/ideas for discussion:

We base our presentation around 2 key questions:

Does the audience think the use of Entrustable Professional Activities as an assessment tool in undergraduate IPP has face-validity?

Does the audience have other methods of assessing undergraduate IPP that students and supervisors value?

Session 2Z

PATIENT FOCUSED CASE BASED LEARNING IN PARAMEDICINE DISTANCE EDUCATION - STUDENT'S QUALITATIVE REFLECTION FOR A DE NOVO CONSOLIDATION COURSE

Author(s): Puckeridge N¹, Weber A²

Central Queensland University, School of Medical & Applied Sciences

Presenter: Nathan Puckeridge, BSc

Introduction:

This research project was designed to investigate student experiences and perceptions of a patient focused case based learning model during a course of knowledge and skill consolidation prior to graduation as Paramedic Interns. Patient safety and transition to practice are areas of concern in paramedic practice. By ensuring work ready graduate paramedics are safe to practice, employer stakeholders can be assured of the clinical education of newly graduated paramedic interns.

Methods:

The participants completed a structured online mixed method survey designed to view the participant's perceptions of patient focused case based learning to link prior knowledge with practice.

Results:

Participants were predominantly positive in their experience and perceptions of patient focused case based learning as a consolidation tool of prior knowledge. Age based demographics show younger adult students favour case based learning modes whereas older adult students may find this mode challenging

Conclusions:

Patient focused case based learning helped students draw links between prior science and foundational knowledge into patient presentation clinical scenarios. Further research is needed to investigate outcomes of learning from a patient focused mode to mold paramedic curriculum into the future.

Take-home message:

The theory and premise behind case-based and problem-based learning is predominantly subjective with limited objective data to verify that the mode constitutes a valuable learning model. Further research is needed to validate the mode from an outcomes basis and determine knowledge and skill degradation for practicing clinicians – graduate and vocationally qualified alike.

COMMUNITY ENGAGEMENT PROGRAMS AND SOCIALLY ACCOUNTABLE MEDICAL EDUCATION

Submitted by

Author(s): Jones R, Lavercombe M, Schwatz J, Lew S, Toussaint J

University of Melbourne School of Medicine. Western Clinical School

Presenter(s): Dr Mark Lavercombe, Dr Rachel Jones and Ms Juli Toussiant

Introduction/background:

There is a continual acknowledgement of the vital role effective communication skills play in doctor's abilities to deliver high quality healthcare. Our medical school further recognised the need to develop 'socially responsible' medical education programs.

Purpose:

Students were involved in three major community outreach programs: 'Community cookout', 'Teddy bear hospital' and 'Sons of the West'. These programs aim to meet the above objectives in a novel and interactive environment.

Issues/questions for exploration or ideas for discussion:

Involvement of students in community outreach programs arguably has a number of benefits.

Results:

Student and community participant surveys were collected and revealed a number of insights:

- Increased student confidence in communicating with special populations.
- Successful dissemination of health information to vulnerable populations.
- Fostering of relationships health care organisations and the community.
- A equitable exchange between students and the community

Discussion:

These programs arguably represent a unique approach to:

- The ethical obligation to strive for socially responsible medical education.
- Enhancing student's communication skills.
- Increasing knowledge of local health issues in a reciprocal exchange.
- Early enculturation of students into the importance of primary care and social justice.
- Community empowerment by removal of the inherent power differential existing in traditional healthcare environments.

DOES SEX REALLY MATTER? INVESTIGATING GENDER BIAS IN LAPAROSCOPIC SURGICAL SKILLS ASSESSMENT

Author(s): Calvert K¹, Acton J¹, Salfinger S^{2,3}

¹ King Edward Memorial Hospital, Subiaco, ² St John of God Hospital, Subiaco, ³ University of Notre Dame

Presenter: Dr Katrina Calvert

Introduction:

Alleged gender discrimination amongst the medical profession, in particular in the surgical specialties, is a topical and ongoing problem. Despite medical schools graduating more than 50% females, there remains a deficit of women in higher levels in surgical specialties. The question has arisen as to whether women may have inferior visuospatial skills, rendering them less proficient at surgery, particularly laparoscopic surgery.

Objectives:

We conducted an observational study at a meeting of the Australian Gynaecologic Endoscopy Society to assess the impact of perceived gender of surgeon on the assessment of laparoscopic surgical skills.

Questions for exploration:

Short video clips of laparoscopic procedures were shown to an audience of consultant and junior gynaecologists, with a computerised response system providing a Likert scale to rate the surgical skills demonstrated. The clips were identified as being either male or female, but were in fact all from a single operation done by an expert laparoscopic surgeon.

Results:

Senior gynaecologists showed no gender bias in their rating of surgical skills, with no difference between the rating of the 'male' clips compared with the 'female' clips. Junior gynaecologists were more likely to rate the clips identified as being from a female surgeon as demonstrating superior skill.

Discussion:

This study shows gender bias is not a concern in the rating of laparoscopic surgical skills by senior gynaecologic surgeons. There may be a positive bias towards women amongst junior gynaecologists, 75% of whom are female.

RESEARCH KNOWLEDGE AND SKILLS IN AUSTRALIAN MEDICAL SCHOOLS

Author(s): Cheek C¹, Hays R¹, Allen P¹, Hemmings L¹, Walker J²

¹ University of Tasmania, School of Medicine, ² Monash University, School of Rural Health

Presenter: Ms Colleen Cheek

Introduction:

Australian universities have been called upon to build research capability among clinicians and allied health professionals and research capacity in health services delivery. Australian medical schools provide opportunities for students to participate in research experiences. Formal research training and competencies will differ among the various professional entry medical courses and the different levels of qualification now offered. Each training site must meet the Australian Medical Council's accreditation standards and the Australian Qualifications Framework requirements for the level of qualification attained. In 2015 we sought better understanding of the ways Australian medical schools currently deliver research knowledge and skills, their methods of teaching, and assessment, and the perceived barriers to medical students receiving quality research experiences.

Methods:

A cross-sectional review of research curricula was conducted with all Australian medical schools offering MBBS courses in 2015. A self-report tool captured the degree type, entry requirement, research knowledge and skills taught, format of teaching, duration, assessment strategies, and barriers to students receiving quality research experiences in that community.

Results:

Collated knowledge and skills will be mapped against the Australian Medical Council's accreditation standards and the Australian Qualifications Framework and presented at the Conference.

Conclusions:

An understanding of how medical schools deliver research training to meet expected student outcomes may provide a knowledge base for those medical schools seeking change for higher quality research training.

Take-home message:

"I HEARD YOU HAD A BIT OF UPSET": JUNIOR DOCTORS' EMOTION REGULATION AS AN INDIVIDUAL AND INTERPERSONAL PHENOMENON

Author(s): Monrouxe L¹, Lall K², Lundin R², Webb K³, Rees C⁴, Mattick K⁵, Bullock A³

¹ Chang Gung Medical Education Research Centre, Chang Gung Memorial Hospital, ² School of Medicine, Cardiff University, ³ CUREMeDE, Cardiff University, ⁴ Faculty of Medicine, Nursing & Health Sciences, Monash University, ⁵ School of Medicine, University of Exeter

Presenter: Prof Lynn Monrouxe

Introduction/background:

Emotion regulation (ER) is the control we are able to exert over our emotions.(1) In medical practice, unregulated emotions impact on doctors' and patients' well-being.(2) The first two years of medical practice are emotionally demanding, with little known about how trainees manage their emotions.(3)

Purpose/objectives:

This in-depth follow-on study examines ER strategies employed by 2nd year junior doctors. Audio-diaries(4) and interviews with 26 Year 2 doctors (18 female, 8 male) across 4 UK sites collected narratives describing their preparedness-for-practice

Issues/questions for exploration or ideas for discussion:

RQ1: What strategies to junior doctors use to regulate their emotions during difficult work-related events? RQ2: To what extent does the wider team engage in the ER of junior doctors?

Results:

We identified 235 narratives for analysis. Trainees frequently narrated one or more ER strategies, particularly in situations where they felt unprepared. Most contained a single ER strategy, often employed during the event, rather than before or afterwards. Although participants narrated many strategies of how they personally managed work-related negative feelings, they also narrated times when the wider team rallied around to help them manage their emotions during and following difficult events.

Discussion:

The more interpersonal ways of dealing with emotions re-framed emotions and their regulation into a more distributed, rather than individual responsibility. With long-term emotional suppression implicated in psychopathology,(6) it is important to ensure that juniors are made aware of the range of ER strategies available, along with being provided emotional support by the wider team.

References:

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2. Rogers ME et al. (2014). Emotional labour; training stress, burnout, and depressive symptoms in junior doctors. *Journal of Vocational Education & Training*, 66(2): 232-248
3. Monrouxe LV et al. (2014). How Prepared are UK Medical Graduates for Practice?: Final report from a programme of research commissioned by the General Medical Council. *General Medical Council*.
http://www.gmc-uk.org/How_Prepared_are_UK_Medical_Graduates_for_Practice_SUBMITTED_Revised_140614.pdf_58034815.pdf
4. Monrouxe LV (2009). "Solicited audio diaries in longitudinal narrative research: a view from inside." *Qualitative Research* 9(1): 81-103.
5. Lundin RM et al. (in preparation). "I'd been like freaking out the whole night": Developing Gross' emotion regulation theory using junior doctors' preparedness narratives.
6. Gross JJ and John OP (2003). "Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being." *J Pers Soc Psychol* 85(2): 348-362.

BEYOND 'BRAIN DRAIN' UNDERSTANDING THE IMPACT OF INTERNATIONAL MEDICAL MIGRATION ON HEALTH SYSTEMS: A PILOT STUDY OF BRITISH DOCTORS IN NEW ZEALAND.

Author(s): Professor Louise Ackers* and Dr Anya Ahmed*

University of Salford, UK

Presenter(s): Prof Helen Louise Ackers and Dr Anya Ahmed*

Introduction/background:

This paper builds on extensive research by the authors on the causes and impacts of highly skilled migration and, more specifically, the international movement of health workers. It reports on some preliminary research undertaken in New Zealand in 2015 involving qualitative interviews with British doctors, nurses and midwives. Whilst previous research by the authors and others has focused on the impacts of human mobility in terms of human resource dynamics (labour shortages etc.) this paper considers the challenges these forms of mobility present to the fiscal basis of public welfare systems particularly during periods of austerity.

Purpose/objectives:

The authors plan to identify the tensions in the neo-liberal (human rights) based notions of individual freedom (to migrate) and the solidarity (reciprocity-based) assumptions underpinning universal public health systems. These dilemmas are creating fundamental, if unspoken, challenges to health systems and those involved in workforce planning.

Results:

The paper will present the results of exploratory qualitative research in New Zealand. These results will be contextualised within contemporary research on 'brain drain' in the health care sector and national and international (including European Union) policy analysis.

Issues/questions for exploration or ideas for discussion:

- To what extent should doctors and other healthcare professionals enjoy an unlimited freedom of movement? (a right enshrined in European Free Movement law, by way of example).
- What are the implications of unfettered individual mobility on human resource management systems and on the public funding of medical/healthcare training?
- What systems can be put in place to balance these tensions?
- Could forms of 'bonding' common in some low resource settings be acceptable and effective in high resource contexts?
- What potential exists for models of 'ethical recruitment' shaping the recruitment of health care professionals from low resource settings (by the UK NHS, for example).

THE HOSPITAL MORTUARY: A PLACE FOR LEARNING ABOUT DEATH...AND LIFE

Author(s): Chen J ¹, Chan G ², Tsang G ³, Tsang J ⁴

¹ Department of Family Medicine and Primary Care / The University of Hong Kong, ² Department of Anatomical Pathology / Queen Mary Hospital, ³ Department of Anatomical Pathology / Queen Mary Hospital, ⁴ Department of Family Medicine and Primary Care / The University of Hong Kong

Presenter: Dr Julie Chen

Introduction:

Having an opportunity to reflect on issues and personal views about death may better prepare medical students to care for dying patients. Doing so in a hospital mortuary, commonly regarded as a place only for storing dead bodies, may stimulate such introspection. In 2014-15, all third year medical students at The University of Hong Kong participated in a hospital mortuary visit where they discussed death and how the mortuary provides care after death. Students completed a questionnaire survey before and after the visit and their written assignments were analysed for recurrent themes.

Purpose:

We sought to assess the impact of a mortuary visit in shaping medical student attitudes towards death and the role of the mortuary.

Issues/questions for exploration or ideas for discussion:

How does setting affect learning?

What are effective ways to provide death education?

Results:

Students identified the mortuary as a place for mourning and grieving, and paradoxically, a place for life education. They also recognized the limitation of medicine in the face of death and were comforted knowing that compassionate care would continue even after death, in the mortuary. The idea of death still caused anxiety and students remained concerned about the difficulties in discussing death with patients.

Conclusion:

The mortuary visit allowed for the beginning of meaningful reflection on death and the positive role of the mortuary in patient care. A more extensive attachment may help students further consolidate and deepen perspectives.

BIBLIOGRAPHIC INFORMATION EVALUATION OF INTERVENTIONAL MEDICAL EDUCATION ARTICLES IN 1980-2012

Author(s): Bahramkhani L¹, Shirazi M², Mollaei Yazdan Abad Oliya A³ Zamanian H⁴, Karbasi motlagh M⁵, Bahramkhani F, Rahmati Najarkolai A⁷, Toni

¹ skill lab /Qazvin university of medical science/ bahonar BLV, ² Medical Education Department, School of Medicine, Tehran University of Medical S, ³ skill lab /Qazvin university of medical science/ bahonar BLV, ⁴ Vesal St- No 56, ⁵ Vesal St- No 56, ⁶ skill lab /Qazvin university of medical science/ bahonar BLV, ⁷ Vesal St- No 56, ⁸ mazandaran state

Presenter : Atena Najarkolai Rahmati

Introduction:

Despite medical education is a relatively new field, its scientific products are increasing rapidly. Due to the multitude of information and articles, the reserves management seems essential, especially in the context of integrated and systematic articles. However, there is not enough information about published articles in terms of distribution, applications and focus on the priorities. This study aimed to systematic reviews of the bibliographic information of all interventional articles of medical education (Due to their applicability in policymaking and reform programs) and reviews their content status in Iran between 1980 and 2012.

Methods :

In this cross-sectional study, all interventional papers in the field of medical education were searched in Iran during 1980 to 2012, in the databases such as: Medline, ERIC, CINAHL and Iranmedex. Initially 1202 paper by 2 reviewing were assessed, and with regard to the inclusion and exclusion criteria of study, the bibliographic information 82 articles were extracted. The variables were (subject, the author name, language, year, number of publication and organizational affiliation). Then they entered in Excel. Articles were categorized in 24 groups, according to the AMEE proposed headings list. Finally Data were analyzed using SPSS software. In this study Statistical Method was descriptive (frequency tables).

Results:

Totally, 13 articles were extracted from Medline, 4 articles from CINAHL and 65 from IranMedex. 63 articles (76.82%) were from 2006-2012. Most interventions have been focused on training methods (Article 49). In most articles samples were students and most intervention was workshop which has been referred to as educational intervention in 50 articles.

Conclusions:

Iran's share of medical interventional articles, in international databases such as Medline is much lower than of other sciences. So improving the quality of studies in this area seems to be essential. Our results indicate rapid growth of knowledge in medical education, especially in interventional studies in Iran. Therefore, future research in this area should be directed to meet the needs and priorities in our country.

Take home message:

Improving the quality of studies in medical interventional articles is required.

GETTING STARTED WITH SETTING PRIORITIES: DEVELOPING THE AGENDA FOR HEALTH PROFESSIONS EDUCATION RESEARCH

Author(s): Dennis A¹, Ajjawi R¹, Rees C²

¹ University of Dundee, Centre for Medical Education Scotland, ² Monash University, HealthPEER, Melbourne, Australia

Presenter(s): Rola Ajjawi,¹ Ashley Dennis,¹ Charlotte Rees²

Background:

In designing programmatic health professions education research (HPER), it is important to set priorities. Setting research priorities has become important within healthcare systems over the past 20 years¹. Recently, national priority setting exercises (PSEs) for medical and dental education research have been performed using different methods across New Zealand,² Canada³ and Scotland^{4, 5}. However, priorities are context specific and stakeholder dependent⁴. This workshop therefore provides the opportunity for individuals to consider the processes of developing a PSE within their own context (e.g. healthcare professional group, country).

Intended outcomes:

By the end of this workshop participants should be able to:

- 1) Identify key stakeholders and a recruitment strategy for a PSE;
- 2) Develop robust data collection and analysis approaches;
- 3) Determine criteria to inform final priorities and inform strategy.

Structure:

Homogenous groups will work together to identify how they might conduct a PSE within their own context. First, facilitators and participants will introduce themselves before the facilitators present examples of PSEs they have conducted.³ Next, groups will develop a plan for a context-relevant PSE, which they will present to the large group for discussion. We will conclude the workshop with any outstanding questions and a workshop evaluation.

Who should attend:

This workshop is targeted at individuals who may want to conduct a PSE within their own context. We particularly welcome participants who represent healthcare professions and/or countries where no PSEs have so far been conducted.

Level of workshop (introductory/intermediate/advanced):

Introductory.

References:

1. Lomas, J., Fulop, N., Gagnon, D., & Allen, P. (2003). On being a good listener: Setting priorities for applied health services research. *The Milbank Quarterly*, 81, 363-88.
2. Wilkinson, T.J., Weller, J.M., McKimm, J., O'Connor, B., Pinnock, R.E., Poole, P.J., Sheehan, D., Tweed, M.J., & Wearn, A.M. (2010). Programmatic research in New Zealand medical education: a national collaboration. *The New Zealand Medical Journal*, 123, 24-33.

3. Hodges, B.D., Albert, M., Arweiler, D., Akseer, S., Bandiera, G., Byrne, N., Charlin, B., Karazivan, P., Kuper, A., Maniate, J., Millette, B., Noyeau, E., Parker, S., & Reeves, S. (2011). The future of medical education: a Canadian environmental scan. *Medical Education, 45*, 95-106.
4. Dennis, A.A., Cleland, J.A., Johnston, P., Ker, J.S., Lough, M., & Rees, C.E. (2014). Exploring stakeholders' views of medical education research priorities: a national study. *Medical Education, 48*(11), 1078-1091.
5. Ajjawi, R., Barton, K., Dennis, A., Rees, C.E. (2015). Setting the agenda for dental education research in Scotland: A priority setting exercise including multiple stakeholders. Final report submitted to NES and Scottish Oral Health Research Collaboration Dental Education Research Group.

Session 3A

National Exams

Ronald Harden, AMEE, UK
Donald Melnick, National Board of Medical Examiners, USA
Terence Stephenson, General Medical Council, UK
Paul Worley, Flinders University, Australia
Nivritti Patil, University of Hong Kong (Chair)

This symposium will explore from different perspectives the merits and potential disadvantages of a national exam.

- 13:00-13:05 Introduction to the symposium and the presenters: Niv Patil (Chair)
- 13:05-13:15 National exams and a US perspective: Don Melnick
- 13:15-13:25 A national exam – a UK perspective: Terence Stephenson
- 13:25-13:35 A national exam – an Australian perspective: Paul Worley
- 13:35-13:45 Is a national examination the best way to recognise competence to practice medicine? Ronald Harden
- 13:45-14:20 Questions, comments & discussion with conference participants
- 14:20-14:30 Concluding comments from Chair and panellists

Session 3B

INTERPROFESSIONAL SIMULATION BASED TEAM TRAINING RESULTS IN A SUSTAINABLE INCREASED COMPETENCE IN EMERGENCY MEDICINE

Author(s): Kiessling A¹, Kuhl J¹, Amiri C¹, Arhammar J¹, Lundbäck M¹, Wallingstam C¹, Wikner J², Svensson R¹, Henriksson P¹

¹ Karolinska Institutet, Department of Clinical Sciences Danderyd Hospital, Sweden, ² Karolinska Institutet, Dep. of Clinical Science and Education, SÄÄdersjukhuset, Sweden.

Presenter: Prof Anna Kiessling

Aim:

The aim was to investigate the sustainable effects of simulation based team-training (SBTT) on professional competence in emergency medicine management.

Methods:

A prospective longitudinal design, exploring participants' learning four to six months after SBTT. Two questionnaires assessed global confidence in acute care situations; in acute interprofessional communication; and in own ability to handle acute medical care.

21 junior doctors, 20 nurses and 14 auxiliary nurses; respectively 37 medical students and 31 nursing students participated in four scenarios with interprofessional teams. Structured feedback was given.

Results:

All increased their global confidence in acute care situations from 5.3 (CI 4.9-5.8) before to 6.8 (CI 6.4-7.2) at follow-up ($p < 0.0001$). The confidence in acute interprofessional communication increased from 5.3 (CI 4.9-5.8) to 7.0 (CI 6.6-7.4) at follow-up ($p < 0.0001$). The students had the greatest gain. The confidence in own ability to handle acute medical care increased from 4.9 (CI 4.4-5.3) to 6.6 (CI 6.2-7.0). The students had a steeper increase from 3.3 (interaction $p < 0.0001$; CI 2.8-3.9) before to 5.7 (CI 5.2-6.2) at follow-up.

The global scoring of satisfaction with the SBTT was 9.3 (CI 9.1-9.5) and the probability to recommend colleagues to participate in SBTT was 9.9 (CI 9.8-10.0).

Junior doctors had a greater increase in global confidence in acute care situations as compared to nurses and auxiliary nurses ($p < 0.0001$).

Conclusions and take-home message:

Interprofessional simulation based team-training of emergency medicine management is an effective means to develop sustainable confidence in acute care situations; acute interprofessional communication; and own ability to handle acute medical care.

INCORPORATING INTERPROFESSIONAL EDUCATION AND PRACTICE WITHIN THE RADIATION ONCOLOGY DEPARTMENT AT THE ODETTE CANCER CENTRE TORONTO, ONTARIO, CANADA - CHALLENGES AND OPPORTUNITIES

Author(s): Szumacher E¹, DiProspero L², McLaney E³

¹ Department of Radiation Oncology , SHSC, University of Toronto, ² Department of Radiation Oncology University of Toronto, Ontario, Canada, Professional Leader, Rad, ³ Director Interprofessional Education Sunnybrook Health Sciences Centre , Toronto, Ontario, Canada

Presenter: Dr Ewa Szumacher MD,FRCP(C),MEd

Introduction

Interprofessional education and practice are integral to the vision of the Radiation Oncology Department at the Sunnybrook Odette Cancer Centre University of Toronto (UofT). Collaboration between radiation therapists, radiation nurses, radiation oncologists and other healthcare providers have led to the development of many successful initiatives.

Methods:

Review of the IPE activities related to major pillars: 1.undergraduate trainee education, 2.continuing education and 3.patient education. Undergraduate nursing and radiation therapy students have been undergoing clinical electives in breast and genitourinary oncology clinics. These activities include mentoring of undergraduate students during the Determinants of Health Care research course; Interprofessional Radiation Oncology monthly rounds for ongoing dialogue and fostering research collaborations among the members of the department from different professions, development of patient online education resources and development of the New Interprofessional Breast Cancer Geriatric Preassessment clinic.

Results:

The majority of these activities were evaluated using structured processes. Scholarship and research output from all of these interprofessional initiatives, such as manuscripts published in peer reviewed journals and presentation at the local, national and international meetings have been generated. This presentation will focus on the design, evaluation and outputs of interprofessional activities within the RO department at the OCC. Successes will be communicated and ongoing challenges will be explored.

Conclusions and Take home message:

Limited research resources, competing departmental priorities, time commitment and time protection for educational activities, budget constraints, and barriers in establishing collaboration with other centres in Canada and globally need to be addressed to support future sustainability and spread with respect to interprofessional education and care initiatives.

ASSESSING TEAMWORK IN INTERPROFESSIONAL CLINICAL EDUCATION

Submitted by Mr John Encandela

Author(s): Encandela J¹, Brissette D², Fahs D³, Gonzalez-Colaso R², Honan L³, Kennedy C¹, Martinez P³, Colson E¹

¹ Yale School of Medicine, ² Yale School of Medicine, Physician Associate Program, ³ Yale School of Nursing, USA

Presenter: John Encandela

Introduction:

Yale Schools of Medicine and Nursing piloted a longitudinal clinical experience (LCE) involving 32 first-year students from the medical, physician associate, and nursing education programs. An objective of this interprofessional education (IPE) initiative was to develop and assess clinical teamwork attitudes and skills among participants.

Methods:

LCE and matched control students completed previously validated pre- and post-test self-assessment scales measuring team skills and attitudes toward and readiness for interprofessional teamwork. Means were compared and t-tests performed. In a second method, 8 intervention and 8 control teams completed a 3-station OSCE. Evaluators, blinded to intervention and control groups, watched OSCE videotapes, using a rubric to assess teamwork. Mean ratings were compared between intervention and control groups, and inter-rater reliability was calculated.

Results:

Surveys showed consistent positive movement of LCE students on most scales from pre- to post-test assessment and more positive mean ratings among LCE students compared with controls. Some were statistically significant or near significant. The exception was for nursing students whose self-ratings decreased in attitudes and readiness. OSCE evaluator ratings were underway at this writing. Preliminary indications are that intervention students performed better than controls in team skills. Full results will be completed for the conference.

Conclusions:

Progress in the desired direction for most intervention students in attitudes, readiness, and team skills suggests a scaling up of the LCE program to further test these areas with larger numbers.

Take home:

Participants desiring to develop IPE clinical teamwork training initiatives for health professional students will be interested in both the process of curriculum development, student assessment, and program evaluation, as well as outcome results of this initiative.

EVALUATION OF A PILOT STRUCTURED INTERPROFESSIONAL LEADERSHIP PROGRAMME

Author(s): Poh C², LimW¹, Tan S¹, Lim E¹, Lim Y³, Lee C³, Yong K¹

¹ Tan Tock Seng Hospital (TTSH), ² Institute of Mental Health (IMH), ³ National Healthcare Group (NHG)

Presenter: Miss Siew Khoon, Heidi Tan

Introduction:

In response to the surging demand for interprofessional education among healthcare leaders, the National Healthcare Group (NHG) developed an interprofessional leadership programme (IPLP) to strengthen interprofessional leadership capabilities among junior healthcare leaders. A pilot run of the first IPLP curriculum was conducted and evaluated.

Methods:

We adopted the innovative pedagogical tenets of PACTS – Personna, Active experiential learning, Community of practice, Tools-centred and Stories-based sharing in our 5-day programme. We identified anchor and ancillary leadership tools that are important for effective relations-orientated and change-oriented leadership behaviours (Yukl, 2012). To facilitate transfer of learning to the workplace, participant-supervisor dyads were engaged in a learning contract, and participants wrote individual and team reflective portfolios of leadership tools application. Pre and post-programme surveys (n=32) and interviews (n=9) were conducted to evaluate learning outcomes. Semi-structured analysis was done and responses were evaluated using both quantitative and thematic analysis.

Results:

Among 32 participants, 22(69%) are clinical professionals (Medical, Nursing, Allied Health), while 10(31%) are administrative professionals. Participants highlighted that strengths of the programme include sharing by senior leaders(n=14), good programme flow(n=13), relevant role-play(n=13) and sharing within teams(n=8). Leadership tools were useful in the workplace, and participants' awareness of interprofessional leadership was raised. Overall, all participants were satisfied/very satisfied with IPLP and would recommend it to their colleagues.

Conclusions:

Results of the pilot IPLP will guide development of an effective and sustainable curriculum for up-scaling to cover 800 junior healthcare leaders each year within NHG.

Take-home message:

A multimodal learner-centred tools-based pedagogy was effective in the learning transfer of effective interprofessional leadership behaviors in junior healthcare leaders.

Reference:

Yukl, G. (2012). Effective Leadership Behavior: What We Know and What Questions Need More Attention. *Academy of Management Perspective*, 66-85..

Session 3C

HOW DO CLINICAL FACULTIES' EXPERIENCES OF ASSESSING CLINICAL TEACHERS IMPACT THE OUTCOMES OF OBSERVATIONAL LEARNING?

Author(s): SAIKI T, Imafuku R, Suzuki Y, Fujisaki K

Gifu University, Medical Education Development Center, Japan

Presenter: Prof Takuya Saiki

Introduction:

Whereas faculty development programs in clinical education have been often delivered by lecture and workshop in a conference room, assessing clinical teachers in the workplace as a part of observational learning has been rarely implemented. The purpose of this study is to examine how experiences of assessing clinical teachers' teaching with assessment sheets impact the clinical faculties' perceptions of clinical education.

Methods:

We have developed a one week faculty development program where Japanese clinical faculties visit a Canadian teaching hospital and observe clinical education in the different cultural context. Clinical faculties were encouraged to assess Canadian clinical teachers' teaching with the structured assessment sheets during the observation. Informal interviews to the clinical faculties were also conducted after the observation to gain a deep understanding of what they learnt. Assessment sheets and interview data were analysed by utilizing content analysis techniques.

Results:

Eight Japanese clinical faculties who joined the program embraced this experience and transformed their perceptions of clinical education. What they learnt through the observation and assessment were categorized into six domains: clinical teacher's case based teaching techniques, learners' behaviours, patient's involvement, the topic of medicine, principles of education, and creating learning climate. Such domains were fit with the categories suggested as "What clinical teachers in medicine need to know (Irby, 1994)".

Conclusions:

Structured observation and assessment of clinical teachers has an impact on transforming clinical faculties' perceptions toward teaching.

Take-home message:

Experiences of assessing clinical teachers in workplaces can be a powerful learning approach to faculty development.

KILLING A SACRED COW: A RANDOMIZED CONTROLLED TRIAL INVESTIGATING THE EFFECT OF PEER OBSERVATION WITH FEEDBACK ON THE TEACHING SKILLS OF JUNIOR MEDICAL EDUCATORS

Author(s): Calvert K¹, Carmody D¹, Tregonning L¹, McGurgan P¹, Mercer A²

¹ School of Women's and Infants' Health, University of Western Australia, ² Education Centre, Faculty of Medicine, Dentistry and Health Science

Presenter: Dr Katrina Calvert

Introduction:

Peer observation of teaching is a popular faculty development tool. The most frequent claim made for peer observation is that it enhances teaching skills, but robust evidence to support this claim is lacking.

Methods:

Thirty-three junior medical staff participants were observed by experienced faculty peer observers for two undergraduate case-based learning tutorials. Participants were randomised into a study group who received feedback on their teaching performance between the tutorials, and a control group who did not. Feedback was based on triangulated assessments from the peer observers, the tutorial students and the participants' self-assessments. The participants were observed a second time by a peer observer who was blinded as to their feedback status, and reassessed using the same triangulated approach.

Results:

Both the control and the study groups showed improvements in their self-assessment and student assessment scores. Only the study group showed improvements in the peer observer scores. There were no significant differences in the overall level of improvement between the groups.

Conclusions:

The provision of feedback made no difference to the improvement in teaching performance of these study participants.

Take home messages:

Feedback did not create an improvement in performance of junior educators in a randomized controlled trial setting. This implies that factors other than the provision of feedback, lead to the improvement of teaching skills in junior medical educators. Peer observation can improve teaching, but the results of this study suggest that the focus of the process should be to encourage reflection rather than as a feedback exercise.

RESIDENT AND STUDENT PERCEPTION EVALUATION BEFORE AND AFTER TRAINING RESIDENT AS UNDERGRADUATE TEACHERS (TRUTH) USING MAASTRICHT CLINICAL TEACHING QUESTIONNAIRE (MCTQ), A PILOT ANALYSIS BEFORE INCORPORATING TEACHING SKILL PERFORMANCE AS PART OF CORE PERFORMANCE FOR ENTERING RESIDENCY

Author(s): Fitriyani N, Bekti R

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Presenter: Dr Nurrahma Wahyu Fitriyani

Introduction:

Increasing awareness for patient safety and integrated teaching-service management in academic hospital in Indonesia have inspired residency program coordinators in our institute to call for reform action. Medical Education Unit has been called to propose conceptual framework for reform. It was then started by introducing the provision of teaching skill training among resident to bring about the strategic issues in postgraduate medical education among supervisor as well as directly strengthen the quality of competency attainment both for resident and clerkship students through teaching learning process. We conducted analysis to bring about the result of program evaluation as resource for arguments for establishing teaching skill as part of prerequisite ability performed resident before and along residency program.

Methods:

The data from clinical education theory based MCQ items, program evaluation questionnaire containing MCTQ administered before and after TRUTH were used as resource for analysis. MCTQ administered to clerkship students before and after training for impact evaluation purpose have also been used.

Result:

There was significant improvement of resident clinical education knowledge which correlated tightly with their MCTQ responses. Clerkship student, through MCTQ, perceived improvement of resident's teaching performance after TRUTH for assessing their learning.

Conclusion:

TRUTH outcomes have been perceived positively both by residents and clerkship students for learning improvement and it was assumed to increase resident's self esteem in teaching learning process as well as clerkship student learning quality.

Take home messages:

Teaching undergraduate students is an essential role and professional responsibility for resident which best to be core EPA for entering residency program.

ASSESSING PROFESSIONAL DEVELOPMENT IN THE HEALTH SCIENCES: PURPOSE ON THE PERIPHERY

Author(s): Weissinger P, Haramati A

Georgetown University Medical Center, Washington, DC USA

Presenter: Prof Aviad Haramati

Introduction:

The Teaching Academy strives to cultivate a community of medical faculty to support the educational mission. The strength of this model is peer-to-peer faculty development. However, faculty development often lies in the hands of voluntary committees with little training - and no compensation! They accept the challenge as an add-on to their other responsibilities. An additional challenge for those consulting in medical and other health science schools is the balance of two cultures: the basic sciences and the clinical focus.

A parallel challenge is collecting evidence to assess effectiveness. This presentation will share how one institution engendered faculty support and developed the structure while concurrently creating/launching the companion assessment plan, which allowed for data collection in real time rather than scrambling, looking for evidence of "success".

Methods:

Presenters will share their process to establish the teaching academy: communicating the need; developing goals; seeking administrative and faculty buy-in; and establishing open communication.

Results:

In less than six months, the *Teaching Academy for the Health Sciences* was accepting applications. Working groups developed the framework, rubrics, workshops, and application process. The inaugural installation occurs in fall 2015.

Conclusions:

Developing buy-in to a new program requires a common message, extensive communication, and dedicated people. The energy to launch the Teaching Academy was extended to develop the assessment plan, which is continually collecting and analysing data to determine program effectiveness.

Take-home message:

Because they are so closely tied, an assessment plan should be developed in tandem with the development of the program.

SYSTEMATIC EVALUATION OF TEACHING QUALITIES OF CLINICAL TEACHERS: PSYCHOMETRIC PROPERTIES OF THE MODIFIED SETQ TOOLS AND CROSS CULTURE CHALLENGES

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Presenter: Prof Ahmed Al Ansari MBBCh, MRCSI, MHPE, PhD

Background:

The importance of effective clinical teaching becomes crucial for future patient care. A strong clinical training therefore is essential to produce strong physicians capable to deliver high quality health care. Tools used to evaluate the teaching qualities of the medical faculty should be reliable and valid. This study investigates (i) the teaching qualities of clinical teacher, and (ii) assessing the reliability and the validity of the modified System for Evaluation of Teaching Qualities (SETQ) instrument.

Methods and Materials:

This cross sectional multicenter study was conducted among four teaching hospitals in the Kingdom of Bahrain. 298 Medical students were approached to evaluate 105 medical faculties for the academic year using the SETQ instrument. Instrument reliability was assessed by calculating the Cronbach's coefficient for the total scales and for each sub scale. Factor analysis was conducted to support the validity of the instrument.

Results:

A total of 125 medical students completed 1161 evaluations of 102 medical faculties. 75 of the clinical staff were male and 50 clinicians were female. Six domains were identified based on the factor loading from exploratory factor analysis. The factor analysis showed that the data on the questionnaire decomposed into 6 factors that represented 76.7% of the total variance. Cronbach's alpha was 0.94 and higher for the six scales on the student's survey and for the clinical teacher survey, Cronbach's alpha was 0.88.

Conclusion:

The modified SETQ questionnaire was found to be both reliable and valid, and was implemented successfully across various in the Kingdom of Bahrain.

Key words:

SETQ, Reliability, Validity

Take-home message:

The modified SETQ is a good tool to assess the clinical tutors in medical school settings

Session 3D

THE PATTERN OF COMMON MISTAKES MADE BY UNDERGRADUATE MEDICAL STUDENTS IN EYE EXAMINATION STATION OF OSCE AT CLINICAL SKILLS LABORATORY OF GADJAH MADA UNIVERSITY, INDONESIA

Author(s): Widyandana D¹, Agni A², Supartoto A²

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Presenter: Mr D Widyandana

Introduction:

The high prevalence number of eye disorders in Indonesia requires all medical doctors in Indonesia to have a good grip of eye examination skills. Undergraduate students usually start their clinical skills training and assessment in a safe environment skill laboratory that should be evaluated and improved regularly.

Methods:

Descriptive analytic study involving eye examination station Objective Structured Clinical Examination (OSCE) score from 1st-4th year undergraduate medical students batch 2010 in Faculty of Medicine, Gadjah Mada University, Indonesia (n=516). All checklists' scores are analyzed descriptively based on particular subscales in every examination topic to explore the most common mistakes made by students in eye examination station during OSCE.

Results:

The order average value of each subscale in OSCE are; Doctor patient interaction (88.42), History taking skills (82.44), Professionalism (76.43), Physical Examination (74.62), Diagnosis (60.68), Management of Pharmacotherapy (54.70). The percentage of failed-students (scores <70) in 1st-4th year OSCE based on topics skills; Year 1: Visual field (5.08%), Visual acuity (14.21%), Anterior Segment (2.54%). 2nd year: IOP by palpation (24.38%), Visual acuity (9.38%), Anterior Segment (29.38%). Year 3: visual field (4.94%), IOP by palpation (2.47%), Visual acuity (12.35%), Anterior Segment (7.41%), Posterior Segment (22.22%). Year 4: Comprehensive eye exam (17.95%).

Conclusions: Students get most difficulties in giving management of pharmaco therapy and diagnosis skills. The highest number of failed students in each year OSCE are vary; 1st year is visual acuity, 2nd year is anterior segment, 3rd year is posterior segment. Those all needs to be improved.

Keywords:

OSCE, pattern of mistake, eye examination, undergraduate students, skill laboratory

PROVIDING QUALITY TEACHING IN CLINICAL TEACHING ASSOCIATE PROGRAMS

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Presenter: Dr Christine Fairbank

Background:

Clinical Teaching Associate (CTA) programs designed to teach the essential technical and communication skills required to perform sensitive examinations. Quality teaching requires quality staff – those who both competent and confident in their area of teaching. Working as a CTA is a unique occupation but is rarely the subject of research. By investigating the motivation and experiences of our present CTAs we hoped to be better able to target recruiting and training and then maintain this trained group of teachers who provide our quality teaching.

Method:

CTAs, from both our women's and men's programs, volunteered to be interviewed for the research, by an interviewer independent of program administration. Interviews comprised ten broad questions designed to elicit their experiences of joining the program and their motivation to continue teaching in the program. They considered challenges they encountered and benefits they derived from participating.

Findings:

CTAs interviewed tended to share health or education backgrounds, and an interest in improving women's and men's health. They regarded the CTA role as requiring skilled communication, sensitivity and self-awareness, a capacity to give feedback and to work in a team. They valued other CTAs, while recognising difficulties with team dynamics and giving negative feedback to colleagues. Most expressed positive feelings about the value of their work, but found it difficult to be open about discussing their work with others as many had encountered negative attitudes.

Conclusion:

Exploring the experiences of CTAs has given us a greater understanding of the motivations of those joining and remaining in the program, so recruitment, training and support may be better targeted.

VALIDITY OF A QUESTIONNAIRE SEEKING STUDENT FEEDBACK ON THEIR CLINICAL CLERKSHIPS IN FAMILY PRACTICE

Author(s): Bartlett M, McKinley R, Hooper V

Keele University School of Medicine, UK

Presenter: Mr Robert (Bob) McKinley

Introduction:

At Keele University School of Medicine, 23 of 94 weeks of clinical clerkships are delivered by a network of general/family practices. These are 'service' practices and few have other academic links so we review them carefully. We regularly review our student feedback questionnaires. Patient satisfaction with English general practices is routinely collected. We are using this patient satisfaction data to examine the validity of our student feedback questionnaire and report preliminary results.

Methods:

The student feedback questionnaire has four domains: student satisfaction with clinical exposure, the preceptor as a teacher, the practice as a place to learn and assessment and feedback on their performance. Data are collected by SurveyMonkey questionnaire at the end of each clerkship; participation is voluntary. We examined the correlations between domain scores and patient satisfaction with the practice. We hypothesised that patient satisfaction would correlate most strongly with student satisfaction with the preceptor as a teacher and the practice as a place to learn.

Results:

At the time of writing we had data from 62 practices and 174 students. The correlation between patient satisfaction and student satisfaction with the preceptor as a teacher and the practice as a place to learn were 0.26 ($p=0.04$) and 0.19 ($p=0.13$), higher than for the other two domains (-0.14 and -0.11).

Conclusions:

Patient satisfaction is related to humanistic but not technical domains of student satisfaction with clerkships.

Take-home message:

Student satisfaction with teaching questionnaires can be valid measures of the humanistic aspects of their clinical teaching.

WHAT DO PRE-INTERN PLACEMENTS (PIP) ADD TO FINAL YEAR MEDICAL STUDENT TRAINING?

Author(s): Smith (¹, Dalebout M ², Sly C ³, Johnson P ¹, Heathcote K ², Braganza S ³

¹ Bond University Faculty of Health Science and Medicine, ² Griffith University Medical School, ³ Gold Coast Health

Presenter: Jane Smith, Patricia Johnson, Marije Dalebout

Introduction:

The whole purpose of medical school training is to create doctors that are fit for the task, namely competent to work as generic junior doctors (Interns). Despite good intentions, both graduates, and workplace find the transition traumatic, stressful, and challenging. Many universities are exploring ways to improve new interns' confidence and competence in dealing with common clinical tasks expected of them.

The Pre-Interns Placement (PIP) program has been designed to deliver "master" to "novice" training to transfer practical work-place knowledge and skills, reinforced by hands-on-experience, log-book entries, and reflective case based teaching to embed the knowledge.

Methods:

In the last month of the medical course, Bond and Griffith University Medical students allocated to become interns in Gold Coast Health will be offered full time 2-week pre-intern placements, partnered with experienced junior doctors, to participate as an active member of the team in all the work duties of an intern.

Log-books will measure the number and variety of clinical skills.

Set Clinical Scenarios will be discussed in reflective teaching sessions before and after the PIP.

Qualitative and Quantitative Surveys will measure graduate's perceptions of how effective and advantageous the PIP is to their confidence, coping and ability to function as an intern.

Results:

The evaluations will be available in January 2016, after new Interns have worked their first few weeks, and the success can be measured

It is anticipated that they will identify what works best to assist new graduates transitioning to interns.

Conclusions:

A short transitioning program can enhance the competence and confidence of new interns

Take-home message:

"Nothing Ventured Nothing Gained"

THE EFFICACY OF SOCIAL MEDIA FOR TRANSLATING EVIDENCE TO PRACTICE IN THE HEALTH PROFESSIONS.

Author(s): Maloney S¹, Tunnecliff J¹, Morgan P¹, Keating J¹, Gaida J², Clearihan L¹, Sadasivan S³, Davies D⁴, Ganesh S⁵, Mohanty P⁵, Weiner J¹, Ilic D¹

¹ Monash University, Australia ² University of Canberra, Australia ³ Monash University, Malaysia ⁴ University of Warwick, UK, ⁵ Swami Vivekanand National Institute of Rehabilitation Training and Research, India

Presenter: Dr Stephen Maloney

Background:

Approximately 80% of research evidence relevant to clinical practice never reaches the clinicians delivering patient care. A key barrier for the translation of evidence to practice is the limited time and skills clinicians have to find and appraise emerging evidence. The aim of this study was to determine the efficacy of social media as an educational medium to effectively translate emerging research evidence to clinical practice.

Method:

The study used a mixed methods approach. Evidence-based practice points were delivered via a social media platform. The primary outcomes of attitude, knowledge, and behavior change were assessed using a pre-post evaluation, with qualitative data gathered to contextualize the findings.

Results:

Data was obtained from 317 clinicians from multiple health disciplines predominantly from the UK, Australia, USA, India and Malaysia. The participants reported an overall improvement in attitudes toward social media for professional development ($p < 0.001$). The knowledge evaluation demonstrated a significant increase in knowledge after the training ($p < 0.001$). The majority of respondents (69.9%) indicated that the education they had received via social media had changed the way they practice, or intended to practice.

Conclusion:

Social media may be an effective educational medium for improving knowledge, fostering the use of research evidence by health professionals, and changing clinical behaviours.

Take Home Message:

Innovative use of social media has a role to play in reducing the knowledge to practice gap in the health professions.

EFFECT OF SIMULATION TRAINING ON ULTRASOUND-GUIDED FEMORAL DIALYSIS CATHETER INSERTION PROCEDURAL COMPETENCY, SELF-CONFIDENCE AND PROFESSIONALISM IN NOVICE INTERNS

Author(s): Renaud C¹, Liu A¹, Siddqui S², Chang S³, Yeoh L¹

¹ Department of Medicine Division of Nephrology Khoo Teck Puat hospital, ² Department of Anaesthesiology Khoo Teck Puat hospital, ³ Department of Biostatistics Khoo Teck Puat hospital

Presenter: Dr Claude Renaud

Introduction:

Internal medicine (IM) residents have limited exposure to femoral dialysis catheter (FDC) insertion. Simulation-based training offers a safe alternative but inadequate data exists outside critical care and emergency settings. We therefore evaluated simulation training impact amongst novice IM residents.

Methods

This was a prospective single-centre study involving 16 first-year IM residents without FDC experience (group A). Twenty nine IM and anaesthetist residents with prior hands-on standard training within the past 3 months served as control (group B). Group A followed a 2-hour individualized program on ultrasonography, anatomy, instructional video and FemoralLineMan mannequin practicum and was assessed after 2 weeks. A 26-point validated checklist with 5 domains on patient preparation, sterilisation, ultrasonography, catheter placement and safety and 3 case scenarios were used for procedural adherence and professionalism assessment respectively. Confidence was self-rated using a 10-point Linkert scale. Scores in the 2 groups were compared. Passing score was set at >70%.

Results:

Group A had younger (26 ± 2 vs 29 ± 4 years, $p=0.01$), less experienced (1.56 ± 0.90 vs 2.28 ± 1.13 years post-graduation, $p=0.04$) and more local-university trained (83 versus 59% , $p= 0.07$) but comparable female residents (56 vs 68%, $p=0.33$). Competency domains and professionalism pass rates were 81 vs 51%, 88 vs 55%, 63 vs 72%, 56 vs 59%, 81 vs 66% and 56 vs 48% respectively ($p>0.05$). Self-confidence was 5.63 ± 1.63 vs 7.31 ± 1.11 , $p=0.00$.

Conclusion:

A structured simulated FDC insertion training of inexperienced IM residents provides comparable procedural competency and professionalism but not self-confidence rate to standard training. Larger studies are required to confirm these findings.

Session 3E

CLINICAL SCIENTISTS' PERSPECTIVES ON THE INTRODUCTION OF THE OSCE METHOD AS AN EXIT ASSESSMENT FOR HEALTHCARE SCIENCE TRAINING IN THE UK.

Author(s): Gay S¹, Chamberlain S¹, Hill S², Gibson C¹

¹ National School of Healthcare Science, Health Education West Midlands, UK ² NHS England

Presenter Sandie Gay and Dr Suzanne Chamberlain

Introduction:

A new, national three-year training scheme for clinical scientists in the UK uses an OSCE as an exit assessment, as part of a strategy for programmatic assessment. A preliminary study was conducted to gather stakeholders' perspectives of the introduction of an OSCE as a standardised exit assessment for healthcare science training in the UK.

Methods:

An assessor questionnaire survey (n=138; 69% response rate), and a series of eight focus groups with trainees (42 participants; 28% of cohort) were conducted in 2015.

Results:

The OSCE was perceived favourably by assessors and trainees in terms of the potential for reliable outcomes, but less favourably in terms of the potential for authentic assessment of scientific clinical skills. The concept of 'acceptability' was multi-faceted and included reference to curriculum coverage, level of challenge, time constraints, and whether the method was fit to purpose.

Conclusions:

The introduction of a national, standardised, high stakes assessment is likely to generate a broad range of perceptions about its acceptability. The perceptions of assessors and trainees contribute to our understanding of how judgements of acceptability are constructed, and how best to communicate with stakeholders.

Take-home message:

Stakeholders' perceptions of the acceptability of the OSCE method in healthcare science are variable, but enhanced understanding of the rationale for using this method appears to increase support for its use.

DOES HAVING SEEN AN OSCE STATION PRIOR TO A SUMMATIVE OSCE PRODUCE A DIFFERENCE IN PERFORMANCE?

Author(s): Fraser J, Lane M, Schafer J

School of Medicine, The University of Queensland, Brisbane, Australia

Presenter: Dr James Fraser

Introduction:

A great deal of academic effort goes into the development of new OSCE stations while our students put effort into creating question banks to share with further cohorts. This paper will investigate whether having access to an OSCE station prior to the summative OSCE leads to an improvement in student performance at that task.

Methods:

A sample set of six recently used OSCE stations was made available to the student six months prior to the summative OSCE via the Learning Management System. The students were made aware of these stations via email at the same time, and during briefing sessions that were conducted approximately four months prior to the OSCE. One of the sample stations was included in the summative OSCE.

Results:

The results of student performance in the previously released station will be analysed and compared with student performance in this station in OSCEs held in previous years. This data will be presented with conclusions and issues for further consideration and investigation.

PREDICTION OF MARGINAL PHYSICAL EXAMINATION PERFORMANCE IN A HIGH STAKES OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)

Author(s): Lee M, Wimmers P, Wilkerson L

David Geffen School of Medicine at UCLA

Presenter: Dr Ming Lee

Introduction:

Competency in physical examinations among medical trainees has been considered deficient. Potential contributors to the deficiency warrant investigation. This study examined the predictive relationship between prior academic achievement and marginal performance in Physical Examination (PE) of a high-stakes OSCE.

Methods:

Three cohorts of medical students (n = 576) participated in the study. Six assessments were used as predictors, including the USMLE Step 1, 2nd-year 3-station OSCE PE, NBME exams on Ambulatory Medicine (AM) and Family Medicine (FM), and AM and FM Clerkships ratings on PE. The outcome measure was the PE performance group (marginal vs. acceptable) of a 3rd-year 8-station OSCE called Clinical Performance Examination (CPX). Multiple logistic regression was conducted to identify significant predictors for the CPX PE group. Receiver Operating Characteristic (ROC) curves were used to determine possible cutoff points of the significant predictors.

Results:

The students who performed marginally in CPX PE scored significantly ($p < .05$) lower than those who performed acceptably on all assessments except the FM clerkship PE rating. Only NBME FM scores significantly predicted the CPX PE group (odds ratio = .92). The ROC curve showed poor prediction accuracy (64%).

Conclusions:

Although the study demonstrated that students' NBME FM scores could predict their CPX PE performance, the accuracy was barely above the level of chance. Other variables not assessed by the study, such as clinical reasoning and time management, may warrant further investigation.

Take-home message:

Physical examination performance in a simulated clinical setting with limited time may be affected by factors other than clinical knowledge and competency.

COMPARISON OF NURSING STUDENTS' COMMUNICATION SKILLS WHO WERE AND WERE NOT TRAINED ON A CULTURALLY-SENSITIVE NURSE-CLIENT COMMUNICATION GUIDELINE IN INDONESIA

Author(s): Claramita M¹, Tuah R¹, Riskione P², Prabandari Y¹, Effendy C²

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Presenter: Mora Claramita, MD, MHPE, PhD

Introduction:

An objective-structured clinical examination (OSCE) consisted of seven stations with seven simulated clients was used to assess thirty nursing students' communication skills, in total; half were trained on a culture-sensitive communication skills guideline. The communication skills guideline used for the training consisted of three domains: strengthened interpersonal skills; to narrow the socio-cultural hierarchical gaps between health providers and clients in Indonesian context, attentive skills; to respond to the unspoken concerns and skills for initiating dialogue in a society which hold a more 'community-oriented'; instead of 'individual', decision making style.

Methods:

This experiment study was done in a nursing school at Yogyakarta, in 4 hours training with role-plays, supportive information and feedback sessions followed by an OSCE. Clinical instructors judged the communication skills of all students using a checklist of 5-point Likert scale. Simulated clients judged their satisfaction using 4-point-Likert scale; represented in colorful symbols.

Results:

There were significant mean differences in overall and in each domain of communication skills between the trained and the control group of students as observed by the clinicians ($p \leq 0.05$). There were only satisfactory colors given for the trained group of students as judged by the simulated clients.

Conclusions:

Training using a cultural-sensitive communication skills guideline improved the communication skills of the nursing students and increased satisfaction of the simulated clients.

Take home message:

An OSCE is useful to assess students who had and had not undergone proper training, also in a specific subject similar to cultural-sensitive communication skills.

ASSESSING MANAGEMENT OF THE DETERIORATING PATIENT IN YEAR 5 MEDICINE OSCE. A CASE STUDY OF THREE STATIONS.

Authors(s): Heal C, Berlot F, Drobeta H

James Cook University

Presenter: Prof Clare Heal

Introduction:

The James Cook University exit examination is conducted at the end of the fifth year of the six year undergraduate course. Twelve Observed Structured Clinical Examination (OSCE) stations, each lasting a time period of eight minutes, are used in the clinical component of the exam, which is run at three different, geographically dispersed sites (Mackay, Cairns and Townsville). An attempt is made to use high fidelity clinical scenarios, based if possible in contextually appropriate rural settings.

Methods:

We will present a case series of three year 5 exit exam stations which involved students assessing and treating deteriorating patients. The three stations involved: assessment and management of the postoperative hypotensive patient; snakebite; bee sting anaphylaxis. All cases took place at the infamous 'Dingo Creek' hospital. The anaphylaxis station was also used as a station for the Australian Collaboration for Clinical Assessment in Medicine (ACCLAIM) project.

Results:

Using assessment and management of a deteriorating patient as an OSCE case presents both challenges and rewards. The design and conduct of the stations was time consuming and resource intensive. Running the station at three separate sites (and more in the case of the ACCLAIM station) also presented challenges. The stations proved to have a high difficulty level but were good discriminators with favourable psychometrics. The stations received positive feedback from students

Conclusions:

Using assessment of the deteriorating patient as an OSCE station is both challenging and rewarding.

Take-home message:

Assessment of a deteriorating patient can be used as a highly discriminative OSCE station, despite being resource intensive.

AN ANALYSIS OF DOMAIN-BASED OSCE MARK SCHEMES: STATION WRITERS' SELECTION OF DOMAINS, AND TRAINEES' DOMAIN-BASED PERFORMANCES ACROSS MULTIPLE HEALTHCARE SCIENCE SPECIALISMS.

Author(s): Chamberlain S, Kirby A, Southgate L, Gibson C

National School of Healthcare Science, Health Education West Midlands, Health Education England

Presenter: Dr Suzanne Chamberlain

Introduction:

The National School of Healthcare Science in the UK provides an OSCE as an exit assessment for a three-year training programme across 20 healthcare science specialisms. All stations are mapped to domains specified in *Good Scientific Practice*, which sets out the standards, principles and values underpinning good practice. This paper discusses how the domains form the basis of OSCE station mark schemes, and presents an analysis of domain-based outcomes across 20 specialisms.

Methods:

A frequency analysis was conducted on 183 OSCE stations to explore trends in station writers' selection and use of 39 domains in constructing their mark schemes, and trainees' domain-based performances across 20 specialisms.

Results:

From the full list of 39 domains developed from *Good Scientific Practice*, approximately one-third are commonly used across all 20 science specialisms, for example, *Information gathering* and *Decision-making*. A small number of domains were used infrequently, or not at all, across the 183 stations and 20 specialisms, including, for example, *Leadership* and *Statistical analysis*.

Conclusions:

There are domains of *Good Scientific Practice* that are relatively over-sampled and under-sampled within and across specialisms. These high stakes assessments drive learning, so it is essential that the station writers for each specialism can demonstrate and defend appropriate coverage of the domains specified in *Good Scientific Practice*.

Take-home message:

In using domain-based mark schemes, assessment blueprints should map the sampling of domains in addition to learning outcomes.

Session 3F

PROGRAM EVALUATION: MOVING BEYOND 'DOES IT WORK?'

Author: Dodds A

The University of Melbourne, Department of Medical Education, Melbourne Medical School, Australia

Presenter: Agnes E. Dodds

Introduction:

'Does it work?' is probably the most frequent question medical educators ask of evaluators. But is outcome-based evaluation the best way to assess prevocational medical programs? In this presentation, I will present alternative perspectives on program evaluation and discuss their potential.

Educational innovations are complex systems of activity. The development and implementation of programs is non-linear. They progress in fits and starts, with adaptations and evolutions. Programs change their directions in response to modified and new goals and priorities. Most importantly, unexpected and unplanned constraints and opportunities emerge during the process. Traditional models of outcome-based evaluation (with Kirkpatrick's model the most widely known and used in the health professions) are ill-equipped to deal with evolving and changing complexities. Evaluation models focused only on final outcomes are unable to give program developers the information they need to understand either their own program processes or the contingencies that emerge.

Several recent theoretical perspectives have been proposed within the discipline of evaluation that are designed to deal with change and emergence. These range from simple Logic Models to more complex formulations such as Michael Quinn Paton's model of Utilization Based Evaluation. I will assess the usefulness of these models for medical education programs. In particular, the role of the evaluator as an 'embedded' member of the medical education team as proposed by Quinn Paton raises questions of objectivity and power dynamics.

I will suggest that an evaluation model that includes an assessment of process with outcomes is best suited to the evaluation of medical programs.

PREDICTING GRADUATE'S SATISFACTION WITH A MEDICAL CURRICULUM: THE RELATIONSHIP BETWEEN ACHIEVEMENT, OVERALL PREPAREDNESS, IDENTIFICATION AND SATISFACTION

Presenter: Ms Sandra Sudmann

Author(s): Sudmann S¹, Rath D², Scherer A², Forkmann T², Gauggel S²

¹ RWTH Aachen University, Medical Faculty, Germany, ² University Hospital RWTH Aachen, Institute of Med. Psychology and Med. Sociology, Germany

Introduction:

Previous work at the RWTH Aachen University (Germany) showed that medical students achieved grades above average in the national final exams and were highly satisfied with the reformed curriculum. For that reason we were interested in investigating the relationship between objective performance data as well as perceived preparedness and satisfaction.

Methods:

This study investigated possible origins of student satisfaction. A new survey based on a theoretical model was implemented. At the end of their studies, 124 young doctors completed a questionnaire containing questions about their satisfaction as well as subjective overall preparedness and identification with the study course. This data was related to students' final exam grade.

Results:

Medium sized correlations were found between satisfaction and subjective preparedness ($r=.43$, $p<.001$) as well as social integration ($r=.46$, $p<.001$). The highest correlation was found between identification and satisfaction ($r=.69$, $p<.001$). Identification was found to be a mediator between preparedness and satisfaction. Interestingly, final grades were neither related to identification nor preparedness nor satisfaction.

Conclusions:

The more students felt prepared to work as doctors, the more did they identify with their study course. The more they identified with the study course, the more were they satisfied with the reformed curriculum. Identification plays an important role in students' satisfaction, so it is important to investigate to what extent specific elements of the curriculum and/or educational objectives promote identification.

Take-home message:

Satisfaction at the end of studies and subjective overall preparedness are not related to grades, but depends on identification with the study course itself.

EVALUATION OF AN UNDERGRADUATE MEDICAL STUDENT PROGRAM DELIVERED IN AN AUSTRALIAN RESIDENTIAL AGED CARE FACILITY (RACF).

Author(s): Radford J¹, Todd A¹, Fuller J², Hanson P², Bramble M¹, Crisp E¹

¹ University of Tasmania, ² Newstead Medical

Presenter: Jan Radford

Introduction:

From 2011 until 2013 a medical undergraduate program was designed, delivered and evaluated using learning opportunities presented by the context of a residential aged care facility (RACF). The medical student program was designed DE novo.

Methods:

The curriculum underpinning the program used deliberative theory to guide its evolution over time. Multiple sources of data were collected and quickly analysed including student written feedback and focus group interview transcripts. Frequent meetings involving RACF health care professionals involved in the program and academic leads underpinned the deliberative evaluative approach.

Results:

The majority of students rated the program highly, while a small group could not see the relevance to their future careers as interns. The continuous program evaluation facilitated the development of opportunities for authentic interprofessional practice (IPP), which evolved and were refined over time. These findings will be presented using Pawson's realist evaluation theory complexity checklist.

Conclusions:

The program evolved to enhance professional skills and capabilities in the delivery of medical care to frail elderly people as exemplified by RACF residents. It also, eventually, delivered opportunities for undergraduate interprofessional practice that are highly regarded by students to this day.

Take-home message:

Australian residential aged care facilities can provide medical student-valued learning covering the care of frail elderly patients. It can also provide a context for delivering authentic IPP for undergraduate healthcare students.

WORKING WITH STUDENTS TO CO-CREATE AN EVALUATION INSTRUMENT FOR LEARNING AND TEACHING ACROSS MULTIPLE CLINICAL TEACHING SITES

Author(s): Raw L¹, Peterson R², Crowhurst T¹

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Presenter: Dr Lynne Raw

Introduction:

Senior medical students requested the opportunity to provide feedback on learning and teaching across clinical placements. An initial survey, with questions developed mainly by students and with modest input from staff, yielded general, but little specific information, and there were some common problems in the question format. Collaboration between students, academic and IT staff co-created a more useful survey instrument.

Method:

By 2013, the Years 4-6 Online Clinical Placement Survey had been co-created to enable students to provide specific feedback for clinical teachers on orientation, curriculum and assessment. The “Reframe” framework forms the conceptual basis for the survey with our outcomes aligning with ‘quality of learning achieved’ at the centre of the framework, and survey questions fitting the domains of ‘learner’, ‘curriculum’, ‘teaching’ or ‘teacher’. In 2014, we developed online reporting systems for Placement Coordinators and in 2015 we investigated how Coordinators engage with the survey and its most useful aspects.

Results:

Collaboration with staff developed a survey general enough to be used across a wide range of placements, whilst also providing specific feedback about individual placements. Input into survey design from students enabled them to provide feedback on areas of learning that they perceived as important and good student support promoted the survey amongst student groups with consequent strong participation rates. Staff and students co-created a method for disseminating evaluation outcomes.

Conclusion and Take-home message:

Engaging with students as well as staff to co-create, implement and report a survey provides ownership which has led to stronger evaluation outcomes.

THE EFFECT OF FORMATIVE PROGRAM EVALUATION ON CONTINUOUS PROGRAM IMPROVEMENT: A CASE STUDY OF A CLINICAL TRAINING PROGRAM IN LAO PDR

Author(s): Yoon H, Shin J, Kim D

Seoul National University College of Medicine, Department of Medical Education, Korea

Presenter: Dr Hyun Bae Yoon

Introduction:

Medical faculties from Korea and Laos worked together to develop a 10-week training program for Lao health professionals covering major clinical fields of primary care. The training program was conducted 4 times consecutively for total 48 health professionals, 12 trainees for each batch. This study aimed to evaluate the effect of the formative program evaluation, which was applied to continuously improve the training program.

Methods:

A 14-item questionnaire with 5-point Likert scale and a focus group interview with the trainees were used to evaluate the satisfaction of the trainees. The survey was conducted every two weeks and the interview was done at the end of the program. The medical records which were written by the trainees before and after the training were collected and reviewed by the trainers to evaluate the transfer of the trainees. The evaluation results were shared with the training management committee and the trainers at the end of each batch of the training program.

Results:

According to the evaluation results, there was continuous improvement of the satisfaction and the transfer of the trainees from the first batch to the last batch of the training program. Especially, most of the improvement happened in the early period of the program.

Conclusions:

The formative program evaluation showed a positive effect on continuous improvement of the training program, especially in the early phase, which consequently led to the improvement of the trainees' satisfaction and transfer.

Take-home message:

Formative program evaluation strongly contributes to the continuous improvement of the training program, especially in the early period.

Session 3G

WHAT HINDERS EFFECTIVE WORKPLACE BASED ASSESSMENT?

Author(s): Taylor D

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Presenter: Dr David CM Taylor

Introduction:

Recent developments in the regulatory framework that governs postgraduate medical training in the UK have led to a number of experienced clinicians undertaking further formal training in teaching, assessing and mentoring specialist trainees. In preparation for the training course that we run in Liverpool colleagues complete a portfolio of current educational activity. Part of this concerns their experiences and expectations surrounding “enhancing learning through assessment” and “supporting and monitoring the educational process”.

Methods:

Commentary that related to workplace-based assessment was extracted from 58 anonymised portfolios, and inductively-abductively coded to extract the main themes.

Results:

Colleagues' principal consideration was balancing the time demands for doing the workplace-based assessment (WBA) conscientiously and meeting the demands of heavy clinical workloads. There were, however, two additional considerations: Trainees had a tendency to leave their WBA until a block of time towards the end of their placement, and there is a formal requirement for a large number of “tick-box oriented” WBA, rather than a smaller number of more detailed assessments with fuller feedback.

Conclusions and Take-home message:

Fewer workplace-based assessments, each providing more feedback, would be more fulfilling and valuable for the assessors and the trainees. These should be scheduled throughout the duration of the placement, to ease the load and to provide for a possibility of development and improvement. If the number of assessments cannot be altered (because of the need to comply with external requirements) they need to be aligned to clear goals and milestones articulated at the start of the placement.

USING 360° ASSESSMENT: WHO FILLS IN WHAT?

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Presenter: Brian Jolly

Introduction:

For some time there has been interest in using 360-degree assessment to measure the so-called 'soft' or professional/humanistic skills of clinical practice^{1,2}. These skills are difficult, if not impossible, to assess efficiently by means of examinations, written assignments or brief observation³. In 360° all assessors typically use a common rating scale, even though factor analysis has suggested that different professional groups might see a clinician's attributes in different ways⁴, and researchers have suggested that asking the right questions about soft skills might require accessing different groups of people

Methods:

We investigated the factor structure of two versions of a 23 item 360 degree instrument used by medical and non medical colleagues to assess a cohort of 115 international medical graduates pursuing the alternative Australian Medical Council pathway to certification in Australia.

Results:

Results suggested that although many of the items were common or similar, medical and non-medical assessors produced markedly different factor structures for the instruments, both in number of factors identified and item loading on the main factors. Medical assessors valued clinical acumen, judgement and efficiency and their data reduced to 6 factors. Non-medical assessors valued being respected and good inter-professional communication and their data suggested 3 factors.

Conclusions:

If reliable perceptions are to be collected on professional attributes, we need to ask the right questions of the right people.

Take-home message:

In 360° assessment, one size does not necessarily fit all.

References:

- 1 Nair BR, Hensley M, Parvathy MS et al (2012). A systematic approach to workplace-based assessment for international medical graduates. *Med J Aust* 2012; **196**:6: 399-402.
- 2 Lockyer J, Violato C. An examination of the appropriateness of using a common peer assessment instrument to assess physician skills across specialties. *Acad Med* 2004;79(10: S): 5-8.
- 3 Wood, L., Wall, D., Bullock, A., Hassell, A., Whitehouse, A., Campbell, I. 'Team observation': A six-year study of the development and use of multi-source feedback (360-degree assessment) in obstetrics and gynaecology training in the UK. (2006) *Medical Teacher*, 28 (7), pp. 177-184.
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ENTRUSTABLE PROFESSIONAL ACTIVITIES AS A FRAMEWORK TO SUPPORT WORK BASED ASSESSMENT IN POSTGRADUATE TRAINING IN ANAESTHESIA

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¹ College of Anaesthetists of Ireland, ² Vancouver General Hospital, ³ University Hospital Waterford, ⁴ Beaumont Hospital, ⁵ St James's Hospital

Presenter: Dr Josephine Boland

Introduction:

Defining and assessing competence remains a challenging aspect of competency based medical education (CBME). As an emerging concept in the implementation of CBME, Entrustable Professional Activities (EPAs) can support identification of authentic work based assessment (WBA). The College of Anaesthetists of Ireland (CAI) has adopted EPAs when reframing a competency-based curriculum to inform WBA for a six-year postgraduate training programme.

Methods:

The methodology included review of literature and emerging practice and consideration of the national and specialty context. A grounded approach to EPA development involved working groups of consultants tutors, late-stage trainees, training managers and a medical educationalist. Wider consultation will be essential to a validation process.

Results:

Outcomes include: (i) a bespoke template for EPA development (ii) a provisional list of EPAs for the specialty (iii) draft EPAs with nested competencies, mapped to Irish Medical Council Domains of Professional Practice. Competencies were mapped against teaching and learning opportunities and blueprinted against WBA tools.

Conclusions:

While the concept of entrustability is implicit within medicine, articulating grounds for entrustability is complex. Nonetheless, EPAs can provide a basis for valid and defensible WBA. Involvement of key stakeholders is critical and the process represents valuable professional development. Dynamic mobile technology is essential to successful implementation of WBA.

Take-home message:

EPAs are a valuable means of identifying how and where to assess competencies: for successful implementation, stakeholders need ownership of the process and of the outcomes.

CONSIDERING ALTERNATIVES TO INDIVIDUALISTIC ASSESSMENTS OF HEALTH CARE PROFESSIONALS IN PRACTICE: PRELIMINARY DATA FROM AN EMPIRICAL STUDY

Author(s): Chapman L ^{1,2,3}, Nelson S ^{1,3}, Hodges B ^{2,3,4}, Jeffs L ^{1,3,5}

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Presenter: Leigh Chapman

Abstract:

Competence is a critical part of health care professionals' professional practice as it addresses issues related to assessment, professional development and quality assurance. However, emerging evidence in support of a move to team-based competence in health care¹ threatens the individualist approach to viewing competence. Current models of assessing competence have also been critiqued for failing to account for the contextual nature of practice². Despite the popularity of competencies in education and accreditation, little is known about their role in the practice environment or in the assessment of health care professionals in practice³.

Introduction:

Several Canadian health professions education scholars^{1,2,4} have suggested that the prioritization of the independent, individual health care professional creates a challenge in the practice arena when attempting to consider collaborative and interprofessional care delivery. An individualistic notion of competence is also problematic given the myriad contextual influences in a health care workplace.

Methods:

The purpose of this qualitative case study is to explore competency assessment in a Canadian academic hospital with the aim of developing a detailed multi-professional picture of competency assessment practices in context.

Results:

This presentation will describe preliminary documentary and interview data from an empirical examination of competency assessment in a Canadian academic hospital.

Conclusions:

Understanding a hospital's competency assessment practices may assist in tailoring performance assessment, professional development and quality assurance processes for regulated health professionals.

Take-home message:

This investigation will provide insight into the process of competency assessment of regulated health professionals in practice and may offer a novel approach to viewing competence in healthcare.

References:

¹Hodges, B. (2013). Assessment in the post-psychometric era: Learning to love the subjective and collective. *Medical Teacher*, 35(7), 564-568.

²Lingard, L. (2009). What we see and don't see when we look at 'competence': notes on a god term. *Advances in Health Sciences Education*, 14(4), 625-628.

³Hodges, B., & Lingard, L. (2012). *The question of competence: reconsidering medical education in the twenty-first century*. New York: Cornell University Press.

⁴Regehr, G. (2015, March). The dangerous pursuit of independence. Wilson Centre Special Presentation, Toronto, ON.

Session 3H

HOW MANY RE-SITS SHOULD BE PERMITTED IN PROFESSIONAL ASSESSMENTS?

Author(s): John C. McLachlan, P. Tiffin

School of Medicine, Pharmacy and Health, Durham University, U.K.

Presenter: Prof John C. McLachlan

Introduction:

Many professional organisations permit a significant number of re-sits in professional assessments. In some cases, an unlimited number of attempts are permitted, and in these cases some candidates may re-sit the assessment 10 or 20 times. This creates the possibility of 'false positives': candidates who pass an assessment process due to construct irrelevant features, and who should not in fact have passed.

Methods:

We identified from the international literature general characteristics of re-sit issues in high stakes testing. The General Medical Council of the U.K. made available to us anonymised data describing re-sit s for International medical graduates undertaking the Professional and Linguistic Assessment Board (PLAB) assessments required to practice in the U.K. These represented the predictor variables. We then compared these with their subsequent Annual Review of Competence Progression (ARCP) outcomes, and referral for Fitness to Practice procedures, as compared to U.K. graduates.

Results:

There was a significant negative relationship between the number of re-sits required to pass both parts of PLAB and subsequent performance in practice as measured by ARCP outcomes, and a significant positive relationship between multiple re-sits and subsequent referral for Fitness to Practice issues.

Conclusions:

The number of re-sits permitted should be limited, at least in the absence of evidence that further training has taken place. The number of re-sits undertaken by candidates may also usefully inform selection and progression decisions.

Take-home message:

The number of re-sits required to pass a professional assessment is a useful guide to future clinical performance.

RISK FACTORS ASSOCIATED WITH ACADEMIC DIFFICULTY

Author(s): Malau-Aduli B, O'Connor T, Ray R, Kerlen Y

James Cook University, Townsville, Queensland, Australia

Presenter: Dr Bunmi Malau-Aduli

Introduction:

A proportion of medical students face academic difficulties and a high risk for delayed graduation or outright dismissal. Accurate prediction and targeted prevention of failure would enable effective use of limited resources to maximise student outcomes. This study evaluated the cognitive and non-cognitive factors that are the most effective early predictors of academic difficulty.

Methods:

Retrospective non-cognitive and cognitive entry data were collated for all 2009-2014 MBBS students (1148). Non-academic variables included age at commencement of studies, gender, indigenous status, origin, first in family to go to University (FIF), non-English speaking background and socio-economic status. Academic variables included interview and tertiary entrance scores expressed as overall position. Summative assessment data in the first and second years of study were also collated. Survival analysis was used to estimate the time and relative risks of experiencing academic difficulty.

Results:

Data analysis revealed that 12.5% of the students experienced academic difficulty mostly occurred in the first two years, and 3% failed and exited the program. FIF ($p=0.015$) and indigenous status ($p=0.0001$) were statistically significant risk factors associated with academic difficulty. High proportions (49%) of the exiting students were FIF students. Low post-entry Years 1 and 2 examination scores were strong risk factors for academic difficulty.

Conclusions:

Medical schools need to be proactive in using student data for early identification of at-risk students and the establishment of appropriate support.

Take-home message:

Remediation and support programs should concentrate on the specific questions: "who" is at-risk and "when" are students at risk of academic difficulty and attrition.

DOCTORS WITH DIFFERING TRAINING NEEDS: CONTRIBUTING FACTORS OF ADVERSE OUTCOMES IN ANNUAL TRAINING REVIEWS

Author(s): Rothwell C¹, Illing J², McLachlan J¹, Forrest S¹

¹ Durham University, Centre for Medical Education, Durham, UK ² Newcastle University, School of Medical Education, Newcastle, UK

Presenter: Mrs Charlotte Rothwell

Introduction:

In the UK all postgraduate trainee doctors are assessed annually, to ensure they are competent and able to progress to the next stage. Trainees who experience difficulty (approximately 5%) are required to have additional training. The aim of this study is to identify who is more likely to require additional training and identify potential solutions to avoid a delay in progressing.

Methods:

A constructivist grounded theory approach was used to identify a model focused on identifying those at risk and how best to support them. Interviews were conducted with trainers and specialty trainees in one region of the UK who had received an adverse outcome in their annual appraisal.

Results:

Interviews were conducted with trainers (n=57) and trainees (n=21). Both groups identified the following themes: difficulties with giving (trainer) and receiving feedback (trainee), failure to fail, negative behaviours, the poor use of workplace based assessments and their lack of sensitivity to reflect a trainee in difficulty, low work-life balance, and negative perceptions of failure. In addition, trainees identified the influence of the work environment, and a lack of recognition of negative life events that impact of work i.e. bereavement and illness.

Conclusions:

Themes have been identified that impact on doctors having difficulties during their training. There was some agreement on the issues identified by both groups, but from different perspectives. This requires further exploration.

Take-home message:

We believe that findings and recommendations from this research may reduce the number of failing doctors.

EFFECT OF RAISING THE STANDARDS ON MEDICAL STUDENTS' PERCEIVED STRESS LEVELS

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¹ IMERR, Erasmus MC - University Medical Centre Rotterdam, Netherlands, ² Dept of Internal Medicine, Erasmus MC - University Medical Centre Rotterdam, Netherlands

Presenter: Dr Karen Stegers-Jager

Introduction:

To improve their students' progress several medical schools have implemented academic dismissal policies that require students to meet minimum standards. As so far the effect on academic progress has been disappointing, it has been suggested to further raise the minimum standards. However, the question is whether raising the standards will negatively affect students' health. Therefore, this study aimed to investigate the effect of raising the standards on students' perceived stress levels.

Methods:

In 2014 Erasmus MC medical school raised the first-year standard from 40 to 60 credits (out of 60). Students from the last 40-credits cohort (n=235, 57%; 71% female) and from the first 60-credits cohort (n=248, 73%; 69% female) completed the 14-item Perceived Stress Scale (PSS) in May/June of their first year. Data were analyzed with two-way ANOVA.

Results:

We found significant main effects of cohort ($F(1,479)=14.79$, $p<0.001$, $\eta_p^2=0.03$) and of gender ($F(1,479)=13.44$, $p<0.001$, $\eta_p^2=0.03$), but also a significant interaction effect between gender and cohort ($F(1, 479)=3.99$, $p<0.05$, $\eta_p^2=0.01$). Specifically, PSS scores were in the 40-credits cohort similar in males ($M=23.23$, $SD=8.41$) and females ($M=24.59$, $SD=7.03$; $p=0.25$), whereas in the 60-credits cohort PSS scores were significantly higher for females ($M=29.34$, $SD=8.23$) than for males ($M=24.74$, $SD=9.96$; $p<0.001$).

Conclusions:

Especially female students demonstrated increased perceived stress levels upon raising the standards. Further research should focus on the relation of perceived stress with biological stress and academic outcomes, and on factors that may explain gender differences.

Take-home message:

The challenge for medical schools is to stimulate students' progress without impairing their health.

WHY WE FAIL TO FAIL: CLINICIANS REFLECT ON THE DOWN AND DIRTY SIDE OF IN-TRAINING ASSESSMENT

Author(s): Sheldon B, Rooney K

Launceston Clinical School, School of Medicine, University of Tasmania, Australia

Presenter: Dr Brooke Sheldon

Introduction:

Failure to Fail refers to assessors' reluctance to report substandard performance in learners. In Training Assessments (ITAs) are critical indicators of postgraduate capability. Hedged reporting is common (Ginsburg et al 2015), translating to false reassurance to underperforming students, missed opportunities for remediation, and graduating students who are potentially unfit for safe professional practice.

Methods:

This paper reports on a small and exploratory qualitative study of clinical supervisors' perceptions of barriers to reporting underperformance in the ITA of medical students in the final two years of their undergraduate course. A focus group was conducted with a group of senior clinicians (n=6) who are Heads of Discipline and regularly active in the supervision and assessment of medical students.

Results:

The study's findings point to a number of complex psychosocial, cultural and system factors that influence ITA of undergraduate capability. A number of key themes were identified as barriers to authentic and defensible ITA. These include the personal burden and consequences of an adverse assessment for the assessor and for the student, and cultural and systematic disincentives.

Conclusions:

Accurate ITA is essential to graduating medical students who are fit for vocational practice. Clinicians acknowledge their role as 'gatekeepers' to progression in the course, however express concerns about the burden of this responsibility. This highlights the complexity of culture and governance in the current training environment and the need to better resource and support those making the difficult decisions.

Take-home message:

Without valid and rigorous ITA, patient care and safety may be at risk. There is a pressing need to support, resource and enable those responsible for ITA in the clinical environment.

WHOSE BENEFIT IS IT FOR ANYWAY? THE REMEDIATION DILEMMA IN UNDERGRADUATE MEDICAL STUDENTS IN THE UNITED KINGDOM

Author(s): Read, J

Plymouth University Peninsula Schools of Medicine and Dentistry, UK

Presenter: Dr James Read

Introduction:

Remediation is widely practiced to improve the performance of students who do not meet the expected standards, but it is often mistrusted and poorly understood by those who undergo it. This research aimed to understand what undergraduate medical students at a United Kingdom medical school thought about their remediation and explore how a greater understanding of student experiences could be used to improve the intervention.

Methods:

Six semi-structured interviews were performed with undergraduate medical students. Two further interviews were performed with members of staff involved in the remediation process. Interviews were transcribed, coded and analysed thematically to understand emerging themes.

Results:

Students frequently approached remediation confused about the purpose of the process and anxious about what is expected. Many expressed concerns that the process was not designed to be of help to them but so that the University could demonstrate that it had made an effort to improve their progress before they failed again. Participants were much more positive once they had undergone the process but remained divided as to the benefits of such interventions. All participants expressed a wish to know more about remediation before they attended the session.

Conclusions:

Remediation is widely used but poorly understood by medical students. Increasing awareness of the purpose of remediation before students attend could help reduce anxiety levels and increase engagement in the process.

Take-home message:

Increasing awareness of the remediation process and the desired outcomes could help student engagement in the process by reducing their distrust and anxiety.

Session 3I

MOVING BEYOND 'KNOW IT WHEN I SEE IT': THE ROLE OF ACCREDITATION IN CLARIFYING THE CURRICULUM AND ASSESSMENT OF PROFESSIONALISM IN UNDERGRADUATE MEDICAL TRAINING

Author(s): Ellwood D^{1,2}, Milligan E^{1,2}, Rooney K^{1,3}

¹ Griffith University, ² Australian Medical Council, ³ University of Tasmania

Presenter(s): Prof David Elwood, Director, Prof Eleanor Milligan, **Dr Kim Rooney,**

Abstract:

In 2014, the AMC established a *Professionalism Working Group* to consider a range of themes relating to professionalism in medical training.

The themes identified included:

- Admission, assessment and supervision.
- Continuum of medical education and the role of employers
- Curriculum and the definition of professionalism
- Legal issues regarding the sharing of information

The elements of this workshop are a result of the AMC working group's deliberations on how to bring more consistency and clarity to the teaching and assessment of professionalism. Through the course of this work, the current focus of professionalism education as a means of identifying the 'dysfunctional' student was challenged and the group began to focus on ways to positively promote the values and attributes of the medical profession for students through curriculum and assessment design. The AMC's role in accreditation provides a key link in connecting the legislative, professional (industry), and educational sectors laying out a more coherent, effective and defensible approach to professionalism education.

Intended outcomes:

Following the workshop, attendees will be able to:

1. Identify and critique current drivers that focus professionalism education on identifying the 'unprofessional' student.
2. Critically interrogate a range of sources that set the parameters of 'professionalism' for the medical profession (eg. Legislation, national Codes of Conduct, AMC accreditation standards, other).
3. Consider ways in which these parameters may be translated into a practically embedded, stage appropriate curriculum within undergraduate medical degree programs.
4. Consider which assessment strategies meaningfully align with and apply to each curriculum element.
5. Understand, and strategically use, the role of accreditation bodies to bring clarity and coherence to professionalism in Medical Education.

Structure:

1. Background context - shifting the focus to positive professionalism (10 minutes- AMC Presenters)
2. Existing standards of the profession/regulatory sources of defining professionalism (eg. Good Medical Practice: A code of conduct for Australian Doctors, National Law) – How can these be used to define and develop a stage appropriate professionalism curriculum Learning Objectives (LO) in the MD curriculum (Group workshop- 30 minutes)
3. Group development of assessment options linked to curriculum LOs identified in 3. (Group workshop 30 minutes)
4. How accreditation bodies can use their influence to guide consistency in the curriculum and assessment of professionalism (10 minutes – AMC Presenters)
5. Summary (10 minutes – AMC Presenters)

Who should attend:

Medical Educators (undergraduate, postgraduate, specialty training colleges), Medical regulators, Tertiary education administrators, policy makers, employers.

Level of workshop:

Advanced

Session 3J

DESIGNING OSCE SCENARIOS TO ASSESS INTERPROFESSIONAL COLLABORATION USING A FUNCTIONAL FRAMEWORK

Author(s): OByrne C¹, **Smith C**¹, Cheung M¹, Simosko S², Pugsley J¹

¹ Pharmacy Examining Board of Canada, ² Susan Simosko Associates Inc.

Presenter(s): Carol O'Byrne¹, **Cathy Smith**¹

Background:

There is a great deal of research and practical experience in inter-professional collaboration as a competency and necessity for patient-centred health care. Few models include well-defined, measurable indicators that can be used to guide observations, assessments and professional development in practice, educational settings, licensing examinations or other contexts. The Pharmacy Examining Board of Canada (PEBC), working with physicians, nurses, physical therapists, pharmacists and educators, developed The Functional Framework for Inter-professional Collaboration in Healthcare. This tool contains behavioural indicators of good practice to help individuals, teams, organizations and collaborative partners evaluate the effectiveness of their collaborative practice, provide useful feedback, and promote on-going professional and organizational development. PEBC has begun to use the framework in developing scenarios for high stakes OSCEs to assess a candidate's ability to collaborate in a health care environment. In this workshop, participants will explore the Functional Framework and gain experience applying it in the design of an OSCE scenario to assess interprofessional collaboration.

Intended outcomes:

By the end of this workshop, participants should be able to

1. Identify the features of the Framework relevant to the design of OSCE scenarios, including observation and scoring protocols.
2. Apply these features in the assessment of collaborative performance in an OSCE scenario
3. Reflect on applications to their own practice

Structure:

Interactive large and small group activities, including discussion, demonstration and practice in assessment using a trigger video, and opportunities for reflection

Who should attend?

Educators, assessment experts and regulators interested in developing, assessing or evaluating inter-professional collaboration.

Level of workshop:

Introductory

Session 3K

SELECTING MEDICAL STUDENTS WITH DISABILITIES: BRINGING IT OUT OF THE "TOO HARD" BASKET

Authors: McConnell H, **Fitzmaurice L**, Palipana D, Clarey S, Owen P

Griffith University School of Medicine, Gold Coast, Australia

Presenters: Dinesh Palipana, Harry Mc Connell, **Liz Fitzmaurice**, Patrick Owens

Background:

Griffith University has re-admitted a student with a significant physical disability. His presence has invited the school to explore how a medical programme can assess the skills, knowledge and abilities of students with disabilities. Using the CanMEDS Framework as a guide we have discovered that our student's disability POSITIVELY impacts his ability to graduate from Medical School, well prepared to become a "medical expert".

Intended Workshop Outcomes:

- Share learning internationally about the incentives, barriers, challenges and rewards of working with students with disabilities.
- What "reasonable adjustments" and "accommodations" are required for equitable clinical skills assessments.
- Encourage Medical Schools to move towards a positive selection policy for people with disabilities.

Structure:

- The students' stories
- The school's stories: the OSCE and work place challenges and surprises
- Your stories: Table based discussions then whole group feedback: Identifying the incentives, barriers, challenges and rewards of working with students with disabilities.
- Table based discussion then whole group feedback: What "reasonable adjustments" and "accommodations" are required for equitable clinical skills assessments for students with disabilities.
- Table based discussions then whole group feedback: Where to from here: International collaboration as a cornerstone to graduating "intern ready" students with disabilities.

Who Should Attend:

-
- Those with a role or scholarly interest in Medical School selections
- Those working in the clinical skills area, tasked with assessing students with temporary or permanent disabilities.
- Those overseeing workplace based assessments and placements

Session 3L

DEVELOPING CONSTRUCT-ALIGNED ENTRUSTABILITY SCALES FOR THE ASSESSMENT OF COMPETENCY IN THE WORKPLACE

Submitted by Dr Wade Gofton

Author(s): Gofton W^{1,3,4}, Dudek N^{2,4}, Halman S², Rekman J¹, Wood T³

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Presenter(s): Wade Gofton MD FRCSC, Samantha Halman MD FRCPC, Timothy Wood PhD^t

Background:

A shift towards Competency Based Medical Education (CBME) in post-graduate residency education has triggered consideration of how to implement feasible assessment tools. Increased formative feedback and assessment from staff supervisors to guide residents through achievement of milestones and Entrustable Professional Activities (EPAs) will be required. For assessment of EPAs to be feasible and acceptable, it is crucial for frontline educators to feel an assessment tool captures their true appraisal of a resident.

EPA assessment evaluates a trainee against what they may actually be doing when practicing independently and should align with Millers level 4 (does). Staff already make daily judgments of their ability to trust a trainee with a task, aligning assessment with these daily considerations should improve how EPAs are assessed.

Intended outcomes:

For participants to:

- have an appreciation for the role of entrustability anchored scales in CBME assessment
- understand how to develop and begin validating scores to meet their specific needs

Structure:

This interactive workshop will provide an overview of workplace-based assessment (WBA) in CBME, and focus on the value of construct-aligned entrustment scales for assessment of the day-to-day activities expected of a physician. Small groups will be guided through the process of tool development using a modern validity theory structure. Examples from our experience in developing 3 entrustment aligned tools for the assessment of technical and non-technical skills, the Ottawa Surgical Competency Operating Room Evaluation (O-SCORE), the Ottawa Clinic Assessment Tool (OCAT), and the Ontario Bronchoscopy Assessment Tool (OBAT) will enrich this process.

Who should attend:

Participants with a focus on postgraduate or graduate medical education who are planning to develop CBME assessment tools.

Level of workshop:

Introductory/Intermediate.

Session 3M

USING TECHNOLOGY TO FACILITATE AN INTEGRATED SYSTEM FOR PROGRAMMATIC ASSESSMENT

Author(s): Jurd K¹, Lumsden C², Cappelli T³

¹ University of Queensland, School of Medicine, Rural Clinical School, Australia, ² Manchester Medical School, Manchester University, United Kingdom, ³ University of Manchester, Medical School, Manchester, United Kingdom

Presenter(s): Colin Lumsden, Tim Cappelli, Kate Jurd

Abstract:

Existing research output shows that mobile learning technologies are being adopted in an increasing number by medical schools globally⁴. The implementation of these devices opens the way for innovative approaches to instructional and assessment design. Digital technologies can facilitate a programmatic approach to assessment, which simultaneously optimises assessment for learning and provides a holistic overview of student progress and performance. Studies have shown that in the light of an increasing workload related to valid assessment strategies, online tools with relevant content and formats are a key factor for successful curriculum reform³.

The adoption of a flexible system for electronic data collection and management⁴ allows for multiple methods of assessment to be employed in courses and across phases of the program to collectively monitor and document knowledge, skills, interactional abilities and personal attributes.

Focusing on a whole program of study, this technology incorporates assessment strategies to drive learning. Embedded in the program are opportunities to build in practice and rehearsal before students are assessed, based on curriculum. Through the generation of an assessment portfolio, students gain insight into their own learning and longitudinal competence development¹, and can readily gain access to feedback on performance. This method of assessment and data capturing has also allowed for portability, minimises human error associated with paper-based assessments, and improves data accuracy and retention.

Medical competence is not the sum of separate entities but an integrated whole² and therefore multiple paper-based examinations cannot provide all the information for a comprehensive student assessment in a domain as broad as medicine².

Background:

Since 2011, Manchester Medical School (MMS) has undertaken the largest deployment of iPads within UK Higher Education⁴. Working towards the more efficient collation of students' compulsory workplace-based assessment data has led to the creation of an electronic form and data capture tool: "University of Manchester (UoM) eForms"⁴. This tool allows the timely collection and management of assessment data from large student cohorts, and provides the means to create assessments for the programme's graduate capabilities including:

- Compulsory workplace-based assessments
- Clinical examinations (OSCE)
- Practical skills assessments
- Case management discussions

The UoM eForms system can be readily adapted for other institutions. The University of Queensland Rural Clinical School (UQRCS) implemented this system at the beginning of 2015 within its MBBS/MD program across its four regional campuses (Toowoomba, Bundaberg, Hervey Bay and Rockhampton). These regional centres are

geographically dispersed. It has been clearly demonstrated that the student learning experience, teacher assessment and procedures have been vastly improved in terms of the quality of the student's experience and the efficiencies gained in the evaluation of the students and the program.

Examples of assessments developed UQRCS include:

- Clinical participation assessment
- MiniCEX
- Simulation scenario formative assessments
- Intern readiness pre and post program assessments
- Clinical practice long case examination
- Clinical skills long case examination
- Long Case Student log book and written summary

Intended outcomes:

By the end of the workshop participants will

- 1) Understand how digital technology can facilitate an integrated system for programmatic assessment and the benefits for curriculum developers, clinical teachers and students
- 2) Examine working examples of work placed based assessments, practical skills assessments, case examination discussion and other assessments that can be generated through this web-based system.
- 3) Participate in a hands-on workshop creating assessment forms.
- 4) Share ideas and perspectives of how this system can be contextualised to their own context/institutions
- 5) Explore opportunities for future applications of a digital assessment system

Structure:

- Overview - how technology can facilitate integrated system for programmatic assessments
- Outline of benefits:
 - Administration and management of student assessment data to capture overall performance
 - Students develop an assessment portfolio – subsequent impact on learning
- Demonstration of example assessments
- Demonstration of eForms administration, creation, distribution and collection
- Hands-on Activity
 - Participants allocated to trial site
 - Participants create their own assessment forms
- Participant discussion of future applications.

Who should attend?

Faculty, Clinical teachers, Medical Administrators, Assessment Leads and those involved in learning and assessment design.

Level of workshop:

Introductory/intermediate

References:

1. Bok HGJ, Teunissen PW, Favier RP, Rietbroek NJ, Theyse LFH, Brommer H, Haarhuis JCM, van Beukelen P, van der Vleuten CPM, Jaarsma DADC. Programmatic assessment of competency-based workplace learning: when theory meets practice. *BMC Medical Education* 2013, 13:123
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Session 3N

ASSESSMENT DESIGN DECISIONS FRAMEWORK: ENHANCING ASSESSMENT PRACTICE

Author(s): Bearman M¹, Molloy E¹, Dawson P², Boud D², Bennett S³, Hall M¹, Joughin G

¹ Monash University, ² Deakin University, ³ University of Wollongong, Australia

Presenter: Prof Margaret Bearman and Elizabeth Molloy

Background:

Assessment is a challenging area for health professional educators, and there are disjunctions between how educators would like to design assessments, how they think they are designing assessment and what they actually do in practice. The Assessment Design Decisions framework provides educators with alternative ways of thinking about assessment, through six design categories:

- assessment purposes
- assessment tasks
- learning outcomes
- context of assessment
- interactions; and
- feedback processes.

The framework considers the ways in which educators negotiate a range of complex interlinked personal and environmental influences to develop, implement and evaluate their assessments. This workshop will centre on a series of activities where participants will explore an assessment example from their own environments, using the Assessment Design Decisions framework to reflect, exchange and problem-solve particular issues relevant to their contexts.

Intended outcomes:

By the end of this workshop, it is expected that participants will be able to:

- Identify the assessment challenges within their own contexts
- Reflect on an assessment design, and articulate some of the underlying drivers and constraints
- Consider design alternatives relevant to their own environments.

Structure:

- Introduction
- Assessment challenges, identified by faculty and participants
- Why assessment design matters
- Assessment processes group activities
- Closing reflections.

Session 3N

INTEGRATED ASSESSMENT: PITFALLS AND POSSIBILITIES

Authors: Wright S ¹, Kulasegaram M ², Whitehead C ³

¹ Toronto East General Hospital, University of Toronto, ² Wilson Centre, Undergraduate Medical Education, University of Toronto, ³ Centre for Ambulatory Care Education, Wilson Centre, University of Toronto, Canada

Presenters: Dr Sarah Wright, Mahan Kulasegaram & Cynthia Whitehead

Background:

Integrated curricula are increasingly promoted in health professions education. There is a related desire to align assessment with these integrated curricula. Medical education assessment strategies, however, have traditionally been framed around discrete assessments of knowledge, skills and professional behaviours. This mismatch raises theoretical, psychometric and logistical dilemmas when contemplating different or conflicting notions of integration and assessments that support integration. In this workshop, participants will engage in dialogue and discussion about opportunities and challenges pertaining to integrated assessment models.

Intended Outcomes:

A key intention of this workshop is to enable participants to bridge theoretical and practical concerns related to integrated assessments. After the workshop, participants will be able to: 1- describe different forms of integration and consider how they might influence assessment strategies 2- consider the theoretical and practical implications of integrated assessments 3- choose appropriate and congruent forms of integration when designing integrated assessments.

Structure:

We will begin with a brief didactic presentation introducing different conceptualizations of integration and some common assessment strategies currently used in medical education. The majority of workshop time will be spent gathering diverse perspectives on the perceived strengths, opportunities and difficulties of creating integrated assessment strategies through a set of structured prompts and questions to small groups. Facilitated larger group discussion will enable the wisdom from small groups to be reported back, so that specific recommendations regarding integrated assessments will be a workshop outcome.

Who should attend?

We hope to attract a diverse audience including: psychometricians, education researchers, clinical educators and others involved in assessment design and delivery.

Level of workshop:

Intermediate.

Session 30

INTEGRATED ASSESSMENT: PITFALLS AND POSSIBILITIES

Authors: Wright S ¹, Kulasegaram M ², Whitehead C ³

¹ Toronto East General Hospital, University of Toronto, ² Wilson Centre, Undergraduate Medical Education, University of Toronto, ³ Centre for Ambulatory Care Education, Wilson Centre, University of Toronto, Canada

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Integrated curricula are increasingly promoted in health professions education. There is a related desire to align assessment with these integrated curricula. Medical education assessment strategies, however, have traditionally been framed around discrete assessments of knowledge, skills and professional behaviours. This mismatch raises theoretical, psychometric and logistical dilemmas when contemplating different or conflicting notions of integration and assessments that support integration. In this workshop, participants will engage in dialogue and discussion about opportunities and challenges pertaining to integrated assessment models.

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Who should attend?

We hope to attract a diverse audience including: psychometricians, education researchers, clinical educators and others involved in assessment design and delivery.

Level of workshop:

Intermediate.

Session 3P

HELPING IDENTIFY STATIONS-LEVEL FLAWS THROUGH FOCUS ON OSCE ITEM WORDING

Author(s): Brotchie K¹, Barton P², Sweet L³, Bullock S⁴, Somers G⁴, Shuttleworth M⁴

¹ Griffith University, Queensland, ² Monash University, Victoria, ³ Flinders University, South Australia ⁴, Monash University Rural Clinical School Victoria, Australia

Presenter(s): Dr K Brotchie¹, P. Barton²,

Background:

The presence of station-level errors in the Objective Structured Clinical Examination undermines the validity of high-stakes clinical skills assessment. An expensive undertaking in any health professional education program, it is essential that OSCE stations perform as expected providing a valid and reliable assessment. Quality assurance processes such as piloting of stations does not always occur and pre-exam reviewers may fail to identify errors. Removal of errors prior to the assessment should form part of a quality improvement cycle and may benefit from a structured approach. A tool for identifying errors has been created and compared against a small database of OSCE stations for evaluation and revision. This workshop will explore the use of the tool in the recognition and remediation of station level flaws. The "OWSAT" OSCE writers and reviewers' analysis tool has undergone significant modification and now has an online format.

Intended outcomes:

Participants will: reflect on the prevalence of OSCE item writing errors in their own settings; review a sample OSCE to identify potential flaws; investigate the use of a tool designed for the systematic identification of errors; reflect on the utility of the tool.

Structure:

Interactive exercises including discussions, large and small group activities and opportunities for individual reflection.

Who should attend:

Academics, clinical educators and health professionals involved with OSCE question writing or reviewing. Internet capable electronic devices welcome, paper-based alternatives will be provided.

Level of workshop:

Introductory/intermediate

Session 3R

INFLUENCE OF OPEN AND CLOSED BOOK EXAMINATIONS ON HEALTH SCIENCE STUDENTS' LEARNING APPROACH

Authors: Ramamurthy S, Er H, Nadarajah V, Pook P

¹ School of Pharmacy/International Medical University Kuala Lumpur, ² School of Pharmacy/International Medical University, Kuala Lumpur, ³ School of Medicine/International Medical University Kuala Lumpur, ⁴ School of Pharmacy/International Medical University, Kuala Lumpur, Malaysia

Presenter: Dr Srinivasan Ramamurthy

Introduction:

Curriculum and assessment play important roles in the development of learning styles. Surface learning concentrates on fact memorization, however deep learning emphasises on the understanding of the underpinning concepts and hence is desirable. The present study aims to evaluate the influence of open and closed book examinations on the learning approach of health science students.

Methods:

Years 1 and 2 undergraduate health science (Pharmaceutical Chemistry and Medical Biotechnology programmes) students were invited to participate voluntarily in open book (OB) and closed book (CB) online formative tests for the respective chemistry modules. Both OB and CB tests in the same module comprised of problem solving questions of similar content and complexity. The students' learning approach was evaluated using the Deep Information Processing (DIP) instrument. Paired samples t-test was used to compare the DIP for the OB and CB tests. The students were surveyed on their perception of learning experience in both tests.

Results:

The mean DIP in the OB test are slightly higher than those in the CB test in both year 1 and 2 modules, although not statistically significant ($p > 0.05$). Nevertheless, the students perceived that the OB test provided an enhanced learning experience due to less memorisation and anxiety, and increased focus on problem solving and application.

Conclusions:

Although there is no difference in deep learning approach in OB and CB tests, the former provides an enhanced students' learning experience,

Take-home message:

Learning experience is associated with motivation and confidence of the learners, which have impact on learning.

USING COMMAND TERMS TO DEMAND HIGHER ORDER RESPONSES IN ASSESSMENT IN MEDICAL EDUCATION

Author(s): Bishop J, McLean M, Moro C

Bond University, Faculty of Health Science and Medicine, Australia

Presenter: Professor Dr Jo Bishop

Introduction:

Command terms provide a way of assessors defining expectations when asking questions while clearly indicating the level of response required. Many examinations contain questions which include “calculate the...” or “What is the...” as the main requirement and objective. The level of response required is, however, unclear. Most assessment in medicine requires the learner to demonstrate higher order skills such as synthesis and evaluation. Using the appropriate command term will greatly assist in communicating the required level of response.

Methods:

First year medical students were provided with a list of command terms and definitions. They practiced using these when writing revision questions and learning issues for themselves within PBL classes. These command terms were incorporated into the subsequent medical examinations.

Results:

Command terms were seen by students as a way to enhance their understanding of what was being asked in each question. They can now identify that questions requiring “review” or “evaluate” require a higher level of response, than those requesting “list” or “define” answers for the same topic. This has enhanced the clarity of questions, the level of responses, and the student comprehension of expectations for their answers.

Conclusions:

As an educator, making one’s intentions clear about exactly what is expected in student responses to a question is important. Command terms assist when demanding higher-order thinking from a student when examining their comprehension and application of learned content.

Take-home message

Having a common understanding of the words used in assessment will assist both the learners and the assessors.

DIFFERENCE IN TEST SCORES BETWEEN EARLY AND LATE FINISHERS OF THE MCQS TEST. AN OBSERVATIONAL STUDY DURING MEDICAL SCHOOL EXIT EXAMINATION.

Author(s): Wongwandee M, Paritakul P

Faculty of Medicine, Srinakharinwirot University, Thailand

Presenter: Dr Monton Wongwandee

Introduction:

There is a general belief that the students who finish the test early are the intelligent students who find the test easy for them. We tested this hypothesis on medical students.

Methods:

During the exit examination of our medical school which included 128 examinees, we recorded the duration between the start of the test and the time individual handed in the answer sheet. The exam is a 200-item single best answer MCQs covering clinical subjects. Total time allowed for the examination was 360 minutes (with a 1-hour break in the middle). To comply with the examination rules, all students must sit at least half of the allowed test time i.e. 180 minutes. We grouped the students who finished at 180-210, 211-270, 271-330 and 331-360 minutes as the "first finisher", "early finisher", "late finisher" and "last finisher" respectively. The mean test scores of each group were compared using one-way ANOVA.

Results:

There was a statistically significant difference between groups as determined by one-way ANOVA ($F(3,124) = 4.30, p = .006$). A Tukey post hoc test revealed that the mean test score of the first finisher group (84.0 ± 11.0) was statistically significantly lower than the early finisher ($104.1 \pm 11.0, p = .009$), late finisher ($105.8 \pm 9.8, p = .003$) and last finisher group ($105.7 \pm 11.1, p = .005$). There were no statistically significant differences between the other three groups.

Conclusions:

In contrary to the general belief, students who are among the first finisher group score lower than other students.

Take-home message:

Handing in the test early may be a result of reckless behaviour rather than the students' ability to answer the MCQs correctly.

APPLYING A SITUATIONAL JUDGEMENT TEST (SJT) IN AN INDONESIAN CULTURE AND CONTEXT: A CASE STUDY IN FACULTY OF MEDICINE, UNIVERSITAS INDONESIA

Author(s): Soemantri D¹, Patterson F^{2,3}, Martin S³

¹ Department of Medical Education, Faculty of Medicine Universitas Indonesia, ² University of Cambridge, UK, ³ Work Psychology Group, UK

Presenter: Dr Diantha Soemantri

Introduction:

Situational judgement tests (SJT) are increasingly used in medical school admissions to assess important non-academic attributes relevant to a career in medicine (Prideaux et al 2011). However, non-academic attributes are laden with culture and context, that differ from country to country such that contextualisation of such tests is vital to their effectiveness. There has been no SJT developed in the Indonesian language and this study aims to develop an SJT specific for the Indonesian context.

Methods:

Medical teachers were involved in the development of SJT items targeting the following domains; noble professionalism, effective communication and self-awareness. A review process by a panel of experts revised the items in line with best practice (Patterson et al 2012). The SJT items are being piloted with first and second year undergraduate students (N=400) to establish the items' comprehension and relevance.

Results:

One-hundred and thirteen SJT scenarios were produced. Each scenario consists of a minimum of 6 responses, of which applicants indicate the level of appropriateness of each response. An expert review and pilot analysis was used to establish the content validity of the scenarios and items.

Conclusions:

A new SJT has been contextualized according to the culture and context of an Indonesian medical school. There are subtle but important contextual differences in the content compared to other countries around the globe. The item writing exercise is a rewarding experience for medical teachers, since they can discuss and confirm the values that medical students should hold.

Take-home message:

SJTs require significant contextualisation to reflect local requirements. The SJT item writing process is beneficial for the institution, but also for teachers' personal and professional development.

THE EFFECT OF HYBRID DEVELOPMENT ON THE CONSTRUCT VALIDITY OF AN INTEGRITY SITUATIONAL JUDGMENT TEST FOR MEDICAL SCHOOL SELECTION.:

Author(s): De Leng W¹, Stegers-Jager K¹, Born M², Themmen A³

¹ Institute of Medical Education Research Rotterdam (iMERR), Erasmus MC, Rotterdam, the Netherlands .² Department of Psychology, Erasmus University, Rotterdam, the Netherlands ³ Department of Internal Medicine, Erasmus MC, Rotterdam, the Netherlands

Presenter: Miss Wendy De Leng

Introduction:

Situational Judgment Tests (SJTs) are used for selection on noncognitive competencies. Developing a proper SJT is important in high-stakes situations such as medical school selection. Most SJTs are developed using inductive, empirical methods that contribute to the content validity. Deductive, theoretical methods, on the other hand, could strengthen the construct validity. This study will examine the construct validity of an integrity SJT for selecting medical students developed by a combination (hybrid) of inductive and deductive methods.

Methods:

The empirical development of the scenarios was based on 9 critical incident interviews. The response options were based on the input of students and staff of diverse backgrounds. The deductive method incorporated the theories of Counterproductive Academic Behavior and Norm Violation into the scenarios. The response options were composed by the theory of Cognitive Distortions and the Honesty-Humility facets of the HEXACO personality scale.

Results:

The simultaneous use of inductive and deductive methods led to an SJT consisting of 57 scenarios, each followed by 4 response options. This SJT will be administered as a pilot among medical students to examine whether the intended theoretical structure can be retrieved. The results of this pilot will be available at the time of the conference.

Conclusions:

The hybrid development of an SJT is a time-consuming process but provides a new and innovative method to create an SJT. It offers a potential solution to some of the common SJT problems such as low construct validity and might therefore improve the selection of medical students.

THE EXPERIENCE OF USING THE SCRIP CONCORDANCE TEST IN EDUCATIONAL RESEARCH

Author(s): Balasooriya C¹, Rhee J¹, Olupeliyawa A¹, Zwar N¹, Shulruf B², Canalese R³, Jabbour V¹

¹ School of Public Health & Community Medicine, UNSW Medicine, UNSW Australia, ² Medicine Education and Student Office, UNSW Medicine, UNSW Australia, ³ School of Medicine, Sydney, University of Notre Dame, Australia

Presenter: Dr Chinthaka Balasooriya

Introduction:

The Script Concordance Test (SCT) is a well-regarded yet relatively novel method of assessing clinical reasoning skills. There is a wide range of studies focusing on the SCT as an assessment method but few instances of its use in research as a longitudinal measure of development of clinical reasoning.

Methods:

This study explored the use of the SCT as a pre and post measure to evaluate the impact of an educational intervention designed to enhance clinical reasoning skills. The study was conducted within a general practice training program, on two cohorts of trainees at two separate training sites that enabled an intervention (n= 11) / delayed intervention (n=12) design.

Results:

There were no statistically significant differences in the mean SCT scores between the two cohorts. Regression analysis revealed differences in the patterns of improvement of SCT scores, which correlated with baseline SCT scores (those with lower initial scores showed greatest improvements). This pattern was more pronounced in the intervention group with a differential impact based on the content domain of the SCT items.

Conclusions:

The findings highlight a number of opportunities and challenges in using the SCT in educational research. The study raises important questions regarding the sensitivity of the SCT to change in clinical reasoning skills and the types of analysis that can best investigate such change.

Take-home message:

The SCT has the potential to play a significant role in educational research but the design of items and methods of analysis need careful consideration.

ANALYZING CURRICULUM OUTCOME USING FINAL YEAR PROGRESS TEST

Author: Diani Puspa Wijaya

Medical Education Unit, Islamic University of Indonesia

Presenter: Diani Puspa Wijaya

Introduction:

Islamic university of Indonesia (IUI) implemented a new competence based curriculum (CBC) on 2011 replacing the old CBC 2005. The curriculum change based on the evaluation of the previous curriculum. The new CBC 2011 consists of four phase. The new CBC 2011 is designed with the concept of spiral curriculum better than the previous curriculum. The progress tests conducted to assess the progress of students in learning achievement. Progress test of end year students' from old CBC 2005 and new CBC 2011 is expected to describe the curriculum outcome in encouraging of students' learning achievement.

Methods:

The final progress test were administered at the third year of each curriculum process. The progress test conducted using the same blueprint that developed referred to the new CBC. Final progress test for old CBC students conducted in 2013 and for the new CBC students in 2014.

Results:

The new CBC students received higher ratings for total progress test result from the old CBC students. The first and second phase subjects are higher in the new CBC students. The old CBC students received higher ratings for the third and fourth phase subjects

Conclusions:

The new CBC successfully promotes student achievement. Further research is needed to analyze problems in the achievement of the third year new CBC students in third and fourth that are lower than the achievement in first and second phases.

SCRIPT: A SCRIPT CONCORDANCE TEST RUNNING WITH THE PROCEDURE OF PBL AND TBL FOR MEDICAL TRAINING AND ASSESSMENT

Author(s): Yao Xun¹, Hu Hai², Qing Ping¹,

Presenter: Mr Yao Xun

¹West China School of Medicine, Sichuan University, Department of Academic Affairs, ²China, West China Hospital, Sichuan University, Department of Emergency Medicine, China

Introduction:

Group-Problem-Solving-Simulation developed by HumanSynergistics are often used and highly regarded for team-building. Such simulations require participants to rank a list of items or activities according to specific objective (e.g. surviving) and compare quantitatively their individual and team solutions to an expert one, which gives students an opportunity to learn about their personal influence style and their effectiveness as a team member. But because of its non-medical nature, limited amount of cases and without learning step, it can't improve medical knowledge and skills and students are losing interests quickly.

Methods:

We developed some medical cases in similar style and added key elements of Script Concordance Test, MCQ, Reasoning, PBL and TBL, for which we call it SCRIPT teaching methods. 261 undergraduate students from 2012-2014 were enrolled to experience didactic lectures, PBL, TBL and SCRIPT in the same semester. A Likert scale with 9 aspects was used to collect the students perceptions towards the three model. Multivariate-dependent variable analysis and Student-Newman-Keuls (SNK) test was used to determine the differences among and between the models and groups.

Results:

The SCRIPT was ranked more effective than PBL, TBL and lecture in Knowledge-Retention, Knowledge-Appling and Learning-Interests. There're no differences between the SCRIPT and PBL/TBL in Learning-Difficulty, Motivation in searching and information management, Understanding Teamwork, Clinical Reasoning, Communicating and Educating, but all of which were ranked better than that of lecture except Learning-Difficulty. Post-hoc tests of homogeneous subsets showed less variability among groups.

Conclusions:

The SCRIPT Model seems great but the case development and course running are much harder than the others.

Take-home message:

DOES PASS-FAIL GRADING AFFECT STUDENT ACHIEVEMENT IN A POSTGRADUATE PROFESSIONAL PSYCHOLOGY COURSE?

Author(s): Roberts, RM & Dorstyn, D

School of Psychology, University of Adelaide, Australia

Presenter: Dr Rachel Roberts

Introduction:

The impact of traditional grading versus pass-fail grading on student achievement in professional postgraduate psychology courses remains undetermined. The effects on achievement levels of these marking systems for students enrolled in a postgraduate psychology course were examined. It was anticipated that performance in this cohort of highly motivated students would not differ as a result of the change in assessment approach

Methods:

Data from 73 students enrolled in the University of Adelaide course "Psychological Assessment" during 2012-2015 was collated. Forty-three students were enrolled in the two years immediately prior to the change in marking and received grade-based marks. Their grades were compared to thirty students who were enrolled in the subsequent two years and marked using a pass-fail system; grade-based marking was undertaken with this cohort but not provided to students.

Results:

A significant difference in scores for grade-based ($M = 86.5$, $SD = 3.2$) and pass/fail marking ($M = 78.4$, $SD = 3.8$; $t(71) = 5.07$, $p < .001$) was observed. This equated to a large group difference in mean grade between the cohorts (mean difference = 5.5, 95% CI: 3.3 – 7.6, $d = 1.2$).

Conclusion:

Although students continued to perform at a high level with the change to pass/fail assessment, demonstrating excellent achievement of the course learning objectives, a reduction in performance was evident.

Take-home message:

Pass-fail grading is a viable assessment alternative for postgraduate professional psychology curricula however it is critical that assessment be seen as a developmental process, based on ongoing practice and performance.

SETTING NEW STANDARDS IN ASSESSMENT: FROM ANGOFF TO COHEN

Author: Ms Carmel Tepper

Bond University, Health Sciences and Medicine, Australia

Presenter: Ms Carmel Tepper

Introduction:

Standard setting of assessment items is an essential component of creating a valid, defensible and fair pass mark for medical assessment. The Angoff method is seen as one significant format, where a panel of experts determines the minimal acceptable pass per item achievable by a borderline student. The Cohen method of standard setting has been proposed as a practical and affordable method for low-stakes exams. The formulae utilised is $PM = \text{'multiplier'} \times \text{student score at 90}^{\text{th}} \text{ or } 95^{\text{th}} \text{ percentile}$. Cohen method utilises the best performing students as the point of reference. It is these students who best reflect the level of difficulty of the exam, the curriculum as it was taught and the quality of alignment of this curriculum and assessment.

Aim:

Review historical assessment data to determine an appropriate local multiplier and reference point to utilise when employing the Cohen method of standard setting.

Methods:

Review three years of Year 1 cohort historical exam data to calculate a personalised 'multiplier' and point of reference

Results:

For Year 1 student exams from 2012 to 2014, the highest correlation between the modified Angoff standard set pass mark and the student scores was at the 90th percentile, being 0.969, significant at the 0.01 level. The average local multiplier at this reference point was 65%.

Conclusions:

A pass mark = 65% of student score at 90th percentile will provide the most similar pass mark to a standard set pass mark created by a panel of experts via the modified Angoff method.

RUBRIC FOR EXAMINER STANDARDIZATION IN PORTFOLIO ASSESSMENT

Author(s): Shitarukmi S, Rokhmah Projosasmito S, Kurniawati N

Faculty of Medicine Universitas Gadjah Mada, Department of Medical Education, Indonesia

Presenter: Savitri Shitarukmi

Introduction:

Faculty of Medicine UGM has introduced portfolio for learning skills assessment. A rubric is developed to uniformly assess learning skills portfolio of first-year medical students. The aim of this study is to measure interrater reliability of rubric used in portfolio assessment.

Methods:

This study is conducted at Faculty of Medicine Universitas Gadjah Mada. A sample of fifty (N=50) from 254 first-year medical students were assigned to compile a learning skills portfolio in 5 weeks. The portfolios is collected and independently scored using the rubric by 2 examiners, each portfolio will be assessed by 1 lecturers compared to the expert. Examiner standardization will be measured using interrater reliability statistical test.

Results:

Interrater agreement will be reported. Data analysis is still on going.

Conclusions:

It is expected that standardization scoring of portfolio assessments can be enhanced by using the rubric.

Take-home message:

It is expected that the rubric might be used to assess portfolio assignments in wider context

INFLUENCE OF DIFFERENT SCORING METHODS FOR MTF ITEMS ON TEST FAIRNESS.

Author(s): Lahner F¹, Nouns Z¹, Krebs R¹, Stricker D¹, Fischer M², Huwendiek S¹

¹ University of Bern, Institute of Medical Education, ² LMU Munich, Institute for Medical Education

Presenter : Ms Felicitas-Maria Lahner

Introduction:

Fairness is an important concept in testing [1, 2]. No test taker should be systematically discriminated by the testing procedure [1, 3].

Beside one-best-answer questions (Type-A), Multiple True- False items (MTF) are the most popular type of Multiple-Choice Questions (MC) [4]. However, optimal scoring for MTF is not stated yet [5, 6].

Our aim is to analyse the influence of different scoring methods for MTF items on test fairness.

Methods:

We analysed exams from two Swiss medical faculties in a cross section design using data from 1st, 3rd, and 5th year medical students. All exams included MTF and Type-A questions. We compared three scoring methods for MTF, namely full-point-, half-point-, and quarter-point-scoring. To operationalize test fairness we analysed how different ability groups profit from different scoring methods by using variance analyses. We analysed correlations between different scoring methods and overall performance. We compared Cronbachs Alpha [7] of different scoring methods using the method of Feldt et al. [8].

Results:

Full-point-scoring produces significant lower reliabilities and lower correlations with overall performance compared to the other scoring methods. It underestimates students' performance (especially of medium- and low-performing students).

Half-point-scoring produces high reliabilities and correlates high with overall performance. It does not favour students with different levels of ability.

Quarter-point-scoring produces high reliabilities and correlates high with overall performance. It overestimates the abilities of low-performing students.

Conclusions and Take-home message:

Half-point-scoring of MTF-items seems to accurately and reliably reflect students' abilities. This scoring method might support the fairness of exams.

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Session 3S

HOW DO SENIOR MEDICAL CLINICIANS USE AND EXPERIENCE NON-MEDICAL LITERATURE AND READING?

Author(s): Shea R, Delaney C, Chiavaroli N

University of Melbourne, Department of Rural Health, Faculty of Medicine, Dentistry and Health Sciences, Australia

Presenter: Dr Rosemarie Shea

Introduction:

The inclusion of medical humanities and non-medical literature in medical curricula is increasingly recognised to integrate the art of personal development, communication skills and specific skills in empathy with the science of clinical practice. However there is uncertainty about what the design and goals of non-medical literature in the medical curriculum should be. Most studies have focused on students' use of this material. There is little exploration of how non-medical literature is used by practising clinicians.

We were interested in the experience of senior doctors. Are there other frames for viewing books and reading, other aspects to their use or other perspectives from practising clinicians that haven't been considered?

Methods:

In this project, 8 senior doctors were invited to participate in an in-depth interview exploring whether and how they integrated non-medical books and reading with their medical practice.

Initial sampling was purposive; starting with clinicians working at the local health service who were known to have an interest in reading, and then progressing via snowball sampling

The interviews were recorded, transcribed and then coded using thematic analysis, informed by phenomenology.

Results:

Key themes included 'time for reading'; 'expanded meanings of non-medical literature'; 'engaging students' and 'the importance of family'.

Conclusions:

Initial results suggest that senior medical clinicians have a rich understanding of how non-medical reading may contribute to medical practice than is reported in current medical education literature.

Take-home message:

Senior clinicians experience and use of non-medical reading provides a valuable new perspective for the medical humanities use in medical education.

SPECIALIST GUIDED IMPROVEMENT IN JUNIOR DOCTOR COMPETENCY

Author(s): Stephens S, Fitzmaurice L, Donald K

Griffith University, Gold Coast, Australia.

Presenter: Dr Sebastien Stephens

Introduction/background:

We have noticed that Specialist Doctors are able to identify holes in Junior Doctor clinical skills. As Specialist Doctors are directly in contact with Junior Doctors, we set out to work with Specialist Doctors to identify what clinical skills their Junior Doctors could improve.

Purpose/objectives:

Primary objective: To list clinical skills that junior doctors could improve as identified by Specialist Doctors from all hospital departments.

Secondary objective: To identify how medical schools could modify their curricula to improve Junior Doctor clinical skills.

Questions for exploration or ideas for discussion:

Specialist Doctors were asked to name 2-3 clinical skills they feel Junior Doctors could improve while rotating in their specialist department.

Results:

There was a general consensus that Junior Doctors could improve in clinical skills. For example, haematology specialists identified abdominal exams and consenting for blood products. In the poster/oral presentation, we discuss in detail the findings.

Discussion:

Specialist Doctors identified certain skills that are in theory taught well by medical schools. Other clinical skills were of surprise and revealed a need for attention. Such results allowed us as a medical school to mould curricula to the dynamic needs of current Specialist Doctors.

EVALUATING THE END OF AN EDUCATIONAL ERA FOR AN INTEGRATED 'WHOLE-SYSTEM' PROGRAMME FOR MEDICAL STUDENTS' ACTIVE LEARNING:--- INAUGURAL TUTORS ON LEGACY AND LAMENT (THE SEQUEL)

Author: Maudsley G

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Presenter: Dr Gillian Maudsley

Introduction:

Seventeen years into an integrated 'whole-system' (5-year) programme for medical students, discontinuation of that system was announced. This ended the longstanding problem-based educational philosophy of active learning in facilitated smallgroup-work around integrated curriculum-themes and early clinical context/contact with clinical/communication skills development.

Initially, in interviews (T1-study, 1997, with 35th tutor-GM), 34 inaugural problem-based learning (PBL) tutors from the first-ever semester (1996) had been cautiously positive about the educational philosophy. Sixteen years later, 10/34 were still on campus educating Liverpool medical students and gave follow-up T2-study interviews with 11th tutor-GM. They were more boldly positive now about student and personal progress. 'The end' was announced only one month after the last T2-interview. Two years later (notwithstanding four retiring, albeit retaining University-links), T2-study participants had contributed to the subsequent '2014 programme' (which emphasized basic science content) or its prelude. Their T2-study narratives merited follow-up.

Methods:

Aim---What do long-serving educators in an 'active learning' system conceptualize as critical legacies and laments after it ended? ~~~**Setting:** Liverpool MBChB curriculum. **Participants:** The previous ten T2-participants ('inaugural PBL tutors' still curriculum-active in 2013). ~~~**Method:** ► In follow-up e-correspondence (7-item schedule), 11th remaining tutor-GM revisited T2-responses and explored perceptions (T2+-study, 2015). ► Within the pragmatism paradigm, inductive analysis sought themes.

Results:

Tutors had adjusted their outlook on 'hidden curriculum' and how things 'might have been'.

Conclusion:

Systematically evaluating legacy at the 'end of an educational era' via long-serving facilitators was educationally cathartic.

Take-home message:

Staff gave constructive evaluative insights about missed quality improvement opportunities.

CLINICALLY ORIENTED ANATOMY TEACHING TO MAXIMISE SECOND YEAR MEDICAL STUDENTS LEARNING EXPERIENCE

Author(s) Swamy M ¹, Venkatachalam S ²

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Presenter: Dr Meenakshi Swamy

Introduction:

The reduction in undergraduate anatomy teaching and the challenge of acquiring sufficient anatomical knowledge for safe and competent clinical practice has caused great concerns. This study aimed to investigate the effect of clinically relevant anatomy teaching on second-year medical students' knowledge and confidence.

Methods:

Sixty seven second year Phase1 medical students(67/93) at Durham University voluntarily participated in this pilot study. An orthopaedic surgeon led clinical anatomy practical session was incorporated after completion of lower limb anatomy teaching. A pre-test and post-test was conducted using a questionnaire, developed from the thirteen lower limb anatomy components applied in general/specific clinical conditions and clinical assessments. A modified Delphi technique involving orthopaedic surgeons was used to identify these components of orthopaedic anatomy currently most valuable in clinical terms. Data were analysed using paired t-test.

Results:

A significant increase in knowledge scores($p < 0.001$) was observed from pretest(15 ± 3.2) to post test(7 ± 2.2). The mean students' self-rated confidence to apply anatomical knowledge clinically increased significantly from pre-test to post-test($p < 0.001$). Majority(63/67:94%) of the students evaluated the session to be useful. The themes that emerged from their feedback about the session in the free text comments were: helps consolidation of knowledge, further motivation, clinical contextualisation, shows gaps in the learning and aids memory.

Conclusions:

Exposure of students to clinically relevant orthopaedic anatomy, identified and delivered by orthopaedic surgeons, improved students' confidence and ability to apply anatomical knowledge in the clinical context.

Take-home message:

Clinically relevant and speciality oriented anatomy learning has the potential to ease students' transition to clinical practice as 'relevance aids learning'.

STUDENT'S PERFORMANCE IN EARLY CLINICAL PHASE ASSESSMENTS: EFFECT OF INTRODUCTION OF CLINICAL INTEGRATION BLOCK IN PRE-CLINICAL PHASE

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International Medical University, Kuala Lumpur, Malaysia

Presenter: Dr Arun Kumar Basavaraj

Introduction:

Pre-clinical Phase curriculum has influence on the student's performance and competency during the clinical years. A revision in the medical curriculum at International Medical University (IMU) was introduced from August 2011. One of the changes was introduction of a "Clinical Integration Block" comprising several weeks of real patient encounters in hospital postings with practice of clinical and communication skills. The aim of this study was to determine: whether students who have experienced clinical integration block in pre-clinical phase have improved clinical performance in the early clinical phase.

Methods:

Assessment results of two cohorts each from old and revised curriculum at IMU clinical school were evaluated. The semester 6 (1st clinical block of Phase 2) results of theory and clinical examinations in Internal medicine (IM) (n=136) and Surgery (SU) (n=156) modules were compared. Comparison of theory grades and global rating was done. Competencies of history taking, physical examination, arriving at differential diagnosis, professionalism, and communication skills were compared. Data were tabulated and analysed using SPSS version 18.0 for windows. Univariate and multivariate multiple regression analyses was used to analyze the data.

Results:

Students from the revised curriculum with a period of intense clinical encounters have been shown to have better global rating in IM, professionalism, ability to suggest appropriate treatment plan, ability to do accurate physical examination and take a competent history. There were no significant changes in global rating for Surgery, but the revised curriculum students showed improved ability to apply basic sciences, better physical examination skills and ability to identify positive physical findings.

Conclusion:

The results of this study shows value and effectiveness of the clinical integration block in better preparation of students for the clinical phase. Curriculum change, has to a certain extent, influenced the performance of students in early clinical years.

ASSESSING STUDENTS' PARTICIPATION AND SOCIAL INTERACTION IN PROBLEM BASED INTER-PROFESSIONAL LEARNING

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Presenter: Ms Endang Lestari

Introduction:

Respect for other professions' roles is key to the success cooperation between medical personnel in collaborative health care team. This study evaluated the participation and social interaction in inter-profession PBL to determine students' equal participation and contribution as well as involvement of all professions in solving the case.

Method:

50 students of medicine, nursing and midwifery schools participated in this pilot project study and grouped into five. The step 7 (report the result of self-study) discussions were videotaped for three weeks. The conversations during discussions were transcribed and analyzed by two experts of medical education. The number of participation and social interactions were calculated based on the number of turns and statements of externalization, initiative, integrative consensus, consensus based on conflict and quick consensus produced. Anova and Kruskal Wallis statistical test were employed to test the hypothesis.

Result:

The means of participation and statements of externalization, initiative, integrative conflict and quick consensus were not statistically different among professions ($p=0.063, 0.871, 0.557, 0.072$, respectively). Meanwhile the average number of consensus based on conflict and integrative consensus statements produced were significantly different among professions ($p= 0.010, 0.016$, respectively).

Conclusion:

Students from different health profession can participate, externalize and provide equal initiative in solving patient problem. Nevertheless, there are still many decisions were taken by medical students, utilizing consensus based on conflict and integrative consensus.

Take home message:

Need to further enhance the confidence of midwifery and nursing students so that they can contribute more in decision making

ART IN MEDICAL EDUCATION: ENHANCING CLINICAL AND SELF-CARE SKILLS

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¹ Weill Cornell Medical College, New York, ² Weill Cornell Medical College, New York, ³ Columbia University College of Physicians and Surgeons, ⁴ Columbia University College of Physicians and Surgeons, ⁵ ArtMed inSight

Presenter: Dr Carol F. Capello

Introduction:

Visual arts can help nurture medical students' critical thinking, observational, and communication skills, professionalism, and self-awareness, challenging how they manage emotions, uncertainty, biases, and ambiguity. In turn, enhancing such meta-cognition may reduce medical bias and, subsequently, limit medical error.

Methods:

First-year medical students from 2 NYC medical colleges elect to take six 3-hour sessions engaging with museum art to provoke further critical thinking and self-discovery. An art educator and/or physician lead students in discussion, writing, and sketching exercises. Building on each others' observations and thoughts, students exercise their own observation skills and reflect on their own perceptions, biases and the role of emotion in observation. Students complete the Groningen Reflection Ability Scale (GRAS), Implicit Association Test (IAT), and Tolerance for Ambiguity (TFA) scale pre-post the innovation; they also reflect, in writing, on what they "see" in selected art and medical images.

Results:

The GRAS has shown significant differences ($p < 0.05$). Although the TFA and IAT scales have not, the TFA is 1.5 SD higher than that of second-year US medical students. Qualitative comments support improved verbal and nonverbal communication skills and increased insight into self-perceptions and the role of context and emotion in the observational process

Conclusions:

This innovation has high reproducibility and scalability. Limitations include course brevity and the need to find additional quantitative methods to assess how the innovation may impact future clinical thought processes and practice. Similar visual-arts based courses may be developed for physicians and other health-care trainees.

Take-home message:

The visual arts offer a rich resource to enhance observational and other clinical competencies.

EXPLORING THE DEVELOPMENT OF REFLECTIVE THINKING IN AN UNDERGRADUATE PROBLEM BASED LEARNING HEALTHCARE COURSE.

Author(s): Skinner K¹, Hyde S¹, McPherson K¹, Crockett J¹, O'Connor S², Breheny L¹

Charles Sturt University, Australia

Presenter: Ms Kay Skinner

Introduction:

Reflective thinking and practice are essential attributes of competent healthcare professionals. Strategies to promote and assess reflective thinking are now common in most undergraduate courses. Evidence is emerging of key variables which influence the development of reflective thinking, including: deep learning, shared reflection, peer support, self-assessment, facilitating context, safe atmosphere, mentorship, time to reflect.

Problem-based learning (PBL) requires students to collaboratively engage with an ill structured problem in order to construct their own understanding. Reflective practices are built into the process, and scaffolded by the PBL facilitator. It is reasonable to expect that these students will develop reflective thinking skills. However there is little evidence to support this assumption. This presentation explores the development of reflective thinking for one physiotherapy cohort as they progressed through their undergraduate course, in which key subjects in every year group use a PBL approach.

Methods:

To explore the development of students' Reflective Thinking across the course, students completed Kember and Leung's (2000) Reflection Questionnaire in both second and final (fourth) year.

Results:

Results will be explored and discussed in relation to: evidence; theory underpinning the questionnaire; key variables linked to the development of Reflective Thinking; and pedagogical strategies used within the course.

Conclusions:

PBL affords many of the variables linked to the development of reflective thinking. Results from one physiotherapy undergraduate course may add some evidence on progression in students' level of reflective thinking as they move through their PBL course.

PEER-REVIEW OF TEACHING FOR RURAL MEDICAL EDUCATORS: EVALUATION OF A PILOT PROGRAM

Author(s): Caygill R, Peardon M, Wright J

University of Melbourne, Department of Rural Health

Presenter: Ms Rebecca Caygill

Introduction:

The continuing expansion of peer-review of teaching within higher education has allowed for its benefits to become better known and accepted: peer-review provides reinforcement and validation of individuals' current teaching practices as well as encouraging critical self-reflection.

Successful implementation of a targeted peer-review program is equally – if not more – important for rural medical educators, in relation to metropolitan based medical educators. Rural Clinical Schools have a limited number of teaching clinicians and as such it is imperative that these educators' teaching abilities are of a sound standard to ensure students receive the best possible education, on par with their metropolitan based counterparts: Rural medical educators need access to suitable professional development tools, to encourage continual professional development and maintain high teaching standards.

This pilot program will provide rural medical educators with a welcomed professional development tool, and the evaluation of the program and its processes will ensure its continuation, relevance, and efficacy to its target audience.

Methods:

Medical educators at the University of Melbourne's Rural Clinical School who take part in the peer-review pilot will be invited to evaluate their experience. Participants will complete three short surveys (prior- and post-participation of a peer-review session, and a final reflection at the end of the academic year) to assess and evaluate their expectations and overall experience of the program.

Results:

The pilot program is ongoing throughout the 2015 academic year. Results will be ready for analysis at the end of the year, preliminary findings will be ready for presentation at the conference in March 2016

Conclusions:

While ongoing professional development is important for tertiary medical educators, availability of professional development resources is scarce, particularly for those based rurally. Providing a peer-review program targeted at rural medical educators is the first step to developing, and implementing, a rural-specific continuing professional development program for medical educators.

Take-Home message:

By providing targeted programs for rural medical educators we can ensure their ongoing professional development and safeguard the high quality teaching, and academic experience, expected by our rurally based medical students.

GEOGRAPHIC AND TEMPORAL TREND IN THE DISTRIBUTION OF PHYSICIANS UNDER THE GOVERNMENT-INITIATED COLLABORATIVE PROJECT TO INCREASE PRODUCTION OF RURAL DOCTORS IN THAILAND

Presenter: Dr Parinya Chamnan

Author(s): Chamnan P^{1,2}, Arora R¹, Nitiapinyasakul A¹

¹ Collaborative Project to Increase Production of Rural Doctors, Ministry of Public Health, Nonthaburi, Thailand, ² Medical Education Center, Sanpasitthirasong Hospital, Ubon Ratchathani, Thailand

Introduction:

An adequate supply of physicians is needed to ensure access to affordable and quality health care. Over the past two decades, the shortage of physicians in Thailand has reportedly been improved following the special government intervention – the Collaborative Project to Increase Production of Rural Doctors (CPIRD). However, whether this led to the uniform distribution of the physicians remained unclear. This study was aimed to examine the comparative proportions of the CPIRD medical graduates who remained in their hometown in the last 15 years.

Methods:

CPIRD student database was merged with health workforce information of the Ministry of Public Health using unique national identification numbers. We examined the proportion of CPIRD medical graduates who remained in their hometowns where they were initially assigned to work in. We compared the proportions across geographical regions and 5-year graduation cohorts, using chi-2 test.

Results:

Among 4,834 CPIRD graduates, 4,337 (89.7%) remained working in the provinces initially assigned. The percentage of the physicians that remained in their hometowns varied across geographical regions ($p < 0.001$), with the highest percentages of 97.6% and 93.1% for Eastern and Southern regions. For every 5-year period of the project, the remaining rates increased from 71.4, 75.2 to 95.9% for graduation years 2000-2004, 2005-2009 and 2010-2014 respectively ($p < 0.001$).

Conclusions:

A significant proportion of physicians under the government-initiated CPIRD project remained working in their hometown, with proportions varying across geographical regions and increasing over time.

Take home message:

Further interventions may be needed to address the across-region uneven proportion of physicians remaining in their hometowns.

SELF-ASSESSMENT IN NON-HOSPITAL SETTINGS

Author(s) : Roger Ladouceur, Francois Goulet

Collège des médecins du Québec; Practice Enhancement Division, Quebec, Canada

Presenter(s): Dr Roger Ladouceur

Background:

Self-Assessment is considered among the best tools for physicians to maintain and improve their professional competencies. The Maintenance of Certification (MOC) program which is a continuing professional development program designed by the Royal College of Physicians and Surgeons of Canada⁶ to support the lifelong learning needs of Fellows and health care professionals, as well as the Mainpro from the College of Family Physicians of Canada⁷, both consider self-assessment as an important part of a Continuing Professional Development plan, by granting it as one of the three recognized CPD activities.

However, there are few tools currently available to assist physicians who wish to assess their practice. For those who do not work in hospital, such tools are extremely rare.

The Collège des médecins du Québec (CMQ) which is the licencing authority for physicians in Québec has the mission to promote quality medicine so as to protect the public⁸. To accomplish its mission, the CMQ verifies the competence of future physicians and their ability to practise medicine, ensures and promotes the maintenance of competence of physicians. Since July 1, 2007, Québec physicians have had to opt for one of the continuing professional development programs (CPD), such as the self-managed plan offered by the Collège des médecins du Québec⁹. In offering a simple, convivial approach to its members, the Collège allows physicians to manage their own CPD plan in a way that appropriately meets their educational needs.

In 2015, the CMQ has launched a workshop on practice assessment for physicians working in non-hospital settings. By this workshop, physicians are invited to evaluate their practice in order to:

1. Ensure application of current scientific guidelines;
2. Avoid the repetition of clinical errors;
3. Facilitate collaboration between physicians and other health professionals.

Intended outcomes:

Participants to this workshop will be able to achieve the following goals :

- Define what is practice assessment;
- Understand the principles of practice assessment based on explicit criteria;
- Learn about tools designed for practice assessment;
- Conduct an assessment on their own practice.

⁶ <http://www.royalcollege.ca/portal/page/portal/rc/members/moc>

⁷ <http://www.cfpc.ca/ProjectAssets/Templates/Column2.aspx?id=6395&langType=4105>

⁸ <http://www.cmq.org/en/Medias/Profil/Commun/AProposOrdre/Organisation.aspx>

⁹ <http://www.cmq.org/en/MedecinsMembres/Dpc.aspx>

Structure:

Short interactive plenary session followed by:

- Break into small groups to analyse different issues regarding the practice assessment;
- Break into small groups to see a demonstration of an practice assessment;
- Apply the practice assessment based on explicit criteria.

Who should attend?

Physicians, Medical Students, Academics, Teachers.

Level of workshop (introductory/intermediate/advanced)

Intermediate

A PROPOSAL OF SKILLS TRAINING MANAGEMENT SYSTEM IN MEDICINE USING SIMULATORS

Author(s) : Shibusawa R¹, Uehara N¹, Matsuoka N¹, Nakae Y¹, Endo Y¹, Maeda T¹, Ishimori K¹, Katayama H¹, Otaki J^{2,3}

¹ Department of Research and Development, Kyoto Kagaku Co., Ltd., ² Graduate School of Medicine, Hokkaido University, ³ Department of Medical Education, Tokyo Medical University. Japan.

Presenter: Dr Ryota Shibusawa

Introduction:

Some commercial patient simulators record training data; however, there're few systems which collect the data from different simulators and integrate them to manage each trainee's skills. The purpose of this study is to develop a Web-based system which manages and promotes a variety of skills and competencies which are required to become a professional.

Methods:

We developed the system using simulators with sensing system for skills in airway management and suturing as well as simulators without sensors such as an injection simulator.

Results:

The system works with two types of simulators – Type A and B. Type A assess trainees' skills such as applied force and suture tension using sensing system. Collected training data is automatically sent to the system's server by software which works in the background. For skills assessment with Type B simulators the system uses check lists, which can be created easily by instructors. The system summarizes and analyses the data and graphically indicates following outcomes: transition of result of each trainee per each criteria, average of the result of defined groups and length of time that each trainee spent on each one of simulators.

Conclusions:

The system is highly feasible on a technical level. Our future work is to increase the number of acceptable simulators and make it compatible with other learning management system.

Take-home message:

This system has potential of serving medical educators as an effective tool to create a database across different facilities and to conduct multidirectional analyses. We expect the system will contribute to standardization of skills in medicine.

Session 3T

ETHICS AND ART: USING ART TO FOSTER ETHICS DEVELOPMENT IN HEALTH PROFESSIONAL STUDENTS.

Author(s): Delany C¹, Gaunt H²

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¹ Melbourne Medical School, The University of Melbourne, 2 Ian Potter Museum, The University of Melbourne

Presenter: Associate Prof Clare Delany

Introduction/background:

Learning healthcare ethics is more than knowing about biomedical ethical principles. Health care students need opportunities develop moral agency, moral imagination and courage to create more constructive practices in their health care discipline.

Purpose/objectives:

We compare and contrast two methods for teaching ethics to final year physiotherapy students. The first; using a narrative trigger to analyse ethical issues and the second; object-based learning in the form of artwork self-selected by students from a campus art museum.

Issues/questions for exploration or ideas for discussion:

We highlight different processes of ethical reasoning and engagement between the two groups. We also discuss the particular value of object-based learning utilising visual arts for health science students to “make meaning through deploying and extending their existing interpretative strategies and repertoires”, and to enhance their moral agency.

Results:

Students who chose an artwork as a trigger demonstrated they were able to effectively transfer the ideas developed in the art museum context to appropriate professional situations and concerns. Their writing was in many cases, broader and more nuanced than narrative-only stimuli group. .

Discussion:

The use of artwork seemed to facilitate moral imagination, including compassion for self and others. We hypothesise that using artworks necessitated a personal and emotionally engaged response from the students, which we consider gave access in turn to a more nuanced and engaged understanding of the ethics as integral although not always visible in everyday practice.

**ROLE OF CONTINUING MEDICAL EDUCATION IN IMPROVING HEALTHCARE DELIVERY:
REORGANIZING HEALTHCARE DELIVERY STRUCTURE**

Author: Khan J

University of Health Sciences Lahore

Presenter: Prof Junaid Sarfraz Khan

Introduction/background:

One of the major issues facing policy makers, governments and non-governmental organizations in Pakistan today is to ensure wide coverage of healthcare delivery to its population while maintaining standards of healthcare and quality of health management.

Purpose/objectives:

The issues related to healthcare delivery in the country have been highlighted by events like the Cholistan crisis, urban slums and outbreaks of communicable diseases. At the same time, poor health education is resulting in a rapidly increasing hepatitis-B & C, hypertensive and diabetic both adult and juvenile population in most of the countries. Lack of policy making or implementation of policies made is resulting in poor quality of management and non-uniformed healthcare delivery throughout the country.

Issues/questions for exploration or ideas for discussion:

The burden of disease borne by the population is amongst the highest in the developing countries as evidenced by their low healthcare indicators.

Results:

This presentation will argue for improving the healthcare delivery to the population by standardizing and restructuring the same through health education to all stakeholders. The presentation shall provide guidelines on how best to utilize our resources to provide efficient and standardized healthcare to our population. '

Discussion:

In order to ensure that healthcare delivery and services are embedded in the local regional context, it is imperative to first of all have a robust continuing medical and dental education programs and secondly that the programs are embedded in the local context focusing on the needs of the population and the society. A failure to do so shall result in a substantial breach in the health professions social contract with the society

FOSTERING CRITICAL THINKING USING HANDWRITTEN NOTES

Author: Kirkman A

The University of Notre Dame Australia

Presenter: Mrs Alison Kirkman

Introduction:

Critical thinking, linked to clinical reasoning, is one of the fundamental attributes of a health professional. Successfully teaching and nurturing this humanistic quality is one of the challenges of health professional education. It has become the norm for most “millennial” students to use a mobile device to take notes during lectures. This paper explores the brain activation and subsequent learning, particularly of critical thinking, influenced by handwriting versus verbatim note taking utilising mobile devices.

Methods:

Questionnaires gathering information about mobile device use, note-taking, study habits and attitudes were completed by 3rd year and final year physiotherapy students. End of semester written exam marks were subsequently collated with this information. Qualitative analyses were used to investigate links between hand-writing habits, demonstration of critical thinking ability and end of semester written exam marks, as an expression of learning.

Conclusions:

There was a positive link between students who were hand-writers and end of semester written exam marks. The motor patterns associated with handwriting may facilitate more connectivity within the brain, thus supplementing understanding and meaning.

Take-home message:

Critical thinking requires complex cognitive function including memory and the integration of associations within the brain linking new and past learning. The brain zones active during declarative memory tasks are stimulated by handwriting. Educators should consider the influence of handwritten tasks in promoting critical thinking in health professional students.

"JUST" BEING A GP: MEDICAL STUDENTS' PERCEIVED ADVANTAGES AND DISADVANTAGES TO PURSUING A CAREER IN GENERAL PRACTICE

Author(s): Koehler N, McMenamin C

¹ Monash University, ² Monash University

Presenter: Dr Nicole Koehler

Introduction/background:

Australia will continue to face a general practitioner shortage unless a significant number of medical students make general practice their chosen career. Perceptions regarding general practice may influence career choices.

Purpose/objectives:

This study investigated what Australian medical students' perceived to be the advantages and disadvantages of pursuing a career in general practice. Medical students from eight Australian medical schools completed an on-line survey in the second half of 2014.

Issues/questions for exploration or ideas for discussion:

- Where do students obtain their perceptions on general practice?
- How reliable are students' sources of information in regards to general practice?

Results:

Fifty-one students indicated general practice to be their first ranked career preference, 200 indicated a career other than general practice, and 106 were undecided. Preliminary analyses show that flexibility, work-life balance, long-term patient care were commonly listed as advantages to pursuing a career in general practice; whereas general practice being boring, of poor pay and low prestige were commonly listed as disadvantages.

Discussion:

Advantages and disadvantages listed will be discussed in light of students' career preferences.

Take-home message:

Negative stereotypes regarding general practice (e.g., low prestige) continue to exist which may influence students' career choices.

AUSTRALIAN MEDICAL STUDENTS' ATTITUDES & EXPERIENCES REGARDING BLOOD-BORNE VIRUS TESTING

Author(s): Leathersich S^{1,2}, Kirk M², Dorevitch D², French M^{2,3}

¹ Fiona Stanley Hospital, ² University of Western Australia, ³ Royal Perth Hospital

Presenter: Dr Sebastian Leathersich

Introduction:

Medical students are tested for BBVs prior to their studies, though there is no national consistency in testing practices and managing positive results. The implications of a positive result on career progression are potentially serious. We therefore sought to explore students' experiences and attitudes regarding testing, their understanding of the issues facing seropositive students, and their attitudes towards such students.

Methods:

Data was gathered from 281 students across Australia through an online survey.

Results:

Students had variable experiences of testing, and there was a lack of understanding regarding testing and its implications. Very few students were fully informed of the implications of a positive result specific to their career progression during testing. Students voiced concerns regarding disclosure of positive results to their medical school, and the potential for a lack of confidentiality and discrimination. There was a lack of understanding regarding the responsibilities for disclosure and the management of positive results.

Take-home message:

Improving knowledge and education, improving testing practices, and ensuring a nationally standardised approach to testing and managing positive results may help to alleviate medical students' concerns, will likely make them more likely to engage with schools and clinical sites regarding their BBV status, and will be beneficial for students, future medical practitioners and patients alike.

ALREADY INVESTED: MEDICAL STUDENTS' SERVICE-ORIENTATIONS AT ENTRY INTO MED SCHOOL

Presenter: Prof Denese Playford

Authors: Playford D¹, Caspersz D², Oлару D

¹ Faculty of Medicine, Dentistry and Health Sciences, UWA, ² School of Business, UWA

Theme: Humanistic perspectives in health professions education.

Background:

The University of Western Australia, in rethinking its medical curriculum, has developed a stream of units intended to allow students to express and develop skills in the more humanistic aspects of medicine. Under the rubric "service learning", students work with not-for-profit organisations on projects that relate to social need. It is suggested that through this engagement, students' understanding of the potential breadth of their role as doctors within the community will increase. However, we propose that students who choose this stream of study, may have a pre-existing disposition towards these humanistic values. This is particularly so for MD students, many of whom enter medicine for altruistic reasons.

Aim:

This study reports on a survey to evaluate the value attributed by MD students' about completing a foundational service-learning unit.

Method:

Second year MD students enrolled in the foundational service-learning unit were given the survey at the beginning of the unit. The survey comprised 21-items about how service-learning is expected to contribute to students' self-development of practical, interpersonal, and leadership skills, and to developing social responsibility and citizenship. The survey was adapted from Toncar et al. (2006) who developed the SELEB (Service Learning Benefits) as an outcomes assessment tool of service-learning. Students were asked to rank the level of their agreement with each item on a 7-point Likert scale. These data were entered into excel, responses were averaged, and comparisons made using t-tests.

Results:

29 of 32 MD students who came to the orientation session completed the survey. The average item response on a 7-point likert scale was 6.0/7. The most highly rated item was "getting involved in the community" (average=6.5/7), along with "making a difference in the community" (6.2/7). Interestingly, a number of students differentiated between "community engagement" (6.2/7) and "applying social justice ideas" (lowest average=5.5/7, $t=2.5$ $p=0.02$). The statement "to make my CV look distinctive" was given the tied-lowest rating (5.5/7). Similarly low was their regard for "developing workplace skills" (5.8/7). Instead, they were open to their participation acting to develop themselves personally (average 6.3/7), and to encountering personal challenge (6.2/7).

Discussion:

The MD students who chose service-learning were highly motivated by altruistic values. Although all items were rated highly, students particularly valued working with the community and making a difference to community life - suggesting that these students are ready for considering the wider humanist implications of being a medical practitioner. This subgroup of students entered the MD with strong orientation to service as a personally transformative experience. This indicates that they are open to the more humanistic dimensions of the medical

curriculum. Areas for growth included students' appreciation for social justice, which is a primary goal of this curriculum.

References:

Toncar, M.F., Reid, J.S., Burns, D.J., Anderson, C.E. & Nguyen, H.P. 2006. Uniform Assessment of the Benefits of Service-learning: The Development, Evaluation, and Implementation of the SELEB Scale, *Journal of Marketing Theory and Practice*, **14**(3): 223-38.

Session 3U

BEING A TEAM TO TEACH TEAMWORK: IPE PROCESSES IN A SCHOOL-BASED STUDENT-LED THERAPY SERVICE FOR INDIGENOUS CHILDREN

Author(s): Copley J¹, Hill A¹, Nelson A², Quinlan T¹

¹ The University of Queensland, ² The Institute of Urban Indigenous Health

Presenter: Dr Jodie Copley

Introduction/background:

A long term collaboration between the University of Queensland (UQ), The Aboriginal and Torres Strait Islander independent Community School (The Murri School) and the Institute for Urban Indigenous Health (IUIH) has allowed provision of regular inter-professional (IP) student-led clinical placements for UQ occupational therapy (OT) and speech pathology (SP) students. A previous study identified that students and clinical educators (CEs) perceived these placements as rich inter-professional learning experiences (Hill, Quinlan, White and Nelson, 2014). However, the placements were time consuming and intensive for both students and educators. To support the ongoing sustainability of IPE practices and outcomes, further refinement and evaluation of IP teaching and learning processes was required.

Purpose/methods:

This project used action learning cycles to refine and promote sustainability of effective teaching and learning processes within an IP student-led clinic.

Results:

IP teaching and learning strategies were identified that reduced the CE workload and created a culture of IP practice among students. These included: explicit modelling of CE teamwork behaviours and reflection on CE team functioning; activities that supported IP evidence-based practice and IP caseload management; and extending CE trust in transdisciplinary education.

Conclusions and Take Home Message:

Action learning in an IP student-led clinical placement context identified teaching and learning processes that promote sustainability of these valued student learning opportunities. The importance of developing the CE team relationship and modelling an IP culture to promote student learning requires further investigation in varying clinical placement contexts.

Reference:

Hill, A. E., Quinlan, T., White, R., & Nelson, A. (2014). Students' and clinical educators' perceptions of clinical learning in an urban Indigenous school placement. Poster presentation at *The Royal College of Speech and Language Therapists conference*, Leeds, UK, 17-20 September 2014.

INTERPROFESSIONAL WORKSHOP FOR RADIATION THERAPY AND MEDICAL PHYSICS STUDENTS USING A VIRTUAL LEARNING ENVIRONMENT.

Author(s): Jimenez Y¹, Juneja P², Church J³, Thwaites D², Cumming S¹, O'Byrne J², Hansen C², Lewis S¹

¹ Faculty of Health Sciences, The University of Sydney, ² School of Physics, The University of Sydney, ³ School of Dentistry and Health Sciences, Charles Sturt University

Presenter: Ms Yobelli Jimenez

Introduction:

Radiation therapy (RT) and medical physics (MP) students have not traditionally shared learning activities during their university training, despite obvious synergies of content and future professional responsibility. In order to promote an interprofessional relationship between RT and MP students, an interprofessional workshop was developed.

Objectives:

This study aimed to explore students' perceptions regarding participation in an interprofessional workshop, the use of a virtual learning environment and the professional roles of RT and MP professionals.

Methods or issues for exploration:

Second year undergraduate RT students (n=8, Charles Sturt University) and first year postgraduate MP students (n= 22, University of Sydney), were invited to attend the workshop. The four hour workshop comprised: (1) introduction to clinical equipment, (2) interprofessional issues and (3) RT patient pathway. The Virtual Environment for Radiotherapy Training (VERT) system was used as a focal learning tool. A pre-test and post-test research design was used. Survey instruments collected demographic data and a workshop evaluation. The Interdisciplinary Education Perception Scale (IEPS) and a modified version of the Generic Role Perception Questionnaire (GRPQ) were used to explore students' perceptions regarding RT and MP professions and roles.

Results:

13 students (RT, n=7; MP, n= 6) attended the workshop. 13 pre-test and post-test surveys were returned. The post-test survey indicated a high regard to operating the VERT system, with 100% of students agreeing that it was a useful feature of the workshop. Free-text responses regarding participation in an interprofessional setting identified both beneficial and negatively perceived aspects of the workshop. IEPS and GRPQ scores were being analysed at the time of abstract submission and will be presented at the conference.

Discussion:

The newly developed interprofessional workshop, which incorporated VERT, facilitated a common academic learning platform for RT and MP students. Importantly, an interprofessional relationship between RT and MP students was promoted, with the potential to continue to offer and further improve interprofessional activities for RT and MP students as a result of this initial experience.

PROMOTING INTERPROFESSIONAL COLLABORATION (IPC) OUTSIDE ACADEMIC INSTITUTION - LESSONS LEARNED FROM INDONESIA

Author(s): Kambey D, Hapsari F, Fauziah F, Muhammad R, Zahara H, Utami A

Indonesian Young Health Professionals' Society

Presenter: Daniel Richard Kambey

Introduction:

Indonesian Young health Professionals' Society (IYHPS) is an independent organisation for young health professionals (YHP) across the nation actively promoting interprofessional education (IPE) and collaborative practice (CP). This initiative was started to break down the professional silos, and to prepare the future leaders with strong collaborative values. IYHPS has handle two high-profile projects, the Nusantara Health Collaborative (NHC) 2014, and developing IPC module for Nusantara Sehat (NS).

Method:

Nusantara Health Collaborative (NHC) is a series of seminar and workshop aiming in 10 regions across Indonesia to socialise IPE-CP to health students and YHP in Indonesia, with main topic tailored to answer region's specific need with collaborative practice.

While Nusantara Sehat (NS) 2015 is a MoH project sending teams of healthcare professionals to rural areas. IYHPS entrusted to develop the pre-departure training IPC module.

Results:

Both projects have high participation rate and the feedback was encouraging. Main lesson from doing the projects is, making the specific needs of the population as intended outcome will increase the effectiveness and engagement of participants.

Conclusions:

Promoting IPC is not bounded within academic/healthcare institution. The young generation of healthcare professionals can step up to promote changes of healthcare education.

Take home messages:

- Involve students and young health professionals to promote change in the national level.
- IPC training should be tailored to answer the specific population needs.

STUDENT PERSPECTIVES ON INTERDISCIPLINARY LEARNING

Author(s): Irwin R¹, **Agastra O**¹, Marchetti R^{1,2}, Hickie M^{1,2}, Kecskes Z^{1,2}

¹ Medical School, College of Medicine, Biology and Environment, ANU, ² Canberra Hospital

Presenter: Prof Zsuzsoka Kecskes

Presenter: Rebecca Irwin¹, Oltana Agastra¹

Introduction:

The literature shows that multidisciplinary teaching and learning improves healthcare delivery and patient outcomes. Attitudes towards interdisciplinary learning pose the greatest obstacle when implementing changes in healthcare.

Purpose:

The aim of this project was to identify the attitudes of health students towards the benefits of interdisciplinary learning opportunities.

Issues:

Evaluation of the inter-professional health student night with participants from the Australian National University, Australian Catholic University and University of Canberra. In addition, a survey was sent to all medical students at the Australian National University and compared with a survey sent previously to health students from the University of Canberra. Descriptive and qualitative analysis was done.

Results:

Fifty-six students participated on the night with the majority of participants (61%) having little experience with other health disciplines prior to the event, compared with an increase in knowledge of other's scope of practice in 96%. Most participants (88%) agreed the event improved how they would approach their future work environment. Results of the survey sent to Medical students and compared with other health students will be presented separately.

Discussion:

Interprofessional teaching provides a learning environment that is well suited to fostering in students the skills they will require to work interprofessionally as fully qualified clinicians. The interactive, teamwork and inter-professional aspects of the event were highly valued. The student perspective should be considered when planning interprofessional activities on placement.

HOW DO INTERPROFESSIONAL STUDENT TEAMS LEARN AND WORK TOGETHER IN A PRIMARY CARE CLINIC?

Presenter: Ms Fiona Kent

Author(s): Kent F, Francis-Cracknell A, McDonald R, Newton J, Keating J, Dodic M

Monash University

Introduction:

Practice based interprofessional education opportunities have been proposed as one mechanism for health professionals to learn teamwork skills and gain an understanding of the roles of others. For students approaching graduation, primary care is an area of practice that offers a promising option for interprofessional learning.

Research Question:

How do students from different discipline groups learn and work together in an interprofessional student clinic?

Method:

An ethnographic analysis using Activity Theory was conducted. During a five month period, we observed 14 clinic sessions involving mixed discipline student teams who interviewed people with chronic disease. Teams were comprised of senior medicine, nursing, occupational therapy, pharmacy and physiotherapy students. Semi-structured interviews were also conducted with seven clinical educators.

Results/ Discussion:

Two integrated activity systems were identified: 1) student teams gathering information to determine patients' health care needs and 2) the patient as either as health consumer or student educator. Students adhered to unwritten rules regarding 'shared contribution' and 'patient as key information source.' Familiarity with patient management software and a pre-determined structure for enquiry both appeared to influence team interactions and leadership. The patient played a clear and active role in the clinical and educational processes.

This project was possible due to funding made available by the Australian Government and the Department of Health and Human Services, Victoria.

ACADEMIC GUIDANCE IN MEDICAL STUDENT RESEARCH: HOW WELL DO SUPERVISORS AND STUDENTS UNDERSTAND THE ETHICS OF HUMAN RESEARCH?

Author(s): Weston K¹, Mullan J¹, McLennan P¹, Hu W², Thompson C¹, Rich W¹, Knight-Billington P¹, Marjadi B²

¹ University of Wollongong, ² University of Western Sydney

Presenter: Dr Kathryn Weston

Introduction/background:

Research is increasingly recognised as a key component of medical curricula, offering many benefits including development of skills in evidence-based medicine. The literature indicates that experienced academic supervision is important in any research activity and positively influences research output. Research ethics is an important component.

Purpose/objectives:

The aim of this project was to investigate the human research ethics experiences and knowledge of medical students, university academics and clinicians.

Issues/questions for exploration or ideas for discussion:

Are university academics and clinicians skilled to supervise medical student research projects requiring human ethics application?

Results:

Training in research ethics was low amongst academic staff and clinicians eligible to supervise medical student research. Only two-thirds of academic staff (67.9%) and students (65.7%) and less than half of clinicians surveyed (47.1%; $p = 0.014$) indicated that specific patient consent was required for a doctor to include patient medical records within a research publication. There was limited awareness of requirements for participant information and consent forms amongst all groups. In the case of clinical trials, fewer clinicians (88.4%) and students (83.3%) than academics (100%) indicated there was a requirement to obtain consent ($p = 0.009$). Awareness of the ethics committee focus on respect was low across all groups.

Discussion:

This project has identified significant gaps in human research ethics understanding among medical students, and university academic staff and clinicians. The incorporation of research within medical curricula provides the impetus for medical schools and their institutions to ensure that academic staff and clinicians who are eligible and qualified to supervise students' research projects are appropriately trained in human research ethics.

Session 3V

CAN A CLINICAL PLACEMENT IN MENTAL HEALTH CHANGE STUDENTS ATTITUDES AND UNDERSTANDING?

Author(s): Natalie Alborés, Lyndal Sheepway, Clare Delany

Macquarie Hospital, NSLHD, NSW Health

Presenter: Miss Natalie Albores

Introduction/background:

There is a high and growing prevalence of people presenting to hospitals with mental health conditions. However health professionals poorly understand their needs and overall presentation. Especially those with little to no exposure such as allied health.

Purpose/objectives:

This research aims to examine, via validated pre and post questionnaires, how a clinical placement up to 6 weeks at a metropolitan inpatient mental health facility impacts on allied health students' attitudes, beliefs and understanding of mental health conditions and their role in working with patients with mental health problems

Issues/questions for exploration or ideas for discussion:

What attitudes and beliefs do allied health students (speech pathology, dietetics and exercise physiology) have about working in mental health facilities? How might this knowledge inform future curricula in this area?

Results:

Preliminary results indicate students' attitudes and understanding changed following their experience of attending a clinical placement in mental health. All three disciplines demonstrated a shift in student's attitudes from highly fearful and concerned about the danger associated with the patients, to more willing to help. All three disciplines recorded other similar changes.

Discussion:

Student placement experience involving working with patients with mental health conditions appears to be effective in improving students' understanding of mental health conditions. Such experience also shifts attitudes involving stereotypes and negative judgments or fear towards better understanding of their potential role in caring for these patients.

MEDICAL EDUCATION IN AUSTRALIAN UNIVERSITIES: DOCTOR/PATIENT COMMUNICATION ABOUT SPIRITUALITY

Author(s): Bennett K, Shepherd J, Bridge D

School of Psychiatry and Clinical Neurosciences, UWA

Presenter: Associate Prof Kellie Bennett

Introduction/background:

There is increased recognition by medical educators worldwide that spirituality is essential to many patients wellbeing. Increasingly, educators believe that doctor/patient communication about spirituality should be incorporated into the curriculum throughout medical training.

Purpose/objectives:

A survey of curricula relating to the teaching of spirituality in Australian universities offering medicine was conducted to explore how spirituality is taught in medical schools across Australia.

Issues/question for exploration or ideas for discussion:

Is there a need for a national framework for teaching doctor/patient communication about spirituality to future doctors?

Results:

Representatives from 16 medical schools in Australia completed information for this survey. Seventy-five percent of respondents reported that teaching doctor/patient communication about spirituality in medical education is very important or essential. Fifty-six percent of respondents reported existing compulsory content in the area of doctor/patient communication about spirituality at their university, and 19% reported optional content. Disciplines primarily involved in teaching spirituality were identified, in descending order, Behavioural Science, Chaplaincy, General Practice, Palliative Care, Population Health, and Psychiatry.

Discussion:

This project provided an opportunity to investigate curricula content of doctor/patient communication about spirituality in medicine in Australian universities. Results reflect similar research from the USA, Canada and the UK, where this area is also recognised as an important aspect of medical education. A range of professionals were reported to be involved in delivering teaching within this area. Through the gathering of knowledge about doctor/patient communication about spirituality, it is envisaged that a national framework to advance teaching in this area may now be explored.

INTRODUCTION OF AN E-PORTFOLIO AS FORMATIVE ASSESSMENT IN MEDICINE IN A GRADUATE MEDICAL PROGRAM

Author(s): Bleasel J, Weeks R, Davies L

University of Sydney, Australia

Presenter: Prof Jane Bleasel

Introduction:

In 2015, limited use of an ePortfolio was introduced into the Sydney Medical Program, a four year graduate degree at Sydney University. The aim of the ePortfolio was to improve the assessment and feedback provided to students in their medical term.

Methods:

Using Pebblepad, a propriety electronic portfolio system, a workspace was created for each medical student in 7 different clinical schools. The students were required to clinically assess and write up 8 patients during the course of their medical term (1 per week). They then presented the case to their supervisor or other doctor who completed a standardised formative assessment. Both the case plus the feedback form were uploaded onto their workspace. A senior medical lead at the clinical school then provided further feedback on the written submitted case (goal of one written feedback for each four week block). Data was collected on whom the students presented to and the number of episodes of feedback.

Results:

There were 284 students across the seven clinical schools who presented 2272 long cases over 8 weeks of medicine. Meta-data collected demonstrated that registrars and supervisors were performing the clinical formative assessments most often (34% each), followed by other consultants and resident medical officers (17% each). The number of written feedback episodes varied between the clinical schools, from 74 - 100% (mean 87%) for the first 4 week term, and 46 - 100% (mean 68%) for the second 4 weeks.

Conclusions:

The introduction of an ePortfolio for Medicine formative assessment was well accepted by students, formalised the process and requirements of students to see patients and provided valuable feedback on their verbal presentation. Written feedback was less consistent across the clinical schools.

FACILITATING CLINICAL REASONING FROM UNDIFFERENTIATED PATIENT ENCOUNTERS: AN INTERNATIONAL CONSENSUS IN 55 WORDS

Author(s): Campbell D¹, Walters L², Couper I³

¹ Monash University, ² Flinders University, ³ University of Witwatersrand

Presenter(s): Prof David Campbell, Walters L.

Introduction/background:

This presentation will report on a detailed consensus position on the development of clinical reasoning in longitudinal undergraduate clinical placements, arrived at through an international conference which brought together clinician teachers, medical educators and academics who work in rural primary care.

Purpose/objectives:

The conference sought to capture the experience of teaching and learning clinical reasoning amongst the conference delegates, all of whom worked in the rural community primary care setting.

Issues/questions for exploration or ideas for discussion:

Delegates were asked to prepare a 55-word vignette related to their teaching experience, and these case studies formed the basis of the subsequent discussion and consensus statement of key issues in the development of clinical reasoning in students.

Results:

The presentation will outline four themes that arose from these discussions: the importance of the patient's story; the learner's reasoning; the context of learning; and the role of the supervisor. The details of these themes will be presented for discussion.

Discussion:

The discussion will relate to the strength of the process of compilation of qualitative data; the initial process of generating 55-word stories, and the subsequent modified Delphi process of generating a consensus around themes and content of the statement. The collective learning process over a 2-day workshop will be explored.

WHAT FACTORS INFLUENCE SAFE PATIENT CARE? A REVIEW OF THE DOMINANT MODELS AND FRAMEWORKS

Presenter: Ms Beverley Bird

Author(s): Bird B, Jolly B, Griffiths D, Williams A

¹ Monash University, ² University of Newcastle, ³ Monash University, ⁴ Monash University

Introduction:

Doctors practice within complex healthcare system environments. Multiple regulatory and organizational layers, set within a range of system and safety models and frameworks, both facilitate and impinge upon the ability of hospitals and their clinical and administrative departments and affiliates to ensure safe, competent and timely care at the clinical team and individual doctor - patient levels.

Methods:

Classical evidence –based safety models and frameworks were identified and analysed through a targeted review of the organisational and patient safety literature.

Results:

Analysis of the findings suggested that patient safety models and frameworks may be considered as belonging to one of three broad categories: the *systems approach to organizational error* (for example, Vincent, 2010; Van der Shaff, 1992; Reason, 1990, 1995, 1997; Amalberti, Vincent & Auroy, et al, 2006); the *clinical practice and regulatory approach* based on performance standards (Southgate, Hays, Norcini et al, 2001); and the *educational approach* through patient safety curriculum frameworks (NPSEF, 2005, WHO Curriculum Guide for Medical Schools, 2008).

Conclusion:

A composite model, incorporating the complementary elements of the three categories of models and frameworks, is proposed.

Take Home Message:

Adoption of collaborative patient safety focussed performance monitoring within a composite model should be

Session 3W

THE 'STEP-UP COURSE'. A NOVEL COURSE TO PREPARE RESIDENT MEDICAL OFFICERS TRANSITION TO BE EFFECTIVE REGISTRARS IN A TERTIARY PAEDIATRIC HOSPITAL.

Author(s): Taylor E^{1,2}, Boulter E^{1,2,3}, Latham J⁴, Frazer F^{1,5} and **Cherian S**^{1,2}

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Background:

The 'Step-up Course' was designed to improve the transition from Resident Medical Officer (RMOs) to Registrar roles at Princess Margaret Hospital. It was designed, delivered and evaluated in 2014 and 2015 to cover skills essential to the registrar position.

Methods:

Funding was secured by a Postgraduate Medical Council of Western Australia (PMCWA) grant. Prior to the course each participant completed an Occupational Personality Questionnaire. The two day course consisted of large and small group facilitated learning sets and targeted simulation training. Areas of focus included communication, conflict resolution, leadership and management of the seriously unwell child.

Results:

31 resident staff participated, with evaluation both immediately and three months afterwards. All participants would recommend the course to a colleague, stating the benefits for future roles. 89% found the OPQ and debrief helpful. Simulation scenarios were well evaluated; 96% responding that it was the most useful aspect of the course. 47% of the 2014 cohort and 88 % of the 2015 evaluated the course at 3 months, not all JMO's had transitioned into registrar roles at the time of evaluation. 73% indicated they had used the skills gained in their new roles.

Conclusion:

The 'Step-up Course' was a valuable adjunct for junior staff transitioning to more senior roles. It addressed key training gaps for paediatric trainees not available in traditional models. Potential for translation to other paediatric training centres and interdisciplinary settings is possible.

MEDICAL PROFESSIONAL IDENTITY FORMATION: A 360 DEGREE PERSPECTIVE

Author(s): McLean M, Johnson P, Sargeant S, Green P

¹ Faculty of Health Sciences & Medicine, Bond University, ² Bond University, ³ Bond University, ⁴ Bond University

Presenter: Michelle McLean, Patricia Johnson, Sally Sargeant, Patricia Green

Introduction/background:

While there is a reasonable literature on medical students' professional identity formation, the focus has been largely from their perspective. On their journey to "becoming" doctors, medical students interact with teachers and trainers from varying professions, all of whom will perceive their professional development from different standpoints.

Purpose/objectives:

The purpose of this study was to develop a 360 degree perspective of medical students' professional identity formation.

Issues/questions for exploration or ideas for discussion:

During interviews, medical students at all stages of their studies and their various trainers and teachers (e.g. faculty, registered nurses, simulated patients) were canvassed about the development of their professional identities.

Results:

A model of professional identity formation has emerged, incorporating key issues and events impacting on students' professional identity formation. Exposure to real patients was identified as an important event for learners to move from student to medical student. An existing professional identity may hinder "becoming" a doctor. "Becoming" a doctor appears to be related to taking responsibility for patients.

Discussion:

Although the journey of each medical student starts at a different place, key issues emerged in terms of what might facilitate professional identity formation. Real patient contact was probably the most important influence. Professionalism was seen to change the most during medical studies.

Canvassing different stakeholders develops a robust understanding of professional identity formation, particularly in terms of what contributes to and hinders this developmental process.

FROM PERSONAL TO GLOBAL: UNDERSTANDINGS OF SOCIAL ACCOUNTABILITY FROM STAKEHOLDERS AT FOUR MEDICAL SCHOOLS

Author(s): Dr Robyn Preston*, A/Prof Sarah Larkins, A/Prof Judy Taylor, Dr Jenni Judd

Introduction/background:

At a global level the World Health Organization has promoted social accountability in medical education since the early 1990s to promote universal health coverage. At the local level, since the 1960s, some medical schools have been responding to the needs of the underserved. Differing contexts have resulted in different interpretations of social accountability.

Purpose/objectives:

Using a multiple embedded case study approach this research explored how contextual issues have influenced social accountability at four medical schools; two in Australia and two in the Philippines. This paper reports on how research participants, understood social accountability. Seventy-five participants were interviewed including staff, students, health sector representatives and community members. Field notes were taken and a documentary analysis was completed.

Issues/questions for exploration or ideas for discussion:

How was social accountability understood by staff, students, health sector representatives and community members at four medical schools?

Results:

Overall there were three common understandings. Socially accountable medical education was about meeting workforce, community and health needs. Social accountability was also determined by the type of programs the school implemented or how it operated. Finally, social accountability was deemed a personal responsibility

Discussion:

The broad consensus masked the divergent perspectives people held within each school. The assumption that social accountability is universally understood could not be confirmed from these data. The term is still open to contention. To strengthen social accountability it is useful to learn from these institutions' experiences to contribute to the development of the theory and practice of activities within socially accountable medical schools.

INTERNATIONAL MEDICAL ELECTIVES: MEDICAL STUDENT REFLECTIONS ON TRANSFORMATIVE LEARNING EXPERIENCES IN DEVELOPING COUNTRIES

Author(s): Richards J¹, Greenhill J¹, Walters L¹, Mahoney S², Campbell N³

¹ Flinders University Rural Clinical School, ² Flinders University, Onkaparinga Clinical Education Program, ³ Flinders University, Northern Territory Medical Program

Presentation Title

International medical electives: medical student reflections on transformative learning experiences in developing countries

Introduction/background:

Medical students at Flinders University select five core and two elective rotations during their final year which aim to provide a balance of clinical experience and flexibility to explore fields of interests. An elective may be undertaken in Australia or internationally in countries with comparable health facilities such as Canada or in developing countries such as Nepal.

Purpose/objectives:

A longitudinal qualitative study (2010-2013) using Mezirow's Transformation Theory as a conceptual framework explored the learning journey of postgraduate medical students. Twenty participants were recruited and undertook up to six semi structured interviews from late in year 2, early and late in years 3 and 4 and early in intern year.

Issues/questions for exploration or ideas for discussion:

What are the educational benefits and personal challenges reported by students undertaking an international medical elective in an underserved clinical setting?

How do these learning experiences compare with clinical training in remote settings of Australia?

Results:

Ten students in this study committed to interview 5 at the end of year 4 of which six selected an overseas elective in an impoverished country. Interview transcripts were coded and analysed thematically. Emerging themes included new perspectives, scope of responsibility, health care system, clinical confidence, clinical uncertainty, doctor-patient relationship and respect for life.

Discussion:

Approximately 50% of Australian postgraduate medical students undertake international medical electives of which half select training in an underserved setting. Each student's experience is unique and the reflections of students in this study will be presented and compared with the experience of students learning in remote Australian learning environments.

RESIDENT FATIGUE AND ITS IMPACT ON THEIR PERFORMANCE AND WELLBEING; LESSONS LEARNED TO AID IN DEVELOPING FATIGUE RISK MANAGEMENT PLANS.

Author(s): Topps M, Kassam A, Cowan M

University of Calgary

Introduction:

The relationship between fatigue, resident performance and patient safety is complex. The National Steering Committee on Resident Duty Hours in Canada recommends all residency programs develop a fatigue risk management plan (FRMP) for their residents. This study explored resident's experiences of fatigue, how they recognize it in themselves and in others and the strategies they use to manage it.

Method:

Residents from various PGY-levels, gender, ethnicity and specialty/sub-specialty residency training programs were recruited at the University of Calgary. A semi-structured interview guide was used to ask residents about how they recognize and manage fatigue as well as components of residency that contribute to fatigue. Interviews were audio-recorded, transcribed and coded by two researchers.

Results:

Fifty-six residents were interviewed from nearly half the residency programs. The majority of residents reported identifying and experiencing fatigue as an inevitable aspect of residency over which they had limited control. Of concern, most felt that fatigue impacted their own physical health, emotional health and cognitive abilities. The majority of residents reported residency-fatigue as taking away from wellness strategies such as physical activity, proper nutrition and work-life balance activities, including time with family and friends, and visiting their physician.

Conclusion:

There is significant room for improvement in ensuring appropriate resident performance through fatigue management at both system and program levels. Residency programs must take the lead on FRMP development and in doing so contribute to resident wellbeing and safe patient care.

Take-home message:

FRMPs that support residency program and system-level fatigue management strategies are necessary.

THE POSITIVE LINK BETWEEN ACADEMIC SELF-BELIEF AND FIRST YEAR PERFORMANCE IN AN UNDERGRADUATE PHYSIOTHERAPY PROGRAM

Author(s): Edgar S

School of Physiotherapy, The University of Notre Dame Australia

Presentation Title:

The positive link between academic self-belief and first year performance in an undergraduate Physiotherapy program

Introduction/background:

Student performance in health professional courses is influenced by many factors including learner motivation and engagement. The Motivation and Engagement Scale – University/College (MES-UC) has been used to demonstrate gender and year level differences in physiotherapy students' motivational factors. This is the first study to track student motivation levels through a Physiotherapy program, using the MES-UC.

Purpose/objectives:

The purpose of this study was to identify any links between motivational thoughts and behaviours and performance in physiotherapy students. First year physiotherapy students completed the MES-UC in first semester and the MES-UC scores were then compared to academic performance.

Issues/questions for exploration or ideas for discussion:

Do motivation and engagement factors directly influence academic performance? If so, can we determine the motivational factors that enhance first year experience, retention and subsequent performance in a health professional program?

Results:

First year female physiotherapy students experienced higher anxiety levels on entry comparative to males ($p=0.007$), although this had no influence on subsequent academic performance. Academic self-belief had the most influence on performance in first semester assessments, with significant correlations between self-belief and foundational unit scores particularly for female students ($r=0.493$; $p=0.005$); and the overall cohort ($r=0.393$; $p=0.004$).

Discussion:

This study indicates that motivational factors should be considered when designing first year learning and teaching activities. This paper will provide a summary and enhance understanding of the motivation and engagement factors that influence learning; as well as suggest practical solutions for improving the academic self-belief of students.

Session 3X

PLAYING THE NUMBERS GAME - HOW DO WE GET THE NUMBERS RIGHT WHEN WE ARE DEALING WITH PEOPLE, NOT MATHEMATICS?

Author(s): Warnecke E, Hays R

School of Medicine, Faculty of Health, University of Tasmania

Presenter/s

AProf Emma Warnecke
Prof Richard Hays

Institution/s

School of Medicine, Faculty of Health, University of Tasmania

Introduction/ Background

A challenge in all medical schools is how to keep medical student numbers consistent across all years of the medical degree and produce a consistent number of medical graduates to join the healthcare workforce. We are aware from large Australian data sets of the high burden of health issues, particularly mental health issues in medical students. This necessitates time away from the medical course and is not something that can be accurately predicted. When combined with academic progress issues due to unsatisfactory progress this can mean a variation in approximately 1-10% students in any one year requiring to repeat a year or take a year out to focus on their health.

Purpose/Objectives

To promote discussion and ideas on how to manage these issues and what can be done to further support medical students to develop resilience and lifelong strategies for well-being.

Issues for exploration/ideas for discussion

What are the experiences of medical schools with regard to managing student numbers?

What attrition rate is acceptable from Year 1 to final year and how are graduation numbers maintained at expected levels?

To what extent are/should student support be separated from decisions about admission and progression?

What could be done to promote resilience and enhance wellbeing in the medical student population (a population well known to require this)?

LEADERSHIP IN HEALTH PROFESSIONAL EDUCATION IN LOW-RESOURCED SETTINGS

Author(s): Kirubakaran S

Flinders University

Presenter/s

Dr. Sneha Kirubakaran

Institution/s

Flinders University

Introduction/ Background

The presenter is in the first year of her doctoral studies researching leadership in health professional education with a focus on the establishment of new medical schools in low-resourced areas.

Establishing a new medical school (or a satellite location of an existing one) is a considerable venture. New medical programs are often established in areas of need to address workforce shortage issues. Regardless of locale, the undertaking requires committed and pioneering leadership.

Existing literature regarding the establishment of new medical schools (institution formation) is primarily descriptive with no underpinning research methodology. Literature regarding leadership for social change and institutional transformation is more prolific and research-rigorous, but not specific to medical schools.

The presenter is plans to qualitatively study several new medical schools established in low-resourced settings using the multiple case study methodology.

Purpose/Objectives

- To generate discussion and seek audience feedback on the issues below

Issues for exploration/ideas for discussion

- Should leadership be about initiating social change or about institutional (trans)formation or both? Why?
- You have been asked to set up a new medical school in a low-resourced setting.
 - How would you approach the social, political, educational, cultural and logistical considerations?
 - What issues would you list as the most important?
 - How would you approach the constraints of being low-resourced?

Session 3Y

WHY NARRATIVE?

Author(s): Zaharias G

Institution: Victorian Metropolitan Alliance General Practice Training, Melbourne, Australia

Facilitator: Dr George Zaharias

Purpose:

Much has been written about “narrative” and the importance of “the patient’s story”. It is not difficult to convince experienced clinicians of the value of narrative medicine and yet, narrative is not generally taught nor is it practised widely as a clinical method. Narrative has been criticised as being “time consuming” and “opening up a can of worms”. It is perhaps also confused with patient centredness and the biopsychosocial approach because many clinicians, having been taught these methods, do end up practising “narratively” without realising it. This has come about through experience and the gradual realisation that listening closely to the patient’s story creates a stronger patient-doctor relationship with improved patient outcomes and greater work satisfaction. In using narrative, the clinician also grows both professionally and personally.

This workshop will provide participants with an understanding of narrative, its importance and usefulness as a clinical method and how the arts lend themselves so well to its teaching.

Workshop outcomes:

By the end of the workshop, participants will have a better understanding of:

- What narrative is, its relevance and importance to clinical practice
- The benefits of using narrative, to both patient and clinician
- How narrative can be taught with relatively simple yet engaging methods
- How the arts can be used more widely in medical education

Proposed Outline:

This workshop will use clinical scenarios, readings, film and music to engage participants in small and large group discussion to guide them through the workshop’s objectives.

Who should attend: anyone with an interest in narrative and/or the use of the arts in medical education

Level of workshop: Introductory and Intermediate

WORKING TOGETHER: COLLABORATIVE PERSPECTIVES ON REFUGEE HEALTH

Author(s): Gilfillan M^{1,2}, Wright H^{1,3}

¹ University of Western Australia, ² Health Students' Council of WA, ³ Princess Margaret Hospital

Relevant Themes:

Humanistic perspectives in health professions' education

Capability for Interprofessional practice

Facilitator/s:

Dr Helen Wright^{1,2}

Ms Molly Gilfillan^{1,3}

Members of Refugee Health Team²

Institutions

1. School of Paediatrics and Child Health, University of Western Australia
2. Child and Adolescent Health Services, Princess Margaret Hospital, Perth WA
3. Health Students' Council of WA

Purpose:

To facilitate active collaboration and learning between health professionals using an applied example of refugee child health. Through the use of interactive small group exercises, visual aids and real-life case scenarios, this session aims to overcome existing barriers and knowledge gaps, leaving participants better equipped in understanding the role of collaborative practice as they move towards achieving more holistic, team-focused healthcare delivery in their own workplace settings.

Workshop outcomes:

This workshop aims to:

- Facilitate engagement between health professionals;
- Develop understanding of roles of other health professionals;
- Reflect on individual practices within the healthcare environment;
- Identify existing barriers to effective collaboration in healthcare;
- Consider benefits, opportunities and potential solutions for improving interprofessional collaboration using applied examples;
- Develop understanding of the barriers for culturally and linguistically diverse (CALD) patients accessing healthcare;
- Emphasise the importance of collaborative practice in formal education and in the healthcare workplace.

Preliminary Session Outline	Presenter/s	Time
<p><i>Introduction</i></p> <ul style="list-style-type: none"> - Short UNICEF video - Objectives - Outline of session 	Molly	5 minutes
<p><i>Intro to Refugee Health</i></p> <ul style="list-style-type: none"> - Background and basic statistics - Role of multidisciplinary refugee child health clinics 	Refugee Health Team	5 minutes
<p><i>Breakout 1 – Photo Exercise</i></p> <ul style="list-style-type: none"> - Break into groups, each member to identify self and profession - Discussion of photo in small groups: each member to answer “<i>what are my immediate concerns for this patient from the perspective of my profession?</i>” - Return to whole group – one member from each group to summarise their discussion, outlining potential differences in responses between professions 	Floating Facilitators, Refugee Health Team	10 minutes
<p><i>Breakout 2 - Group collaboration on management priorities</i></p> <ul style="list-style-type: none"> - In same groups, discuss top 5 management priorities for this patient - Presentation from a member of each group, brief whole group discussion 	Floating facilitators, Refugee Health Team	10 minutes
<p><i>Breakout 3 – Interprofessional education in practice</i></p> <ul style="list-style-type: none"> - Outline that this has been an interprofessional collaborative exercise - Discussion in groups of exercise: what worked, what didn't, who led the discussion, equal participation - Discussion in groups of barriers to collaboration, successes of collaboration, their experiences in the workplace - Short whole group discussion on the above 	Floating facilitators, Helen	10 minutes
<p><i>Conclusion</i></p> <ul style="list-style-type: none"> - Debrief, outlining of workshop objectives and take home messages - Brief presentation of HSC-WA data outlining student preferences for learning using collaborative practices in formal education - Summary of how participants can apply collaborative practice in their own workplaces - Questions and comments 	Molly	5 minutes
Total time		45 minutes

Session 3Z

THE USE OF "MASTER SCIENCE TEACHERS" TO HELP INTEGRATE FOUNDATIONAL SCIENCES INTO THE CLINICAL CURRICULUM

Author(s): Osheroff N, Pettepher C, Nanney L, Van Kaer L, Dalley A, Atkinson J, Blackford J, Dahlman K, Weinger M, Estrada L, Cutrer W

Vanderbilt University School of Medicine

BACKGROUND:

It is important for physicians to have a strong understanding of the biosciences that underlie clinical practice. To address this issue, many medical schools are attempting to re-introduce foundational sciences during the clinical years. Although most modern curricula have successfully integrated clinical materials into the pre-clerkship phase, the overt integration of foundational sciences into clinical courses has proven to be challenging.

Purpose:

This presentation will provide practical solutions for the incorporation of foundational sciences into the clinical years of undergraduate medical education.

Issues for Discussion:

We will discuss mechanisms to incorporate foundational sciences during meaningful clinical encounters in the post-clerkship curriculum.

Results:

Vanderbilt's curriculum features 1-year pre-clerkship and clerkship phases followed by a 2-year highly individualized "Immersion phase." During the Immersion phase, students complete at least four integrated science courses (ISCs) that combine training in the foundational sciences with meaningful clinical experiences. ISCs, co-taught by clinicians and scientists, have a clinical focus (e.g., diabetes, cancer, addiction). To ensure that ISCs contain appropriate foundational sciences, courses are reviewed by a group of Master Science Teachers (MSTs), who are heavily involved in the pre-clerkship curriculum. MSTs actively work with ISC directors to optimize relevant foundational science learning. Additionally, during advanced clinical experiences, students identify a patient-driven issue and research the underlying biosciences, with MSTs as their mentors.

Discussion:

The integration of foundational sciences into the clinical years requires a strong collaboration between scientists and clinicians. Positive feedback from students and clinical faculty indicates that this collaboration is yielding desired learning outcomes.

LONGITUDINAL AUDIO DIARIES: A METHOD TO EXPLORE INTERSECTING PERSONAL AND PROFESSIONAL IDENTITIES IN HEALTHCARE EDUCATION RESEARCH

Author(s): Arun K Verma* (1), Charlotte Rees (2), Lynn Monrouxe (3), Rola Ajjawi (1), Dr Susie Schofield (1)

¹ University of Dundee, Centre for Medical Education, ² Monash University, HealthPEER, ³ Chang Gung Memorial Hospital, Chan Gung Medical Education Research Centre

Presentation Title

Longitudinal Audio Diaries: A method to explore intersecting personal and professional identities in healthcare education research.

Introduction:

Longitudinal Audio Diaries (LADs) in healthcare education are rare and undervalued. LADs can help explore how personal and professional identities are formed and developed longitudinally (1,2). In this paper, we argue for and evaluate the use of LADs as a method to enlighten a unique perspective on how healthcare students' personal and professional identities intersect, form and develop (3, 4).

Questions:

(1) How can healthcare education researchers explore intersecting personal and professional identities in healthcare education using LADs? (2) What are the strengths/limitations of LADs and how can these be overcome?

Objectives:

We conducted a multi-site study using LADs to explore the influence of intersecting identities on healthcare students' retention and success. Medical and nursing students recorded their experiences in clinical workplace learning environments.

Results:

Early analyses show that LADs can illuminate the development of intersecting personal and professional identities over time with participants becoming sensitised to how their own identities surface in different environments (e.g. "discussing it [sexuality of patient] with the rest of the team [I] obviously informed them that I'm gay"). LADs, therefore, have potential to be utilised as an education intervention to facilitate critical reflection.

Discussion:

LADs require researchers to have high contact (e.g. emails) with participants to minimise attrition from a study. This further contact also allows researchers to open up a dialogue with participants through their LADs, to further explore intersecting identities and critical reflection.

THE DECLINE OF MORAL JUDGEMENT COMPETENCE DURING MEDICAL SCHOOL: CAN THIS BE AMELIORATED BY AN ETHICAL REASONING CURRICULUM?

Author(s): Langendyk V, Hegazi I, Abrahams N, Gribbon E, Wilson I

¹ Univeristy of Western Sydney, ² University of Western Sydney, ³ University of Western Sydney, ⁴ University of Western Sydney, ⁵ University of Wollongong

Background

In a cross-sectional study, Hegazi and Wilson (2013) demonstrated a decline in moral judgment competence of medical students over the 5 years of medical school. They used Lind's Moral Judgement Test (MJT) which consists of a medical and a non-medical dilemma. The decline was limited to the judgements involved in the doctor's dilemma with many students exhibiting moral segmentation. Moral judgment competence increases with age and education in the general population therefore; the authors suggested that the decline may be an effect of medical education.

Summary of work

We performed a longitudinal study to investigate changes in moral judgement competence as students' progress from first to fourth year. We also investigated the impact of a 14 hour curriculum of ethical reasoning, undertaken during fourth year, on students' moral judgement competence. Students completed the MJT during 1st and 2nd year and twice in 4th year, prior to and following the ethics programme.

Summary of results

There was a significant decline in the moral judgement competence of students from first to fourth year, limited to the doctor's dilemma. Following the ethics course, there was a small, but statistically significant, increase in this score without change in the total moral judgment score.

Discussion

By controlling for the cohort effect, our results confirm the progressive decline of students' moral judgement competence which may be ameliorated by formal ethics teaching. However, the focus of medical education is on clinical not ethical reasoning.

Conclusion

If medical practice is a moral endeavour, medical education is failing.

Take away messages

Ethics needs a bigger slice of the curriculum pie.

DEVELOPING A FOUNDATION: POSTGRADUATE YEAR 1 (PGY1) INTERIM CURRICULUM

Author(s): Rice L, Edwards J, Greene D

¹ Health Education and Training Institute, ² Royal Prince Alfred Hospital

Presentation Title

Intern Training - Intern Outcome Statements: Charting the Course

Introduction:

In 2014 the Australian Medical Council and the Medical Board of Australia adopted the National Intern Training – Intern Outcomes Statements. These describe the broad and significant outcomes that interns need to achieve by the end of PGY1. The outcome statements were based on the Australian Curriculum Framework (ACF) for Junior Doctors but were not designed to be a curriculum. The development of a formal PGY1 Interim Curriculum has the potential to facilitate interns, their supervisors and Directors of Prevocational Education and Training (DPETs) in building valuable workplace teaching, learning and assessment experiences in the PGY1 year.

Methods:

Current and emerging models of medical education, curriculum design and workplace assessment both within Australia and internationally were reviewed. An iterative process was undertaken by a curriculum designer and informed by a formal consultation process with key stakeholders. An advisory group was established to provide governance for the project and expertise in reviewing the consultation feedback.

Results:

The NSW PGY1 Interim Curriculum was mapped against the National Intern Training – Intern Outcomes Statements and constructively aligned learning outcomes with suggested teaching/learning strategies and assessment options. It provides greater depth to the existing Australian Curriculum Framework (ACF) for Junior Doctors.

Take home message:

The development of a PGY1 Interim Curriculum supports the continuum of learning of prevocational trainees from medical school towards vocational training. The implementation, support and promotion of the curriculum will be critical to its success. Evaluation of the curriculum will inform the development of a curriculum for PGY2-5 doctors and could provide the basis of a National Intern curriculum.

LEARNING TO INTEGRATE PRACTICE BETWEEN MEDICINE AND COMMUNITY: AN OVERVIEW OF COMMUNITY BASED MEDICAL EDUCATION PLACEMENT PROGRAMS

Author(s): Goodall J

Monash University

Presentation Title:

Learning to integrate practice between medicine and community: An overview of community based medical education placement programs.

Introduction/background:

Since the 1990s, community based medical education (CBME) has continued to develop as a strategy for integrating students' understanding of clinical medicine with its practice in the community, or with community health support organisations, through community based placements. CBME, however, covers many quite different educational programs and purposes. This presentation reports on a systematic review of the relevant literature since 1990 with a picture emerging of how CBME operates around the world and how it can be classified into different forms with different purposes.

Purpose/objectives:

To determine what CBME means in practice and to clarify misunderstandings engendered by confusion between its different forms and purposes.

Issues/questions for exploration or ideas for discussion:

What is meant by CBME? How does this differ across different countries? How has it developed over time? What are likely benefits of including its different forms into medical curricula?

Results:

The systematic critical review examined 425 relevant references. These formed a set of five distinctively different categories: Local community clinical placements; Rural and remote clinical placements; Marginalised and underserved communities placements; Service-learning placements; and Non-clinical community placements. The pattern of these varied strongly geographically and different types met quite different needs.

Discussion:

The review, carried out by a single researcher rather than a team, has limitations but serves as a foundation for further work complementing existing more narrowly targeted surveys.

ENHANCING ENROLLED NURSE EDUCATION THROUGH AN INNOVATIVE PARTNERSHIP FRAMEWORK

Author(s): Hall M, De Silva S

Presenter: Sanjee DeSilva, Michelle Hall

Epworth HealthCare, Nursing Education, Australia

Holmesglen Institute, Department of Health Science and Biotechnology, Australia

The Epworth / Holmesglen partnership for nursing programs was established in 2007. The mission of the partnership is to embrace the synergies between education and practice and provide leading edge educational and clinical opportunities for nursing programs within a culture that values professional development and lifelong learning.

The partnership involved the development of the Nursing Education Collaboration Holmesglen & Epworth (NECHE) fellowship program, is unique to Diploma of Nursing programs. Students selected to the NECHE program complete the majority of their clinical placements at Epworth and those who continue their education into the Bachelor of Nursing at Holmesglen are then guaranteed a place in the Bachelor of Nursing NECHE program.

The aims for developing the NECHE were to:

- Develop a successful clinical placement model which enhances staff satisfaction, recruitment, and retention and quality graduate outcomes.
- Provide continuity with clinical learning experiences from both the perspective of Epworth HealthCare clinical staff and Holmesglen students.
- To provide a sense of belonging and facilitate the socialisation of undergraduate nurses.
- Increase staff recruitment.

Epworth staff participate in practical assessments on campus at Holmesglen, leading to greater understanding of expectations of students and of the program.

Benefits for students include:

- They become familiar with the hospital and staff along with policies and protocols
- Clinical placements take place across a variety of clinical areas
- The NECHE program provides unrivalled support and assists with the transition from student to practitioner
- Support with Resume and interview preparation.

This presentation will include the establishment and implementation of a clinical partnership including benefits to both organisations and students.

IS IT TIME TO INTRODUCE LONGITUDINAL INTEGRATED CLERKSHIPS (LICS) FOR ALL MEDICAL STUDENTS?

Author(s): Mahoney S, Worley P, Heddle B, Robertson G, Walters L, Kennedy E, Campbell N, Joseph S, Fearon D

Flinders University

Presentation Title

Is it time to introduce Longitudinal Integrated Clerkships (LICs) for ALL medical students?

Introduction/background:

There is mounting evidence that traditional rotations-style medical education for early clinical learning is no longer serving students or the profession well. LICs, originally developed to address workforce issues, have also been shown to overcome some of the issues related to rotations – decreased need for frequent re-orientation to new settings and teams, improved student-teacher relationships, more opportunities for longitudinal contact with patients, improved student well-being.

Nearly two-thirds of medical students in year three at Flinders medical school now undertake either a full year LIC or a hybrid program with at least 20 weeks LIC. Newer LICs include urban community-based and tertiary hospital programs in addition to the well-established rural LICs.

Purpose/objectives:

This presentation will explore the possibilities of further developing LICs in urban community and tertiary hospital settings, discussing the strengths and issues experienced at Flinders Medical School.

Results:

Outcomes from the Flinders urban LICs will be presented including assessment outcomes.

Issues/questions for exploration or ideas for discussion:

Should all medical students undertake their early clinical learning in an LIC?

What are the opportunities for expanding learning environments into the private sector?

Discussion:

How can urban LICs be further developed and strengthened?

WHEN TRAINING IS NOT ENOUGH

Author(s): Morrison L, McBride L

Allied Health Professions' Office of Queensland, Department of Health

Introduction/background:

A key recommendation from the Queensland *Ministerial taskforce on health practitioner expanded scope of practice* was that the Allied Health Professions' Office of Queensland (AHPOQ), in partnership with education providers, facilitate access to training to support allied health professionals to expand their scope of practice. AHPOQ has provided training support for expanded scope models including prescribing for podiatrists, pharmacists and physiotherapists; pathology requesting; image interpretation; primary contact allied health vestibular services; and radiographer commenting.

Purpose/objectives:

To support consistent evaluation of training, an evaluation framework examining inputs, reach, outputs, impacts and outcomes was developed. Training data are captured on participant demographics and model of care; and training impact is measured using standardised surveys.

Issues/questions for exploration or ideas for discussion:

What is the impact of training, particularly on change in practice and participation in expanded scope roles?

Results:

A total of 285 training places have been supported. Participants consistently reported increased confidence in knowledge acquisition. The majority indicated intention to change practice; primarily incorporation of new assessments and treatments, and the use of diagnostic tools into their practice. At six month follow-up, actual changes to practice had been limited by delays in credentialing and implementation of the models locally.

Discussion:

The six month post-training evaluations have highlighted barriers to intended changes to practice beyond those related to training that need to be considered alongside future training provision and timing if these models are to be successfully implemented.

THE EFFECTIVE USE OF ORAL EXAM IN A REMEDIAL PROGRAM TO SUPPORT STUDENTS' LEARNING AND TEACHERS' TEACHING STRATEGY

Author(s): Hidayati N

Medical Education Unit (MEU) of Faculty of Medicine, University of Brawijaya

An oral exam as an assessment method might offer some educational impacts for both students and teachers in term of assessment for learning. We challenge this method to support students' learning; to what extent that this method can inform and direct students and teachers interaction for the sake of learning improvement. Guiding students learning for supporting low-attaining pupils stimulates the maximum result of this quality approach of study. Therefore, under the schema of a remedial program, both students and teachers were challenged to get a formative purpose though run a summative setting of assessment using an oral exam. Some features of oral assessment as a method using six Joughin (1998) dimensions of primary content type, interaction, authenticity, structure, examiners, and orality were referenced as the materials interviewed from the perspectives of both students and teachers in experiencing the exam to guide students' learning. From 30 students and 17 teachers participating the study, we found some interesting results. Both parties agreed for oral exam flexibility to direct students' learning and teachers' teaching process covering the primary content, authenticity and interaction; however, they doubt for the fairness in regard to the structure, examiners and orality among all the process. Students were mostly worried about the subjectivity of examiners in judging the exam; establishing their under pressure concern though the exam had informed for formative purpose. The great findings, students appreciated the beneficial function of oral exam in identifying and establishing their comprehensive understanding. For teachers, they were impressed with the experience of finding students "real" understanding and the great efforts to guide them travelling the science personally. Finally, both parties believe oral exam is suitable and recommend it for remedial program.

PEER-LED, STUDENT-CENTERED INTERVENTIONS THE KEY TO STUDENT HEALTH CARE WORKER INFLUENZA VACCINATION

Author(s): Nyandoro M¹, Kelly D¹, Macey D^{1,2}, Mak D^{1,3}

¹ School of Medicine, University of Notre Dame Australia, Fremantle, ² b. School of Veterinary and Life Sciences, Murdoch University, Western Australia, ³ c. Communicable Disease Control Directorate, Department of Health, Western Australia

MG Nyandoro, D Kelly, D Macey, & DB Mak

Background:

Vaccination is the most effective influenza prevention strategy recommended for all health care workers (HCW), including students. However uptake among Australian HCWs' is poor.

Objectives:

Implemented a peer-led campaign to raise awareness of, and improve access to, influenza vaccination. Then measured self-reported influenza vaccination uptake rates, attitudes and motivations towards influenza vaccination among student HCWs at UNDF pre/post campaign.

Issues for exploration:

Occupational Health Safety issues for health professional students. Attitudes, motivations and reasons for getting/not vaccinated.

Results:

Pre-campaign influenza vaccination uptake was 36.3%, with students identifying awareness, cost and inconvenience as key barriers. Post-campaign vaccination coverage increased significantly to 55.9%. Multivariate logistic regression showed that HCW students in 2014 were more likely to be vaccinated, with eligibility for National Immunisation Programme funded vaccine, HCW employment, enrolment in medicine and campaign poster recall being additional factors. Important factors for vaccination, self-protection 25.6% vs desire to protect patients 15.2%, other important factors being access 30.3% and affordability 13.7%.

Discussion:

This study revealed student HCW self-interest as a more important factor for vaccination than the desire to protect their patients which might indicate a deficiency in teaching and learning of professionalism. Given that student HCW curricula include learning outcomes relating to professionalism, it seems reasonable to expect universities to include influenza vaccination as an important part of educating students about professionalism. In addition, targeting student HCWs for annual influenza vaccination may facilitate improved influenza vaccination uptake among HCWs in the future, making influenza vaccination routine practice for HCWs.

Session 4A

Improving selection into medicine and the health care professions

Katie Petty-Saphon, Medical Schools Council, UK
(Kirsty White, General Medical Council, UK)
Sandra Nicholson, Queen Mary University of London, UK
Jon Dowell, University of Dundee, UK
Fiona Patterson, Work Psychology Group, UK
Jen Cleland, University of Aberdeen, UK

Developing the evidence base to improve selection into medicine and other health care professions remains a major challenge, as does aligning assessment processes to ensure “blueprinting” within programmes and legitimate comparisons across programmes.

The UK Medical Schools Council (MSC), the General Medical Council (GMC) and the International Network for Researchers in Selection into Healthcare (INReSH) have established collaborations focused on generating high quality evidence on selection and assessment processes.

The proposed symposium aims to share evidence of best practice, highlight areas where evidence is lacking and identify areas for international collaboration. We shall showcase a number of developments in selection to widen access, explore predictive validity, understand differential attainment and describe the UK Medical Education Database - a collaboration between the GMC and a number of key stakeholders which will hold data on assessment performance from application to medical school (since 2006) through to postgraduate training and professional practice (N=~7500 per annum). We shall report on the successful matching of anonymised candidate data, linking performance in the UKCAT with performance five or six years later in application to the UK's Foundation Programme (the generic 2-year training programme which immediately follows medical school). The utility of large datasets will be illustrated with this and other research study data. We shall also present how generic issues including stakeholder engagement; data protection, confidentiality and processing; ownership / IP have been addressed. The research possibilities which are opening up as a result of these collaborations will stimulate debate with the audience – as a key element of the symposium - about how best to work across countries and systems.

Session 4B

HOW GOVERNANCE CHANGES IMPACT ASSESSMENT

Author(s)

Lucy Donaldson and Claire Spooner

Presenter

Lucy Donaldson

Institution(s), Department(s), Country/Countries

Australasian College for Emergency Medicine (ACEM), Education department, Australia

Abstract

Changes to the Australasian College for Emergency Medicine (ACEM) assessment system overall had a direct impact on College governance structure and processes. A revised governance system was introduced to support the assessment changes.

Changes to governance at the training site, regional and college levels was required. Newly created roles and assessment governing bodies were formed.

Implementation of the revised system has resulted in benefits to the emergency medicine training. Risk mitigation strategies have included:

- Introduction of additional progression milestones in the training program, governed by Regional panel review process
- Revision of remediation and exit pathways
- Introduction of auditing at regional and binational level for assessors and sites completing assessments
- Dismissal processes occur at a higher level using more data points
- Revised training and assessment regulations
- Larger suite of College policies and procedures to reflect the regulations
- Revision to trainee selection process and assessments to support this process

The impact of these governance changes continues to be a challenge because of the complex links between operational, educational and advocacy aims within the organisation. Trainees, supervisors, assessors and committees benefits from clear reporting lines, plain-language organisational policy and governance processes that support the training program.

DEVELOPMENT OF THE 'CARE' MODEL FOR ASSESSMENT OF POSTGRADUATE MEDICAL PRACTITIONERS

Author(s)

David A Kandiah

Presenter:

David A Kandiah

Institution(s), Department(s), Country/Countries:

School of Psychiatry and Clinical Neurosciences, University of Western Australia, Perth, WA, Australia

Introduction: The quality of medical graduates coming out of medical schools is highly variable. This variability can be attributable to the curriculum, applied clinical teaching and learning, clinical supervision, mentorship, individual student characteristics and methods of assessment of competence by the time of graduation from medical school.

Methods: Discussion with supervisors, trainees and medical students as to what they perceive is important in clinical practice on graduation. The fora for this was in Grand Rounds, Supervisor workshops, individual feedback sessions and interviews.

Results: 4 main areas of assessment were identified. These are:

Capability at the level they should be at based on their appointment, year of training and previous experience

Affability in working of various members of the multidisciplinary clinical team and towards patients

Reliability and responsibility for their tasks including work with other doctors to complete both clerical (e.g. discharge summaries) and clinical duties (e.g. rostered shifts)

And

Ethical practice including appropriate reporting of problems and deviations from standard practices early (e.g. interaction with clinical staff from other Departments, hospital administration)

Conclusions: Rather than have broad outcomes in determining progression through a training program, having assessments that tailor to specific outcomes relevant to that training program should be identified as essential for clinical practice. This could produce more equitable and reproducible rules of progression through training programs and ultimately patient safety.

Take-home message: Taking optimal care of patients involves producing the best possible medical professionals. This CARE model can be applied to all health professional training.

IMPROVING COMMENTS ON ASSESSMENTS LEADS TO BETTER DETECTION OF RESIDENTS IN DIFFICULTY

Author(s):

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Presenter:

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Abstract:

Introduction: Residents who struggle in residency programs are a cause for concern. On average, residency programs experience 6-10% of residents struggling at some point in the program. In addition to causing stress for the resident, programs encounter significant costs in time and resources. Generally, improving identification of residents in difficulty benefits both programs and residents. In this study, we examined the extent to which an intervention to increase comments on assessments led to earlier detection of residents in difficulty.

Methods: Secondary data analysis: archived resident assessment data was mined for three years pre-intervention and three years post-intervention (total N=393). Rotation and progress report flags were used to identify residents in difficulty. Total numbers of comments were counted, as were words within comments. Content analysis of the comments was conducted to determine the degree to which comments gave residents specific information about where and how they could improve.

Results: Post-intervention, an ANOVA found that significantly more comments were found on assessment forms compared to pre-intervention forms ($F_{5,384}=8.8, p<.005$). Quantitative analysis found that the comments were more informative, and specifically mentioned areas where residents were encountering difficulty, and how they could improve their performance. More flags (indicating difficulty) were found on assessments post-intervention, but residents were flagged earlier in their program, and fewer residents required formal remediation.

Conclusions: Creating a residency program assessment culture that emphasizes informative comments on assessment forms facilitates earlier and clearer identification of residents encountering difficulty

Take-home message: Comments on assessment forms are crucial to identifying and helping residents in difficulty.

SYSTEMATIC EDUCATIONAL REVIEW AND DEVELOPMENT OF A PROGRAMMATIC APPROACH TO ASSESSMENT FOR AUSTRALIAN ORTHOPAEDIC SURGICAL TRAINING

Author(s):

I. Incoll^{1,2} and J. Atkin¹

Presenters:

I. Incoll and J. Atkin

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Introduction: From 2012-2013, the Australian Orthopaedic Association (AOA) undertook a global strategic review. Key challenges facing AOA training highlighted by the review included the prominent gap between the designed vs. implemented curriculum and the subjective nature of in-training assessment practices.

Methods: Workplace based assessment forms that will become one element of the programmatic approach, were uniquely designed. They: are tightly aligned to the revised curriculum; have the global scale positioned to record an expert judgement of the trainee's overall performance prior to consideration of individual elements of an encounter; abandon numerical rating scales for individual items to focus on qualitative feedback; and include the trainee documenting a plan to action suggestions made. Paper-based versions were piloted with Directors of Training, Trainee Supervisors and the Trainees they supervise in Victoria, South Australia and Western Australia.

Results: Assessors found the items on the forms meaningful to everyday practice and the scale for each item allowed them to identify specific areas observed that the trainee is competent with or needs to work on. The global scale with its focus on the provision of effective patient care, was perceived to be good holistic measure of the trainee's performance.

Conclusions: Increased frequency of formative workplace based assessment is a pivotal component of the programmatic approach. Innovative collation methods are required to effectively utilise data gathered for progression decisions.

Take home message: Transformation will require extensive engagement with all consultants involved in training, including an appreciation of the rationale behind the revised approach to assessment, by both trainees and their assessors, to achieve successful implementation.

Session 4C

DO WE TRULY ASSESS WHAT WE TEACH? TECHNOLOGY POWERED CURRICULUM GAP ANALYSIS

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Presenter

Gerald Thrush

Introduction

How do we ensure if there is alignment between what we teach and what we formally assess? We have developed a novel technological approach that identifies the relationship between classroom learning activities with that of the learning outcomes emphasized on exams.

Methods

Built on Microsoft SharePoint technology, we created a real-time curriculum map which allows us to track learning outcomes. ExamSoft computer-based testing empowers us to assess student performance on those learning outcomes. We can then compare the mix of learner outcomes from the curriculum map to the exams and to determine if what is emphasized during the learning activities are appropriately represented on the exams.

Results

Using the above outlined technology, we have found that some courses have great alignment between what is emphasized in the classroom and what topics show up on the exams, while other courses appear to have poor alignment. In both scenarios, faculty have easy access to the data and have begun to implement change to better address identified gaps in learner outcomes as were previously sub-optimally taught or/assessed.

Conclusions

We have been able to perform gap analyses between what we teach and what we assess using a novel technical approach. This technique has allowed us to readily identify and implement curricular change to improve gaps between teaching and assessment.

Take-home message

Effective analysis of student learning outcomes can be easily accomplished by thoughtfully using currently available technologies.

DEVELOPING NEW TECHNOLOGY TO FACILITATE IMPLEMENTATION OF PROGRAMMATIC ASSESSMENT FOR LEARNING

Author(s)

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Introduction

Programmatic assessment for learning (PAL) argues the need for a longitudinal view of student performance, mapping individual assessment results against anticipated standards on an ongoing basis to facilitate students' self-identification of learning progress and inform their goals for future learning. An electronic centralised assessment data management system (CADMS) is fundamental to implementing PAL, as it enables purposeful display of authoritative assessment data, access by multiple stakeholders, equal credit to qualitative and quantitative data, and easy separation of assessment results from progress decisions.

Methods

This case study explores CADMS development (as part of a broader PAL implementation) at the School of Medicine, Flinders University, via analysis of documents, process and experience.

Results

Development of CADMS necessitated collaboration between multiple stakeholders. The relationship between CADMS and PAL became confused due to a lack of mutual understanding of the extent to which CADMS data would span the needs of PAL, posing a significant risk to the project. Project scope was narrowed and that understanding disseminated to key stakeholders to manage expectations and facilitate development.

Conclusions

CADMS is intended to be the database of authority from the School perspective of what will be and has been completed by students in relation to course outcomes. Additional PAL software is required to assist students to make sense of their own learning with respect to course outcomes.

Take-home message

Clear definition and repeated articulation of project scope is essential to avoid scope creep and subsequent project failure when developing technology to support assessment.

BEAXI¹⁰ – THE ALL-IN-ONE TABLET SOLUTION FOR E-ASSESSMENTS

Author(s)

Daniel Kohler | David Böhler

Presenter

Daniel Kohler

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K2Prime GmbH | Medical Faculty of the University of Basel, Switzerland

Introduction (www.beaxi.com)

E-Assessments have become increasingly popular lately. A growing number of educational institutions nowadays do e-assessments one way or another. Enabling the usage of innovative multimedia question types, long menu or key feature are some of the core factors why e-assessments gain that much momentum. Further advantages are discussed in the Literature. E-Assessments are mostly conducted in locations that are geared up with appropriate infrastructure like PCs, dedicated network installations and air-conditioning. The lack of flexibility and mobility, legal aspects, usability as psychological issues, complex technology and financial aspects are the challenges of the E-Assessments. (Bridgeman 2009, Clariana und Wallace 2002, S. 593, Dahinden und Hinterberger, Hartig und Klieme 2007, Reich und Petter, Villalba 2009, Wolf 2007, Williams und Nash 2009)

BeAxi revolutionizes the way of how you do exams as it master the challenges and support all innovative question types. The application runs on Apple iPads – guaranteeing you the most mobile way of conducting exams. The devices are easy to handle and do not require a power outlet nor a network connection to conduct exams. Custom-built infrastructure is not required – conduct your exams wherever you like. Moreover, we will show that E-Assessments benefit from the usage of iPads being more efficient compared to usual desktop environments. BeAxi is the first E-Assessment Application for High-Stake Exams running natively on iPad and master the mentioned challenges. Worldwide there is only little experience. (EP 2014) With BeAxi the MC and OSCE exams can be conducted.

Results

Evaluations with students of the first exam have shown that the usability of the software is highly approved and innovative features like, for example, the possibility to annotate questions is much appreciated.

In 2015 all exams were conducted on iPads. Other institutions in Switzerland started using BeAxi. The concept can be transferred to other Universities.

¹⁰ Developed by Medical Faculty of the University of Basel, K2Prime GmbH is distributing Spin-Off

Conclusions

BeAxi on iPad is effective and efficient. The integration is fast and easy without the need of deep technical knowledge.

Take-home message

Buy iPads, conduct innovative exams, save time while correcting exams.

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GAME-BASED OR TEXT-BASED PATIENT CASES: WHAT DO THEY ADD TO ONLINE INSTRUCTION?

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Introduction

Simulation games can deliver instruction in a realistic, engaging way and are becoming increasingly popular in medical education. However, more insight in their effectiveness and critical design features is needed. This study investigated whether emergency skills and motivation of medical students can be improved by adding a high-fidelity simulation game or a low-fidelity text-based cases program to an instructional e-module.

Methods

We set up a randomized design with three groups: a control group working on an e-module, a cases group, combining the e-module with text based patients cases, and a game group, combining the e-module with a simulation game, based on the same cases. Participants completed a questionnaire on cognitive load and motivation. After a 4-week-study period, assessors rated students' cognitive emergency care skills in mannequin-based scenarios.

Results

In total 61 students participated and were assessed; 16 control group, 20 cases and 25 game students. Learning time was 2 hours longer for the cases and game groups than for the control group. Acquired cognitive skills did not differ between groups. The game group experienced higher cognitive load than the cases group and felt more engaged, with large effect sizes.

Conclusions

Students with little expertise in emergency skills did not profit from working on open cases, which nonetheless challenged them to study longer. The e-module appeared to be very effective, while the high-fidelity game, although engaging, probably distracted students and impeded learning.

Take-home message

Medical educators designing motivating and effective skills training for novices should gradually increase complexity and fidelity of cases.

ADAPTIVE E-LEARNING TOOLS AND ACADEMIC PERFORMANCE IN A LARGE UNDERGRADUATE PSYCHOLOGY COHORT

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Presenter:

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Introduction: In recent years there has been growing interest in the use of e-learning tools that are able to adapt to suit the ability levels, needs, or preferences of individual learners. In this project we aim to test the utility of an adaptive e-learning study tool within the context of a large undergraduate Psychology course (N = 700).

Methods: We measured student usage of the adaptive e-learning tool and the effect that this usage has on academic outcomes, while controlling for the effects of intellectual ability and personality traits such as conscientiousness and openness to experience.

Results: Regression analysis indicated that the psychological variables and the adaptive e-learning tool predict approximately 17% of the variance in performance on the final exam. Relative importance regression analysis indicated that the adaptive e-learning tool accounts for approximately 46% of the explained variance, with intellectual abilities accounting for 32% and personality variables accounting for 22%.

Conclusions: Usage of the e-learning tool had a significant impact on the student's final exam grade above and beyond the effects of the psychological variables. Further research is required to ascertain whether particular students benefit more than others from such interventions.

Take-home message: Given the widespread availability and relatively low cost of adaptive e-learning study tools it is recommended that these sorts of tools are incorporated more widely into undergraduate curricula.

Session 4D

EFFECTS OF ASSESSORS' CULTURAL ORIENTATIONS ON ASSESSMENT OF COMMUNICATION SKILLS IN MULTICULTURAL SETTINGS

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Introduction

Assessment of communication in patient-practitioner interactions typically relies on rater-based assessments. Rater-based assessments are noted for their fallibility and recent research points to various cognitive factors responsible for these assessment findings. Little is known, however, about effects of raters' cultural background on assessment in multicultural settings. This study aims to explore how raters' cultural orientations (power-distance, uncertainty avoidance, masculinity, long-term orientation, individualism) influence evaluation of student performance in patient-practitioner interactions.

Methods

Pharmacist-assessors (N = 25) watched 3 videos portraying student-patient interactions. Assessors provided an overall performance score for each of the videos. Assessors' cognitive performance was captured using stimulated recall interviews and verbal protocol analysis. Assessors' cultural orientations were measured using CVSCALE. Cultural orientations were correlated with performance scores and dimensions in assessors' cognitive performance.

Results

Uncertainty avoidance, collectivism and long-term orientation were negatively related to positive valuing of patient involvement during interactions ($r = -0.54, -0.44, -0.55; p < .05$). Masculinity is negatively related to positive valuing of verbal behaviours ($r = -.41; p < .05$) and explanation/planning ($r = -.61; p < .05$). Finally, individualism is positively related to positive valuing of closing/summary of sessions ($r = .44; p < .05$). Findings differ across videos with power-distance and masculinity relating to positive ranking of video 3 ($r = .45; .54; p < .05$).

Conclusions

Findings indicate that assessors' cultural orientation influences assessment of task performance in patient-practitioner communication. Findings may have implications for assessment design, interpretation of assessment data and training of assessors.

Take Home Message

OTTAWA2016
ANZAHPE2016



Assessment in multicultural settings must account for assessors' cultural orientations.

FEEDING BACK – USING LINGUISTIC ANALYSIS TO INFORM EFFECTIVE COMMUNICATION FEEDBACK TO HEALTH SCIENCE STUDENTS ON CLINICAL PLACEMENT

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Presenter

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Introduction

Good communication between patient and healthcare professional is crucial to patient satisfaction and outcomes, however developing these skills is challenging to students, particularly those for whom English is not a first language. Linguists can provide insights into the subtle and pragmatic aspects of communication. This project aims to draw on expertise of applied linguists to provide clinical educators with insights to better provide students with feedback to facilitate effective communication.

Methods

An analysis of video-recordings of student-patient interactions (n=8) and of tutor-student feedback sessions (n=8), involving 4 tutors, 8 students and 7 patients was undertaken by two of the authors, MD and LY (applied linguists). The analytical focus was on communication feedback provided by the tutors, including the structure, strategies & realisations in providing feedback generally and on communication strategies specifically.

Results

Information was generated, using the lens of an applied linguist, on: the type of feedback provided, the structure of feedback, the student vs tutor agenda, and feedback strategies more generally.

Conclusions

By comparing feedback to students with best practice, strengths and weaknesses of the way clinical tutors provide feedback can be identified and used to inform educator training. This has particular importance when considering the need to assist students from non-English speaking backgrounds to develop the communication strategies required for effective practice.

Take-home message

Linguists can partner with healthcare educators to provide unique insights into communication strategies for effective feedback, and to aid educators to identify and provide feedback to students about their communication strategies with patients.

WRITING AND THE ASSESSMENT OF WRITING ABILITY IN THE MEDICAL CONTEXT

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Introduction

To work in English language contexts, doctors for whom English is not the first language often need to demonstrate their proficiency in the language. Assessment of this ability is facilitated when there is close correspondence between the assessment task and the tasks doctors actually perform—that is, when the test has construct validity. In this paper, we report on a study that considers the written modality in relation to the writing component of the Occupational English Test (OET), a specific-purpose test of English language ability for the medical context that is recognised by various regulatory bodies.

Methods

First, interviews and surveys were conducted to identify the writing tasks that doctors perform as part of their work. The findings from this part of the study were then used to evaluate the extent to which the OET writing task and assessment criteria reflected doctors' writing requirements.

Results

The results show that most frequently used writing genres include patient notes, emails and letters, filling in forms, and writing referral letters.

Conclusions

For language assessment purposes, patient notes and forms are not ideal, yielding a minimal sample of language. Linguistically, referral letters are arguably most likely to pose a challenge, requiring a relevant response characterized by appropriate detail and conciseness, clarity, organization, tone, and correctness.

Take-home message

It is concluded that the OET Writing task—a referral letter based on case notes—remains appropriate and relevant, as do the marking criteria covering the desired qualities mentioned earlier.

OBJECTIVE ASSESSMENT OF REFLECTIVE WRITING AND ITS ASSOCIATION WITH ACADEMIC PERFORMANCE

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Introduction: Medical educators frequently implement reflective writing into the curriculum to promote a variety of learning options, including knowledge, skills, behaviors, and professional values. The aim of this study was to investigate the habitual reflective writing behavior of medical students in preclinical courses, including the influence of gender, age, and previous education, using objective measures, as well as its association with learning outcomes.

Methods: Complete records of students' personal reflections during their preclinical years (from the first to the fourth year), which were recorded using an e-portfolio platform, were collected from two separate cohorts. Number, length, delay, and nature of reflections based on competence key words were collected, and characteristics of these entries were then analyzed based on gender, age, and admission status. Objective measures of reflection and computer-based testing (CBT) and Objective Structured Clinical Examination scores at the end of fourth year were evaluated using regression analysis.

Results: Based on analysis of 8537 records of reflection from 199 participants, female and bachelor students more frequently wrote longer reflections with more competence key words than male or general admission students. Among characteristics of reflective writing, mean length of reflection in the fourth year was identified as a dependent variable to predict CBT scores in both cohorts.

Conclusions: Gender and prior educational experience appear to be strong influential factors for reflective writing. Objective measures of reflective writing may be associated with student's academic performance.

Take-home message: Objective assessment of students' reflective writing habits may have predictive validity for academic performance.

AN INVESTIGATION INTO PATIENT EXPERIENCES AND PERCEPTIONS OF COMMUNICATION ENCOUNTERS WITH ALLIED HEALTH PRACTITIONERS

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Introduction – High level communication skills are an essential component of effective relationships between allied health practitioners and their patients. Clinical experience with patients traditionally plays a large role in the education of allied health students (Towle et al, 2010). Yet rarely are patients asked to give feedback on their clinical encounters with students, typically student supervisors provide feedback and assess students' communication skills. Standard communication items from allied health students' clinical assessment tools have largely been devised from what the literature states is best practice; to date patients have not been involved as a stakeholder in their development.

The aim of this exploratory study is to improve our understanding of what makes a communication encounter with an allied health practitioner effective from the patient's perspective.

Methods – Participants were recruited from private practices and the University of Sydney. Semi structured interviews were completed with individuals who had experienced an encounter with a speech pathologist, occupational therapist, physiotherapist or medical radiation science practitioner in the preceding three months. Interviews were audio-recorded, transcribed and thematically analysed.

Results – To date 14 interviews with patients who have experienced an encounter with an allied health practitioner have been completed. Recruitment is continuing and it is expected that full results will be presented at this conference.

Conclusion – Findings received will inform the development of a communication inventory tool, to assist in identifying and developing student allied health practitioners' communication skills.

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Session 4E

DEVELOPMENT AND IMPLEMENTATION OF AN INNOVATIVE ONLINE OBJECTIVE STRUCTURED CLINICAL ASSESSMENT (OSCA) OF RADIATION THERAPY STUDENT READINESS FOR PRACTICE

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Catherine Osborne and Caroline Wright

Presenter:

Catherine Osborne

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Introduction: The Master of Radiation Therapy (MRT) is a unique graduate entry program. The theoretical components are delivered on-line. This makes it ideal for training graduates in regional and remote areas of Australia. Over the past decade, there have been significant advances in on-line pedagogies. This includes the use of simulated learning environments. In combination with clinical placement, these strategies scaffold the development of skills that can be directly transferred in the profession.

Previously, as students have neared course completion, face to face assessments of readiness to practice (Objective Structured Clinical Assessment (OSCA)) were conducted in the student's local clinical centre. This involved nation-wide travel, which was both costly and logistically challenging. In 2014 we transitioned to an online OSCA process to evaluate graduate capabilities.

Implementation: The OSCA utilised an online video conferencing platform to host the interactive, timed assessments. Students were required to analyse and reflect on a range of radiation therapy cases. Virtual Environment for Radiation Therapy (VERT), a RT simulation suite was used to create case-based vignettes. Images and planning data were displayed via screenshots for analysis. Each OSCA was also recorded, which allowed for cross moderation between assessors.

Conclusion: The use of technology and simulated learning tools has made it possible to transition from a face to face OSCA to an online version. This has proved cost effective and allowed us to maintain high level interaction with the students during the assessment.

Take-home message: Engage in innovation and utilise technology to create equitable assessment platforms that save time, and resources.

COPING THE CHALLENGE: HOW AN INSTITUTION PREPARES STUDENTS FOR THE NATIONAL OSCE

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Introduction

National certification examination is used as one of the methods to quality assures medical graduates in Indonesia. Clinical skills are assessed in national examination using OSCE in 12 stations format, each with 15 minutes standardised patient encounter. Faculty of Medicine Universitas Gadjah Mada (FM UGM) has taken part in national OSCE including the pilot project since 2011. Starting in 2014, the Skills Laboratory in FM UGM runs the preparatory training program for students to cope the challenge of national examination in this limited resource country.

Methods

The preparatory training program consists of 3-4 weeks clinical skills training sessions. Each session is a small group learning, facilitated by a teacher in Skills Laboratory. Simulated cases are presented by simulated patients in a 15-minute encounter. Students encounter more than one case in each session, practicing management skills with simulated patients and procedural skills using manikins. Teachers give feedback using rubrics after the encounter. Evaluation for the preparatory training program is conducted periodically (three to four times a year). A study to explore students' perception of their preparation program and how it affects their performance in OSCE is currently on progress.

Results

Since the program implementation in 2014, the passing rate in FM UGM is 90-98%. The evaluation using open questionnaire revealed that students appreciate feedback from teachers after they perform skills. Practicing skills using the same format as the national OSCE is helpful for them. Teachers prefer students to practice more diverse cases and discuss feedback during debriefing sessions.

Conclusions

A preparatory training program is helpful to give students opportunity to practice in a safe environment and prepare them for the examination. Feedback and diversity of cases are important in facilitating the training.

Take-home message

This study highlighted how an institution prepares for national OSCE in a country with limited resources. The challenge of national OSCE implementation in this country will have different impact on students' preparation for the examination. Further study to improve the program and aim for preparation of future practice in real setting is necessary.

DEVELOPING AN ENHANCED PERSONALISED WEB-BASED OSCE FEEDBACK SYSTEM TO HELP STUDENTS UNDERSTAND OSCE PERFORMANCE

Author(s)

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Presenter

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Introduction

Students surveys such as the UK National Student Survey consistently show a significant disparity between satisfaction with teaching and that for feedback and assessment. OSCEs do not lend themselves to providing personalised feedback in summative examinations. We developed a system to allow students to visualise and understand their OSCE performance. Beyond the initial investment in time developing this, the year-on-year academic time to use this system is minimal (less than two hours for a 20 station OSCE).

Methods

Using a taxonomy to code OSCE skills assessed and data mapping tools to deliver dynamic visual representations of these data for our students could drill down to understand their performance. We conducted surveys of student satisfaction of assessment feedback and conducted focus groups about their experience using the site

Results

65.94% of students visited the site within 4 hours of result release with a mean of 2.95 visits per student over the following 4 months (range 0-15). Students valued both the amount of feedback available and the nature of it with significant improvement in satisfaction ratings (from 48% to 86% 'satisfied'). Some, however, reported dissatisfaction as they wanted detailed descriptions of exactly where they went wrong rather than focus on what they needed to improve.

Conclusions

Students value individualised feedback but some still struggle to move beyond the question-by-question detail typical of pre-university teaching which sets expectation incompatible with adult learning.

Take-home message

Significant improvement in student satisfaction with examination feedback is possible without significant continued investment of academic time.

CHANGING BACK TO SEQUESTRATION - THE IMPACT ON OSCE PERFORMANCE AND STUDENTS' PERCEPTIONS

Author(s)

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Presenters:

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Introduction

Objective structured clinical exams (OSCE) are used to assess students' clinical skills (doing and showing more than simply knowing)

In 2012 our university made an evidence based policy change and stopped the sequestration of students during structured clinical examinations. This was triggered by research showing little to no impact from the deliberate "disclosure of examination content" on performance. However the common student view is very different to the published research findings. And regardless of the published evidence, most medical schools in Australia continue to use quarantine.

Methods

We have surveyed, and will survey medical students in 3 clinical years using qualitative and quantitative questions before and after the re-introduction of quarantine in 2015.

In addition analyses were made comparing the mean performance of students allocated to early and late examination sessions, to see any differences in their scores.

Results

Students not sequestered, openly declared widespread cheating occurred. This triggered strong reactions both for and against sequestration. As they believed that those in later sessions received advantageous exam information. Our analysis of their perceptions and the data on their comparative performance will be presented from before and after the re-introduction of sequestration.

Conclusions

Assessment practice needs to be guided by both evidence and consideration of perceived fairness.

Take-home message

Sequestration evokes strong opinions regardless of the current published evidence. Our research findings will add to the debate about the case for and against this time-honoured practice.

VIEWING OSCEs THROUGH THE DRAMATURGICAL LENS: ASSESSING PERFORMANCE OR SIMPLY PERFORMING?

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Introduction: Objective Structured Clinical Examinations (OSCEs) are a key method of assessing clinical skills in medical students, therefore, it is important to ensure that OSCEs continue to be a valid assessment tool.

Methods: This presentation is part of a larger study undertaken to understand the experience of medical students learning physical examination, using phenomenology as the research methodology. Medical students in years 2-4 of a graduate medical program were invited to attend semi-structured focus group or individual interviews which were then transcribed, de-identified and analysed using Interpretative Phenomenological Analysis (Smith and Osborn, 2008). The data relating to the “performance” of the OSCE (held during the preclinical years) was then re-interpreted through the lens of dramaturgy (Goffman, 1959).

Results: the main areas that will be discussed are:

1. The rehearsals
2. The OSCE as a recital
3. The patient as a prop

Conclusions: When medical students can confidently predict the stations, this permits them to spend time memorising lines and manoeuvres, so that the performance of the OSCE becomes a “recital”, particularly in OSCEs during the preclinical years, when standardised patients are used. The students in this study described how they did not interact with the (standardised) patient at all, nor did they perceive any of the physical examination findings, calling in to question the validity of the OSCE as an assessment tool.

Take-home message: Organisers of OSCEs need to be aware that medical students can “game-play” any assessment. However, awareness of this can lead to creative responses, significantly improving validity

Session 4F

MEASURING THE PATIENT SAFETY CULTURE

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Introduction

The Institute of Medicine has declared that the goal of delivering fundamentally safe care would require a commitment of all stakeholders to a *culture of safety*. An exact roadmap to achieve the goal is lacking but understanding baseline culture is helpful. The objective of this study was to take the first step in creating a culture of safety by determining the current culture in an academic emergency department (ED) through the AHRQ Patient Safety Culture Survey.

Methods

This was a cross-sectional study of 256 staff in an academic, tertiary care ED, using the Agency for Healthcare Quality and Research (AHRQ) Patient Safety Culture Survey. The survey included four dimensions of the previously validated AHRQ Patient Safety Culture Survey (Teamwork Within Units, Overall Perceptions of Safety, Handoffs & Transitions and Communication Openness).

Results: The response rate was 70%. The ED scored lower than the 2012 AHRQ national hospital averages in Teamwork Within Units (22 percentage points lower than national average), Overall Perceptions of Safety (8 percentage points lower), and Communication Openness (8 percentage points lower). The ED average patient safety grade was lower compared to the 2012 AHRQ national average.

Conclusion: The AHRQ Patient Safety Culture Survey results demonstrated low scores in the domains of Teamwork, Perceptions of Safety, and Communication Openness.

Take home points Use of a Safety Culture Instrument may help departments understand their culture and to focus time and resources on those areas with greatest vulnerability and focus improvement to lead to a safer culture.

ASSESSMENT OF A 3D E-LEARNING RESOURCE FOR ENHANCED NEUROANATOMY EDUCATION

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Introduction: Neuroanatomy is a challenging topic for medical students, with many experiencing difficulty in understanding the complex spatial relationships. Students report having the lowest knowledge in neuroanatomy, and often experience difficulty applying basic neuroanatomical knowledge in clinical settings.

Methods: An interactive 3D online learning resource was developed to complement the current gross anatomy laboratory instruction. The e-learning resource allowed students to view structures from any desired angle, view cortical and subcortical structures at high magnification, and control interactive labels. The cross-over design divided 87 participants into two groups. Each group initially completed neuroanatomy knowledge and spatial ability assessments, followed by access to either the 3D e-learning module or gross anatomy laboratory. Participants completed a second anatomy knowledge assessment prior to interacting with the other learning modality. A final knowledge assessment and qualitative questionnaire were administered following exposure to both learning modalities.

Results: Students who initially accessed the 3D resources scored significantly higher on the first anatomy knowledge assessment than students who accessed gross anatomy resources. With exposure to the 3D resources, students who initially viewed the gross anatomy resources improved their scores to a level equivalent to students who had viewed the 3D resources first. Significant positive correlations were observed between spatial ability and assessment scores. Student qualitative feedback of the 3D learning resource was positive.

Conclusions: Assessment scores significantly improved following exposure to the e-learning resource and were positively correlated with spatial ability.

Take-home message:

Results could guide the design and implementation of effective e-learning resources.

FUTURE PROOFING PSYCHIATRY: EVALUATION OF THE CLAASSEN INSTITUTE OF PSYCHIATRY FOR MEDICAL STUDENTS

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Introduction

Exposure to psychiatry in most medical courses starts in the preclinical years and progresses to clinical clerkships. However, while attitudes towards psychiatry are reasonably positive, psychiatry as a career choice is regarded negatively by medical students. In order to improve recruitment, psychiatry curricula need to develop innovative strategies to attract more students towards a career in psychiatry.

Methods

A novel enrichment programme, the Claassen Institute of Psychiatry for Medical Students was developed by the School of Psychiatry and Clinical Neurosciences at UWA. The Institute aims to provide students with the opportunity to learn more about specialising and working in psychiatry.

It is an intensive, week-long programme. Interactive seminars cover a range of diverse topics and current contemporary themes. Students also attend elective sessions at community and hospital-based mental health services. There is a student led debate and interactive stigma discussion. Evaluation is carried out each year using questionnaires.

Results

Since 2008, 138 students have attended the Institute. Evaluation has found significant increases in level of student interest and knowledge in psychiatry at the end of the programme. Numbers of students definitely considering psychiatry as a career has increased significantly. Approximately 20% of these are now undertaking post graduate psychiatry training.

Conclusion

The Institute is an innovative enrichment programme that is successful in increasing the number of students who choose psychiatry as their career.

Take-home message

The establishment of similar programmes will protect this endangered discipline and further strengthen and future proof the psychiatric workforce for decades to come.

SPIRAL CURRICULUM FOR MEDICAL ETHICS EDUCATION AND ASSESSMENT

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Abstract

Effectively assessing ethics competences is indeed an important aspect of medical ethics education. If we think medical ethics is a fundamental component of the education of medical students, then it should be formally assessed on a par with medical competences (Ashcroft et al 1998).

Medical students often perceive ethics as a “fluffy” discipline (Leo and Eagen 2008). This perception might change if ethics assessment is brought to the same high standard of rigour that characterizes the assessment of medical competences. A good way of doing so is linking evaluation to specific learning objectives through the so-called “SMART” approach, i.e. creating teaching objectives which are Specific, Measurable, Action Oriented, Reasonable, and Time bound (Carrese et al. 2015). This approach is based on the idea that there is a “critical relationship between a program’s goals and the design of an assessment strategy” (Favia et al 2013).

We propose a medical ethics curriculum together with assessment tasks. It is tailored on a 4-year course with 2 years of pre-clinical education and 2 years of clinical education. The curriculum is based on constructivist pedagogy where students learn the ‘facts’ of health law and ethics in the pre-clinical years with increasing opportunity to practice these throughout these years. Assessment in these years evaluates knowledge and application. In clinical years, students apply the knowledge and skills learned in pre-clinical years to their experience in the clinical context with assessment targeting higher levels of understanding and attitude through journals, interactive tutorials and OSCE.

BLENDED LEARNING – A RESPONSE TO OVERCOME THE CURRENT CHALLENGES IN TRANSFUSION EDUCATION

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Introduction

Haematologists need an understanding of patient blood management (PBM) to optimise, conserve and manage a patient's own blood and minimise or avoid transfusion when appropriate. Limited transfusion and PBM topics in current haematology training curriculum and unavailability of a national transfusion program for haematology registrars are important issues.

Methods

In 2013–14, a Registrar Transfusion Education Program (RTEP) with a broad transfusion medicine curriculum was established, which was open to other health professionals. Blending learning where nine transfusion and PBM-focused online webinars and a 2-day case based workshop were delivered. A survey was available after each event. The program was repeated in 2014–15.

Results and conclusion

During 2013-14, there were 150 registrar attendances (out of 293 total attendances) in the RTEP. Ninety registrars provided feedback. The learning needs of 65.9% of registrars were entirely met, further 34.1% was partially met and none indicated it had not met their learning needs. Forty-three registrars attended the in-person workshop and 60% of these registrars engaged in the webinars before attending the workshop. Out of 151 registered haematology registrars, 41% engaged in the program.

Year 2 of the program showed a decline in the webinar attendances, however there was an increase in the workshop attendance. Fifteen registrars attended the workshop for a second time. Out of 171 registered haematology registrars, 39% engaged in Year 2. In conclusion, the national program using a blended approach is a successful intervention to engage and inform registrars about transfusion medicine and PBM principles.

Take-home message

A blended learning approach is a successful way of engaging postgraduate registrars around transfusion practice and PBM principles.

Session 4G

THE BROAD-BASED TRAINING PROGRAMME: WORKPLACE-BASED ASSESSMENTS

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Introduction

Introduced by the Academy of Royal Medical Colleges, two-year broad-based training programmes (BBT) are running in regions across England. BBT follows the first two years of training and provides 6-month placements in General Practice, Core Medical Training, Paediatrics and Psychiatry. Our evaluation of the BBT programme is wide-ranging and ongoing. We give specific attention here to findings related to assessment.

Methods

BBT trainees (n=38 BBT2013; n=24 BBT2014) completed baseline questionnaires which collected data on education and training, experience of current practice, motivations and future expectations. The questionnaire contains both open and closed questions. Statistical analysis used SPSS.

Results

BBT is first choice training pathway for most, typically chosen to gain broad experience and provide more time to decide on career specialty. Data from BBT2014 revealed significant increases in satisfaction with workplace-based assessment and the ePortfolio ($p < .001$ respectively). Respondent satisfaction with their training experience in BBT also showed an increase on BBT2013 ratings. ARCP (Annual Review of Competence Progression) data from BBT2013 shows the majority achieved an outcome 1 (data for BBT2014 is pending).

Conclusions

The BBT programme is continually developing. Increases in satisfaction with workplace-based assessments show how teething problems have been addressed in the programme. Familiarisation with BBT have improved assessment processes.

Take-home message

BBT is being received positively. Evaluation findings demonstrate increasing trainee satisfaction with key benchmarking processes.

THE AUSTRALASIAN COLLEGE FOR EMERGENCY MEDICINE'S CENTRAL AND REGIONAL PANELS: ESTABLISHING A SHARED UNDERSTANDING FOR INTER-RATER AND INTER-PANEL RELIABILITY

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Introduction:

In 2015, the Australasian College for Emergency Medicine (ACEM) implemented a new Curriculum Framework with a progression system based on workplace based assessments (WBAs) for its bi-national training. Nine regional panels were established and tasked with the progression decision-making. In establishing a progression system that was clear, transparent, reproducible and defensible, it was apparent that inter-rater and inter-panel reliability and concordance would be essential to the success of the system.

Methods:

A descriptive study of how ACEM Central and Regional WBA panels established a shared frame of reference.

Results and Conclusions:

Central and Regional panels took time to establish a shared understanding. Communication strategies included written and verbal modalities. Face to face discussions were invaluable to discuss issues and workshop solutions while electronic forums were helpful in maintaining communication and raising issues.

Inter-rater and inter-panel concordance depended on;

- an established standard as outlined in the Curriculum Framework
- an agreed upon rating and assessment scale for WBA tools
- local assessors understanding that ratings and narrative comments must be of sufficient detail to build a picture of a trainee's progress
- a robust communication and administrative system responsive to feedback allowing extraction and audit of accumulated assessments and decisions

Take-home message:

To ensure a robust, dependable process for progression and remediation decisions, regional panels must be given time to come to a shared understanding which must also be communicated to local assessors to ensure that WBAs are completed accurately and in sufficient detail to enable progression decision-making.

VALUE OF THE NEWER WORK-PLACE BASED ASSESSMENTS IN PREDICTING DOCTORS IN DIFFICULTY.

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Introduction

Supervised Learning Events (SLEs) replaced traditional Foundation Work-Place Based Assessments (WPBA) in the UK in 2012. A key element of SLEs was to incorporate trainee reflection and feedback in order to drive learning and identify training issues early. Few studies have looked at the value of the newer WPBA in predicting doctors in difficulty (DiD). Therefore this study evaluated this further.

Methods

- Retrospective observational study of North-Western Foundation School, UK trainees (2012-2013 cohort) Electronic-Portfolios (n=1086).
- All DiD (n=71) included.
- Controls randomly selected from same cohort (2:1 basis) (n=142).
- Free-text from WPBA assessed qualitatively and coded blindly using General Medical Council's Good Medical Practice Guideline domains.

Results

- DiD prevalence rate 6.5%
- Team Assessment of Behaviour (TAB) strongly predictive of DiD (Receiver operator curve analysis Area Under the Curve (AUC) 0.74).
- Educational Supervisor Report (ESR) strongly predictive of DiD status (AUC 0.90).

- TAB and ESR predicted DiD status significantly associated with actual overall DiD status and health and performance subcategories (Fisher's test-P<0.0001).
- Newer WPBA are not used to their full potential with lack of negative but constructive feedback (Qualitative analysis).

Conclusions

- TAB is the only WPBA useful in predicting DiD.
- ESR plays a pivotal role in evaluating DiD.
- Focused training of trainers/trainees is recommended to improve WPBA completion, feedback and identify DiD earlier.

Take-home message

- TAB and ESR have predictive value in identifying DiD but many other newer WPBA are not used to their full potential.

FACTORS IMPACTING ON MINI-CEX ASSESSOR JUDGEMENTS IN AUSTRALIAN AND NEW ZEALAND EMERGENCY DEPARTMENTS: A MIXED METHODS EXPLORATORY STUDY

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Introduction

The Mini-Clinical Evaluation Exercise (Mini-CEX) relies on the judgement of assessors directly observing trainees in daily practice. Most studies of rater-based judgement to date have utilised videotaped encounters. The aim of this study was to identify the factors impacting on Mini-CEX assessor judgements in the authentic setting of Australian and New Zealand Emergency Departments.

Methods

This was a sequential mixed methods exploratory study using a survey followed by focus groups, developed from a conceptual framework of rater-based judgement¹. Survey and focus group data were analysed and triangulated to explore emerging themes.

Results

Four important factors impacting on Mini-CEX assessor judgements in Emergency Departments were identified: 1) Assessor factors – subjectivity and variability of clinical skills, frames of reference, bias and gestalt; 2) Assessment factors – related to observable clinical skills and identifying learning gaps; 3) Contextual factors – related to prior assessor-trainee relationship, trainee motivation, case complexity and uncertain environmental influence; and, 4) Feedback factors – related to providing constructive feedback. The cognitive, perceptual, responsive, purposeful, authentic and divergent relationships between these factors were then elucidated.

Conclusions

This study identified a holistic framework of real world factors impacting on Mini-CEX assessors in the acute care setting of the Emergency Department

Take-home message

This framework provides an important basis for future Mini-CEX design, development and rater training in clinical settings.

Reference:

1 Kogan, J. R., Conforti, L., Bernabeo, E., Iobst, W., & Holmboe, E. (2011). Opening the black box of clinical skills assessment via observation: a conceptual model. *Medical Education*, 45, 1048–60.

HOW DO MINI-CEX AND DOPS AFFECT THE LEARNING OF MEDICAL TRAINEES AT THE WORKPLACE? A GROUNDED THEORY STUDY

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Introduction

Mini-CEX [1] and DOPS [2] were introduced into medical training to assess clinical performance at the workplace. Over time, the conceptualization of Mini-CEX and DOPS changed: Whereas at the beginning they were used as *assessment of learning*, nowadays the formative approach is emphasized. As *assessment for learning* Mini-CEX and DOPS are aimed to support medical trainees' learning at the workplace [3, 4].

The assumption that Mini-CEX and DOPS positively impact learning mainly derives from feedback research. However, to our knowledge, there is no framework of how Mini-CEX and DOPS affect the learning of medical trainees at the workplace.

Methods

To study how Mini-CEX and DOPS affect the learning of medical trainees (medical doctors and students) at the workplace, we perform a constructivist grounded theory study [5]. As sensitizing concepts we particularly use social learning theory [6] and feedback research [7-10].

Empirical data is collected using distinct approaches (triangulation):

1. observations of the trainees' daily clinical routine including Mini-CEX and DOPS,
2. short, spontaneous interviews at the workplace during these observations,
3. focus group interviews with medical trainees and assessors.

Results

According to the current state of the project (iterative process), we present a first preliminary framework of how Mini-CEX and DOPS affect the learning of medical trainees at the workplace.

Conclusions & Take-home message

So far, there was no framework of how Mini-CEX and DOPS affect the learning of medical trainees at the workplace. Presenting a first preliminary framework, we might help medical educators to improve the effectiveness of Mini-CEX and DOPS *as assessment for learning*.

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PERSONAL DEVELOPMENTAL PLANS AFTER MULTISOURCE FEEDBACK – TRAINEES' FOCUS AND PERSPECTIVE

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Introduction

Multisource feedback (MSF) has gained acceptance in Postgraduate Medical Education as a formative assessment tool. In the MSF set-up used at Aarhus University Hospital a written plan for personal development is a mandatory part of the MSF process. The content of trainees' personal developmental plans after MSF has not previously been investigated.

Methods

Written developmental plans from trainees in four departments have been analysed (inductive analysis).

Results

In all 88 trainees participated in the study. Each developmental plan contained 3-5 goals within the roles Communicator, Collaborator, Manager and Professional. Trainees plan to seek and give more feedback, to listen more to the feedback given, and to react constructively to corrective feedback. Trainees intend to be clearer, more structured and precise in the way they communicate with patients and colleagues, and to ask others' opinion on the decisions they make. To prevent stress and burnout trainees plan to delegate tasks to co-workers to a higher degree. Trainees intend to increase ability to judge own competence and limitations and build up higher self-confidence. They will take on leadership, explore expectations colleagues might have to them and their work and thus contribute to better cooperation, increased job satisfaction and work environment improvements.

Conclusions

Following MSF trainees make plans to improve their overall performance as professional doctors, increase self-confidence and interpersonal skills, take on leadership and contribute to a positive working environment and a learning culture.

Take-home message

After MSF trainees set reachable, relevant and meaningful goals for personal professional development.

Session 4H

MOUSE DYNAMICS AS A SURROGATE OF ASSESSMENT RELATED STRESS AND ANXIETY

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Introduction

Assessment is a particular stressful and anxiogenic process for higher education students. Stress is a powerful modulator of cognitive performance with a biphasic pattern. Mild/moderate acute stressors tend to enhance performance while prolonged or intense stress responses lead to impairment in performance. Individual responses to stress may affect a students' cognitive performance in both written and practical exams. Additionally, the format of the exam may affect the students' response: penalizations in MCQ affect male and female students in different manner. We aimed to design electronic tools that could predict a students' response to stress and correlate with self reported and biological readings of stress/anxiety.

Methods

Using a cohort of 140 medical students we collected salivary samples for cortisol measurement and questionnaires (Test Taking Scale, Perceived Stress Scale) on baseline and during exams periods. Data concerning cognitive performance and mouse dynamics was collected during exams using a proprietary software (www.medquizz.com)

Results

Our preliminary results show that mouse dynamics vary according to three different patterns in an exam (Using Mouse Dynamics to Assess Stress During Online Exams, Hybrid Artificial Intelligent Systems, Lecture Notes in Computer Science Volume 9121, 2015, pp 345-356). results on cortisol assessments reveal that women have higher levels of cortisol in both written and skills exams. Skills exams induce a stronger stress response and this is enhanced in women. Additionally, women show a stronger correlation between cortisol levels and perceive stress as assessed by the questionnaires. The analysis of mouse dynamics correlation with biological variables is still underway.

Conclusions

Students show different pattern of mouse dynamics. Stress levels are affected by exam modality and by gender. Women have better perception of test related stress.

Take-home message

Stress affects students' performance during an exam and this is modulated by gender.

BURNOUT, QUALITY OF LIFE, ACADEMIC MOTIVATION, AND ACADEMIC PERFORMANCE AMONG MEDICAL STUDENTS: A PERSON-ORIENTED APPROACH

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Introduction

There is a high prevalence of burnout and diminished quality of life among medical students, which can affect academic motivation, adjustment, and achievement. The objectives of this study were to generate burnout and quality of life profiles of medical students and determine their associations with academic motivation, self-efficacy, test-anxiety, and performance on progress testing.

Methods

Medical students (N=670) in Years 2 to Year 5 of the six year medical programme at The University of Auckland were classified into three different subgroups as derived from a two-step cluster analysis using the World Health Organisation Quality of Life-BREF scores and the Copenhagen Burnout Inventory scores. Cluster membership was used as an independent variable to assess differences in academic motivation, self-efficacy, test anxiety, and academic achievement on progress tests over time.

Results

The response rate was 47%. Three clusters were obtained: Higher Burnout Lower QOL (HBLQ N=62, 20%), Moderate Burnout Moderate QOL (MBMQ N= 131, 41%), and Lower Burnout Higher QOL (LBHQ N=124, 39%). After controlling for gender and year level, HBLQ students had lower intrinsic motivation and self-efficacy scores, and higher amotivation and test anxiety scores when compared with the other profiles ($p < .0001$). The HBLQ students also scored lower on the third (end of year) progress test when compared with the other profiles.

Conclusions

Higher Burnout Lower QOL (HBLQ) students reported lower intrinsic motivation and self-efficacy, and higher amotivation and test anxiety. These students also scored lower on progress tests over time when compared with the other burnout and QOL profiles.

Take-home message

Medical student burnout and QOL profiles are associated with academic motivation, self-efficacy, test anxiety, and differences in PT scores over time.

ETHNICITY AND SOCIAL BACKGROUND AS PREDICTORS OF PERFORMANCE ON DIFFERENT TYPES OF EXAMINATIONS IN UNDERGRADUATE PRE-CLINICAL TRAINING

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Introduction

Numerous studies have shown that ethnic minority students underperform compared with those from the ethnic majority. However, there are inconsistencies in findings on different types of examinations. Additionally, little is known about the performance of first-generation university students and on performance differences across ethnic minority groups. This study aimed to investigate underperformance across ethnic minority groups and by first-generation university students in different types of written tests and clinical skills examinations during pre-clinical training.

Methods

A longitudinal prospective cohort study of progress on a 3-year Dutch Bachelor of Medicine course was conducted. Participants included 2432 students who entered the course over a consecutive 6-year period (2008-2013).

Results

Compared with Dutch students, the three non-Western ethnic minority groups (Turkish/Moroccan/African, Surinamese/Antillean and Asian) underperformed on the clinical problem solving tests, the language test and the OSCEs. Findings on the theoretical end-of-block tests and writing skills tests, and results for Western minority students were less consistent. Age, gender, pre-university grade point average and additional socio-demographic variables (including first-generation university student, first language, medical doctor parent) could explain the differences in theoretical examinations, but not in language, clinical and writing skills examinations. First-generation university students only underperformed on the language test.

Conclusions

Ethnic minority students underperform in pre-clinical training, but there are differences both across ethnic subgroups and between different types of written and clinical examinations.

Take-home message In designing assessment programs care should be taken to avoid possible unintended effects of certain types of examinations for certain groups of students.

DOCTORS WITH DYSLEXIA: A WORLD OF STIGMA, STONEWALLING AND SILENCE, STILL.

Author(s):

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John L Anderson

Presenter

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John L Anderson

Institution(s), Department(s), Country/Countries

Division of Medical Education, Brighton and Sussex Medical School, United Kingdom

Introduction

Previous research on medical students with dyslexia has focussed on the adequacy of adjustments in exams. This report is one in a series investigating the lived experiences of medical students and junior doctors with dyslexia – a very under-researched area.

Our research question is: “what are the lived experiences of medical students and junior doctors with dyslexia?”

Methods

A qualitative – interpretive phenomenological – approach was used. Dyslexic doctors were recruited via announcements in the South Thames Foundation School eBulletin. Participants were interviewed, in-depth, by telephone. Interviews were transcribed verbatim. These were analysed using a Framework approach, which was verified in an iterative manner by both researchers.

Results

Eight participants were interviewed. Core themes emerging were:

- Beliefs surrounding dyslexia;
- Perception from others;
- Stonewalling;
- Emotional responses;
- Disclosure;
- Influence on career pathway;
- Working life as the real word; and
- Desires to help set things right.

Conclusions

Our results highlight a world of stigma, stonewalling, bullying and a reluctance to disclose as a result. There is the urgent need for education and public information about dyslexia in order to begin to tackle this prejudice. Making adjustments to time in undergraduate exams is not enough. One of the most startling findings was the **fear** of being identified as “dyslexic”.

Take-home message Students and doctors with dyslexia can perform well – when adequately supported. They experience a neglectful, negative and hostile world.

PREPARING GEOGRAPHICALLY DISPERSED INTERNATIONAL MEDICAL GRADUATES (IMGs) FOR A MEDICAL BOARD MCQ EXAM: QUALITY INDICATORS FOR FACE-TO-FACE AND ONLINE PREPARATION COURSES

Author(s):

Beverley Sutton,

Mary Lawson

Presenter:

Beverley Sutton / Mary Lawson

Institution(s), Department(s), Country/Countries:

Health Education Australia Limited (HEAL), Australia

Introduction

International Medical Graduates (IMGs) seeking general registration with the Medical Board of Australia via the standard pathway need to pass two assessments. The first is an MCQ and HEAL provide preparation courses for this exam and are developing online delivery modalities.

Process

Six-week face-to-face MCQ preparation courses tutored by IMGs who have previously graduated through the exam process demonstrated consistent success in preparing candidates for the exam. High levels of interest for an online system were expressed by candidates for whom attendance was impractical for geographical, time or financial reasons. An initial pilot was designed which demonstrated different course outcomes for the participants.

A needs analysis with current and prospective candidates and current tutors was applied using a modified Delphi technique. This enabled formal and informal aspects of the existing courses to be integrated with relevant content into design aspects of the online programme. The informal peer-to-peer and tutor experience were demonstrated to be highly significant factors for success.

Conclusions

Whilst the demand for each format is high and the courses share common goals, a face-to-face MCQ preparation course cannot be easily replicated in the online environment. Care has to be taken to incorporate social aspects of learning for this cohort with a specific set of requirements.

Take-home message

There is a need for online MCQ preparation courses which are sensitive to the informal and formal aspects of learning for time-poor, internationally dispersed candidates. Engagement and online participation levels for exam preparation courses present the greatest challenge to effectiveness.

"I DON'T BELONG HERE" - HOW FEELING LIKE AN IMPOSTER AFFECTS LEARNING IN MEDICAL STUDENTS STRUGGLING ACADEMICALLY

Authors

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Presenter

Vedantashankar Sean Sarma

Institution(s), Department(s), Country/Countries

School of Dental Sciences, Newcastle University,

School of Medical Education, The Medical School, Newcastle University

Background and aim

Feelings of imposture were first noted in the literature under the label of the *imposter phenomenon*. The concept of such imposturous feelings is underpinned by an inability to internalise one's own successes, resulting in the feeling of being an intellectual phony despite evidence to the contrary. Such feelings have strong correlations with anxiety, depression and reduced self-efficacy, each of which has been associated with reduced academic performance. Whilst feelings of imposture have been documented in medical students, few studies detail the experience from the perspective of the student, and even fewer provide insight into how such feelings affect students who have faced academic difficulty during their degree programme. This is pertinent as students that have struggled academically are known to be at higher risk of eventual dropout from the medical degree. The aim of this study, therefore, was to develop insight into how feelings of imposture affect the learning of medical students experiencing academic difficulty.

Methodology and method

This study adopted the methodological approach of Interpretive Phenomenological Analysis (IPA) using semi-structured interviews. A purposive sampling method was used to locate three medical students at Newcastle University (UK) who were each deeply experienced in the phenomenon of feelings of imposture. The interviews were transcribed and analysed following an inductive approach in order to allow themes and superordinate themes to emerge, which were then used to form a narrative account of the experiences gathered, taking into account convergent and divergent experiences between the participants.

Results

Three superordinate themes emerged, which were "evolving as an imposter", "negotiating the world as an imposter" and "the imposturous self". Whilst these superordinate themes and many of the underlying themes were common to each participant, their experiences surrounding each theme were unique, varied and intricate.

Discussion

In contrast with the extant literature, each participant described development of their feelings after starting their undergraduate degree. Their feelings were attributed to lack of ability, and many of their behaviours could be understood when viewed through attributional models of motivation, thereby allowing consideration of ways to support them more effectively. Implicit is the suggestion that appropriate support structures may be able to prevent such feelings manifesting in the first place. There may therefore be merit in larger studies surrounding this phenomenon, and how support structures may be adapted to influence it.

Session 4I

FACILITATING REFLECTIVE HEALTHCARE PRACTITIONERS THROUGH PORTFOLIO ASSESSMENT: THE ROLE OF TEACHERS IN GUIDING AND ASSESSING REFLECTION

Author(s)

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Presenter(s)

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Background

Reflection is one of the ability required to become a professional healthcare practitioner. Being continuously aware of one's own strengths and weaknesses is important in maintaining competence. Many educational institutions have included portfolio assessment as a method to assess students' achievement, however some have not been equipped with a valid piece of reflective writing. A reflective writing is an essential part of a portfolio because it shows how much the students are aware of themselves, where they are now and where to go next. Some reflective writing within a portfolio remain to be pieces of writing without assessment and feedback. This situation limits the advantages of a portfolio assessment. Therefore, it is important to equip medical and clinical teachers with the skills to facilitate and assess students' reflection.

Intended outcomes

At the end of this workshop, participants will be able to reflect on the skills required to facilitate and assess students' reflection on their learning

Structure (90 minutes)

Activity	Time (in minutes)
Introduction and group formation	5
Making a reflective piece for your portfolio	15
Focus group discussion: "Reflection upon the process of reflection"	15
Jigsaw technique: "Identifying the barriers to reflect"	15
Debriefing: highlights in <i>Portfolio assessment & reflection</i>	10
Nominal group technique: "How to facilitate & assess reflection"	20
Debriefing: highlights in <i>Facilitating & assessing reflection</i>	5
Summary & take home message	5

Who should attend

Teachers with interest in facilitating and assessing reflection

Session 4J

HOW TO DEVELOP AND ASSESS A PEER-CONSULTATION PROGRAM FOR CLINICAL TEACHERS.

Author(s)

Manjula Gowrishankar, Louanne Keenan, Bruce Fisher, Sarah Forgie

Presenter(s)

Manjula Gowrishankar, Louanne Keenan, Bruce Fisher

Institution(s), Department(s), Country/Countries

University of Alberta, Department of Pediatrics, Family Medicine and Medicine.

Background:

Workplace-based learning and therefore clinical teaching is an integral and large component of the undergraduate and postgraduate medical education experience in all faculties of medicine. Teachers from academic and community clinical practices are responsible for teaching learners in multiple clinical venues (in-patient, clinic, procedural areas etc). Feedback and evaluation of such an important activity is commonly limited to summative reports from learners with varying rates of return (0 – 100%), and “teaching awards”.

Teachers can observe and provide feedback to each other on their clinical teaching skills. If performed effectively, teaching skills are enhanced and learning is improved. Various models of Peer observation of teaching programs (evaluative, developmental, peer-review) have been in existence for several years. Peer-review in our mind is akin to a consultation where a teaching activity is observed and timely, constructive and consolidative feedback is provided to the teacher. This process has to be standardized. Thus, peer-consultants have to be trained and teachers should become aware of the supportive and professional development aspect of this activity. We developed a module to train peer-consultants with the use of workshop, videos and real-time observation and feedback, and a toolkit. Through an iterative process, changes were made to the program. We conduct workshops to build awareness and engagement. Knowledge we gained from developing this training program and the results of our research on its impact on those who trained form the basis of this workshop

Intended outcomes:

Participants will

1. Acquire skills that will improve/enhance engagement and learning experience of learners.
2. Understand that this activity can provide valuable support for continuous professional development, be used in overall assessment of teaching,
3. Acquire knowledge on how to make institutional cultural changes to sustain the program.

Structure:

1. Presentation on peer-review and principles on which our program is set-up.
2. Small group activity: View video clips (3-4) of bedside teaching encounters and practice observation and feedback skills with the tool kit provided.
3. Input and sharing of small group discussions and experience with the large group.
4. Present local results on the training experience and its impact.

Who should attend:

Administrators/faculty involved in faculty development to improve teaching and learning, clinical teachers, senior residents.

OTTAWA2016
ANZAHPE2016



Level of workshop (introductory/intermediate/advanced):

All

Session 4K

SUPPORTING STUDENTS IN ACADEMIC DIFFICULTY - THE CASE FOR REMEDIAL INTERVENTIONS

Author(s)

Mairead Boohan

Presenter(s)

Mairead Boohan

Institution(s), Department(s), Country/Countries

Queen's University Belfast, Centre for Medical Education, United Kingdom

Background

Increasingly students experiencing academic difficulties and examination failure are offered remedial support. The structure and scope of the support varies across institutions. Frequently there is no evaluation of the effectiveness of remedial interventions or indeed the most appropriate programme to initiate. Using data from interviews with students experiencing academic difficulties at QUB this workshop will explore:

The role of remedial support in medical education

Different models and approaches used to deliver remedial support

Best practice in design and delivery of remedial support

The support requirements of different student groups, for example, international students

Intended outcomes

Gather examples of current best practice from an international audience

Explore different options to be considered when offering remediation to diverse groups of students, for example, international students

Consider the value of remedial programmes and the long-term impact they may have on student performance

Structure

Discussion of data from student interviews at QUB

Discussion of examples of remedial support offered to students experiencing academic difficulties

Group work using scenarios to identify the most appropriate remedial support for students experiencing a range of academic difficulties

Who should attend?

Those interested in offering remedial support to students experiencing academic difficulties

Level of workshop (introductory/intermediate/advanced)

Intermediate

Session 4L

HOW TO PROVIDE EFFECTIVE WRITTEN FEEDBACK ON ASSESSMENT TASKS TO ENHANCE STUDENT LEARNING

Authors:

Dr Sandra Kemp and Associate Professor Katharine Boursicot

Presenters:

Dr Sandra Kemp and Associate Professor Katharine Boursicot

Institution(s), Department(s), Country/Countries

Nanyang Technological University, Lee Kong Chian School of Medicine, Singapore

Background:

Providing effective feedback to students on assessment tasks is an important skill for all educators. The purpose of this workshop is for participants to understand how different characteristics, circumstances and timing contribute to the effectiveness of feedback. A key focus of the workshop is on how to ensure that written qualitative feedback on assessment such as OSCEs, Workplace Based Assessment activities and reflective writing assignments will have a positive influence on student learning.

Intended outcomes:

By the end of the workshop, participants will be able to:

- 1) Understand key academic work (both theoretical and empirical) related to feedback.
- 2) Consider the consequences of different types of feedback on student learning.
- 3) Apply techniques of effective written feedback in different assessment contexts.

Structure:

This highly interactive workshop will begin with a short interactive lecture, followed by small group activities. Activities in the last section of the workshop will alternate between small-group discussion and large-group discussion.

Who should attend:

Educators involved in assessment, program leads overseeing formative and summative assessment

Level of workshop:

Introductory/Intermediate

Session 4M

ASSESSMENT AND EDUCATIONAL ANALYTICS

Author(s):

Rachel H. Ellaway ¹, David Topps ¹, Kulamakan Kulasegaram ², Martin Pusic ³

Presenter(s):

Rachel H. Ellaway ¹, David Topps ¹, Kulamakan Kulasegaram ², Martin Pusic ³

Institution(s), Department(s), Country/Countries:

1: University of Calgary, Community Health Sciences, Canada - 2: University of Calgary, Family Medicine, Canada - 3: University of Toronto, Wilson Centre, Canada - 4: New York University, Institute for Innovations in Medical Education, USA.

Background:

Assessment data used to be specific to a particular assessment activity. However, with the ever-growing use of digital technologies that record learner actions, the potential for using this tracking data for assessment purposes has created many opportunities for medical educators. We now have the ability to track detailed patterns of student and teacher behaviour over time, we can model this data in support of formative and summative assessment, and we can compare their performance to that of their peers and to qualified professionals. This affords continuous multidimensional assessment, thereby potentially reducing the need for episodic high stakes assessments.

Intended outcomes:

Participants will be able to:

1. Describe the basic principles of educational analytics
2. Understand how to use educational analytics for assessment purposes
3. Critique the strengths and weaknesses of using analytics for assessment

Structure:

This highly interactive workshop will take participants through the principles of educational analytics; it will let them explore the different kinds of data that can be captured; it will let them review a range of analytical techniques and tools; discuss issues around defensible interpretation methods; and it will allow them to explore

the ethical, practical, and educational implications of these approaches. Issues such as data proxies and models of behaviour, linkages to learning models, the ethics of ambient surveillance, and the potential for participants to 'game' these techniques will also be considered.

Session 4N

INTERPROFESSIONAL PROFESSIONALISM: FROM THEORY, TO RESEARCH, TO APPLICATION!

Author(s)

Primary authors:

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Presenter(s)

Ms. SCOTT, Colette; Dr. HARVISON, Neil

Institution(s), Department(s), Country/Countries

National Board of Medical Examiners, USA; American Occupational Therapy Association, USA

NOTE: One to two additional presenters from the Co-author list will be identified if workshop is accepted.

Abstract (maximum 250 words)

Education and practice environments in which collaboration exists among students and practitioners representing multiple health professions are an integral component of future healthcare delivery models. In 2006, a group of health profession organizations began to explore how professionalism is defined, taught, measured, and evaluated. The purpose was to identify public-domain educational and assessment tools to promote professionalism. Many parallel, overlapping efforts to support professionalism within professions existed, but few efforts focused on professionalism frameworks across professions.

By 2009, the Interprofessional Professionalism Collaborative (IPC) was formed consisting of 13 health professions and one assessment organization. The IPC defined a unique construct, interprofessional professionalism (IPP), focusing on observable behaviors that illustrate the elements of professionalism relevant to collaborations across health professions. The IPC developed a 26-item behavioral assessment, the Interprofessional Professionalism Assessment (IPA), for use by preceptors/supervisors to rate how well students under their supervision are demonstrating professionalism when interacting with other health professionals. Initial testing of the IPA is nearing completion with over 25 US academic institutions and 10 health professions participating. Additionally, the IPC is developing an IPP toolkit targeted at entry into the health professions.

This interactive session is part of a series of workshops presented by the IPC. In this session, attendees will engage in assessing IPP behaviors using the IPA. Participants will assess and discuss IPP behaviors in practice-based or education-based case vignettes, followed by cross-case analysis and discussion to determine the efficacy of the IPA's use.

Preliminary results from the IPA pilot study will be shared.

Background

Participants will assess Interprofessional Professionalism (IPP) behaviors in a practice or education case vignette followed by cross case discussion to determine the efficacy of the IPA's use in both environments. Participants will be the first users to access the IPA instrument and provide critical feedback to refine its utilization.

Intended outcomes

By the end of this session, the participant will...

1. Discuss the development of and the preliminary research results from the Interprofessional Professionalism Assessment (IPA) pilot study.
2. Analyze and discuss interprofessional professionalism behaviors evidenced in written case vignette situations in practice and in education.
3. Probe through cross case analyses, two case vignettes applying interprofessional professionalism behaviors to determine the efficacy of the IPA's use in education and practice.

Structure

Interactive Session Work Plan Outline (90 minutes)

1. Introduction of speakers (2 minutes)
2. Interactive Ice breaker exercise associated with the construct of Interprofessional Professionalism (10 minutes)
3. Phase I – Interprofessional Professionalism Assessment Power Point Presentation (15 minutes)
 - Construct of interprofessional professionalism as a bridge between IPE and collaborative practice
 - Brief description of the Interprofessional Professionalism Assessment. (IPA)
 - Preliminary findings from the Interprofessional Professionalism Assessment pilot study.
 - Questions & Answers about the pilot study
4. Phase II – Exploration of Two Case Vignettes in Small Groups (30 minutes)
 - Divide participants into two groups to review one of two case vignettes that apply the IPA behaviors in education and practice environments.
 - Discuss and analyze each case based on questions provided about the case situation to facilitate the application of the IPA behaviors to that case.
5. Phase III – Cross Case Analyses as a Plenary (30 minutes)
 - Probe through facilitated discussion and questions, comparison/contrast of the two case vignettes.
 - Facilitate discussion to determine the efficacy of the IPA's use in education and practice.
 - Discuss barriers and opportunities to implement the IPA in education and practice environments.
 - Respond to questions and answers about the application of the IPA to education and practice environments to be used to inform the development of future training materials to be made available on the IPA.
6. Phase IV – Closing Summary Remarks (3 minutes)

Who should attend: All conference participants interested in Interprofessional Assessment and Education are encouraged to attend.

Level of workshop (introductory/intermediate/advanced)

This workshop is targeting all participant levels.

Session 40

ASSESSMENTS OF EMPATHY AND RESILIENCE: BEST PRACTICES AND CURRENT GAPS

Author(s)

Aviad Haramati, PhD and Peg Weissinger, EdD, MBA

Presenter(s)

Aviad Haramati, PhD and Peg Weissinger, EdD, MBA

Institution(s), Department(s), Country/Countries:

Center for Innovation and Leadership in Education, Georgetown University Medical Center, Washington, DC USA

Background:

Reports from various sources suggest that chronic stress and burnout is prevalent in the medical and other health professions, affecting upwards of one in two practitioners. This trend may begin earlier with the observed decline in empathy in medical students and other trainees. A key to this work is using survey instruments that are valid and reliable for measuring empathy and resilience. However, there is no consensus on which instruments are most suitable for which populations and under which conditions are they valid.

Intended outcomes:

The goal of this workshop/discussion is to address the approaches currently being used to assess empathy and resilience in health professions education and to determine the best practices and identify what gaps currently exist and how they can be addressed.

Structure:

This 90 minute workshop will be a combination of a short (30 minute) didactic presentation on the approaches currently used to assess empathy and resilience in medical and other health professional students and faculty. We will then open up the session to an extensive discussion of the strengths and weaknesses of the current approaches and as well as an analysis of gaps in current assessment strategies. We hope to contact the participants prior to the conference, so they can be prepared to contribute to the discussion.

Who should attend:

researchers in this field and Individuals with responsibility for faculty development, student and faculty well-being and professionalism.

Level of workshop (introductory/intermediate/advanced):

This workshop/discussion is aimed at the intermediate and advanced levels.

Session 4P

INTER-INSTITUTIONAL COOPERATION IN COMPETENCY-BASED AND QUALITY-ASSURED MEDICAL ASSESSMENT IN AN INTERNATIONAL CONTEXT

Facilitators:

Reinhard Westkämper (ESICM, Brussels & University Bern, Switzerland), John Norcini (FAIMER, Philadelphia, USA), Konstantin Brass (UCAN, Germany), Richard Hays (University Tasmania, Australia)

Introduction:

In order to be able to deliver competency-based valid and reliable exams, institutions around the world are increasing their level of collaboration in assessment through developing –“medical assessment networks”. In an increasingly globalized world, such collaboration often goes beyond national borders. Assessment networks can be an efficient way of developing state of the art quality-assured assessment items and practices in medical education. At the same time, collaboration in an international context can also lead to challenges in terms of conceptual, cultural and legal differences in the exam workflow and the quality-assurance.

Objectives:

The goal of this workshop is to identify requirements, current trends and issues in inter-institutional collaboration in medical assessment in an international context. A focus lies on identifying instruments that can make cooperation in quality-assured competency-based assessment both successful and efficient.

Structure

The facilitators will give examples of existing international cooperation projects as well as current trends and requirements for quality-assured competency-based assessment. Based on their experience in their own assessment programs, participants will then work together in groups to gather requirements, stumbling blocks as well as instruments for successful inter-institutional cooperation. One working group will focus on quality assurance, the other one in competency- based assessment. In a final plenary session the results will be gathered together.

Who should attend?

Educators interested in engaging in cooperation projects in the field of medical assessment as well as representatives from existing projects are invited to the workshop.

Level of workshop:

(introductory and intermediate)

Session 4R

EFFECTIVENESS OF THE INTEGRATED FACULTY DEVELOPMENT PROGRAM (IFDP) IN THE UNIVERSITY OF THE PHILIPPINES COLLEGE OF MEDICINE (UPCM)

Author(s):

Coralie Therese D. Dimacali, MD

Presenter:

Coralie Therese D. Dimacali, MD

Institution(s), Department(s), Country/Countries:

College of Medicine, University of the Philippines Manila, Philippines

Introduction

In the UPCM, an IFDP was developed to enhance the teaching competence, research and leadership skills of its faculty. It consists of seven modules that are offered for 1-2 days once a year: (1) Ethics, values and professionalism, (2) Needs based instructional design, (3) Microteaching, facilitating and counselling, (4) Evaluation and community diagnosis, (5) Research, (6) Leadership and Management, and (7) Innovative approaches in medical education. No evaluation has been done to determine its long-term impact on the faculty and its usefulness and relevance to faculty functions.

Methods

Survey questionnaires were sent to graduates of the IFDP program from 2007 to 2014.

Results

Response rate was 71.15% (83/116). Majority of respondents were junior faculty with the rank of Clinical Associate Professor (75.9%). Faculty were most satisfied with Modules 2 (98.7%), 3 (97.4%) and 1 (96.11%), and least satisfied with Module 5 (90.79%). Module 3 was the most useful (98.7%) and most relevant (100%), while Module 5 was least useful (92.21%) and Modules 4 (93.5%) and 6 (93.51%) were least relevant. As a result of the IFDP, faculty reported better test construction, the use of varied teaching methods and more structured lessons. Better student engagement was observed. Respondents recommend regular updates and refresher courses to improve their pedagogical skills.

Conclusions

The IFDP is effective, useful and relevant to the UPCM faculty functions.

Take Home Message:

While the current IFDP is effective, useful and relevant, modules need to be reviewed and developed to enhance the pedagogical skills of UPCM faculty.

STUDENTS' PERCEPTION ON TEACHING PERFORMANCES OF TRAINED TEACHERS FOCUSING UNDERGRADUATE TUTORIAL CLASSES IN BANGLADESH

Author:

Dr. Shamima Parvin

Presenter:

Dr. Shamima Parvin

Institution(s), Department(s), Country/Countries:

Centre for Medical Education (CME), Bangladesh.

Introduction:

Teachers' training is a kind of education that helps the faculty to understand the basic theories of teaching-learning and expected to tailor their teaching according to learner's need. The present study was undertaken to identify students' perception on the teaching performances of the teachers who had gone through training on teaching methodology.

Methods:

This descriptive type of cross sectional study was conducted in public and private medical colleges of Bangladesh. Six hundred (600) students of the tutorial classes conducted by trained teachers were taken as sample. A structured questionnaire was used to collect students' perceptions which included 13 separate positive statements; each followed by 5-point Likert scale.

Results:

About 67.5% respondents were informed regarding learning objectives of the session in advance, 39% showed dissatisfaction regarding face to face seating arrangement and 61% showed dissatisfaction regarding tasks of the group. Nearly 51.3% were informed about the sequence of activities and 47% got guideline for discussion of the selected topic. About 57.4% respondents found the audiovisual aids helpful, 51.7% agreed about their active participation and 60% agreed on necessary feedback. Approximately 48% satisfied about content coverage, 55% agreed upon the good summarization and 54% believed that the sessions guided them for self-directed learning.

Conclusions:

The mean score of almost all the statements were in-between 3 and 4 which shows trained teachers were not maintaining required standard in tutorial classes. This indicates we need to pay attention on most aspects of the tutorial classes.

Take-home message:

To make tutorial classes more students centred a well-designed, updated and contextual training programme needs to be adopted.

ESSENTIAL COURSE FOR MEDICAL EDUCATOR (ECME): AN INTEGRATED FACULTY DEVELOPMENT PROGRAM

Author(s)

Kanokwan Sriruksa*, Rajin Arora***, Araya Khaimook**, Achara Nithiapinyasakul***

Presenter

Kanokwan Sriruksa

Institution(s), Department(s), Country/Countries

*Khon Kaen Medical Education Center, ** Hatyai Medical Education Center, ***The Collaborating Project to Increase Production of Rural Doctor (CPIRD), Ministry of Public Health, Thailand

Introduction

Faculty development in medical education is crucial for all medical schools, especially newly established medical education centers. To our knowledge, there is no diploma or master degree course in medical education in Thailand. This paper describes an innovative medical education program and its preliminary evaluation.

Methods

A year round program was designed based on 3 concepts: integration of the existing courses with the newly developed ones, feasible for busy clinical teachers, fostering in-depth educational knowledge. The program included six 3-to 5-day workshops. Of these, 3 were new workshops. The themes were teaching and learning, curriculum development, instructional design, assessment and medical education in practice. The modules increased from 40 to 42 in 2015. All participants must attend at least 80% of total workshop hours and complete 12 out of 22 assignments to be awarded a Certificate. The program was evaluated by questionnaire and 2 focus group discussions.

Results

The numbers of participants were 41 and 44 in 2013 and 2014. The assignment completion rate in 1 year were 63% and 52% for the first and second batches. There were high satisfaction rating regarding the content (100%), quality of workshop facilitators (96%) and assignment (89%). The participants reflected that they were motivated to improve their teaching techniques and to apply theories into practice. Although writing assignment was time-consuming, they gained deep understanding. Many new study guides were developed during the workshops and can be used in their own settings.

Conclusions

Although one-year assignment completion rate was moderate, participants were satisfied with the program. They were motivated and could apply the theories into real practice with students.

Take-home message

A year round faculty development course for busy clinical teachers can be done. It can be based on the integration of the existing courses with new ones. Assignments can be used to foster in-depth educational knowledge.

COMPETENCE-BASED EXAMINATION TO STRENGTHEN QUALITY OF HEALTH HIGHER EDUCATION AND HEALTHCARE SYSTEM IN INDONESIA

Authors:

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Presenter:

Florentina Carolin Puspita Hapsari

Institution(s), Department(s), Country/Countries:

(1) Indonesian Young Health Professionals' Society; (2) Ministry of Research, Technology and Higher Education, Indonesia

Background:

Indonesia strategic framework for development of enhancement of education system will give improvement to health system. The health higher education study programs have large quality disparity. The integration of health-education system is intended to achieve best health outcomes for patient safety. In response to the challenge, since 2010, Ministry of Research, Technology, and Higher Education had been working with Ministry of Health intensively to ensure alignment between health services delivery strategies and health workers competences.

Methods:

The collaborative policy to ensure the alignment is competence-based examination (CBE) system for health workers, as reflection of competence-based curriculum practice. Government implemented CBE for nursing and midwifery education, which its development adopted best practices from medical. The implementation of CBE is strengthened by joint decree between two ministries as regulation.

Results:

The CBE accomplished successfully on June and July 2014 with total number of 30151 participants in 168 registered location. The passing grade was set for each profession (40.14, 42.16, and 46.70 respectively). The higher percentage (64.65%) was obtained for midwives diplomas. As many as 47.81% nurse diplomas and 57.81% of nurse profession passed the passing grade. The low passing grade and successful rate showed red alert for government and related stakeholders.

Conclusions:

CBE is used as one of the parameters to evaluate the quality of health education and health worker competence. Government will use the evaluation to map the quality disparity among institution and to formulate appropriate nurture strategy for each institution, to ensure the quality of graduates as health workers.

VALIDATING A 'FIT-FOR-PURPOSE' COMPETENCY SCREENING EXAMINATION FOR INTERNATIONAL GRADUATING OPTOMETRISTS (LGOS)

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Presenter

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Introduction

This pilot tested the appropriateness of an evaluating exam to screen IGOs for eligibility to challenge the national Optometrists licensing exam (CACO) through quantitative and qualitative analyses.

Methods

34 participants, (10 Optometrists, 24 Canadian exam-ready final year students), were recruited as comparative candidates. They completed a 140 item multiple choice exam and a 12 station OSCE, rated by 26 examiners. Clinical simulations with standardized patients and optometric equipment assessed practice performance in relevant scope of practice topics.

Results

Valid cases, developed by content experts, conformed to an Entry-to-Practice competency blueprint aligning key features. Trained examiners pre-rated items with tools validating content and competency scoring schemes. OSCE station and total test score psychometrics were acceptable (α -reliability 0.78). Written test average score and percentage pass/fail results were acceptable. Qualitative feedback from candidates affirmed suitability of content in terms of relevance to current Optometric practice and essential National competencies. Examiners, standardized patients, and support staff feedback supported practicality of logistical and operational issues.

Conclusions

The test performed well with respect to the psychometric quality of results, acceptability to all participants and operational feasibility.

Take-home message

This competency-based evaluating examination is intended to be offered to IGO candidates in lieu of traditional credential screening. The pilot incorporated an understanding of licensing exam parameters, and appropriate measures to validate competency assessment and address public safety. The pilot study results provide supportive evidence of the test's suitability for screening IGOs for licensing exam eligibility.

TITLE: THE ULTRASOUND LEARNING PYRAMID: A USEFUL TOOL FOR THE TRAINING AND COMPETENCY ASSESSMENT OF ULTRASOUND.

Author(s):

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Introduction:

Ultrasound (US) examinations are an increasing need in healthcare organizations, with different specialties and disciplines interested in learning how to perform them for a variety of applications.

Methods

For the past 24 months we have been running interdisciplinary workshops to train principles of US applied to vascular access. We had participation of different specialties with high levels of satisfaction of the participants. The workshop has been modified according to the participant's feedback.

Results

Based on the experience obtained, the US learning pyramid was designed. The first level includes anatomy, physics and equipment. The second level has technique and simulation and the upper level is "Do US". We consider that this design has been very useful in the success of our workshop and can be utilized for the assessment of competency. This presentation will explain and discuss the different options for assessment and teaching at the different levels.

Conclusions

We propose the US learning pyramid as a model for teaching and assessing US competency. We believe that it can be replicated in different institutions and applied to different disciplines. There is a wide variety of ways of teaching and assessing US as there are many disciplines currently doing it. Our model is an effort to add a structure to this and it is based in our experience as teachers and operators in diagnostic imaging who are now teaching other disciplines.

Take-home message

Learning US requires a well established multi-layer training program and an effective assessment of competencies.

LEARNING AND ACADEMIC EMOTIONS DURING CLINICAL COURSES – A LONGITUDINAL STUDY VIA MOBILE PHONES

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Introduction:

Learning is associated with “academic emotions” such as enthusiasm, anxiety or stress and relates to the balance between challenge and competence. The contextual activity sampling system (CASS) methodology can be useful when collecting data on different placements over longer time periods. The aim of this study was, by using CASS, to investigate medical students’ perceptions of emotions over time and to relate these to CanMEDS roles.

Methods:

74 medical students (66% females, mean age 28.4 years) were included during their 6th term. They were sent every 3rd week a CASS questionnaire via their mobile phones during internal medicine (6th term), project work (7th term) and surgery (8th term) and asked to report the most important learning activity related to CanMEDS roles and their current academic emotions.

Results:

1390 questionnaires were completed. All CanMEDS roles were reported of which ‘Medical Expert’ (terms 6 and 8) and ‘Scholar’ (term 7) were most common. “Health Advocate” was less common during all terms. “Medical Expert” was most frequently associated with good balance between competence and challenge, i.e. flow. Females reported higher stress levels compared to males. Positive academic emotions were more frequent during terms 6 and 8 while negative dominated during 7th term.

Conclusions:

Reported learning activities related to all 7 CanMEDS roles, even if the frequency and reported academic emotions varied. Some gender differences were noted.

Take-home message:

CASS is a useful tool when collecting contextual data over time. This type of data can be used in program evaluation and development.

WAITING IS NOT AN OPTION! EXAMINING THE UPTAKE OF NEW ASSESSMENT CONCEPTS IN HEALTH PROFESSIONS EDUCATION

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Introduction:

The Competency Based Medical Education (CBME) movement is poised to reshape training programs yet its impact will be limited unless assessment practices change. This systematic review highlights three assessment concepts that need to be addressed. The three concepts relate to the capacity of assessments to capture: (1) observable professional activities, (2) interdependent structures of competency and milestone achievements, and (3) progressive development and growth.

Method:

Citation analysis techniques were used to trace the prevalence of the three concepts in Health Professions Education (HPE) journals. First, original works for each key concept were identified. Second, frequencies of citations were documented using Google Scholar and Web of Science (WS). Third, citation data sets, which contained variables such as journals cited and research domains, were generated through the WS site (isiknowledge.com). SPSS was used to calculate frequencies to determine the prevalence of the original works.

Results:

There was moderate uptake of the first concept and little to no uptake of the second and third concepts. Overall, the HPE field lags behind in the uptake of new knowledge generated in psychology and education by 5-20 years. The uptake of new concepts is generally based on secondary sources in HPE journals rather than original works in other fields.

Conclusions:

Many institutions are moving forward with CBME without fully considering the advances and limitations from an assessment perspective. This review suggests that the HPE field needs to generate original knowledge and/or draw from original sources in other fields rather than waiting for the uptake via secondary sources.

EVALUATION AND FEEDBACK FOR EFFECTIVE CLINICAL TEACHING (EFFECT): EXPERIENCE AT LITHUANIAN UNIVERSITY OF HEALTH SCIENCES

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Introduction

In 2013 all residency programs at LUHS were renewed into competency-based education. To evaluate the effectiveness of the new curricula from residents' and supervisors' perspective we carried out an assessment of 5 programs applying the EFFECT questionnaire (Evaluation and Feedback For effective Clinical Teaching), that was designed and validated at the Radboud University medical Center in the Netherlands. EFFECT contains seven domains, reflecting the important aspects of clinical teaching.

Methods

EFFECT was used to assess obstetrics/gynaecology, anaesthesiology/reanimatology, emergency medicine, neurology and cardiology programs.

Results

Residents filled-in 267 questionnaires evaluating 255 supervisors. We received 125 self- evaluations of clinical teachers. The mean residents' scores of all domains (role modelling, task allocation, planning, feedback, teaching methodology, assessment and personal support) were significantly higher than the mean supervisors' domain scores ($p < 0.01$). Supervisors who filled-in their self-evaluation got significantly higher mean scores from residents in role modelling and teaching methodology domains than those who did not fill it (5.38 and 5.05, $p < 0.01$; 5.23 and 4.92, $p < 0.05$; respectively). The highest proportion of "not (yet) able to evaluate" (NAE) both from residents and supervisors were observed in assessment domain (70.4% and 60.8%, respectively) and in the feedback domain from residents (11.1%).

Conclusions

The residents valued all domains significantly higher than their supervisors. NAE evaluations in assessment and feedback domains implies the possibility of these domains to be the weakest part of current clinical teaching.

Take-home message

Implementation of the competence-based education curricula at LUHS should focus on improving quality in the feedback and assessment domains.

A FRAMEWORK TO ORIENTATE AND DEVELOP THE NEWLY APPOINTED HEALTH PROFESSIONS EDUCATOR

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Introduction:

The newly appointed health professional educator is “bright, capable and energetic” (Jarvis 1992) thus the ideal cohort to orientate to the culture of a Faculty and to equip them with knowledge and skills to become expert educators. Careful planning of an orientation programme can prepare newly appointed health professions educators at the University of the Free State for their specific educational role in a multicultural educational environment with a parallel medium of instruction.

Methods:

Qualitative and quantitative data by means of focus group interviews and a questionnaire survey were obtained. The analysed data was used to develop an outcomes-based staff development programme, which complies with adult education principles, aimed at newly-appointed academic staff members in Health Sciences.

Results:

Entering the programme colleagues commonly have no or little prior teaching experience and seem to lack knowledge of important medical education concepts. Three phases were identified (orientation, intermediate and advanced) to offer learning opportunities in several units including: teaching-learning, learning design, practical evaluated learning opportunities, networking opportunities, and concludes with a portfolio of evidence. The content and learning experiences advance through the three phases.

Conclusion:

An effective orientation programme offers opportunities to strengthen collegial relationships, offers effective directed and self-directed learning opportunities and ultimately contribute to the overall excellence in educational scholarship.

Take home message:

To best support the transition from professional practitioner to health professions educator a Faculty of Health Sciences will benefit from investing in an effective academic staff development orientation programme.

FACULTY' SKILLS AND EDUCATIONAL NEEDS CONCERNING CLINICAL TEACHING METHODS IN QAZVIN MEDICAL SCHOOL OF NURSING AND MIDWIFERY

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Introduction

Previous studies declared that clinical teachers are not enough prepared for educational responsibilities . This fact causes conflicts to arise in teaching and learning processes, therefore, a need for teaching clinical education skills to medical teachers is felt. The proper strategy to promoting teachers is leading them to participate in teaching courses. The present study aimed to determine the teachers' skill level further to comprehend educational needs of faculty members. Accordingly the content of workshops are tailored to the needs of teachers.

Methods

This cross-sectional study was carried out through census by participation of 22 faculty members who teach internship and apprenticeship in Qazvin nursing and midwifery medical University, in 1387. The study tool was a questionnaire consisting of 18 options in skill level and educational needs. The questionnaire was designed by Medical Education Development Center of Isfahan medical university. In another study of Isfahan development center the validity and reliability of the questionnaire was confirmed. The skill levels and educational needs have been asked by 1-4 and 5 degree respectively. In the reliability assessment the Cronbach's alpha in skill level reached 0.93 and in educational need it reached 0.98. Score of 2.5 which attained in Isfahan center was used as a benchmark for analyzing skill level, accordingly lower scores were considered as low skill levels. Moreover benchmark score of educational needs was 3 and greater scores indicated the faculties' educational need. Data were analyzed using SPSS statistical software. In which mean score and standard deviation were assessed

Results

In skill level Mean and standard deviation were $2/76 \pm 0/44$ out of 4. In 12 subjects the skill level were greater than 2.5 and the least they had authority to execution. However their skill level were lower than 2.5 in following capabilities: using video recording and tutorials Film, Problem Base Learning (PBL) technique and analysis of test questions. Mean and standard deviation of educational needs were 1.12 ± 3.63 out of 5. In all 18 subjects, faculty members obtained score more than 3 that indicate their educational needs. Although they score in following cases were higher: motivating students, being oriented with university information sources. Improve students' critical thinking and reasoning, use interview to develop students' problem solving ability and familiarity with educational supplies and their application.

Conclusions

Despite the fact that in most cases, faculty members evaluated their skills almost at proficiency, they needed more training. The teachers' educational needs were higher in following cases: teaching apprentices and internship, motivating students, as well familiarity with information resources and electronic journals. Moreover they were less expertise in video recording and educational film. Therefore, it is recommended that it is held workshops for teachers to improve their performance.

Take home message

it is necessary to held workshops for teachers to improve their performance

Session 4S

INNOVATIVE MODEL FOR ASSESSING THE QUALITY OF UNDERGRADUATE AND POSTGRADUATE MEDICAL EDUCATION

Author

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Presenter

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Abstract

Medical education is a continuum from student to independent practitioner. In the UK, the GMC regulates and quality assures all medical education. Medical Schools and Local Education Training Boards (formally Postgraduate Deaneries) are accountable to the GMC for assessing the quality of medical education against GMC standards, which are generic. For decades, Medical Schools and Postgraduate Deaneries have worked in isolation, employing independent processes to deliver their remit of assessing quality of education and training by conducting separate visits to Local Education Providers (LEPs).

A close collaboration between Health Education West Midlands (formally Deanery), the commissioner of all Health Education programmes, and the three Medical Schools in the region (Birmingham, Keele and Warwick), was established in 2013 with a clear remit and terms of reference. The steering group was charged with oversight of all aspects of the project, including wide consultation to identify best practice, develop a comprehensive framework, visiting programme, identifying and training visiting panel members, communication, pilot testing and full implementation of combined visits. Reporting systems to respective executive boards ensured robust governance and accountability. Combined visits began in 2015, with visiting panels consisting of academic staff, independent lay advisors, medical students, trainee doctors and quality managers, who were briefed and trained to interview the various groups of personnel in LEPs and to triangulate the information gathered.

The combined visiting process with undergraduate and postgraduate personnel is an innovative, efficient and effective model that is deliverable. Its robustness and impact on enhancing the quality of medical education requires further evaluation.

TITLE IS THE QUALITY OF TEACHING CRUCIAL FOR STUDENTS' CHOICE OF THEIR TEACHING HOSPITAL?

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Presenter

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Introduction

Medical University of Vienna introduced a clinical practical year (48 weeks) in winter term 2014/15. For this entirely new situation additional teaching hospitals all over Austria have been accredited and extensively instructed to offer good clinical training. Students choose their teaching hospitals (up to four) independently.

Methods

The aim of this work is to ascertain what factors influence students' decision to choose a hospital. All hospitals represent different facets (rural, urban, size, medical spectrum, etc.). In a voluntary online questionnaire students assessed qualities of teaching hospitals.

Results

Preliminary results have revealed the following decisive key factors in the students' choice of their practice hospital: Location (78.57%), getting to know a potential employer (71.43%), close vicinity (60.71%), the well-known good teaching (57.14).

However, one of the yes/no answers shows that the quality of education is more important than the location (78.57%).

The answers to the open-ended question about a hospital's perfect properties support this. Students agree that factors such as "the ambition to teach", "integration into the team", "competent supervision" are crucial.

Conclusions

The results underline the need to further instruct our associate teaching hospitals in order to increase the quality of education. A big focus should be put on the willingness to provide more time for student supervision and personal feedback. Especially rural hospitals could attract more students by raising the reputation of their clinical education and dedication to students.

Take-home message

Students welcome a well-located hospital, yet they highly value good apprenticeship at an institution ambitious to teach.

ASSESSMENT AND EVALUATION OF APPLIED COLLABORATIVE PRACTICE: ONLINE MODULES AND EXPERIENTIAL TEAM LEARNING EVENTS

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Introduction

Many Faculty of Health Sciences (FHS) student-learning experiences are in highly individualized and competitive environments, yet it is important for them to develop skills for collaborative practice for effective healthcare. The goal of the project was to develop a collaborative practice curriculum capable of integrating perspectives that transform knowledge, attitudes and behaviours across Queen's FHS students to equip them to provide safe and high quality healthcare.

Methods

A mixed methods evaluation was completed. Online modules were developed and mounted on learning management systems to accommodate all users. *Online Module Quizzes* were embedded in the modules to measure content knowledge levels. *Module Interaction Statistics* were collected. *Team-Q Rubric* (a validated peer-assessment) assessed team functioning post-experiential learning events. The impact of the overall curriculum strategy was evaluated using *Focus groups and In-depth interviews*. *Concurrent Feedback and Audit Trail Observations* also contributed to the overall analysis. Ethics proposal was submitted to the University Research Ethics Board.

Results

The project will be completed autumn 2015. Results include student assessment using online and experiential learning methods and curriculum evaluation. A deep understanding of applied collaborative practice learning will be obtained including curriculum development, individual and peer-assessment, and curriculum evaluation.

Conclusions

Project deliverables will comprise new teaching products; knowledge of collaborative practice learning and insights for future curriculum enhancement.

Take-home message

A new and cohesive Collaborative Practice curriculum including student assessment and curriculum evaluation

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will be available for other health sciences faculties, and for a broad range of academic programs requiring a focus on teamwork.

A SHORT EMOTIONAL STIMULUS IS AS EFFECTIVE AS PRACTICAL ASSESSMENT STRATEGY FOR LEARNING BASIC LIFE SUPPORT SKILLS

Author(s)

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Introduction: Training Basic Life Support (BLS) has an essential influence on its performance. Within the training external chest compressions (ECC) are of outstanding importance. Different training strategies for an optimal basic life support performance are existing. The objective was to mimic two different strategies - influence of emotional stimulus vs. practical assessment- to change knowledge and skills for resuscitation and to evaluate if one of the concepts leads to superior performance of ECC.

Methods: Laypeople (n=237) were randomly assigned to two study groups. These were defined as the emotional-stimulus-group (EG) and the assessment-group (AG). The EG-group participants having seen a video with emotionally stimulating content prior to the BLS course, meanwhile AG was announced and tested in a practical assessment in a modified BLS scenario. After the baseline assessment a standardized BLS course based on the 4-step approach principle was provided. Practical performance of BLS in terms of compression depth and compression rate were recorded as primary endpoints. These parameters were evaluated one week and six months after the course.

Results: Participants (age 21±4.1; 68% female) from both study groups reached equal practical ECC performance without any statistical difference. Even six months after intervention, students from the EG as well as from the AG were still able to perform ECC meeting the ERC guidelines.

Conclusions: Both interventions are shown to be equivalently effective. Nevertheless the two-minute video used in the EG-group with its low production effort and marginal costs compared with the time and person-intensive assessment approach opens wide applicability in BLS training.

Take-Home-Message:

An emotional stimulus strongly influences training of the Basic Life Support performance.

THE IMPACT OF AN INTERPROFESSIONAL CONTINUING EDUCATION WORKSHOP ON FACULTY KNOWLEDGE, SKILLS, ATTITUDES AND PRACTICES

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Aims

Faculty development remains a critical need within interprofessional continuing education (IPCE).¹ Previous research has demonstrated that attitudes associated with interprofessional education (IPE), interprofessional teams, and interprofessional learning were significantly lower ($p < .05$) for medicine faculty as compared with nursing academic faculty; female faculty and faculty with prior IPE experience reported significantly more positive attitudes ($p < .05$); and age, years of practice experience and experience as a healthcare professional educator had no relation to overall attitude responses towards IPE or interprofessional teamwork.² There is limited evidence reported, however, for faculty working within interprofessional continuing education (IPCE). The aim of this study is to evaluate the impact of skill-building IPCE workshops on faculty knowledge, skills, attitudes, and practices through pre-testing and longitudinal post-testing at 3 and 6 months.

Methods

Following informed consent, participants were randomly assigned to small groups of six and subsequently completed a researcher-developed, pre-workshop survey to assess existing knowledge, skills, attitudes, and practices in relation to IPCE. Participants were then randomly assigned to 1 of 6 different professional roles (physician, nurse, student, social worker, mother and child (patient)). In the event that a group exceeded 6, a duplicate professional role was assigned or the participant chose his/her own unique role. Participants were given 5 minutes to review his/her assigned role and contextual factors associated with the role. Participants were then provided with a clinical scenario, asked to assess the problem(s) in practice as an interprofessional planning team, and develop an IPCE activity while role-playing the assigned professional role. Post-activity debriefing was conducted after approximately 1.5 – 2 hours. Post-activity evaluation is being conducted at 3 and 6 months using the same researcher-developed survey instrument.

Quantitative data are presented as mean \pm SD or frequency and percent, where appropriate. Individual mean scores for each domain and evaluation period will be compared from Baseline to 12-months via the Wilcoxon Signed Rank Test. Individual comparison across the 3 periods will be conducted via graphical analysis. Individual scores will be plotted across time. Increasing slopes over time will suggest an increase in IPE skills. Qualitative data will be analyzed thematically.

Results

A series of 5 workshops have been/will be conducted. The initial workshop (October 2014) was the catalyst for this study and no formal pre and post testing was conducted, though feedback during de-briefing helped inform the formal evaluation of future workshops. Workshops are scheduled May, July, September, October and November of 2015. Pre and post-evaluation data will be presented by workshop date and in aggregate. Preliminary analysis of pre-evaluation, self-reported quantitative data demonstrate workshop participants have moderate levels of knowledge, moderate to low levels of confidence, and positive attitudes associated with IPCE. Exposure to developing IPCE activities varied widely. Post-activity evaluation qualitative data demonstrated that faculty tend to overestimate their knowledge and skills related to developing IPCE, and underestimate the complexity of facilitating an interprofessional planning team. Strategies to promote facilitation were shared.

Conclusion

An interactive, problem-based learning workshop provides opportunity for faculty to self-assess pre-existing knowledge, skills, attitudes and performance of IPCE, and to develop skills needed to facilitate interprofessional planning teams. Role playing highlighted behaviors such as using professional hierarchies to influence the planning process, communication barriers between healthcare providers and patients/families, and little self-reflection by healthcare providers in assessing their contribution to problems in clinical practice.

¹Reeves, S., Tassone, M., Parker, K., Wagner, S.J., & Simmons, B. (2012). Interprofessional education: An overview of key developments in the past three decades. *Work, 41*(3), 233 – 245.

²Curran, V.R., Sharpe, D., & Forristall, J. (2007). Attitudes of health science faculty members towards interprofessional teamwork and education. *Medical Education, 41*, 892 – 896.

LEADERSHIP TRAINING FOR JUNIOR DOCTORS SUPPORTS BETTER TEAM PERFORMANCE.

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Presenter

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Introduction

Junior doctors act as leaders in clinical teams but do not feel competent in this role. According to Minzberg leadership is a social practice and a course should offer support in practice over a period of time, besides basic knowledge. This study reports the outcome of such leadership training for junior doctors.

Methods

Ten junior doctors joined a leadership training program that consisted of five individual coaching sessions “on-the-job” and three seminars during a period of 7 month. A handbook with theoretical literature and personal exercises supported this training. At start, a personality test was done. Outcome data was generated by focus group interviews before and after the intervention and by a questionnaire.

Results

The first focus group interview revealed that junior doctors do not feel prepared to take on leadership and that they are not familiar with the different aspects of leadership and management in the medical field. After the intervention they felt more confident with the role as leader. Knowing their own personality profile and having skills to recognise others' and adjust their interaction according to this had had a significant impact on their ability to collaborate in clinical situations. Improved situational awareness and skills in conflict solving and time-management led to a better team performance and perhaps a better outcome for the patient.

Conclusions/ Take-home message

There is a need for the training of junior doctors as leaders. A practical and theoretical approach, embedded in the daily work as doctors, seemed to improve their individual behaviour, team performance and organizational practices (Kirkpatrick levels 3 and 4).

AN ASSESSMENT OF EDUCATIONAL PROGRAM FOR UNDERGRADUATE DENTAL STUDENTS WITH JAPANESE-ENGLISH DUAL LINGUISTIC EDUCATION SYSTEM AT HIROSHIMA UNIVERSITY (THE THIRD AND THE FOURTH YEAR)

Authors

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Background

Hiroshima University Faculty of Dentistry (HUD) had started the International Dental Course (IDC) program in 2011 in collaboration with Asian dental schools. Then, IDC international students and regular dental program students (almost all of them are Japanese) have shared the HUD curriculum for 3 and half years and learnt the dental subjects given by a Japanese - English dual linguistic education system; all the lectures are given in these two languages because regular dental program students need to understand special terms in Japanese for National board examination.

Summary of Work

To assess the dual linguistic education system at HUD, we had provided questionnaires to the students asking the impact of dual linguistic education at each end of the semester in 2012, 2013, 2014 and 2015.

Summary of Results

Understanding level of the contents of class and satisfaction level for the class have continuously increased year by year. The results showed the students finally understood especially by reviewing the lecture after the class. Moreover, more than 80% of them answered the improvement of English proficiency will be advantageous to their future dental career. Additionally, almost all of the students answered they felt passion and effort of lecturers for their education.

Conclusion

Most of the students in HUD had adapted to the dual linguistic education system. It is too early to conclude educational effect of the system to nurture global human resources. However, the system has surely worked based on good relationship between "teachers" and students.

Take-home Messages

HUD has been developing educational program with Japanese-English dual linguistic education system.

DEVELOPING AN ASSESSMENT SHEET FOR ANALYZING DIFFICULT AND COMPLICATED PROBLEMS IN HEALTH PROFESSIONS EDUCATION

Author(s)

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Presenter

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Introduction

Previous studies demonstrated that difficult teaching encounters in health professions education often include multiple aspects of problems and causes such as learners, teachers and educational system. Since faculties and administrative staff in educational section may see the same problem differently from limited aspects from different position when solving the problem together, there may be some misunderstanding and conflict. To grasp the problems appropriately should be the first step to tackle on collaboratively. This study aims at developing an assessment sheet for analyzing difficult and complicated leaning encounters.

Methods

Literature review was conducted by ERIC, medline and Google scholar to gather the causes of the problems from major domains such as learners, teachers and educational system. The causes listed were analyzed by content analysis and finally categorized into a framework.

Results

In the domain of learners' problems, 1)learners characteristic including learning disorders/physical disability, 2)Cognitive problems, 3)problematic attitudes, 4)skills including communication skills, 5)gifted learners, 6)others were emerged. In the domain of teachers' problems, 1) mistreatment, 2) Ignorance, 3) Harassment such as academic-/sexual- were emerged. And finally in the domain of educational system and others, 1) unclear examination standard, 2) workload, 3) facilities, etc. were emerged. The assessment sheet were developed based on these causes listed above.

Conclusions

Initial version of the assessment sheet was developed with three category of problems to detect the specific cause of the problems.

Take-home message

Assessment sheet may be effective for faculties and administrative staff to detect and share the causes of the problem to tackle on together.

QUESTIONS ABOUT QUESTIONS: A FORMATIVE STUDY ON ASSESSING MEDICAL STUDENT COMPETENCY IN EVIDENCE-BASED MEDICINE

Author(s):

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Presenter:

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Introduction

Medical students are expected to progressively develop the ability to form clinical questions and effectively search the medical literature. There are multiple skills that must be mastered while developing this competency, and health sciences librarians are experts at educating and coaching students about this process. One challenge faced by the Library is the lack of opportunity to evaluate the students' competency in a gold-standard way, through direct observation in an OSCE setting.

Methods

A pilot rubric was utilized with a group of graduating 4th year medical students to determine feasibility and reliability of the tool. Each student in the pilot group went through an OSCE station for a regular case, then was given 15 minutes to ask and answer a clinical question related to the case. Two experienced librarians scored each student independently via a screencast of their work.

Results

The process of utilizing this tool was efficient and simple. Disagreements between raters were more common in the subjective categories, while there was a greater degree of agreement in the objective categories.

Conclusions

The categories used in the rubric capture the relevant elements of asking and answering a clinical question. Discrete norms need to be established in each category to address rater variability. It is essential for librarians to partner with physicians to evaluate appropriateness of the clinical question and validity of their answer.

Take-home message

Utilizing a rubric to evaluate medical student ability to form and answer clinical questions in an OSCE setting is a novel and useful method of assessing this competency.

QUALITY ASSURANCE OF EARLY CLINICAL EXPERIENCE GP VISITS

Author(s)

Dr Enam Haque, Dr Emma Willert, Andy Conway

Presenter

Dr Emma Willert/Dr Enam Haque

Institution(s), Department(s), Country/Countries

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Introduction

Early Clinical Experience visits to General Practice are an integral part of our medical curriculum in the first two years. Quality assurance of these has been introduced to improve the experience. The aim of the study is to analyse the results of the evaluation and see if they help with development of the content.

Methods

A student online questionnaire enabled quantitative and qualitative data to be collected. A Likert score enabled rating of both general areas and those specific to a visit. Qualitative data was from free text comments on positive and negative aspects and suggestions for change, which were manually coded and themed.

Results

The majority of practices scored well with the quantitative data. Positive qualitative comments included students loving feeling involved, meeting positive role models and having their learning objectives met. Negative issues included a disorganised practice, lack of opportunity for patient contact, and poor role modelling. Suggestions for improvement included more time in the GP consultation, a better induction and the GP being aware of the learning objectives.

Conclusions

The aim of the study was to evaluate the early clinical experience GP visits. The method used was effective in identifying areas to be improved both in terms of general issues and those specific to particular practices.

Take-home message

Early clinical experience visits conducted well are invaluable learning opportunities for students. Quality assurance enables this to be delivered in a high quality way.

PACK CHECK: A RESOURCE FOR SAFE TRANSFUSION PRACTICE

Author(s)

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Presenter

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Introduction

Failure to correctly undertake the bedside check of blood components is a key error point in safe transfusion worldwide. The Blood Service designed Pack Check, a printable simulated resource to assist teaching patient identification and blood component checking before transfusion. For each component type patient scenarios, with images of pack, patient label and prescription are provided for the learner. Pack Check is based on Australian guidelines and standards, and can be used by an individual unassisted or in a group workshop.

Methods

Between January and March 2015 an observational simulated practice audit of 174 nurses using pack check was conducted in a tertiary health network.

A survey of Transfusion Nurse Specialists regarding content and relevance was performed in June 2015.

Results

The simulated bedside audit under reported poor practice; many staff were interrupted if they were not correctly completing the task for education with the result then recorded as correct. The practice audit identified areas for improvement:

- Asking the patient to state their full name (8.5% not asked), DOB (12.5% not asked), spell their name (50% not asked)
- Identity checked on prescription (7.5% not checked)

31 Transfusion Nurse Specialists responded, 22/31 specifically commented that it was a "good & useful" tool, 84% felt the tool had improved bedside practice. Learner feedback indicated it was "thorough and relevant".

Conclusion

Pack Check is a useful tool, relevant across multiple clinical settings and improves safe bedside transfusion practice

Take-home message

Pack Check tool improves the bedside check and patient identification for transfusion.

Session 4T

CHALLENGE IN CLINICAL EDUCATION – WHEN IS IT TOO MUCH OR TOO LITTLE?

Authors:

J Rudland, T Wilkinson

Introduction/ Background

Research into stress in medical education has tended to concentrate on (dis)stress (Moffat et al 2004, Lewis et al 2009, Le Blanc 2009) rather than the positive effects of stress (eustress) on learning (Le Pine et al 2005; Gibbons et al 2008). The term stress has become confused in its usage in medical education and is often seen as a detrimental force rather than a force (stressor) that then leads to specific responses; neutral, positive or negative. Cavanaugh et al (2000) proposes that a stressor may be seen as a challenge, positive for performance, or a hindrance, negative for performance. In this study the term challenge is seen as a good alternative to the term stress.

Purpose/Objectives

The purpose of this study was to explore the relationship between challenge and learning and to determine what aspects of learning students find challenging. In addition the relationship of support to perceived challenge, the resultant affect and impact on learning are explored.

Methods

At the end of each period of time in a clinical discipline in the 4th year of an undergraduate medical course, students were asked to rate, using a piloted questionnaire, the challenge associated with the attachments, the degree of perceived learning, level of affect (negative to positive) and the support given by staff and received and given by students. Students were also asked their self-belief in respect to the value of challenge for learning and to describe a challenging scenario. Students were asked to report on these parameters four times during the year.

Correlations were ascertained between the parameters described above and the challenging scenarios were coded using different classifications.

In addition focus groups were run at the end of the first and last clinical attachment.

Results

Different clinical experiences (modules and specific learning opportunities within a module) were perceived as more or less challenging than others. Support from staff and students were related to how challenging a student reported the experience and also how positive or negative they felt about the module. There was an interesting relationship between challenge and support where reported low levels of support resulted in a greater perception of challenge.

Students reported different types of challenges. Some were very discrete and related to specific tasks, for example an invasive procedure (e.g. intramuscular injection) and some more to the culture and the embryonic formation of becoming a doctor (transformational learning experiences). Challenge of a personal nature was considered different to academic challenge.

Self-belief about the value of challenge did not appear to be fixed and was influenced by experience.

Discussion

Although a positive relationship does exist between learning and challenge the actual point that challenge optimises learning is unclear, but seems related to support. For transformative elements of learning the lack of support itself may be challenging as well as the specific learning expected.

INTEGRATING AN INDIGENOUS CULTURAL CURRICULUM WITHIN AN AUSTRALIAN POST-GRADUATE MEDICAL COURSE

Author(s);

Annie Simmons* Candice McKenzie, Erik Martin, Scott McCoombe, Colin Bell

Institution(s), Department(s), Country/Countries

Deakin University School of Medicine

Introduction/background:

Culturally competent Doctors are needed to close the gap in life expectancy between Indigenous and non-Indigenous Australians. To ensure graduates emerge as culturally competent, Deakin School of Medicine has integrated an Indigenous Cultural Curriculum (ICC) into the Public Health Medicine theme of the Bachelor of Medicine and Surgery (BMBS) course.

Purpose/objectives:

To describe integration of a practice-based ICC across the 4-year BMBS course and alignment with *National Best Practice Framework for Indigenous Cultural Competency in Australian Universities* and *CDAMS* Indigenous Health Framework*.

Issues/questions for exploration or ideas for discussion:

- Definitions of cultural competence/proficiency –common ground?
- Evaluating cultural competence –by educators or reflective practice?
- From cultural competence to cultural proficiency –threshold concepts across the course?

Results and Discussion:

Year 1 improves cultural knowledge/awareness through an Immersion Program and a constructively aligned assessment detailing experiential learnings; Year 2 builds this knowledge helping students recognise racism and its impact on Indigenous health and equity and identify research priorities for local Aboriginal communities.

In the clinical years, students realise the final components of the *Framework*: to work proficiently in Indigenous contexts and effect positive change in medicine, through a/n:

- self-directed module on social determinants of health;
- workshop that creates professional working relationships with Aboriginal Health Liaison Officer's (AHLO) and teaches cultural considerations for Indigenous patients;
- assessment based on an authentic medical history that teaches contextualisation and health advocacy for Indigenous patients and communities

Early evaluation is positive indicating engagement with curriculum concepts/activities and cultural competence outcomes across the curriculum. Research is underway to assess change in knowledge/attitude (Years 1/2) and levels of competence (Years 3/4).

PERFORMANCE IN AN AUSTRALIAN GRADUATE ENTRY MEDICAL SCHOOL: PREDICTIVE VALIDITY OF COMMON SELECTION TOOLS.

Author/s

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Affiliation

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Introduction

Assessment of prospective medical students should use valid procedures. The predictive ability of selection tools in a medical course is thus important. In an Australian context, these commonly include the Graduate Australian Medical School Admissions Test (GAMSAT), Grade Point Average (GPA) from an undergraduate degree, and a selection interview.

Methods

A four retrospective cohort study of graduate entry medical students admitted to Flinders University examined the predictive ability of GAMSAT, GPA and a semi structured panel interview. Outcomes included multiple assessments of academic and clinical performance and impeded progress.

Results

GPA was the most robust predictor across all years of the curriculum, GAMSAT was sporadically predictive but mostly early in Year 1, and the interview emerged as predictive in the more clinically-focused Years 3 and 4. Impeded progress was associated with a lower GPA. Collectively Flinders combined use of all three tools predicted up to 40% of performance depending on the outcomes assessed.

Conclusions

Findings support the use of multiple selection tools, but GPA remains the most robust performance predictor. The semi structured panel interview has sufficient support for ongoing use, despite a growing trend toward Multiple Mini Interviews. GAMSAT primarily predicted early Year 1 performance, but this in turn may mediate subsequent performance. An important question for the medical education community is whether GAMSAT is considered a selection tool or a performance indicator.

Take-home message

Scores from GAMSAT, GPA and an Interview all predict performance, albeit it variably, and depending on the stage of the course.

EVALUATING AN EVOLVING EXPERIENCE, BREAKING DOWN AND EXPLAINING CLINICAL REASONING, A LOCALLY DESIGNED AND RUN TEACHING WORKSHOP AT A TERTIARY TEACHING HOSPITAL 18 MONTHS IN.

Authors

So N, Huq F, Aitken S, Blyth F

Affiliation

Concord Clinical School

Introduction

At Concord Repatriation General Hospital (CRGH), junior medical officers (JMOs) and registrars are highly involved in bedside teaching despite limited opportunities for formal faculty development. Developing Residents as Teachers (DR T) is an ongoing exercise in applying the evidence and theory in the field of faculty development for bedside teaching as described by the Best Evidence Medical and Health Professional Education Collaboration.

Clinical reasoning: a key skill with defined objectives and diverse instructional methods

Clinical reasoning is a key skill that like teaching is often not formally taught. We synthesised the literature and developed exercises to break down and explain its constituent elements:

- principles of history taking
- semantic qualifiers, syndrome statements and illness scripts

We have done this while employing a diverse use of methods including:

- expert role-modelling
- team based think-out-aloud exercises
- competitive games
- micro PBLs

Results: our evolving experience

Dr T balances systematic education design principles with its practical nature as a course run by doctors for doctors and designed locally for locals. It is built on learning needs assessments, a logic model, defined objectives driving instructional method and ongoing program evaluation as per Kirkpatrick's Levels, preliminarily:

- Learner and faculty reaction 1/2A
- Organisation educational outcomes 4A

Though spaced learning is ideal, amid busy ward rounds and seasonal job applications, we have moved from four 2 hour sessions once a week to two 4 hour sessions on separate weekends.

Attendees volunteer more than 8 hours to attend, not including the weekly 1 and half hours for bed-sides. This may amount to 20-30 hours of voluntary time over a teaching block.

Conclusion: take home message

We expect that as a locally run course we will have ongoing flexible and rapid iterative evaluation and adjust to learner needs. We have synthesised a promising model curriculum in clinical reasoning.

ASSESSMENT FOR LEARNING: THE INDIVIDUAL TEAMWORK OBSERVATION AND FEEDBACK TOOL (ITOFT) AND RESOURCE PACK.

Authors

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Abstract

The individual Teamwork Observation and Feedback Tool (iTOFT) is a formative assessment tool for use during work-based or simulated interprofessional teamwork activities. It focuses on an individual's behaviour rather than the team's and is intended to support assessment and feedback practices to enhance learning. It was developed through an Office for Learning and Teaching (OLT) grant award project completed in 2014. The tools, resource pack and final report are published on the OLT website www.olt.gov.au/resources.

The first iteration of the iTOFT, the individual Student Teamwork Assessment Tool (iSTAT), was field tested in nine sites over 18 months. Findings from psychometric analysis and evaluation of usability and acceptability led to tool refinements. The initial rating scale was changed to one based on a feedback model derived from the literature. It can be used by assessors or peers in appropriate settings..

The resource pack gives guidance for those organising teamwork development within programs and provides quick and detailed sections to guide observers and learners on how to use the iTOFT. It presents the conceptual framework underpinning assessment and feedback practices designed to help learners develop judgement and improve performance.

This presentation will report on current experiences around the use of the iTOFT and how the resource pack has impacted IPE and other programs in institutions. Further validation activities and available results will also be presented.

Session 4U

GAP OF PERCEPTION AND READINESS TOWARDS IPE: PRE-CLINICAL MEDICAL AND HEALTH SCIENCE STUDENTS OF UNIVERSITAS MUHAMMADIYAH YOGYAKARTA (UMY) EXPERIENCE

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Presenter

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Introduction/background:

Advancement of knowledge and technology lead to diversification of health professionals. As half-crafted health professionals, it is essential to prepare student to face the new era of health care that foster mutual understanding among health professionals that we defined in Interprofessional Education (IPE). As leading university that has faculty of medicine and health sciences, we conduct IPE simulation.

Purpose/objectives:

To measure perception and readiness towards IPE of pre-clinical health professional student those attend IPE simulation and those who did not.

Issues/questions for exploration or ideas for discussion:

For the first time, we conduct IPE simulation, measure participants' perception and readiness by Interdisciplinary Education Perception Scale (IEPS) and Readiness for Interprofessional Learning Scale (RILS) questionnaires, and compare to those who did not attend. This study is involved 53 students from medicine, dentistry, nursing, and pharmacy.

Results:

We found perception score is 74,82 (SD:4,12) and readiness score is 84,33 (SD:4,17) in student who attend IPE simulation meanwhile perception score is 67,3 (SD: 3,74) and readiness score is 74,23 (SD: 4,17) in student who did not attend IPE simulation. T-test result shows there is significant different between student group who attend IPE simulation and student who never attend (p<0,05)

Discussion:

Student who involved in IPE simulations indicates better score rather than those who did not attend IPE

simulation. Needs further study with larger groups and better teaching and learning method before initial integration into intra-curricula.

LET'S TALK ABOUT FOLLOWERSHIP: DEVELOPING EFFECTIVE TEAMWORKERS

Author(s)

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Presenter

Professor Judy McKimm

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Introduction

Traditional approaches to leadership development and teamwork emphasise the importance of effective leadership in academic and clinical work – 'leader-centric' approaches (1). However, a recent re-emphasis on the important and often under-rated role of the follower (1) has coincided with findings that many teams are dysfunctional and may not actually fall into the definition of a 'team' at all (2). At undergraduate and early training levels, teaching people how to 'become leaders' can be difficult when leaders are typically conceptualised being in more senior positions and, although the idea of 'little 'i' leaders' (3) can help students and trainees develop skills in, e.g. leading projects or activities, a lot of what could potentially be learned is too early for the stage of training and experience.

Methods

We reviewed and revised our approach to formal leadership development for trainees and students. We rebalanced the programmes to reduce time spent on leadership theories and concepts and increased purposeful learning about effective followership whilst working in groups, teams and 'loose coalitions' (4).

Results

Incorporating theories and research on teamwork and followership in an aligned, combined curriculum framework led to an improved understanding of team functioning and the role of individuals as leaders and followers and self-reported improvements in practice.

Take-home message

Including followership as well as leadership theory and hands on practice in how to be an effective follower in groups and teams improves understanding of and practice in teamwork and communication.

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THE ROAD LESS TRAVELLED: THE TRAINING CENTRE FOR SUBACUTE CARE WA COMMUNITIES OF PRACTICE STRENGTHEN INTERPROFESSIONAL LEARNING FOR SUB-ACUTE CARE CLINICIANS ACROSS WA HEALTH

Author(s)

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¹ TRACS WA HEALTH, ² AUSTRALIA CARDIOVASCULAR REHABILITATION ASSOCIATION

Introduction

Subacute care clinicians face numerous challenges, changing clinical environments, and the need to improve efficiencies. The Training Centre for Subacute care (TRACS WA) provides supportive, interprofessional forums, named Community of Practice (CoP) events which connect clinicians throughout WA and provide up to the minute training and development.

Methods

The CoP forums facilitate sharing and exchange of skills, knowledge and resources. TRACS WA invite over 700 clinicians including allied health, nursing, and medical practitioners in tertiary, primary and community care. The content is driven by clinicians and delivered by expert local, national and international speakers. Recent examples include managing long-term neurological conditions and enhancing care of Aboriginal people. TRACS WA have innovatively partnered with WA Telehealth to provide knowledge transfer to remote clinicians.

Results

Attendance at monthly forums averages 30-50 with videoconferencing to 15 sites reaching over 100 rural practitioners. Further outreach is provided by the posting of CoP content on the TRACS WA website. Each CoP is evaluated with excellent feedback.

Conclusions

CoP's provide clinicians with up to date evidence, networking to discuss enablers and barriers of contemporary practice, opportunities to assess performance against guidelines/best practice, and strategies/solutions to address gaps and enhance service provision.

Take-home message

TRACS WA, Communities of Practice provide excellent interprofessional learning opportunities for subacute care clinicians to ensure excellent service provision resulting in quality outcomes for clients and their families.

CULTIVATING A COMPASSION DISCOURSE IN THE WORKPLACE

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Introduction

A team from University of Brighton and Surrey, BSMS and BSUH collaborated to develop a compassion toolkit which built on previous research, practice and educational expertise in the areas of professionalism and ethics in healthcare practice. (Adamson et al 2012, Banks and Gallagher 2009, Cornwell and Goodrich 2008, DH 2013).

Aims and Research Objectives

Develop a sustainable and evidence based programme of compassion training that built on existing organisation initiatives and to generate compassion indicators and digital stories from healthcare workforce to contribute to the toolkit. An evaluation of the toolkit and understanding of barriers and enablers to delivering compassion training.

Methods

Training the trainer' workshops were run and the toolkit was further developed following the feedback from these workshops ensuring the organic nature of the toolkit. Evaluation of the project involved questionnaires, focus groups, semi structured interviews.

Results

The evaluations of the workshops were positive with participants being able to use the resources as aids to compassionate discourse within the workplace. Many participants have been able to use the resources in the clinical setting rather than the need to take healthcare workers out of the clinical environment.

The themes arising from evaluation data consisted of a confidence in initiation discourse about compassion, a shift of perspective around compassion and highlighting the enablers and challenges of using this toolkit.

Discussion

Factors for success of the project included:

- Flexibility in the design/accessibility of activities within the toolkit
- Engagement of multidisciplinary leaders that supported staff to disseminate the toolkit.

- Embedding the project within existing training programmes and aligning with organisational 'values based' initiatives.

Take home message:

Use the toolkit to start a conversation around compassion. <https://cultivatingcompassionatecare.wordpress.com>

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PROMOTING COLLABORATIVE PRACTICE THROUGH INTERPROFESSIONAL CO-SUPERVISION: PHARMACISTS AS CO-SUPERVISORS OF JUNIOR DOCTORS' PRESCRIBING

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Introduction

Prescribing is a multi-professional and multi-staged process; despite this there is limited evidence examining it as collaborative practice and how interprofessional supervision may contribute to this. This study aimed to evaluate an intervention which formalised the pharmacist's role as interprofessional co-supervisors of junior doctors' prescribing.

Methods

This action research study was conducted in three phases. In Phase 1, informed by another interview study, an interprofessional educational program to support pharmacists' transition to their roles as interprofessional supervisors was developed, delivered and evaluated. In Phase 2, the pharmacists adopted a formal co-supervisory role in three clinical areas (renal, respiratory and vascular surgery) for 10 weeks. In Phase 3, the 10-week intervention was evaluated by interviewing the three pharmacists and surveying all of the pilot participants (n=7) including junior doctors, medical consultants and pharmacists.

Results

The thematic analysis of the evaluations indicated that the intervention contributed to improved understanding of each others' roles. Overall the participants felt that the intervention made the greatest contribution to improving the level of trust between professions, better relationships and improving the communication between pharmacy and medical staff. The pharmacists' engagement as interprofessional supervisors was enabled by a sense of role legitimacy and their focus shifted from error identification to augmenting junior doctor learning.

Conclusion

The findings from this study suggest that IPC can be enhanced by strategies, which promote engagement, legitimise roles and are unified in their intention, that is, supporting the learning and development of junior doctors as prescribers. This intervention could be used as a model to support other interprofessional collaborations.

AN ESTABLISHED ALLIED HEALTH GRADUATE PROGRAM - RESULTS AND LEARNINGS FROM A MIXED METHODS EVALUATION

Author(s)

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Presenter

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Introduction

The Allied Health Graduate Program (the program) has been in place at ACT Health since 2013. It includes six modules based on the Canadian Interprofessional Health Collaborative (2010) Interprofessional Competency Framework. Over 80 participants have completed the program. The program is evaluated using a mixed method evaluation design.

Methods

Participants' experience of the program and reflections on translating learning into practice are explored through module evaluations, a reflective practice questionnaire immediately post program and semi-structured interviews three months post program.

The degree of perceived change in participants' beliefs, behaviours and attitudes towards working with other disciplines is assessed using the Interprofessional Socialization and Valuing Scale (ISVS) (King et al 2009).

Managers and Clinical Educators are also surveyed to explore their perspectives on the program.

Results

Evaluation data indicates:

Participants prefer activities that involve learning about and from each other (not just with each other)

Participants are translating program content into practice

The program compliments discipline specific education

Based on ISVS results, there is a continuing trend in participants towards improved comfort, value and ability to work interprofessionally (post program compared to pre program)

Conclusions

Results suggest this program offers benefits at multiple levels, including to individual participants, disciplines and work teams. This includes the benefit of encouraging interprofessional collaboration.

Take-home message

The evaluation design has provided valuable feedback on various types of benefits offered by this program. This has enabled targeted development and contributed to the sustainability of this Allied Health Graduate Program.

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Session 4V

IMPACT OF CURRICULUM CHANGE ON OSCE PERFORMANCE IN YEAR 1 AND 2 MEDICAL STUDENTS

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Presenter

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Introduction/background:

Examination of the 2012 and 2013 results of Year 1 and Year 2 Griffith University medical students OSCE stations 'Taking a Medication History' showed higher than acceptable failure rates. In 2014, a decision was made to change the teaching approach by introducing the following acronym to provide the students with more structure for this task.

P rescribed

O ver the Counter/Complementary

C hanges or Ceased Medications

A llergies/Adverse Drug Reactions

For any product the patient is taking or using ask:

U sed for

P roblems with

D aily dose

A dherence

T imeline

E ffectiveness

Purpose/Objectives:

To evaluate the impact of this curriculum change, and ascertain whether it has improved the students' ability to do the task, a decision was made to repeat the two 'Taking a Medication History' OSCE stations for Year 1 and Year 2 in 2014 and 2015 respectively and quantitatively compare the students' results with those obtained in 2012 and 2013.

Issues/questions for exploration or ideas for discussion:

How successful was the curriculum change?

What teaching strategies lead to better retention of materials?

Results:

Analysis of OSCE results was undertaken from 2012 – 2015. Student feedback supported the use of the acronym. An improvement in the students' confidence in their ability to perform this task was also reported.

Discussion:

How do we teach patient centred pharmacology and therapeutics as a clinical skill for practice?

'TALKING OUT LOUD': WA MEDICAL STUDENT VIEWS ON SEXUAL HEALTH TEACHING

Author(s):

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Presenter:

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Introduction:

Between 2007 and 2013, third year medical students at the University of Western Australia were offered an elective unit in sexual health titled: *People, Health and Sexuality*. In 2014, a study was initiated to explore whether former students of the elective gained and maintained knowledge, confidence and skills in the area of sexual health, and whether this impacted on their clinical practice. Furthermore, the study explored which educational strategies were effective in fostering or hindering sexual health clinical competence.

Methods:

This qualitative research employed a phenomenological approach using semi-structured interviews of ten former students. The interviews were recorded, transcribed and thematically analysed.

Results:

This presentation will share highlighted findings around educational strategies which enhance teaching sexual health. These include facilitating open discussion around sexual health, exposing students to a variety of individuals' perspectives (including transgender, older people, people with disability), and challenging them to consider sexual health more deeply than they had previously. The findings highlighted that many of the participants gained knowledge and confidence to address sexual health problems, which they thought positively influenced their skills as developing clinical practitioners when compared with peers who did not complete the elective unit.

Discussion:

The findings from this study recommend that sexual health is an integral part of the medical curriculum. Open discussion, exposure to a variety of sexual health perspectives, and challenging students preconceptions may lead to sustained increases in confidence and knowledge in their future sexual health practice.

BURNOUT AND HEALTH BEHAVIOURS IN MEDICAL STUDENTS

Author(s):

Anita Laidlaw¹, Ashley Dennis², Jennifer Cleland³ and Jo Cecil¹

Presenter

Ashley Dennis

Institution(s), Department(s), Country/Countries

1. School of Medicine, University of St Andrews, Scotland, UK
2. Centre for Medical Education, University of Dundee, Scotland, UK
3. Division of Medical and Dental Education, University of Aberdeen, Scotland, UK

Introduction

Burnout consists of high emotional exhaustion (EE) and depersonalisation (DP) and low levels of personal accomplishment (PA)[1]. Burnout in doctors has been associated with aspects of suboptimal medical care [2] including medical errors [3]. A recent report highlighted that stress and burnout are common amongst UK medical students [4], and that students should consider ways to counter them [5]. This study investigated whether specific health behaviours are associated with burnout.

Methods

Medical students at three Scottish medical schools completed an online questionnaire consisting of the Maslach Burnout Inventory (MBI, incorporating EE, DP and PA subscales)[1], the General Health Questionnaire (GHQ)[6], the International Physical Activity Questionnaire (IPAQ)[7], the Alcohol Use Questionnaire (AUQ)[8], the Food Frequency Questionnaire (FFQ)[9], a single item self-reported health question and various demographic questions.

Results

A total of 326 participants completed the questionnaire. Of these, 171 (52%) participants reported high EE, 145 (44%) high DP and 103 (32%) low PA. Whilst PA scores varied significantly with year of study, gender had no significant effect on any MBI subscale. Health behaviours including walking, moderate physical activity, AUQ alcohol intake and AUQ binge score were significantly correlated with MBI subscale scores.

Conclusions

Our findings suggest that burnout is prevalent within Scottish undergraduate medical students with specific health behaviours associated with components of burnout.

Take-home message

This research highlights the importance of advancing our understanding of the relationship of health behaviours and burnout, which may inform future interventions to reduce burnout in medical students and doctors.

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ASCERTAINING STUDENT READINESS AND OUTCOMES ON INTER-PROFESSIONAL EDUCATION IN HEALTH PROFESSIONAL PROGRAMS

Author/s: Dragan Ilic, Linda Ross, Caroline Wright, Uschi Bay, Ramesh Rajan, Brett Williams

Presenter: Dragan Ilic

Institution: Monash University

Introduction

Systematic review evidence highlights the benefits of IPE, yet the significant majority of studies in this field have focussed on medical/ nursing students and professionals. The aim of this study was to identify the attitudes, readiness and self-efficacy of paramedic, public health, social work and radiation science students for IPE.

Methods

Students enrolled in Bachelors courses across paramedics, health science and radiation science were recruited for participation in this study. Student attitudes and readiness for IPE were assessed using the Readiness for Inter-professional Learning Scale (RIPLS). Student self-efficacy for IPE was measured by the self-efficacy for inter-professional experiential learning scale (SEIEL). Descriptive and inferential statistical analyses were performed.

Results

From a total of 778 eligible participants, 437 (56.2%) completed the two instruments. Student readiness for IPE differed significantly amongst the four disciplines, with paramedic students reporting significantly higher scores than public health and radiation science students ($p < 0.01$). Differences were consistent across all domains of IPE. An interaction between discipline and year of study was apparent ($p < 0.05$). Student self-efficacy for IPE differed significantly amongst the four disciplines, with radiation science students reporting significantly lower scores compared to the other three disciplines ($p < 0.01$). This effect was consistent across all domains of IPE. An interaction between discipline and year of study was also evident ($p < 0.05$).

Conclusion

Development of specific programs to target differences in discipline and experience, including exposure to the health system, may compensate for differences in IPE readiness and self-efficacy.

Take-home message

There is a high level of demand for IPE in the non-medical and nursing health professions.

INTERPROFESSIONAL (PRACTICE) COMPETENCY TOOLS FOR INTERNATIONALLY EDUCATED HEALTH PROFESSIONALS

Authors

Grymonpre R¹, Bainbridge L², Deutschlander S³, Harrison E⁴, Mickelson G⁵, Suter E⁶

Presenter

Ruby Grymonpre BSc (Pharm), PharmD, FCSHP, Professor

Institution

College of Pharmacy, University of Manitoba, Manitoba, Canada

Purpose:

In response to an increased demand for health care providers in the Canadian health care system, internationally educated health care professionals (IEHPs) have increasingly been recruited. To ensure seamless integration of IEHPs into the health workforce and to enable these professionals to put their skills to work in Canada, there is a need for increased and easy access to learning and assessment programs targetting the unique requirements of these professionals. The focus of this project is on the development of competencies that allow IEHPs to function well within interprofessional health care teams.

Specifically, the deliverables of this project include:

- development of interprofessional education (IPE) modules for IEHPs
- corresponding assessment tools for health professional regulators, employers or educators to use as a component of their competency assessment of health professionals
- acceptance, uptake and sustainability of these tools by relevant user groups

Workshop outcomes:

After this workshop participants should be able to:

- Articulate project methodologies including an integrated knowledge translation strategy, and results of an environmental scan of existing IPE curricula and assessment tools and a needs assessment
- Recall the learning principles that guided curriculum development
- Examine and critique a preliminary online version of the toolkit
- Establish ongoing dialogue to inform future development, uptake and sustainability of this toolkit

Proposed outline:

- Presentation of project rationale, methodologies, guiding principles (30 minutes)
- Small group review of assigned sections of the online IEHP toolkit (30 minutes)
- Large group reflections and open discussion (30 minutes)

Session 4X

IS DEATH A MEDICAL FAILURE? FACILITATING STUDENTS TO PLAY AN ACTIVE ROLE IN MANAGING DEATH IN THE CLINICAL CONTEXT.

Presenter/s

Chan, K¹, Laven, G², Ray, R³

Institution/s

¹Griffith University, ²University of Adelaide, ³James Cook University,

Introduction/ Background

It is common for students studying health related programs to think that their main aim is about saving lives. As much as death and dying is an inevitable part of health services, rarely it is raised to the front of the mind of students.

From our experience in health education, when students encounter death and dying in a clinical setting they might perceive that as a failure. This brings up a mixture of feelings ranging from self-doubt to guilt and could impact on their wellbeing.

Purpose/Objectives

Three academics from three universities are interested to discover if it is a shared phenomenon in health education institutes that clinical death is seen as a medical failure. If so, how are we facilitating our students on their journey to accept death as part of their work and reduce their sense of failure?

Issues for exploration/ideas for discussion

1. What is your approach to death in a clinical context? Do you perceive death a medical failure and why?
2. What is your experience with students dealing with death in a clinical context? Do they perceive death as medical failure?
3. As a health educator how do you facilitate your students to move beyond the perception of death as a medical failure?

TEACHING 'TALKING ABOUT DEATH AND DYING': WHERE SHOULD LEARNING BEGIN?

Presenter/s

Laven, G¹ Ray, R² and Chan, K³.

Institution/s

¹University of Adelaide, ²James Cook University, ³Griffith University

Introduction/ Background

Death is a natural part of the life cycle, only its timing and cause varies. While end-of-life care is taught well, teaching about difficult conversations around death and dying is another issue. We have found the teaching of 'talking about death and dying' in medical education varies between universities. Add a mix of multiculturalism, the use of euphemisms such as 'passing', and a generation of medical students who have little to no personal experience or empathy with respect to death and dying, and we have a challenging topic.

Three academics, from three universities, share their experiences of learning and teaching the humanistic perspectives around talking about death and dying, whilst exploring the current practice across health programs.

Purpose/Objectives

- To bring together academics interested in 'talking about death and dying' learning and teaching to explore current practice
- To explore the teaching of death and dying with respect to different cultures
- To develop a shared toolkit for use in teaching health students to talk about death and dying

Issues for exploration/ideas for discussion

4. Is there interest in establishing a community of practice for learning and teaching in the area of talking about death and dying?
5. Is IPL the best place for this teaching?
6. Should talking about death and dying begin 'at home' or 'with peers'?

Session 4Y

DEVELOPMENTS IN THE GENOMICS EDUCATION PROGRAMME FOR NHS HEALTHCARE PROFESSIONALS

Facilitator/s

Professor Sue Hill^{1,2}: Department of Health Chief Scientific Officer

Professor Nicki Latham²: Chief Operating Officer

Ms Val Davison²: National Scientific Advisor in Genomics

Dr Anneke Seller²: Scientific Advisor in Genomics

Institutions

¹NHS England

²Health Education England

Purpose:

To describe the Genomics agenda developed and delivered in England, including the 100,000 Genomes Project, establishment of NHS Genomic Medicine Centres (GMCs) and strategic approach to the implementation of the associated educational framework. The session will focus on the applications of genomics in improving healthcare and the impact of educational resources on workforce transformation. The programme has significant potential for international collaboration and these opportunities will be explored in the discussion with participants.

Workshop outcomes:

1. To gain an understanding of the 100,000 Genomes Project, the delivery through NHS GMCs and implications for the future of healthcare.
2. To raise awareness of the Genomics Education Programme, and showcase the resources: an innovative Master's in Genomic Medicine, professional training programmes, e-learning modules, videos, workshops and new ways of working.
3. To understand how we have engaged with healthcare professionals to develop appropriate education and training resources and frameworks that can be applied in other settings, including the integration of genomics into the education continuum.
4. To explore the international contribution to the Genomics England clinical interpretation partnership in education and training

Proposed Outline: 4 presentations followed by facilitated discussion

1. An overview of the Genomics agenda in England to include the 100,000 Genomes Project, establishment of the GMCs and the Genomics Education Programme.
2. Educational resources and their impact on staff including development and innovative delivery of a Master's programme, identification of workforce needs and development of resources.
3. Exemplars of education in clinical practice.
4. Potential for international collaboration

VARIATION IN DECISION MAKING ON MEDICAL STUDENT PROFESSIONALISM DILEMMAS

Facilitator/s

McGurgan P¹, Carr S¹, Skinner C², Celenza T¹, Calvert K¹, Riley G¹, Alfonsi E³, Narula K³

Institutions

¹ Faculty of Medicine, UWA, ² Faculty of Medicine, Notre Dame (WA), ³ Medical School student, UWA

Background:

There is increasing emphasis on medical student fitness to practice and managing non-academic professionalism breaches. Most developed countries have moved towards implementing similar processes for undergraduates as to the systems for managing post-graduates, but the university regulatory system can conflict with these processes. Studies examining decision making on medical student professional dilemmas have demonstrated that there can be considerable variation between academics, qualified doctors, medical students and the public in terms of how significant the different groups perceive student professionalism breaches to be. Possible explanations for this may be the transition between the "proto-professional" student and the standards that would be expected of a qualified doctor, and the cultural norms that are a feature of human group dynamics.

Intended outcomes:

Demonstrate the differences in decision making that different health professionals may have for professionalism scenarios.

Demonstrate the situations when health educators are obligated to report students to AHPRA Develop networking opportunities for health professionals/ academics involved in Fitness to Practice Committees/ Professional Behaviour Panels.

Discuss "best practice" for the functions of Fitness to Practice Committees/ Professional Behaviour Panels.

Structure:

Interactive workshop for health professionals involved in medical student fitness to practice/ professional behaviour panels.

Participants will be given transponders to record in real time their decisions for 20 medical student professionalism dilemmas.

After each scenario the panel will facilitate a discussion on the participant's decision making process.

The workshop will conclude by comparing and contrasting those scenarios which had the greatest and least concordance with participant decision making and discussing "best practice" approaches.

Session 4Z

REDUCING SURFACE LEARNING APPROACH OF MEDICAL STUDENTS USING DIGITAL MEDIA AS AN INTERVENTION TOOL

Author(s)

Dr Sonali Prashant Chonkar¹, Melissa Lim¹, Ms Hester Lau², Ms Tang Wan Chu², Ms Goh Jia Ying², Ms Tan Li Xian Amy¹, Mr Ng Mor Jack¹, Prof Tan Kok Hian¹

Presenter

Tan Kok Hian

Institution(s), Department(s), Country/Countries

KK Women's & Children's Hospital, O&G, Singapore

Yong Loo Lin School of Medicine, Singapore

Introduction

Having identified the pattern of predominant learning approach among students, our project aims to reduce the usage of surface learning approach using a digital video intervention tool.

Methods

Supported by a Teaching Enhancement Grant (TEG) awarded by National University of Singapore (NUS) Centre for Development of Teaching and Learning (CDTL), we brainstormed, conceptualized and produced a digital video "Be a Predominantly Deep Learner in Medicine". This video introduced the learning approaches and featured students representing the three types of learners-deep, strategic and superficial learner in various scenes. Before the video intervention, Approaches and Study Skills Inventory for Students (ASSIST) surveys were administered to participants during orientation. A video evaluation survey was administered after video screening. A second ASSIST survey was administered four weeks later.

Results

The pilot study involved 17 students. Before video intervention, 29.4% (5/17) employed surface learning approach. We administered ASSIST questionnaires to 15 students a month later (2 students were absent). Results indicate 20.0% (3/15) employed surface learning as the predominant approach. Percentage of students who employed surface learning approach decreased from 29% to 20%.

Video evaluation surveys indicate that 100% (17/17) agreed that the learning approaches explained in the video was clear. 94% (16/17) agreed that they were able to reflect on their predominant learning approach after watching the video.

Conclusions

Our preliminary results indicate that video intervention is able to reduce the incidence of surface learning approach of students.

AN ONLINE WORKSHOP SHOWING HOW TO CREATE VIDEO USING A CAMERA: SHOOT, EDIT, SHARE.

Author/s

Charlton A¹, Kenwright D², Nga M³

Presenter

Amanda Charlton

Institution(s), Department(s), Country/Countries

The Children's Hospital at Westmead, Sydney, Australia

Purpose:

Learn to use your own compact camera to create original HD video suitable for use in e-learning lessons and presentations.

Workshop outcomes:

At the completion of the workshop participants will have shot, edited and exported a video. Examples of videos produced using a compact camera and these workshop methods, are a series of 10 training videos for pathology registrars, obstetric medical officers, nurses, and midwives on '[how to examine a placenta](#)'.

Workshop Outline:

Introduction to video skills [recorded presentation 15 mins]

Series of short instructional videos [3-5 mins each] showing 4 steps to create video

Camera [set up, camera settings, record]

Shoot [set up for camera, lights, stage, background]

Edit using Windows Movie Maker (PC) or iMovie (Mac)

Share [upload to Vimeo, embed, link]

Level of workshop:

Introductory

Workshop participants need:

Camera capable of recording HD video, this includes most compact cameras less than 5 years old, mobile phones and tablets.

Headset microphone or earbuds with microphone.

Cameras with a memory card of at least 2GB and class 4, preferable is 8GB or more and class 10.

Tripod or copy stand if you have one

Method to transfer images from camera card or mobile device to your computer [card reader or cable]

Windows users must install Windows Movie Maker [free], Mac OS users will use iMovie.

Workshop website: www.digipathed.wikispaces.com

Take-home message

Digital media can be used as an educational tool to enhance the learning approaches of medical students. (247)

A TRAINEE-LED STUDENT FINALS PREPARATION PROGRAMME – THE FIRST YEAR

Author(s):

Dr Thomas Colville

Presenter(s):

Dr Thomas Colville

Institution(s), Department(s), Country/Countries:

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Northern Health, Epping, VIC, Australia

Overview:

During the 2014/15 academic year, trainee doctors from the Royal Liverpool Hospital have been working with The University of Liverpool (UK) in delivering a lecture-based teaching programme (*The Finals Revision Course (FRC)*) for students preparing for their finals.

Concept:

Junior doctors develop and lead weekly lectures on the core principles of general medicine and surgery geared towards passing finals. The sessions are intended to aid the student in revision and demonstrate the important concepts in each field. They focus on common exam topics and systematic ways of structuring answers.

Development and Feedback:

Initially sessions were delivered in the Guild of Students using PowerPoint on weekday evenings. Attendance (average of 30) and feedback was overwhelmingly positive, leading to affiliation with the University and the provision of equipment allowing recording of screencasts of the sessions. In turn this led to development of the website (<https://livmedicine.wordpress.com/2014/11/26/the-finals-revision-course/>), accessible for all students, with the most recent content of *The FRC* available. This content is also available via the website of a students' peer-to-peer teaching organisation (*PeerMedics* <http://www.peermedics.com/finals-revision-course/>).

After the first year we have run 18 lectures, with 13 hours of material available online, being viewed over 2,200 times.

The Future:

We are delivering the course for a second year and will be introducing the format of a pre-release of the lecture online followed by case discussions a week later. This will help to create an extensive and wide-ranging learning resource. Further evaluation of the accessibility and relevance of the FRC is planned.

STUDENT RESPONSE TO REMOTE-ONLINE CASE BASED LEARNING - A QUALITATIVE STUDY

Author/s

Mr. Peter Nicklen

Dr. Jenny Keating

Dr. Stephen Maloney

Presenter

Mr. Peter Nicklen

Institution(s), Department(s), Country/Countries

Monash University

Introduction/background

Case based learning (CBL) typically involves face-to-face interaction in small collaborative groups, with a focus on self-directed study. To our knowledge, no published studies report an evaluation of web-conferencing in CBL.

Purpose/objectives

The primary aim of this study was to explore students' perceptions and attitudes in response to a remote-online case based learning (RO-CBL) experience.

Methods

This study took place over a two-week period at Monash University, Victoria, Australia, in 2013. A third year cohort (n=73) of physiotherapy students was invited to participate. Students were required to participate in two training sessions, followed by RO-CBL across two sessions. The primary outcome of interest was the students' feedback on the quality of the learning experience during RO-CBL participation. This was explored with a focus group and a survey.

Results

68/73 students completed the post-intervention survey (non-participation rate 8.3%). RO-CBL was generally well received by participants, with 59% of participants stating that they like RO-CBL to be used in the future; 78% of participants felt they could meet the CBL's learning objectives via RO-CBL. Four key themes relevant to student response to RO-CBL emerged from the focus groups and open-ended questions on the post-intervention survey: how RO-CBL compared to expectations, key benefits of RO-CBL including flexibility and time and cost savings, communication challenges in the online environment compared to face-to-face, and implications of moving to an online platform.

Discussion

Web-conferencing may be a suitable medium for students to participate in case-based learning. Participants were satisfied with the learning activity and felt they could meet the CBL's learning objectives. Further study should evaluate web-conferencing CBL across an entire semester in regards to student satisfaction, perceived depth of learning, and learning outcomes.

BLURRING BOUNDARIES: RADIATION THERAPIST PERCEPTION OF SOCIAL MEDIA AS A PROFESSIONAL DEVELOPMENT TOOL

Author/s

Kristie Matthews

Presenter/s

Kristie Matthews

Institution(s), Department(s), Country/Countries

¹ Peter MacCallum Cancer Centre, ² Monash University, ³ Central Queensland University

Introduction

Peter MacCallum Cancer Centre (Peter Mac) operates radiation therapy services across five geographically distant campuses, and has a staff cohort of over 200 radiation therapists. Providing equitable professional development opportunities to this cohort can be challenging, and it is perceived innovative means using online technologies and social media may be a solution¹. This paper will present the results and outcome of a mixed-methods study to investigate the perceptions and utilisation of social media for professional development according to radiation therapists at Peter Mac.

Method

An ethics approved anonymous online survey was circulated to all radiation therapists at Peter Mac in May 2015. The objectives were to investigate the experience and perceptions of radiation therapists in using online media/social media for professional development, and to determine the primary mechanism utilised.

Results

Results indicate radiation therapists at Peter Mac currently utilise more 'credible' mechanisms to support online professional development. Respondents are risk averse to social media for professional development as having 'grey' boundaries between personal and professional communication.

Conclusion

Social media is becoming an increasingly popular mechanism in health care professional education. However, results indicate that prior to implementing social media facilitated educational strategies for radiation therapists at Peter Mac we require further education about the potential benefits.

¹ Lawson, C. & Cowling, C. (2015). Social Media: the next frontier for professional development in radiography. *Radiography*, 21(2), pp. e74e80.

EVALUATION OF ONLINE PATHOLOGY PRACTICAL TEAM BASED SELF DIRECTED LEARNING IN PROBLEM BASED LEARNING CURRICULUM

Authors:

M Fayez Al Homsi, Amer M. Al Homssi, Bassel M. Al Homssi

Presenter:

M Fayez Al Homsi

Institution(s), Department(s), Country/Countries:

University of Sharjah and American University of Sharjah, Sharjah, UAE

Abstract:

Pre-clerkship medical learning strategies at University of Sharjah are blended problem based learning (PBL), team based learning (TBL), task based learning or learning basic medical sciences in the clinical environment (LBMSCE), and self-directed learning (SDL). This continues to the clerkship phase in “spiral approach”.

Online pathology SDL in TBL is actively utilized in PBL curriculum at University of Sharjah in pathology practical sessions. Pathology objectives list is posted online immediately after the first PBL session, and the pre-lab session is conducted a day before practical session.

All 119 medical students answered a questionnaire that included evaluation of different aspects of SDL, PBL and TBL strategies of learning as well as in combination. Motivation to self-directed learning and improvement of presentation skills were the main advantages of pathology SDL, PBL and TBL as expressed by 95 students (80%). Ninety nine students (83%) like the TBL most because it provides teamwork atmosphere, and 95 think that the sessions effectively stimulate group discussion. Motivation of self-directed learning was again emphasized as one of the major advantages of TBL as expressed by 92 students (77%). Ninety nine students (83%) think that pre-lab resource sessions help them markedly in understanding the subject. The students responded positively to the outcome of combined PBL, SDL and TBL, with 95 students (80%) think that this combination improved their understanding of different pathological aspects, and improved their academic performance.

From students' perspectives, PBL, SDL and TBL help better understanding of pathology studying material and possibly improve the academic performance.

I JUST DON'T KNOW WHERE TO START- THE JOURNEY OF TMTTOPICS

Author/s

Petterd R¹, Stewart R², Turnock A²

Presenter

Turnock A

Institution(s), Department(s), Country/Countries

Introduction/background:

There is no one location for primary health care professional resources. A needs analysis of GP Registrars and GP Supervisors working in rural and geographically diverse locations identified a need for a curated online resource repository supported by in-practice education methods and formative assessment opportunities. A variety of resources are included for each topic, and are supported by a generic set of teaching tools that can be applied to any topic. This session will explore the journey of tmttopics from the creation of the concept, to the implementation of the tool.

Purpose/objectives:

tmttopics aims to:

- Collate quality resources useful to primary health care professionals in General Practice
- Guide GP Registrars in their personal learning
- Assist GP Supervisors in the teaching of GP Registrars

Issues/questions for exploration or ideas for discussion:

How do we best support GP Registrars to achieve their learning outcomes?

How do we best support GP Supervisors in practices with GP Registrars?

What is the importance of engaging the user in the creation of online supports such as tmttopics?

What are the practicalities of setting up a resource such as tmttopics?

Results:

The usage of tmttopics has steadily increased from 200 sessions per month in the latter half of 2014, to 1000 sessions per month in the first 6 months of 2015.

Discussion:

tmttopics is a constantly evolving platform for GP Registrar and GP Supervisor resources. It is acting as a scaffold to many activities in the TMT Education Program.

LISTENING TO LEARNERS CREATES REUSABLE REFUGEE HEALTH EDUCATIONAL RESOURCES

Authors:

Dr. Katie Newman, Dr. Kelly O'Donovan, Dr. Helen Wright, A/Professor Moira Maley and Dr. Nin Kirkham.

Presenter:

Katie Newman

Institution(s), Department(s), Country/Countries

¹ Rural Clinical School of Western Australia, University of Western Australia, ² University of Western Australia's student group Crossing Borders for Health, ³ Department of General Paediatrics, Princess Margaret Hospital, ⁴ The School of Paediatrics and Child Health, University of Western Australia, ⁵ Department of Philosophy, University of Western Australia

Introduction:

Health professionals need education on ethical and clinical issues the refugee health population face, to improve care and advocacy for this vulnerable group. Construction of a virtual patient (VP) on refugee health was prompted by final year medical students who recognized an opportunity to create a reusable learning object (RLO), supported by medical educators.

Methods:

Medical students who were members of a refugee health student group and had previously used VPs approached Rural Clinical School of Western Australia (RCSWA) staff with an idea to create a refugee VP. Over eight months, the students created the VP with support from the PMH refugee health team, an ethicist and a psychiatrist. It was edited by their RCSWA paediatric academic mentor and a medical education technology academic, and was linked to a qualitative evaluation tool.

Outcomes:

The RLO comprises an ethics section, and follows one refugee family through various clinical settings. It provides learning opportunities in paediatrics, women's health, infectious diseases and psychiatry, as well as social and communication aspects including use of interpreters.

It has been re-used in multiple settings including urban and rural medical teaching, inter-professional workshops, and in pre-clinical and clinical UWA MD curriculum.

Although server logs showed 200 distinct visits during 2014, only four students completed the evaluation, which was insufficient feedback for analysis. Other challenges include maintaining academic attribution during re-use and ensuring the currency of content.

Conclusions:

Listening to learners helps create reusable educational resources on international health and vulnerable populations. The usefulness of this resource as a learning tool was not effectively evaluated.

“TO REMEMBER OR NOT TO REMEMBER”: AN ANALYSIS OF THE LITERATURE INVESTIGATING THE IMPACT OF INFORMATION COMMUNICATION TECHNOLOGY AFFORDANCES ON ACTIVE-LEARNING PEDAGOGIES

Author/s

Kette G, Schuwirth L, Ash J

Presenter/s

Kette G, Schuwirth L, Ash J

Institution(s), Department(s), Country/Countries

Flinders University

Abstract

Information Communication Technology (ICT) has infiltrated higher education. However, the impacts of ICT on learning and cognition during active-learning pedagogies have not been extensively investigated.

Educators are concerned that a reliance on ICT affordances may lead to “shallow” learning, increased dependence on ICT, decreased time-on-task, impatience with ‘not knowing’, truncation of face-to-face discussions, of critical appraisal of information and of lateral thinking. Although active-learning tenets and ICT affordances on the surface appear to be compatible and synergistic in promoting learning, cumulatively the outlined concerns are at odds with active-learning tenets.

We undertook a comprehensive analysis of the literature to evaluate ICT affordances and active-learning tenets on cognition, metacognition and learning outcomes with a view to inform future research on how to adapt and align active-learning pedagogies to the affordances of ICT in medical education.

Current research highlights that students perceive Googled information as their own. They form transactive memory systems with their mobile devices, have high self-efficacy and a high sense of knowing. Yet, they do not necessarily remember the information itself but where to find it. Many researchers recommend choreographing multimedia and scaffolding when using ICT enhanced active-learning sessions.

This presentation will highlight assumptions and discuss inconsistencies of the active-learning tenets of construction, collaboration and contextualism with the ICT social and semantic Web affordances of creation, communication, collaboration, communities and convergence. Social Cognitive Theory and Information Processing System of learning form the theoretical lens for this analysis of the literature and future research.

Session 5A

5A Symposium Monday 1630-1800

Assessment in Rural and Remote Locations

W Suzanne Eidson-Ton, Director, Rural Program in Medical Education (PRIME), University of California, Davis, USA

Jay Erickson, Assistant Dean-WWAMI Clinical Phase/Montana, University of Washington School of Medicine, USA

Louis S Jenkins, Head of Family Medicine, George Hospital, Western Cape Government / Division of Family Medicine & Primary Care, Faculty of Health Sciences, Stellenbosch University, Cape Town, South Africa

Carmi Margolis, Emeritus Professor, Medical School for International Health, Ben Gurion University, Beer Sheva, Israel

Roger Strasser, Professor of Rural Health, Northern Ontario School of Medicine, Ontario, Canada

Paul Worley, Dean of Medicine, Flinders University, Australia

Moira Maley, Assoc Professor, Rural Clinical School of Western Australia, University of Western Australia (Chair)

Over the last 15 years, there has been a substantial increase in the number of undergraduate medical students undertaking core clinical learning in rural and remote settings. Students learning in rural community settings, particularly rural longitudinal integrated clerkships gain important skills that may not be learned in shorter term clinical rotations in the tertiary teaching hospital setting at the parallel course level. The longitudinal placement opens up unique opportunities for skills acquisition and attitudinal development, heightened awareness of social accountability and inter-professional communication.

- *Does the changed learning paradigm warrant a revised assessment paradigm?* Globally there are many training centres where the clinical learning and assessment follow a non-traditional framework and produce competent doctors. Learning that happens in a rural or community-based real clinical context is enriched by its continuity, team approach and potentially transforming experiences.
- *Is a traditional assessment blueprint still valid to assess parallel student cohorts in rural/remote environments as well as those who have been city based for the same period?*
- *Should assessment instruments be modified for greater validity or fidelity for rural students?*
- *How would we benchmark any changes against traditional assessment?*

This symposium invites contributions from schools with students learning in diverse settings and explores a common thread to their assessment practices and the maturity of their assessment culture.

Session 5B

ALIGNING QUALITY IMPROVEMENT WITH PHYSICIAN CERTIFICATION

Author(s): Price, David

American Board of Medical Specialties, Multispecialty Portfolio Approval Program Organization and Research & Education Foundation, Chicago, IL, USA

Presenter: Dr David Price, MD

Introduction:

Specialty board certification in the United States has moved to a continuous process, involving participation in quality improvement (QI) activities. This presents opportunities for physicians to focus on implementation of clinical practice guidelines and other process improvement as part of maintaining board certification and their continuing professional development.

Methods:

The American Board of Medical Specialties (ABMS) Multispecialty Portfolio Program (MSPP) began in 2010 between the Mayo Clinic and the American Boards of Family Medicine, Internal Medicine, and Pediatrics. It aligns organizationally relevant QI with continuous certification (Maintenance of Certification, MOC); physicians who meaningfully engage in these QI efforts can receive MOC credit. The program has continued to grow in size and scope.

Results:

As of July 2015, 45 US organizations and 21 of 24 ABMS Specialty Boards participate in the MSPP. Continuing Professional Development (CPD) professionals are intimately involved in collaborating in or overseeing the activities in many participating organizations. Over 1100 different QI, process improvement, guideline implementation, patient safety, access to care, costs of care and physician-patient communication activities are part of the MSPP. 6000+ unique physicians have received MOC credit for over 7,800 different QI efforts. Many participating physicians have improved their performance, and find this process more relevant and less burdensome than other board certification practice-improvement options.

Conclusions/ Take-home message:

Aligning organization QI goals with physician certification processes leads to physician engagement in quality improvement and, potentially, improvement in care delivery. CPD professionals can play key roles in these initiatives.

WEB-BASED ASSESSMENT AND DIRECTED PERFORMANCE IMPROVEMENT FOR CONTINUOUS CERTIFICATION OF OSTEOPATHIC PHYSICIANS IN THE UNITED STATES

Authors: Jeanne M. Sandella DO, Dorothy Horber PhD, Natalie C. Lavelle MEd

National Board of Osteopathic Medical Examiners, Department of Continuous Professional Development and Innovations, United States

Presenter: Jeanne M. Sandella DO

Introduction:

In the United States, osteopathic physicians engage in the American Osteopathic Association's Osteopathic Continuous Certification (OCC) to ensure continuing competency and maintain specialty board certification. The National Board of Osteopathic Medical Examiners (NBOME) has developed the Osteopathic Performance Assessment and Improvement Module (OPAIM), a web-based, practice relevant formative assessment. The purpose of this investigation is to see if participation in this module results in improved physician-patient communication regarding medication safety.

Methods:

A physician begins the Medication Safety Communication OPAIM by collecting survey data from patients who have received a medication prescription. Patients rate the physician's communication about the purpose of the medication, how and when to take it, possible side effects and interactions with other medications, and the consequences for not taking it.

He/she receives feedback on strengths and areas for improvement. The physician is directed to targeted educational activities based on these results. Activities include techniques that improve patients' medication adherence. The physician repeats the patient survey and completes a program evaluation.

We compared physicians' survey results before and after completing the educational activities using the Wilcoxon Signed Rank Test, one-tailed comparison.

Results:

Results indicated improvement in all categories, with statistically significant improvement in medication side effects and possible medication interactions. 92% agreed that the module demonstrated effective techniques to improve communication.

Conclusion:

These data offer preliminary evidence that physicians can improve their medication safety communication with this OPAIM.

Take Home message:

Web-based formative assessments offer opportunities which prove effective in continuous licensure, revalidation and certification of physicians.

THE REPORTING PREFERENCES OF AUSTRALIAN RADIATION THERAPISTS IN RESPONSE TO HYPOTHETICAL FINTESS TO PRACTISE DILEMMAS: AN ONLINE SURVEY

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Presenter: Caroline Wright

Introduction:

Radiation therapists (RTs) are responsible for ensuring they and their colleagues are fit to practise (FTP). However, there remains confusion as to RTs understanding of the concept of FTP and how it relates to everyday clinical work.

This study aimed to investigate RTs suggested reporting preferences in response to hypothetical FTP dilemmas and to determine whether any specific demographic characteristics were associated with reporting type.

Methods:

An online survey was emailed to RTs. Each participant provided open-ended responses to four FTP dilemmas. Qualitative data analysis was guided by grounded theory. Themes were transposed into a numeric format, after which frequency and binary logistic regression analyses were performed.

Results:

Four themes emerged from the data: 'no reporting', 'informal reporting to a senior practitioner', 'internal formal reporting' and 'external formal reporting'. Sixty percent (433/720) of respondents did not indicate any form of reporting preference and only 0.97% (7/720) suggested external formal reporting. Radiation therapists with six years or more experience in the profession were more likely to report formally compared to those with five years' or less experience ($p < 0.1$).

Conclusions:

A cultural shift is required in RT to educate and support practitioners in relation to FTP and reporting, starting during entry level training and continuing in the workplace. The implementation of advocate and ombudsman roles may encourage more RTs to report sub-optimal practice. There is scope for these strategies to be applied across other health disciplines in order to encourage reporting/whistleblowing.

Take-home message:

Practitioners should ensure they understand when and how to report instances of sub-optimal practice.

Session 5C

CONNECTING ORAL HEALTH STUDENTS AND LIFE SCIENCE THROUGH LIVED EXPERIENCE

Author(s): Leadbeatter D, Gao J

University of Sydney, Faculty of Dentistry, Australia

Presenters: Dr Delyse Leadbeatter and Dr Jinlong Gao

Introduction:

Integrative learning is an approach that encourages students to make connections to subject matter, to the self, as well as others and their wider contexts so that transformative learning can occur (Huber and Hutchings, 2004). An integrative assessment approach was introduced to an Oral Health program, Faculty of Dentistry, University of Sydney because it was recognised that traditional assessment approaches, such as written examinations rewarded fact memorisation and promoted disconnection with their scientific studies.

Methods:

Two scaffolded assessments, requiring students to choose a topic that has somehow personally affected them were introduced to the Oral Health program. The first captured interest in everyday phenomena and the second in diseases. Each student did a piece of writing and gave a presentation demonstrating how connections with their lives, peers and scientific learning could be integrated.

Results:

Student evaluation of these assessments clearly demonstrated a high level of engagement. The scaffolding of the assessment was effective and facilitated the students to develop skills of research-enriched learning. Students commented the new assessment makes a difference because it began with issues they encountered in their personal experience and illuminated the questions and problems they really care about.

Conclusions:

Life sciences need not be perceived as a series of incoherent facts that are distant from the everyday lives of students. Through an integrative approach, students were also able to engage in learning in a way that provided a social context and relevance. This means that the assessment was not only an outcome of learning, but reflected the process of learning.

Take-home message:

Disconnected students can develop a genuine interest and enthusiasm for learning in the life sciences through assessment types that encourage weaving of their lives into their scientific studies.

DEVELOPMENT OF INSTITUTIONAL FEEDBACK BASED ON NATIONAL EXAMINATION RESULTS

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Presenter: Gandes Retno Rahayu

Institutions:

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Introduction:

Since 2007, there has been a national examination for Indonesia medical doctors. The examination is 4 times a year, consisting 200 MCQs and 12 stations OSCE. Sixty-three medical schools have participated in the examination. As the national examination has a very rich data, it should be used beyond passing and failing the examinees. The data should be used as a rich feedback to inform medical schools on their strengths and weaknesses. The feedback is expected to drive improvement at institutional level.

This presentation is aimed to describe the development of institutional feedback based on one-year examination results.

Methods:

We analysed quantitatively data of MCQs and OSCE results from August 2014 to May 2015. We chose crucial information that could be followed up by medical schools and presented in the form of tables, figures and narrative feedback. We made feedback-booklet for each medical school.

Results:

The feedback-booklet contains of the following information: 1) number of registered examinees and who pass MCQs and OSCE, 2) mean scores and passing rates of MCQs at institutional versus national level, 3) mean scores and passing rates of MCQs at institutional level versus accreditation groups, 4) mean scores of MCQs based on organ system, pathophysiology, and role of doctor dimension, 5) mean scores and passing rates of OSCEs at institutional versus national level, 6) mean scores and passing rates of OSCEs at institutional level versus accreditation groups, 7) mean scores of OSCEs based on organ system, departmental, and clinical competency dimension, 8) overall mean scores and institutional achievement, 9) List of failed examinees, and 10) narrative feedback.

Conclusions:

National examination results can provide rich feedback to stimulate institutional improvement.

Take-home message:

Relevant data from national examination should be utilised to drive educational change.

THE ROLE OF STAKEHOLDERS IN AN NATIONAL COMPETENCY-BASED EXAM: LESSONS LEARNT FROM INDONESIA

Author(s): Savitri T

Presenter: Titi Savitri

Department of Medical Education, Faculty of Medicine, Universitas Gadjah Mada

Introduction:

National Competency-based exam is compulsory for acquiring certificate of competence issued by Indonesian College of Medicine that is used for getting the Registration Letter from the Indonesian Medical Council. It is written in the Medical Practice Law No.29/2004 and in the Medical Education Law No. 20/2013. During nine years of its existence, there have been power struggle among the relevant stakeholders claiming that their organizations who have the right to organize this exam. The power struggles are among Ministry of Education and Culture, Indonesian Medical Council, Association of Medical Education Institutions, Indonesian Medical Association and Indonesian College of Medicine. This has resulted in two different exams being held by different stakeholders which were harmful for the medical graduates. This qualitative study captured the process of achieving compromise among the stakeholders.

Methods:

Qualitative method is applied using observation and document analysis for data collection from November 2014 until February 2015

Results:

To overcome the deadlock among stakeholders, the Indonesian Medical Council took the initiative to establish a working team of which the members comprises of conflicting stakeholders. Six themes are identified to reflect the phases of team formation. It starts with distrust, followed by mutual understanding and supported by willingness to listen, then common goals are achieved. Once the common goals are achieved, each stakeholder conducts an internal reflection on to what extent their attitude potentially jeopardize their common goals. Based on this, they are ready to compromise.

Conclusions:

National competency-based exam is a high stake exam, therefore various stakeholders claim to have a stake in this exam. It is important to involve stakeholders since beginning and to identify common goals.

Take-home message:

TESTING: THE TESTING EFFECT IN A PDL CURRICULUM

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Presenter: Mr David Birks

Introduction:

The reported positive results for PBL include competence in skills and sustained self-directed learning behaviours but the findings for knowledge retention are equivocal. Conclusions regarding content memory are typically based on performance at end of year summative assessment tasks.

The “testing effect” suggests that assessment during learning is superior to study in maintenance of knowledge. Repeated testing and feedback enhance this effect. The aim of this study was to explore the testing effect from the perspective of students and clinical facilitators working within a PBL curriculum.

Methods:

A web-based tool was developed, revised and implemented to capture students’ knowledge of conditions explored within a systems-based PBL curriculum. The tool involved the presentation of multiple choice questions to be completed on the conclusion of each case. Questions were developed by educators based on learning triggers identified within the PBL sessions. Variables included response latency, feedback and consequences for non-participation. Immediate and blocked responses were compared to later and mixed answers.

Results:

Engagement with the testing tool did enhance knowledge retention. A positive educational impact resulting in greater retention of knowledge *and* identification of misunderstandings that could be quickly rectified was noted.

Conclusions:

The testing effect contributes to learning in PBL and provides insights into the processes and the outcomes of this pedagogy.

Take-home message:

A web-based testing system can support and capture learning to scaffold the efforts of students and educators, guide curriculum development, and highlight useful complementary clinical learning experiences.

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EDUCATORS' EXPERIENCES OF DESIGNING FEEDBACK INTO PROGRAMS

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¹ Monash University, ² Deakin University, ³ University of Wollongong, ⁴ University of Queensland

Presenter: Molloy Elizabeth

Introduction:

Educators and learners consistently report that feedback is an important yet problematic process. Educators indicate that they spend too much time in producing performance information that does not get read, or acted upon. Learners state that there is not enough feedback, and that the feedback they do receive is lacking specificity. Little is known about how educators design programs with opportunities for timely and meaningful learner feedback.

Methods:

31 semi-structured interviews were conducted with higher education educators (including health professions educators) to explore approaches to formative and summative assessment. The interviews were audio-taped, transcribed and thematically analysed. The coded 'feedback' data were re-analysed independently against the Feedback Mark 2 Framework (Boud and Molloy 2012) to assess for alignment between actual and idealised feedback practice.

Results:

The data suggest that most of our interviewees enact feedback in a way that is largely consistent with the Feedback Mark 2 Model. Participants described the planning of sequential tasks that enabled students to take on and enact suggestions for improvement in the subsequent task. Educators highlighted the difficulties in shaping individual, tailored feedback to students and described their successful trials of group-based feedback. Peer to peer feedback also featured as a key innovation but educators reported that the learners themselves still saw peer feedback as an inferior and confronting mechanism compared with educator-generated feedback.

Conclusions:

Most educators described feedback not just as episodes of performance information exchange, but as a system intimately related to task design and sequencing.

Take-home message

Feedback practices may be more sophisticated than previously thought, though more research is needed on how to design group based and peer feedback in programs, including how to meet and overcome learners' resistance to engagement in these alternative modes.

Session 5D

SPIKES TRAINING ON BREAKING BAD NEWS TO IMPROVE OBSTETRICS AND PEDIATRICS RESIDENTS' COMMUNICATION SKILLS: A RANDOMIZED TRIAL UTILIZING STANDARDIZED PATIENTS

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¹ University of Campinas, UNICAMP, ² University of Campinas, UNICAMP

Introduction:

Breaking Bad News (BBN) to mothers about their baby is a difficult task for residents who feel ineffective and frightened. The impact on patient's can be disastrous. Communication skills can be learned and improve with practice. Would SPIKES training improve obstetric (OBS) and paediatric (PED) resident's ability to BBN?

Methods

Y1 to Y4 (PED) and (OBS) residents from UNICAMP Medical School, Brazil, voluntarily participated in the project. First, a videotaped simulation to communicate neonatal death or foetal death to a mother (two well-trained Standardized Patients (SP) - one for PED and another for OBS). SP and resident graded resident's skills, SP gave feedback and resident's evaluate activity. Half the residents were randomly assign for SPIKES training based on their videos. Half had feedback only. All returned for a second simulation, similar to the first one with the same SP blinded to randomization.

Results

For PED, 31 (62%) of 50 eligible residents agreed to participate completing the study (100%). For OBS, 30 of 50 started (60%) and 27 finished (90%). Simulations lasted in average 12 minutes, feedback, 5 minutes and SPIKES training 1:30 hours. Both groups improved similarly but in PED group, the actress' rate for controls increased significantly. OBS residents' self-evaluation and satisfaction rate was significantly higher for SPIKES group.

Conclusions

Residents want BBN training. SP feedback after simulation is a potent tool. The more training (SPIKES group) the higher resident's self-evaluation and satisfaction.

Take-home message

On BBN, 17 minutes simulation and SP feedback can make a difference

USE OF WEB-BASED LEARNING AND ASSESSMENT IN TEACHING COMMUNICATION SKILLS.

Milnes S

Deakin Univeristy

Background: The literature indicates many doctors are both uncomfortable and unskilled at end-of-life discussions (von Gunten CF, Ferris FD, Emanuel LL 2010; Truog RD 2010; Rosenbaum et al 2004). This could be a result of a paucity of opportunities for learning necessary skills in undergraduate medical degrees (Hayes 2010). The use of web-based learning and blended learning may be useful in teaching communication of bad news (Watson and Jolly 2012). For this reason, four interactive on-line simulations (Medesims) have been developed which use current literature and real scenarios with student sin the role of the treating/communicating physician. Assessment is embedded into the simulations.

Aim: The aim of the study was to determine student attitude towards the MedeSim in terms of conformity to aspects of teaching and learning, usability and relevance to the needs of the profession.

Methods: Final year medical students at Deakin University (Victoria, Australia) rotate through four rotations in semester 1. 112 students from the 2011 cohort were surveyed. Responses to a questionnaire with a total of 26 questions were analysed: qualitative data from open-ended questions were thematically analysed and quantitative data was analysed using non-parametric methods.

Results: Response rate – 77%. Qualitative results were around the themes of safety, environment, opportunities for skills acquisition and feedback/assessment.

Discussion: Students feel safe in practising end-of-life communication skills in the virtual environment. Educational theory tells us these skills should be transferrable to clinical practise through reflection-in and on practice. Assessment should encourage participation with built-in feedback to ensure ongoing learning and reflective transference of skills and knowledge learned.

Conclusion: The virtual learning environment has a role in teaching but should occur with face-to-face feedback and skills practise.

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ADAPTATION OF SBAR AS AN INTERPROFESSIONAL COMMUNICATION TOOL: A UTILITY STUDY

Author(s) & Institution(s)

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Presenter

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Introduction

Whilst the Situation-Background-Assessment-Recommendation (SBAR) tool provides a structured communication framework to promote patient safety for highly urgent patient care situations, its application in non-urgent clinical and non-clinical team-based settings is less well studied. The aim of this study is to examine the utility of SBAR as an interprofessional communication tool for both clinical and non-clinical settings.

Methods

A 5-point Likert survey was administered to 32 participants comprising 22 clinical (medical, nursing and allied health) and 10 administrative professionals after completion of an interactive scenario-based SBAR workshop, supplemented with post-course reflective portfolios of SBAR application at the workplace. We used descriptive statistics to summarize group data and independent-sample t-tests to compare between clinicians and non-clinicians. Iterative text analysis was employed to analyse qualitative data obtained from reflective portfolios.

Results

Participants endorsed SBAR as an effective inter-professional communication tool that is easy to use [Mean(SD)=4.0(0.5)] and to apply in the workplace [Mean(SD)=3.8(0.8)]. Interestingly, despite lower prior usage of SBAR, administrative professionals gained more insights about SBAR from the programme [Mean(SD) = 4.11(0.60) vs. 3.33(0.84); $p=0.01, d=0.41$], alluding to the potential benefits of learning SBAR among non-clinical staff. Qualitative analysis corroborated the bridging role of SBAR across different settings to enhance clear and concise communication among interprofessional team members.

Conclusions

This study highlights the innovative use of SBAR as an effective inter-professional communication tool beyond urgent clinical care settings. Our results pave the way for future studies to explicate how SBAR can be adapted to optimise inter-professional communication in both clinical and non-clinical situations.

ASSESSING THE ENGLISH LANGUAGE SKILLS OF INTERNATIONAL MEDICAL GRADUATES: REVALIDATING THE WRITING TASK OF A SPECIFIC PURPOSE LANGUAGE TEST

Author(s)

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Introduction

A specific purpose English language test for overseas health professionals, the Occupational English Test (OET), includes assessment of written intra-professional communication of International Medical Graduates wishing to work in Australia. The current writing task requires candidates to write a letter of referral or discharge summary. This validation study aims to determine criteria for effective written communication to inform the existing OET assessment criteria and task.

Methods

Thirty doctors from a range of specialties and health information managers (HIM) participated in workshops examining a selection of discharge summaries and referral letters from two participating Australian hospitals. Participants were asked to identify positive as well as less effective aspects including missing information. A content analysis of the audio-taped workshops and records used was carried out and differences between professions and specialties (clinical and HIM) noted.

Results

Both doctors and the HIM participants valued prioritising of relevant clinical information, completeness, legibility; however the extent of psychosocial information and past medical history differed according to specialty. HIM participants identified ambiguities in principal diagnoses of discharge summaries. While electronic health records have assisted legibility and access, many discharge summaries and referral letters include redundant pre-populated information.

Conclusions

The assessment criteria for the writing task of the language test for clinicians seeking registration in Australia should reflect the criteria of health professionals. These criteria should also inform transition to practice medical education.

Take-home message

Effective written communication about patient care warrants greater attention in medical education so that future doctors gain greater understanding of the record's multi-faceted purpose.

DEVELOPING EMOTIONAL COMPETENCE OF MEDICAL STUDENTS IN CLINICAL TRAINING

Author(s)

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Introduction

Emotional competence has been regarded as “a learned capability” based on emotional intelligence, and gaining emotional competence can result in outstanding performance at work. Likewise, emotional competence is an important ability of doctors’ clinical performance. Promoting emotional competences of medical students during their clinical training may enhance the mechanisms they use to cope with professional issues.

Methods

Medical students kept audio diaries during their clerkship in their first 2 or 3 clinical rotations in the hospital. Instructions were provided for the students to address their experiences, emotions and emotional competences. Two years later, audio diaries were collected in the end of their internship. The diaries were analysed and compared using Grounded theory method.

Results

16 Medical students in clerkships generally thought that they lacked of some part of personal competence of emotional competence, such as self-confidence. 12 Interns participated the follow up studies and revealed more competent in dealing with their emotions but became indifference to some exciting clinical situations. Heavy work loading and no time for reflection were the possible causes.

Conclusions

Insufficiency of self-confidence was the main finding of developing emotional competence during the clerkship. As clinical experiences increasing, interns became competent but indifference. Emotional competence training program might be developed in next stage.

Take-home message

Emotional competence is an important ability of doctors’ clinical performance. Keeping audio diaries during clinical learning seemed an effective way for medical students to developing and reflecting emotional competence. Insufficiency of self-confidence during clerkship and becoming indifference after internship training were found. Emotional competence training program will be created.

IMPROVING THE ASSESSMENT OF COMMUNICATION SKILLS AT THE SWISS FEDERAL LICENSING EXAM: RESULTS OF A STUDENTS NEEDS ASSESSMENT

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Introduction

With a three year project the assessment of communication skills within the Swiss Federal Licensing Examinations (FLE) shall be improved. As a first step a needs assessment among communication experts and medical students of the Swiss Medical Faculties will be performed. In this presentation the results of the students' needs assessment will be presented.

Methods

A bilingual student's online questionnaire will be developed by an expert panel taking relevant literature, the Swiss Catalogue of Learning Objectives and other consensus statements for communication (e.g., the European and Basler consensus statements) into account. With a think aloud study response process validity evidence will be sought. The questionnaire will focus on the following topics related to communication skills: (1) What has been taught?, (2) What has been assessed in the faculty exams?, (3) What has been assessed in the FLE?, (4) What should have been assessed in the FLE and how should the assessment be improved?

Results

Results of the students' needs assessment will be available by the end of 2015 and be presented.

Conclusions/ Take-home message

We hope for valuable input for improving the assessment of communications skills within the FLE also from the students' side. Results of the needs assessment from the students and experts will be combined and taken as input for an international expert symposium on how to improve the communication skills assessment within the FLE.

Session 5E

ASSESSING EXAMINER MARKING STYLES ON THE CLINICAL EXAM

Author(s)

Michael Rasmussen

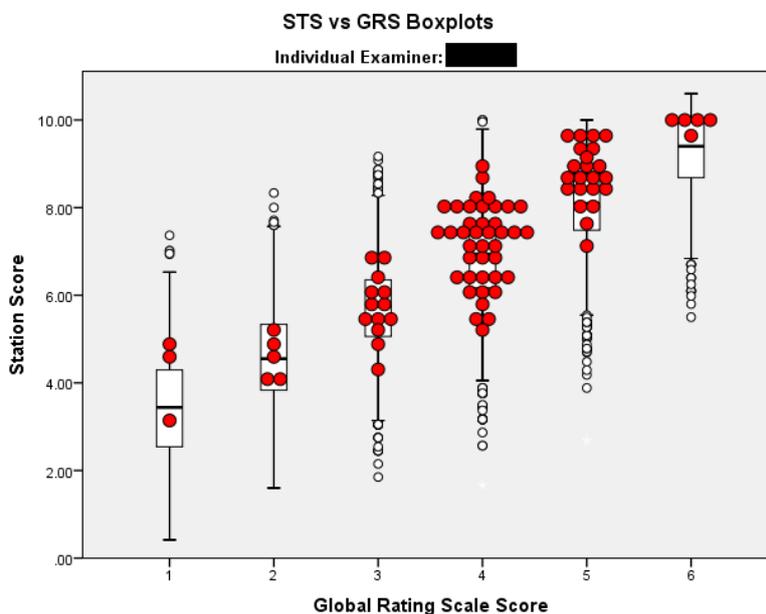
Presenter

Michael Rasmussen

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The Clinical Exam belongs to a host of performance-based assessments employed by the College to assess trainees' competence across a range of clinical tasks within a set timeframe and structured marking scheme. Examiner judgements on the trainees' competence can introduce bias / errors that may compromise the reliability and validity of the exam itself. This presentation introduces an approach to identifying examiners who systematically mark too leniently, severely, or unexpectedly, and provides a visual aid to help compare an individual examiner's marking style to the expected norm. Examples of examiner marking styles are provided to demonstrate several patterns to help compare between individual examiners' marking styles. Recommendations are provided in carrying out various analyses to ensure 'poor' marking styles are identified as opposed to 'poor' stations. SPSS syntax is also provided for others in the medical education field to apply to their exam settings.



INVOLVING RESIDENTS ON ASSESSING EYE EXAMINATION SKILLS OF UNDERGRADUATE MEDICAL STUDENTS DURING OSCE IN UNIVERSITAS GADJAH MADA

Authors:

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Introduction:

Undergraduate clinical skills laboratory requires a lot of number clinical instructors to train and assess medical students' competency. Involving residents that already had intensive training as an Objective Structured Clinical Examination's (OSCE's) assessor gives advantages to fulfill the number of required assessor. However, the challenges are standardization among assessors that comes from different level of expertise.

Methods:

This is a quantitative study involving OSCE results from undergraduate medical students batch 2010 (n=516 checklist) in Skills Lab Faculty of Medicine Universitas Gadjah Mada, Jogjakarta, Indonesia. Data analysis using Mann Whitney test to compare score given by ophthalmology residents that already had intensive training to specialist doctor.

Results:

This study found OSCE score given by ophthalmology residents and specialists were resulting equal standard ($p > 0,05$).

Conclusion:

Intensive training to ophthalmology residents is able to give equal standard with specialist doctor in assessing undergraduate medical students during OSCE.

Keyword: Undergraduate, OSCE, ophthalmology, resident, specialist, assessor standardization.

VIDEO TRAINING TO REDUCE CROSS CAMPUS VARIABILITY IN OSCE STATIONS

Author(s)

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Institution(s), Department(s), Country/Countries

School of Medicine, University Tasmania

Introduction

Many schools provide OSCE summative examinations at multiple sites. Traditional methods of examiner and role player training and standardisation at one site are not possible across multiple geographically dispersed sites. Video calibration has been shown to reduce examiner variability (1) in a research setting. University of Tasmania introduced this method as a mechanism of training our examiners and role players for all our sites in 2013.

Methods

Video Calibration site created and populated for every OSCE delivered in summative exams.

Qualitative feedback from academics, role players, examiners and administrative staff on Video Calibration as a method of training examiners and role players.

Quantitative data on use and outcomes of examiner calibrations

Results

All OSCE's have trial run and can be modified if issues found

More consistent performance with role players across sites

Easier for consistent set up across sites

Quantitative data shows examiner calibration consistent

Conclusions

Feedback from administrative staff, role players and examiners also demonstrated that it played a quality assurance role in providing more consistent examiner marking, role player performances and room set up across the different sites

Take-home message

Using video calibration has benefits beyond examiner training in developing a quality assured process across multiple delivery sites

Inter-Rater Reliability: Comparison of Checklist and Global Scoring for OSCEs* Creative Education 2012. Vol.3, Special Issue, 937-942 Published Online October 2012 in SciRes (<http://www.SciRP.org/journal/ce>) Bunmi S. Malau-Aduli¹, Sue Mulcahy², Emma Warnecke¹, Petr Otahal³, Peta-Ann Teague⁴, Richard Turner¹, Cees Van der Vleuten⁵

Inter-disciplinary examiner calibration (IDEC)

Introduction

Clinicians from a range of medical disciplines examine in high stakes medical student OSCEs. Busy clinicians have limited availability to participate in face to face examiner training to calibrate their judgements about medical student clinical skills; we therefore piloted an asynchronous online approach to inter-disciplinary examiner calibration (IDEC).

Methods

With the informed consent of the medical student participants, we developed, delivered and recorded a simulated OSCE. A selection of student performances on each station was uploaded to a secure Community Blackboard site, which included assessment and discussion forums for clinician participants to rate and comment on student performances. Aggregated ratings were displayed, and the project was evaluated by an online survey. Participation was voluntary.

Results

67 clinicians were recruited, including physicians, surgeons, psychiatrists and general practitioners. 25 clinicians rated at least one student performance, and there were 1599 “hits” on the discussion forums. Considerable variability in examiner ratings was evident, and discussion was wide-ranging. 62% of respondents to the evaluation survey reported being more confident in the judgement of examiners from other Disciplines, and 40% had changed some of their assessment practices and/or judgements, as a result of their participation in IDEC. 80% believed that similar opportunities should continue to be provided, and would encourage their colleagues to participate.

Conclusion and Take Home Messages

A model for asynchronous online inter-disciplinary examiner calibration was piloted successfully, despite some recruitment and IT challenges. Clinicians are willing to engage in robust discussion about medical assessment, and share their examiner judgements with interdisciplinary colleagues.

SCORING THE *OBJECTIVE STRUCTURED PERFORMANCE EXAM (OSPE)* FOR PHARMACY TECHNICIANS AT ENTRY TO PRACTICE IN CANADA: A VALIDITY RESEARCH PROJECT

Author(s)

Carol O'Byrne¹, John Pugsley¹, Lila J. Quero Muñoz²

Presenter(s)

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Institution(s), Department(s), Country/Countries

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Introduction

The Pharmacy Examining Board of Canada (PEBC) developed an "objective structured performance examination" (OSPE) to complement a written knowledge assessment, to certify entry-to-practice competency of pharmacy technicians, for professional licensure. As there were no licensed pharmacy technicians when the OSPE was developed, licensed pharmacists were used as assessors. With increasing numbers of licensed pharmacy technicians, PEBC conducted research to determine the consistency of scoring and the differential impact on pass-fail decisions when using licensed pharmacy technicians as assessors.

Methods

Examinees' performances are documented using behavioural checklists and scored using criterion-referenced holistic ratings. In a sample of OSPE stations across multiple exam sites, pairs of assessors scored the same candidates independently. Pairings included two pharmacists, a pharmacist and pharmacy technician and two pharmacy technicians. Assessors' data were collected on machine-scorable forms. SPSS was used to score and conduct traditional reliability analyses. Genova was used to conduct generalizability (G) and dependability (D) studies. Kappa coefficient was used to determine the differential impact on pass-fail decisions.

Results

A coefficient alpha ≥ 0.8 , and a small percentage of candidates' score variability of 1% and 3% due to variability between pharmacist assessors were obtained, using trained pharmacist assessors. Results of current studies involving pharmacy technician assessors will be reported.

Conclusions

In the OSPE valid, defensible scores and pass-fail results are obtainable using one pharmacist rater per station. Additional conclusions will be reported.

Take-home Message

When high-stakes decisions are made based on examinees' scores, the impact of decisions made regarding types of assessors needs thorough investigation.

Examining OSCE validity: a quantitative and qualitative analysis of OSCE data to identify domains of performance not captured in pass/fail decision making.

Author(s)

Imogene Rothnie

Presenter

Imogene Rothnie

Institution(s)

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Introduction

The OSCE is the major platform for assessment of clinical competence. The structured format and inclusion of objective scoring checklists facilitates reproducibility of results. However, the predominant contribution of checklist scores to standard setting mechanisms can mean that important domains of clinical performance and expert examiner judgement are not contributing proportionally to a decision about competence. This paper describes the process by which one medical school examined the OSCE scoring process and standard setting mechanism to address this issue.

Methods

We undertook curve linear regression of OSCE examiner global ratings and checklist scores to evaluate the relationship between these two variables. We undertook qualitative analysis of examiner comments on student performance to identify common attributes of performance that were important to examiners but not reflected in the scoring mechanism.

Results

Curve linear regression revealed a broad range of checklist scores for most levels of global ratings awarded by examiners, particularly the borderline group. Qualitative analysis revealed that communication skills and the level of deliberate structure a student applied in completing an OSCE task were common themes for examiner comments, irrespective of checklist criteria met.

Conclusions

We found that using only checklist scores and a single global rating scale is insufficient to capture all domains of performance examiners are concerned about in an OSCE. Examination of historical data can reveal these domains.

Take-home message

Quantitative and qualitative review of historical data from an OSCE can identify domains of performance important to examiners but not captured by the scoring mechanism.

Session 5F

E-PORTFOLIOS: A LENS INTO THE COMPLEX RELATIONSHIPS BETWEEN ASSESSMENT AND CURRICULUM

Author(s)

Frank Bate and Chris Skinner

Presenter

Frank Bate

Institution(s)

University of Notre Dame Australia

Introduction

The School of Medicine of the University of Notre Dame Australia explored the potential of e-portfolios for medical students. The School had used paper-based portfolios since its inception in 2005, and judged it timely to consider digital technologies as a mechanism to enhance student learning and improve the way in which portfolios were administered.

Methods

Qualitative methods were adopted to collect data from three groups: a group that used a Blackboard e-portfolio, one that used a Mahara e-portfolio, and a group that used the existing paper-based portfolio. The research gathered data from students and tutors pertaining to the functionality and usability of these portfolio approaches. Feedback was gauged in relation to principles of constructive alignment and authentic task design.

Results

The curriculum should shape the way in which innovations are interpreted and implemented. Sometimes low-tech solutions are most appropriate and in important stepping stone to more sophisticated practices. Exploring the potential of digital technologies assisted in conceptualising other possibilities for curriculum renewal.

Conclusions

A useful way in which to gauge the quality of curriculum is to measure the extent to which it conforms to principles of constructive alignment and authentic task design. Ultimately, the curriculum should shape the way technology solutions are interpreted and implemented.

Take-home message

e-portfolios are worth investigating because they emphasise competency-based education by empowering students to capture what they do as well as what they know. They also present opportunities to provide creative approaches to reflective practice. However, the features of the e-portfolio should be systematically analysed in relation to established educational theory.

DEVELOPMENT CENTRE OF THE UNIVERSITY OF SRI JAYEWARDENEPURA

Author

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Presenter

Dr. Rohana.B.Marasinghe

Introduction:

The six month CTHE programme of the University of Sri Jayewardenepura has 250 face-to-face lecturer/discussion hours, interactive supervised training, group discussions, Microteaching sessions, elearning as well as Outward Bound Training (OBT) components. Evidences on reflective practice is evaluated through a Portfolio. Main objective of this study was to review the reflection of learning outcomes.

Methods:

The portfolios submitted by the participants of CTHE programme from 2010-2013 were reviewed to ascertain the level of reflection of learning outcomes. Based on the achievements, they were grouped into high, moderate and low categories. Interviews were performed on a stratified (assessment category, gender and teaching Faculty), random basis until the point of saturation is reached. Issues identified were subjected to thematic analysis.

Results:

Almost all participants have achieved learning outcomes on ten main areas. Outcomes related to the 'Active Learning, Teaching and Assessments' were scored 'high' by all the participants. Area related to 'Enhancement of quality of life of university academics' were rated as low by the majority. There was a Faculty wise difference in the area related to 'Improvement of Research competencies' and 'Use of modern technologies in teaching'. Improvement of 'Professional Skills and Interpersonal skills' were rated as highly useful and the OBT training and Microteaching component of the programme rated as most memorable and useful component in their career.

Conclusions:

The CTHE programme run by the University of Sri Jayewardenepura provided grounding for newly recruited lecturers by providing relevant, enjoyable learning opportunities while portfolio assessment produced rich data in reflecting their learning.

Take-home message:

Portfolio found to be valid, reliable and easy assessment tool when multifaceted learning opportunities are included in a Teacher Training Programme.

COMPARISON OF STUDENTS' SCORES FROM DIFFERENT ASSESSORS IN PORTFOLIO ASSESSMENT: COMMUNITY MEDICINE MODULE EXPERIENCE

Author

Fika Ekayanti

Presenter

Fika Ekayanti

State Islamic University of Syarif Hidayatullah Jakarta, Community Medicine Department, Indonesia

Introduction

Community medicine module in clinical year used portfolio assessment as the summative assessment. At the end of the module, the portfolio from their experience in the primary health services will be assessed by three groups of assessor; campus tutor, campus assessor (tutor that assessed students), and the preceptor, with a specific rubric form. This study aimed to compare the scores from those different groups of assessor.

Methods

It was a cross sectional study with total samples of 44 students in the module. Data was collected from the students' portfolio results in 2014. The scores from three groups of assessor were analyzed by non-parametric, Kruskal –Wallis test due to abnormal data distribution. It continued by Post Hoc analysis with Mann-Whitney test.

Results

The data showed that median score of the campus tutor is 77 (68-82); campus assessor is 76 (64-85); preceptor is 79 (71-91). The Kruskal-Wallis test showed significant difference between the three groups ($p=0.001$). From post hoc analysis, the comparison of campus tutor and campus assessor had no significant difference to the portfolio scores ($p=0.556$), while the preceptor's scores showed significant differences compare to the campus tutor and campus assessor ($p=0.001$ and $p=0.003$).

Conclusions

From the three groups of assessor, the preceptor has given significantly higher scores than campus tutor and assessor.

Take-home message

It should be examined further which aspects influenced the difference although rubric form has been used and also needs to evaluate the inter-rater reliability.

Keywords: portfolio assessment, campus tutor, campus assessor, preceptor, community medicine module

MEDICAL STUDENT RESPONSES TO ASSESSMENT USING AN ELECTRONIC PORTFOLIO

Authors (Presenters)

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Institution, Department, Country

University of Manchester, Manchester Medical School, UK

Current principles within medical undergraduate assessment incorporate student responses to feedback. This reflects the UK General Medical Council's learning objective that students should establish foundations for continuing professional development and self-directed, life-long learning. At the University of Manchester Medical School, this is a mandatory aspect of the student's professional development, as recorded in their electronic Portfolio for Personal and Professional Development (ePPD Portfolio).

Manchester Medical School has approximately 2,200 undergraduate students currently enrolled on its MBChB Medicine course, all of who complete an ePPD Portfolio throughout the course. One of the features of the ePPD Portfolio requires students to analyse and respond to feedback from their clinical placements and assessments. One of our ePPD Portfolio's strengths is that students can incorporate their electronic assessment and placement records directly into the relevant section. They are required to analyse assessment feedback and formulate specific action plans, which are then revisited. Such analyses can be used to identify areas of strength and progress, issues that still require attention and areas for improvement. Successful completion of the portfolio is also a mandatory requirement for progression between Years 4 and 5, as well as for graduation and commencement of Foundation Programme. In Year 4 91.5% of students (n=454) included a comprehensive analysis of their 6-monthly assessments in their ePPD Portfolio.

Take-home message

The presentation will explore the development of student responses to assessment and feedback via the ePPD Portfolio, and explore the ePPD Portfolio's role in facilitating ongoing reflective responses throughout the MBChB Medicine programme.

MEDICAL UNDERGRADUATES' PERSPECTIVE OF PORTFOLIO AS A LEARNING TOOL: FACULTY OF MEDICINE AND ALLIED SCIENCES, RAJARATA UNIVERSITY OF SRI LANKA

Author(s)

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Presenter

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Introduction

Portfolios are integrally related to professional learning and have been introduced in a range of professional learning contexts. Department of Paediatrics has introduced portfolio from third year both as means of learning and assessment tool. Aim of this study was to evaluate final year medical students' perception of portfolio as a learning tool.

Methods

Feedback was obtained from final year undergraduates of batch 2009/2010. An anonymous questionnaire survey was conducted consisting 16 items in which students had to respond to 5 point likert scale, ranging strongly agree to strongly disagree. Frequencies were calculated to determine students' views on different aspects of portfolio writing.

Results

Response rate was 92% (167/180). In order to facilitate analysis and interpretation, strongly agree and agree were regrouped and disagree and strongly disagree regrouped. The majority of undergraduates perceived that maintaining portfolio encouraged reflective thinking of cases which they discussed in the portfolios (69%), helped them in professional development (53%), helped to practice self directed learning (51%) and improved their written communication skills (59%). Forty five percent of students felt that portfolio writing help them to apply learning in to practical context while 66 % students perceived it a useful learning tool. However, majority of students' perceived portfolio writing as stressful process (63%) and time consuming (72%). Hence, only few students' enjoy the writing process (16%). Further, only few students were clear about examiners expectations (32%). In addition, most students viewed that additional guidance is needed from the department to write portfolio (68%) and they also felt difficulty in writing reflection component (86%). Interestingly, although majority felt it as a useful learning tool most of the students were uncertain and disagree with implementing portfolio for other parts of MBBS curriculum (78%).

Conclusions

A majority of undergraduates perceived portfolio as useful learning tool which encourage self reflection, writing skills and professional development even though it is time consuming and stressful.

Take-home message

Since portfolio writing is a stressful and new learning techniques to Sri Lankan undergraduates and assessors', continuous guidance on reflective writing and standardizing the assessment process has to be considered by the faculty.

Session 5G

HOW DOES MINI-CEX IMPACT POST-GRADUATE TRAINEE LEARNING AND SUPERVISION?

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Presenter: Dr Damian Castanelli

Introduction

Workplace-based assessment is integral to programmatic assessment in a competency-based curriculum. Mini-CEX became compulsory for Australia and New Zealand College of Anaesthetists (ANZCA) trainees in 2013. Negative perceptions of mini-CEX have been reported⁽¹⁾. We explored trainees' and supervisors' understanding and experience of mini-CEX and its impact on learning and supervision.

Methods

We undertook an inductive thematic analysis of semi-structured telephone interviews with 18 supervisors and 17 trainees.

Results

Inter-related themes emerged clustered around the perceived purpose and value, the process, and the impact of the mini-CEX (table 1). Engagement with the mini-CEX process varied. Some interviewees perceived the mini-CEX primarily as an administrative burden while most focused on its potential for facilitating trainee improvement and reported positive impacts on feedback quantity and quality, trainee learning, and supervision. Difficulty in finding time for assessment in a busy clinical workplace, with adverse consequences for timely feedback delivery, was broadly acknowledged. Views on case and assessor selection diverged, with perceptions of trainees selecting lenient assessors or easy cases contrasting with trainees selecting challenging cases or critical assessors. Few interviewees reported its use in decisions on progression.

Conclusions

The use of multiple mini-CEX in programmatic assessment was poorly understood with confusion over their potential for both formative and summative assessment. Perceptions of the purpose of mini-CEX influenced judgements of value, trainee selection of assessor and case, and assessor behaviour.

Take-home message

Mini-CEX is broadly accepted in ANZCA training and perceived positively. Clarifying the underlying purpose and maximising the use for trainee learning may provide further value.

1. Weston PS, Smith CA. The use of mini-CEX in UK foundation training six years following its introduction: lessons still to be learned and the benefit of formal teaching regarding its utility. *Med Teach*. 2014;36(2):155-63.

Table 1: Thematic Structure

THEME	Sub-theme
Purpose	<ul style="list-style-type: none"> • Trainee Improvement • Documentation/ trivialisation • Inform progression • Identify underperformance • Summative or formative
Value	<ul style="list-style-type: none"> • Trainee learning • Feedback • Supervision
Time	<ul style="list-style-type: none"> • Making time • Timeliness • Timing
Scoring	<ul style="list-style-type: none"> • Understanding • Variability • Leniency • Independence v Perceived Level
Case/ assessor selection	<ul style="list-style-type: none"> • Demonstrate competence • Maximise learning • Assessor characteristics

MINI-CEX ASSESSMENTS ARE A RELIABLE, VALID AND FEASIBLE MEASURE OF WORKPLACE PERFORMANCE WHEN YOU ASK SUPERVISORS THE RIGHT QUESTION.

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Presenter

Associate Professor Jennifer Weller

Introduction

Mini-CEX became compulsory for Australia and New Zealand College of Anaesthetists (ANZCA) trainees in 2013. Supervisors score trainees in 11 domains of performance, give an overall score for supervisory requirements (SR), and perceived training level (PTL) for performance in that case. We previously demonstrated high test reliability in a small group of volunteers, where supervisors' judgements were based on trainees' need for direct or more distant supervision. Are these findings replicated in a large population undertaking compulsory assessments?

Methods

We analysed all mini-CEX assessments submitted to ANZCA over one year, using generalizability theory and Pearson's correlation.

Results

There were 7687 mini-CEX assessments. Reliability for SR scores $G > 0.7$ was achieved with two assessors and five cases (Table 1).

Mean SR scores were significantly correlated with ANZCA level of training (Figure 1) and the PTL, supporting the validity of mini-CEX.

PTL and ANZCA training level were strongly correlated at 0.759 ($p < 0.01$), but PTL was higher than ANZCA level, suggesting leniency. However, in >1000 assessments PTL fell 1-2 grades below ANZCA level, and 67 trainees consistently performed 1-2 levels there ANZCA level over ≥ 6 mini-CEX. Future research will explore the trajectory of these underperforming trainees.

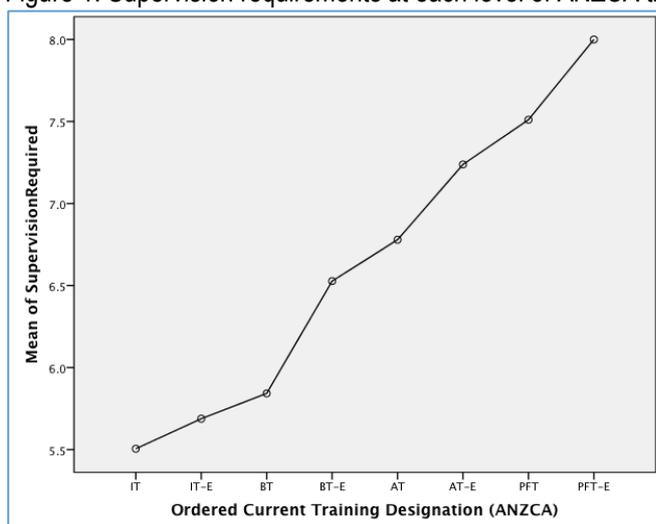
Conclusions and take home messages

Mini-CEX assessments where supervisors make judgements on supervisory requirements are a feasible and defensible option for summative assessments with potential to identify struggling trainees. Supervisory requirements depend on the case complexity. Our assessment data will be used to generate norm-referenced expected supervisory requirements for cases of varying complexity to enable a standardized approach to decisions on competency.

Table 1. Supervision Requirement scores generalisability analysis D Study

Assessors	Cases per assessor				
	1	2	3	4	5
1	0.18	0.24	0.27	0.29	0.30
2	0.39	0.45	0.47	0.48	0.49
3	0.53	0.57	0.59	0.60	0.60
4	0.62	0.65	0.67	0.67	0.68
5	0.68	0.71	0.72	0.72	0.73
6	0.73	0.75	0.76	0.76	0.76
7	0.76	0.78	0.79	0.79	0.79
8	0.79	0.80	0.81	0.81	0.81
9	0.81	0.82	0.83	0.83	0.83
10	0.83	0.84	0.84	0.84	0.84

Figure 1. Supervision requirements at each level of ANZCA training



IT= Introductory trainee (first six months)

BT = Basic trainee (18-24 months)

AT=Advanced trainee (24-56 months)

PFT =Provisional fellow trainee

E=extended time (trainee has not met all requirements to pass into next stage)

CLINICAL ASSESSMENT IN LONGITUDINAL INTEGRATED CLERKSHIP: MCEX SUBSCALES USEFULLY TRACK THE DEVELOPMENT OF DIFFERENT ELEMENTS OF CLINICAL PERFORMANCE OVER ONE ACADEMIC YEAR

Author/s

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Introduction

Each clinical year of medical programmes is expected to develop additional dimensions of clinical performance. During the penultimate year of medical school at The Rural Clinical School of WA (RCSWA), the principle new skill being developed is the management of clinical care.

We examined how the subscales of mCEX form profiled students' development of different clinical skills during the RCSWA year.

Methods

Students were given a mCEX booklet in January, and required to submit a minimum of 25 by October. There were 6 independent collection periods, with newly completed mCEX required in each. All mCEX were entered into a bespoke database.

Results

In 2014, 2,977 mCEX were completed by 83 students in 7 discipline areas. There was a mean of 496 mCEX per collection period. Over the year the average mCEX score increased from 5.82/10 at collection period one to 6.90/10 at collection period six. mCEX scores also increased in each subscale. However, the increases were not all of the same magnitude. Professionalism, communication, and history taking showed the lowest increase, whilst clinical management showed a striking 1.75 point increase from 4.61 at the year start to 6.36 at year end.

Conclusions

Skills covered in the earlier years of the programme showed relatively less development in the penultimate year. Skills which the year aimed to develop showed the largest gains during the year. The mCEX tool therefore not only tracks global clinical development over the year, it also usefully tracks the development of clinical skill elements over time.

AT WHAT STAGE CAN STUDENT PERFORMANCE IN MINI-CEX ASSESSMENT BE PREDICTED?

Author(s)

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Abstract (maximum 250 words)

Introduction

The mini-Clinical Evaluation eXercise (mini-CEX) is used to assess medical trainees' competency in conducting a medical interview and performing a physical examination. The mini-CEX has high internal consistency, yet limited evidence exists to inform at which point in time can overall competency, as measured by the mini-CEX, be predicted. This study aimed to determine the critical threshold for predicting performance in the mini-CEX.

Methods

A retrospective analysis of medical student performance in the first year of training with the mini-CEX was performed. Data was gathered over a three year period, including data from graduate & undergraduate students, and local & international students. Multiple and hierarchical linear regressions were performed.

Results

Data from 1319 students, all of who completed 6 mini-CEXs, was gathered and analysed. Significant correlation between number of mini-CEXs performed and total score was evident across all 6 time points of assessment ($p < 0.01$). Greater numbers of included mini-CEXs, correlated with better prediction of final performance. Use of data from 4 mini-CEXs was a significant predictor, accounting for 81% of variance ($R=0.90$, $F(4,1315)=1390.66$). Use of data from 5 mini-CEXs was a significant predictor, accounting for 93% of variance ($R=0.96$, $F(5,1314)=3254.07$). Student type and location were not significant factors ($p > 0.05$).

Conclusions

Final medical trainee competency, as assessed by the mini-CEX, can be strongly predicted after 4 assessments. Competency in a workplace based setting may be assessed at an earlier stage, reducing the cost and human resources required in the multiple assessment of medical trainees.

Take-home message

Final medical trainee performance may be accurately predicted after the first few assessments of the mini-CEX.

AN IN-DEPTH ANALYSIS OF THE MINI-CEX IN SPECIALIST MEDICAL EDUCATION

Authors:

Rebecca Paton, Rebecca Udemans, Julie Gustavs, Marie-Louise Stokes

Presenter:

Rebecca Paton

Institution:

The Royal Australasian College of Physicians

Introduction

From January 2008 to June 2014, approximately 40,000 formative mini-CEX assessments were conducted by trainees and their assessors as part of the Royal Australasian College of Physicians Basic Training Programs in Adult Medicine and Paediatrics and Child Health. On average, this represents 21,719 hours of trainee and assessor time. This study aimed to assess how well this time was spent in terms of improving the learning experience of trainees.

Methods

Three key methods were used:

1. Analysis of mini-CEX data extracted from the Basic Training Portal and the College database
2. Routine surveys to monitor trainee perspectives on mini-CEX
3. Consultations with trainees and assessors on the quality and feasibility of mini-CEX.

Results

Positive findings included that mini-CEX were completed on a variety of patient cases of varying complexity; and there was a positive correlation between mini-CEX scores and Clinical Exam results. The study also points to some areas of concern, largely from the consultation and the survey results. These included a perception among trainees of mini-CEX as a "tick-box exercise" with limited educational value; and the limited variance in clinical performance scores and written feedback given to trainees as part of the assessment. These findings are similar to that found in other international studies (e.g. Weston et al. 2014, Haffling et al. 2011).

Conclusion and take home message

In order to promote learning, development and progression towards expert practice the mini-CEX needs to be more integrated into the learning and assessment cycle and its use needs to be targeted to achieve specific learning goals.

Session 5H

INTERVIEWERS' REASONING ABOUT THEIR MULTIPLE MINI INTERVIEW SCORES: AN ETHNOGRAPHIC STUDY

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Presenter:

Chris Roberts

Institution(s), Department(s), Country/Countries

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Background

Within a national assessment centre to determine entry into specialty postgraduate training, interviewers met to discuss candidates' performances following each circuit of a multiple mini interview (MMI). We explored interviewers' reasoning behind their judgment-based decision making.

Methods

We used ethnography from the perspective of rater cognition theories to explore the social phenomena of an interviewer meeting in which they discussed how they had; made their own judgments on candidates, explored the judgements of other interviewers, and evaluated their own judgment-based decisions.

Results

Interviewers readily socialize into the expected behaviours set by the organizing institution. They tend to make decisions on gut feelings most of the time but are more analytical in complex cases. They readily acknowledge that judgments can be flawed, and find training around principles of bias helpful. They express a need to judge capability for growth in candidates. In making their decisions, they are most informed by their own experience as a professional, the outcomes of their previous decisions, and their shared understanding of the expected behaviours of the candidates.

Conclusions

An ethnography of MMI interviewers gives rich insights into judgment-based decision-making. Interviewers are highly expert and often constrained in making good judgments by the limitations of the tools that they have at their disposal.

Take-home message

Understanding how interviewers make decisions in the MMI could improve the design of marking rubrics and interviewer training, and lead to more precise decisions in the MMI.

TAKING ACCOUNT OF INTERVIEWER STRINGENCY IN MULTIPLE MINI-INTERVIEWS (MMI) USING THE MULTIFACET RASCH MODEL (MFRM)

Author(s)

Vernon Mogol, John Monigatti, John Shaw, Elana Curtis, Mark Barrow, Phillipa Poole, Warwick Bagg

Presenter

Warwick Bagg

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Introduction

The University of Auckland first adopted in 2014 a common eight-station multiple mini-interview (MMI) as a selection tool for candidates applying for medical, optometry, and pharmacy programmes. This study aims to show what the results would have been if the modelled *fair* scores were used in ranking the candidates instead of the observed averages of ordinal-level ratings.

Methods

MMI scores were analysed using the Facets software with candidates ($n = 629$), interviewers ($n = 122$), scenarios ($n = 64$), and items/qualities ($n = 14$) as facets. Fair scores that took into account interviewer stringency, scenario difficulty and quality difficulty were calculated and used to model candidates' adjusted ratings.

Results

The MMI reliably (0.93) separated the candidates into five groups with statistically distinct levels of qualities. The Rasch model accounted for 49.1% of total variance in ratings (candidates 27.9%, interviewers 16.6%, scenarios 4.2%, items/qualities 0.5%). A two-factor Anova revealed that ratings did not significantly differ male and female interviewers ($p = 0.26$) and between internal and external interviewers ($p = 0.34$). Internal male interviewers, however, were found to be less stringent than their external counterparts ($p = 0.03$).

Conclusions

Using the adjusted fair score resulted in adequate separation of the applicants, with applicants accounting for the majority of the variance observed. The advantage of an adjusted fair score is that it accounts for interviewer stringency.

Take-home message

When the data fits the Rasch model, using the adjusted fair score could be a useful alternative

INVESTIGATING BIAS IN THE MULTIPLE MINI INTERVIEW USING MULTI FACED RASCH MODELING

Author(s)

Adrian Husbands, Jonathan Dowell

Presenter

Adrian Husbands

Corresponding Author's address

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Introduction

The Multiple Mini Interview (MMI) is one of the primary admissions tool used to assess non-cognitive skills for medical school selection. While significant gender differences in MMI performance have been observed within a previous study (Dowell & Husbands, 2012), no research to date examines such differences among candidates at the same ability level. This study aims to investigate gender bias in MMI stations using Multi-faceted Rasch Model (MFRM).

Methods

A total of 563 candidates attempted the Dundee MMIs during the 2014-2015 admissions cycle. MFRM was used to adjust MMI scores for candidate ability, examiner stringency or leniency and station difficulty. Differential Item Functioning (DIF) analysis determined whether male or female candidates at the same ability level were more likely to achieve higher station scores.

Results

Separation-index reliability for the MMI was acceptable (.91) and separated candidates into 4 distinct ability groups. All 22 MMI stations showed a good fit to the Rasch model. DIF parameter magnitudes ranged from 0.01 to 0.28 logits, with measurement errors of between 0.06 and 0.12 logits. While three stations showed statistically significant DIF ($p < .05$), all DIF parameter values were lower than the accepted 0.5 logit criterion for detecting DIF (Bond & Fox, 2012).

Conclusions

While differences in performance were observed there was no evidence to suggest the stations considered were unfairly biased according to gender. Future research should investigate bias according to other characteristics such as ethnicity, age and socioeconomic class.

Take-home message

Bias should be routinely investigated in MMIs to ensure fairness.

EXPLORING THE RELATIONSHIP BETWEEN THE MULTIPLE MINI INTERVIEW AND UKCAT SITUATIONAL JUDGEMENT TEST SCORES

Author(s)

Adrian Husbands, Matthew Homer, Jon Dowell

Presenter

Jon Dowell

Institution(s), Department(s), Country/Countries

Adrian Husbands, Matthew Homer, Jon Dowell Medical School Undergraduate Office, University of Dundee, Ninewells Hospital Dundee DD1 9SY

Introduction

In 2013 The United Kingdom Clinical Aptitude Test (UKCAT) introduced a new non-cognitive Situational Judgement Test (SJT) component. As SJT constructs (perspective taking, integrity and team involvement) show considerable overlap with many Multiple Mini Interviews (MMI) we sought to assess their concurrent validity.

Methods

Five UK medical and two dental schools submitted data. Across institutions MMI station content comprised of 7-10 observed interactions of 5 to 7 minutes duration. Relationships between SJT, MMI scores and demographic variables were analysed using graphical, ANOVA and correlation techniques.

Results

SJT and MMI scores were matched for 2940 (97.8%) of 3021 candidates. A modest correlation of .12 ($p < .05$) was observed between MMI and SJT overall, with 3 out of 7 institutions showing correlations of between .14 ($p < .05$) and .30 ($p < .01$). Relationships between scores were stronger amongst lower socioeconomic class candidates 4 and 5 (.45, and .28, respectively) compared to higher classes 1 to 3 (.07 to .10). MMI-SJT associations were also stronger for overseas domiciled compared to UK applicants.

Conclusions

Relationships between MMI and SJT scores provide modest support for the concurrent validity of MMIs and SJTs as assessments of shared non-cognitive skills. However this varied considerably between institutions. The difference in correlations found related to SEC and overseas status merit further investigation.

Take-home message

This study reports a positive low-level correlation between SJT and some MMI in the UK context.

USING THE BIOMEDICAL ADMISSIONS TESTS (BMAT) TO SUPPORT SHORTLISTING FOR MULTIPLE MINI INTERVIEWS (MMI): EVIDENCE FROM A UK DENTAL SCHOOL TRIAL.

Author(s)

Dr Kevin Cheung
Dr Sarah McElwee
Mark Shannon

Presenter

Dr Sarah McElwee

Institution(s), Department(s), Country/Countries

Admissions Testing Service, Cambridge English Language Assessment, Cambridge, UK

Introduction

BMAT is used by a number of UK medical schools in their selection processes. It measures aptitude for demanding, science-based study by assessing the application of scientific knowledge, critical thinking, and written communication skills. University of Leeds Dental School trialled BMAT with UK applicants in 2014 to investigate its potential usefulness in their admissions processes.

Methods

Candidates' application forms were scored, and shortlisting conducted, according to the School's pre-existing criteria. Where an applicant's BMAT scores suggested high potential but an interview place had not already been awarded, the application was reassessed. Thus BMAT scores were not used in the majority of the shortlisting decisions in this trial.

Scores on all three BMAT sections were correlated with candidates' application form scores, and their performance on a 9 station multiple mini interview (MMI) task.

Results

Scores on BMAT Section 1 (Aptitude and Skills) correlated with two MMI stations related to following instructions and communication. BMAT Section 3 (Writing Task) performance correlated with MMI stations on communication skill and empathy, and discussing issues in accessing healthcare. Both sections also correlated with the overall MMI score. Candidates' overall application form scores showed a positive association only with the MMI presentation task and correlated negatively with performance on insight into issues in accessing healthcare.

Conclusions

BMAT scores show small but significant correlations with aspects of MMI performance and can support early shortlisting of applicants for further interviews.

Take-home message

BMAT compares favourably to other methods for shortlisting candidates for MMIs and is a useful tool for medical schools.

Session 5I

FROM THEORY TO PRACTICE: DEVELOPING AN ASSESSMENT STRATEGY FOR PRE-CLERKSHIP MEDICAL STUDENTS THAT INCORPORATES COMPETENCY DOMAINS

Author

Neil Osheroff

Background:

Clinicians require a set of skills and attitudes that extends well beyond medical knowledge. However, programs often struggle to design assessment strategies that help develop the skills needed to adequately prepare students for the clinical workplace. To address this, we have transitioned from grading pre-clerkship student performance primarily on knowledge-based examinations, to evaluating across six core competency domains: medical knowledge, patient care, interpersonal and communication skills, practice-based learning and improvement, systems-based practice, and professionalism. Team-based active learning environments enable observation of diverse aspects of student performance. Assessment strategies include quantitative assessments in medical knowledge and qualitative (faculty- and peer-based) milestone assessments in all six competency domains using standardized rubrics that are applied consistently throughout the curriculum. This approach has identified previously undetected competency challenges for individual pre-clerkship students, allowing opportunities to coach and remediate adverse behaviors before these students enter the clinical workplace.

Intended Outcomes:

This workshop will provide practical information and a framework that participants can use to implement competency-based assessment strategies at their institutions.

Structure:

1. We will share the competency-based assessment strategies that we have developed and describe the journey that it took to reach our present system.
2. We will engage the audience in an active discussion about competency-based assessment, and break into small groups to discuss the role of assessment in directing future learning, followed by a report back.

Who Should Attend:

This workshop will benefit curricular leaders, course directors, and administrators who are involved in student assessment.

Session 5J

ELUCIDATING THE ENIGMA OF ASSESSMENT IN INTERPROFESSIONAL EDUCATION: STRUCTURE, FUNCTION AND OUTCOME

Author(s)

Simmons, B.S.^{1,2,3}, Wagner, S.J.⁴ and Reeves, S.⁵

Presenter(s)

Simmons, B.S. & Wagner, S.J

Institution(s), Department(s), Country/Countries

¹University of Toronto, Standardized Patient Program, Faculty of Medicine, Canada

²University of Toronto, Division of Neonatology, Department of Pediatrics, Faculty of Medicine, Canada

³Sunnybrook Health Sciences Centre, Women and Babies Program, Toronto, Canada

⁴University of Toronto, Department of Speech-Language Pathology, Faculty of Medicine, Canada

⁵Kingston University/St George's, University of London, Faculty of Health, Social Care & Education, United Kingdom

Background

The interprofessional education (IPE) literature has expanded significantly to provide a rich variety of evaluation studies, however, efforts to produce rigorous assessment of IPE learning continues to be a challenge. At present, most IPE assessment is focused on learner self-assessment that only provides a perception of what the learner thinks s/he may have learned. These struggles with assessing IPE are rooted in a number of factors, however, the principles of assessment should be adhered to in any IPE activity.

Intended outcomes

- Identify key issues related to assessing performance in IPE
- Describe a new Structure-Function-Outcome Model of IPE assessment
- Reflect on the application of milestones and EPAs to this model

Structure

This workshop provides an exploration of key issues related to the assessment of IPE. It considers the processes of designing and implementing an IPE assessment focusing on structure (individual), function (team) and outcome (task). This clinical competency continuum model is illustrated employing the concept of milestones and entrusted professional activities (EPAs) in a performance framework.

Agenda (in minutes)

10 – Introduction

10 – Small/Large Group Discussion– *Identification of Key IPE Assessment Issues*

25 – Brief Didactic (5) and Reflection, Small Group/Large Group Discussion–*Assessment of a Simulated IPE Learning Activity on DVD Utilizing a Blueprint of the New Assessment Model*

35 – Brief Didactic (10) and Small/Large Group Discussion – *Application of Milestones and EPAs to Model*

10 – Large Group Discussion –*Strategies for Application to Participants' Own Contexts*

Who should attend

Health profession educators interested in assessment, competencies and IPE

Level of workshop

Introductory

Session 5K

GETTING BEYOND “A PLEASURE TO WORK WITH”: STRATEGIES TO IMPROVE FORMATIVE FEEDBACK SHARED WITH LEARNERS

Author(s)

Shelley Ross, Mike Donoff, Paul Humphries, Shirley Schipper

Presenter(s)

Shelley Ross

Institution(s), Department(s), Country/Countries

University of Alberta, Department of Family Medicine, Canada

Background:

Formative feedback is important to learning, especially in the health professions. The aim of feedback is to advance a trainee closer to his or her desired goal by providing specific information regarding level of knowledge and skill acquisition. The development of expertise is largely contingent upon effective and frequent formative feedback provided to learners. Despite a general understanding among clinical educators of the importance of formative feedback, there is still great variability in the quality of formative feedback shared with learners, both verbally and on assessment forms.

Intended outcomes:

By the end of this workshop, participants will be able to: 1) List the essential features of good formative feedback; 2) Describe best practices in sharing formative feedback with learners; 3) Appraise the ways in which tools for the evaluation of content and process of formative feedback can be applied to improve teacher and learner understanding of formative feedback

Structure:

This workshop will open with a general discussion of how participants collect or observe formative feedback in their programs. A brief didactic overview of best evidence about sharing formative feedback with learners will be followed by table practice in sharing feedback. The final third of the workshop will look at ways to apply tools for evaluating documented and observed formative feedback, in the context of using these tools to guide clinical teachers in how to improve their methods and processes of sharing formative feedback.

Who should attend:

Clinical teachers, faculty development, program directors.

Level of workshop (introductory/intermediate/advanced): Introductory/Intermediate

Session 5L

ASPIRE Awards: Excellence in Assessment

Author(s) and Presenter(s)

Institution(s), Department(s), Country/Countries

Professor Trudie Roberts
AMEE President and Co-Chair of ASPIRE Assessment Panel
Director of the Leeds Institute of Medical Education
University of Leeds
UK

A/Professor Katharine Boursicot
ASPIRE Assessment Panel Member
Assistant Dean for Assessment and Medical Education Research
Lee Kong Chian Medical School
Nanyang Technological University
Singapore

Background

The Association of Medical Education in Europe (AMEE) launched the ASPIRE programme (<http://aspire-to-excellence.org>), to promote international recognition of excellence in medical education. Assessment is one of the four areas in which Awards may be conferred. This workshop for those wishing to apply for the Assessment ASPIRE Award for excellence in medical, dental and veterinary schools, and want to familiarize themselves with the criteria and process.

Intended outcomes

Attendees will gain:

- familiarity with the application process for the ASPIRE Award for Excellence in Assessment
- in-depth understanding of the criteria for excellence

Attendees will have the opportunity to:

- consider how they will gather evidence of excellence from their own institutions
- identify areas where further development is required to achieve excellence

Structure

- Interactive talk on the ASPIRE Assessment review process: 15 mins
- Examination of the assessment panel criteria – supported group work: 15 mins
- Discussion of the types of evidence required – supported group work: 15 mins
- Identification of areas for further development – supported group work: 15 mins
- Plan for next steps – supported group work: 15 mins
- Final Q&A session – whole group: 15 mins

Who should attend:

Medical/dental/veterinary school staff who are involved in student assessment and whose institutions are considering applying for an ASPIRE Assessment award.

Level of workshop: (intermediate/advanced)

Session 5M

MedEdPORTAL Author Workshop: Promoting Teaching Tools and Assessment as Educational Scholarship

Presenter:

John Nash
Operations Manager, Medical Education Online Resources

MedEdPORTAL promotes educational scholarship by providing faculty educators with the opportunity to publish and share their educational and assessment tools with a global audience. MedEdPORTAL is unique because it publishes actual educational content (i.e., the materials used by instructors and learners). These peer reviewed resources are treated as compelling scholarly contributions that may be used to support faculty advancement decisions at many institutions. Come learn about how you can contribute to this collection.

Session 5N

OBJECTIVE STRUCTURED TEACHING EXAMS (OSTEs) – TURNING A TEACHING TOOL INTO AN ASSESSMENT TOOL

Author(s):

Elizabeth Kachur, PhD

Presenter(s):

Elizabeth Kachur, PhD; Chaoyan Dong, PhD; Thanakorn J Jirasevijinda, MD; Chay Hoon Tan, MD; Angelika Hofhansl, PhD

Institution(s), Department(s), Country/Countries:

Medical Education Development, USA; Sengkang Health, Singapore; Weill Cornell Medical College, USA; National University of Singapore, Singapore; Medical University of Vienna, Austria

Background

High expectations for teaching skills have been set, and there is increasing pressure to create strategies for developing and measuring such competencies. Scenarios can include presentation and feedback skills, one-on-one or small group teaching, teaching with patients and mentoring, evaluating learners, negotiating with co-teachers, interacting with other professionals and administrative personnel. OSTEs have been used as teaching tool but they can also be tailored to serve as screening tool, faculty assessment and program evaluation (e.g., using a pre/post-test format). This workshop will summarize the current information available on OSTEs and discuss the tasks necessary for converting teaching exercises into assessment tools. A highly interactive process will insure engagement of all participants.

Intended outcomes

By the end of the workshop participants should be able to:

- 1) give an example of how they can convert an OSTE from being a formative to a summative assessment
- 2) develop relevant rating scales to measure optimal teacher behaviours
- 3) describe the opportunities and challenges for instituting OSTEs as assessment tools at their institution

Structure

10 min - Welcome, introductions, definition

15 min - What makes a teaching tool become an assessment tool? (Think-pair with neighbour-share with large group)

20 min - Criteria for effective assessment tools (Presentation with literature review and examples)

30 min - Transformation of OSCE structures and rating forms (parallel small groups review OSCE outlines and rating forms for transformation to assessment tools, presentation to large group)

15 min - Overcoming challenges in local settings, Take Home points & closure

Who should attend: Educators, faculty, administrators

Level of workshop (introductory/intermediate/advanced): intermediate

Session 50

ASSESSING CLINICAL REASONING

Author(s) :

Joseph Rencic, MD¹; Steven Durning, MD, PhD²; Larry Gruppen, PhD³

Presenter(s):

Joseph Rencic, MD¹; Steven Durning, MD, PhD²; Larry Gruppen, PhD³

Institution(s), Department(s), Country/Countries:

¹Tufts University School of Medicine, Department of Internal Medicine, USA; ²Uniformed Services University of the Health Sciences, Department of Internal Medicine, USA; ³University of Michigan, Department of Learning Health Sciences, USA

Background

Clinical reasoning assessment has been called the Holy Grail of assessment. Studies highlight clinical reasoning's context-specific nature. The construct of clinical reasoning likely consists of more than one domain; much of the variance in clinical reasoning performance remains uncharacterized. Practical approaches to assess clinical reasoning are required to insure the competence of learners and improve our teaching strategies.

We expect workshop participants to:

- Critically evaluate the advantages/disadvantages of common clinical reasoning assessment tools, focusing on the preconditions and/or contexts that maximize or minimize their utility
- List literature- and consensus-based best strategies for assessing clinical reasoning and overcoming practical challenges encountered in the workplace
- Describe the emerging strategies in clinical reasoning assessment

Structure

Schedule (minutes)

0-10	Overview Clinical reasoning assessment
10-25	Choose best assessment tool: Case-based vignettes
25-50	Debrief, discuss advantages/disadvantages of different tools using vignettes
50-70	Discuss challenges and potential solutions
70-80	Emerging strategies
80-90	Question and answer

We will create an active learning environment. Paired participants will review vignettes and select the best clinical reasoning assessment tool for the given context. The large group will discuss the advantages/disadvantages of these tools. Participants will discuss their local challenges in clinical reasoning assessment and we will use a

combination of evidence, expertise, and crowd-sourcing to develop solutions. Finally, we will highlight emerging strategies and discuss their potential uses.

Who should attend

Any participant involved in the teaching and assessment of clinical reasoning

Workshop level

Intermediate

Session 5P

SETTING FAIR PASS SCORES FOR OSCE EXAMINATION.

Authors

Margaret J. Dennett
Dwight D. Harley

Session Presenter(s)

Margaret J. Dennett¹, Dwight D. Harley², Ronald Damant²
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University of Alberta, Faculty of Medicine & Dentistry, Edmonton, Canada

Background

The OSCE is a commonly used performance based assessment format that provides an objective measure of clinical competency. When OSCEs are used as part of an evaluation process, setting a defensible standard for academic success is a critical component of the OSCE process. Difficulties arise in understanding, selecting and applying standard setting procedures as well as, explaining the process to the academic staff and convincing them of their value. In this workshop we will discuss these problems and possible solutions. Four common methods of standard setting will be demonstrated using realistic examples.

Intended outcomes

Upon conclusion of this workshop attendees will be better able to:

- Discuss the importance of “scientifically set” pass scores.
- Describe the principles/operation of four commonly used standard-setting procedures.
- Discuss rater calibration.
- Use an appropriate standard-setting method.
- Determine the reliability of OSCE pass score decision.

Structure

Following an introduction of the necessity of standard setting the speakers will review various concepts OSCEs and scoring OSCE stations utilizing real examples. Sample stations will be used to illustrate the problems associated with the decisions that have to be made, and the standard setting approaches to be discussed (Holistic, Angoff, Borderline Group and Borderline Regression) will be applied to model station. Participants will calibrate and rate performance on a live sample station. Discussion about introducing a formal standard-setting approach and the challenges faced is planned. Time will be reserved for audience question and answer.

Who should attend

Anyone interested in OSCE examinations.

Level of workshop

Introductory/Intermediate

Session 5Q

WE ALL WANT HIGH QUALITY HIGHER EDUCATION, RIGHT?

Author(s)

Dr Dason Evans, Senior Lecturer in Medical Education, Head of Clinical Skills (1)
Dr Sandra Nicholson, Reader in Medical Education, Head of Student Progression (1)
Prof Olwyn Westwood, Associate Dean for Education Quality (1)
Dr Scarpa Schoeman, Director of Undergraduate Education (2)

Presenter(s)

Dr Dason Evans, Dr Sandra Nicholson, Prof Olwyn Westwood, Dr Scarpa Schoeman

Institution(s), Department(s), Country/Countries

- (1) Barts and the London School of Medicine and Dentistry, Queen Mary, University of London, UK
- (2) University of Witwatersrand, Johannesburg, SA

Abstract (maximum 250 words)

In his 2006 paper in Medical Teacher "Medical education and the maintenance of incompetence", Brian Hodges highlights different discourses of 'competence', arguing that each of four discourses has its own side effects and can paradoxically drive learning toward incompetence.

In this interactive workshop Dr Dason Evans and colleagues will explore different discourses of 'quality' in higher education, encouraging participants to identify their own preferred view, and to consider what effects and side effects can result from each discourse. The hypothesis that different conceptualisations of 'quality' are a common cause of conflict in higher education will be tested.

By the end of the workshop, participants will have a framework of different conceptualisations of quality in higher education, informed from the literature, they will have reflected on their own beliefs about the meaning of 'quality' and how this affects their interactions with colleagues who hold different but equally valid beliefs.

The workshop will start with a pre-test/trigger, followed by a brief presentation of the literature and introduction to a framework for conceptualising quality. The rest of the workshop will be taken up by group-work and discussion. Conclusions will be summarised and sent out to participants.

This workshop will be suitable for anybody interested in teaching and assessment, from students to principals and everyone in-between.

Indicative literature¹⁻¹⁰

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Session 5R

FIVE TIMES IS ENOUGH SKILL'S PRACTICE IN MEDIAL STUDENTS: CASE STUDY IN UVC SKILL

Author(s):

Busaya Santisant M.D.

Presenter:

Busaya Santisant M.D.

Vachiraphuket Hospital. Phuket, Thailand

Introduction:

The umbilical catheterizations (UVC) insertion was assigned in medical students trained to themselves experienced insertion for UVC skill. We want to know that how many times that medical student should be done this skill until experienced.

Methods:

We use UVC model with discarded umbilical cord in this study. Pediatric staff was done in 3 times and means duration was calculated for reference time. Then 10 fourth year medical students (male 3, female 7) was done this UVC insertion skill with the same method. Their duration of UVC insertion was recorded in each time of each persons. Until each medical student can do this skill with duration less than 1.5 times of reference time twice continuously. The number of fist less than 1.5 times was counted for each person's best times to do this skill. Means of 10 medical students was calculated to tell us about how many times that medical student should do this skill until experienced

Results:

Pediatric staff need 179 seconds for means of UVC insertion. The 1.5 times of reference was 269 seconds so that medical student should do until they get their twice better than this time. The medical students were done the best times that less than 269 seconds were 5,6,4,4,5,6,4,4,4,5 times for do this skill. The means count of UVC insertion times was 4.7 for this skill

Conclusion :

The medical student need 4.7 times to practice UVC insertion until experienced for not more than 1.5 times of reference time

Take-home message:

Each skill can set up appropriate times for medical student to do until they can get experience as this study.

ASSESSING TECHNICAL SKILLS USING MULTIPLE SOURCES

Author(s):

Lars Konge & Yoon Soo Park

Presenter:

Lars Konge

Institution(s), Department(s), Country/Countries

Centre for Clinical Education, The Capital Region of Denmark, Copenhagen, Denmark

Yoon Soo Park: Department of Medical Education, University of Illinois Chicago, Chicago, USA

Introduction:

Multi-source feedback is routinely used for assessing non-technical skills but technical skills are often assessed unsystematically or by using a single measure e.g. direct observation of procedural skills that is very prone to bias. The aims of this study were to minimize bias and ensure a valid assessment by combining the subjective observations by experts with objective measurements and to explore the reliability of these combined measures.

Methods:

Physicians with varying degrees of experience in colonoscopy performed two colonoscopies on a phantom. The procedures were assessed using four different methods: Direct observation by an endoscopy expert, time to caecum, automatic analysis of operator movements (using a Kinect™ system), and automatic analysis of scope progression (using the ScopeGuide™).

Results:

Twenty physicians (11 males, 9 females) ranging in experience from 0 to 4000+ colonoscopy procedures were included in the study. The test-retest reliability (Cronbach's alpha) of the subjective score assessed under direct observation, time to caecum, operator movement, and scope movement were 0.92, 0.57, 0.87, and 0.55, respectively. A composite score reliability of 0.95 could be achieved by combining all four measures. Weights of 65%, 35%, and 25%, respectively, must be assigned to the subjective score to achieve reliability above 0.9 when it is combined with one, two, and three objective measurements.

Conclusions:

By combining the subjective assessment with objective measures it was possible to minimize bias and still keep the very high reliability necessary for high stakes examinations.

Take-home message:

Combining multiple sources improves assessment of technical skills.

DEVELOPMENT OF A PROCEDURE SPECIFIC ASSESSMENT TOOL FOR DIAGNOSTIC FLEXIBLE PHARYNGO-LARYNGOSCOPY USING A DELPHI METHODOLOGY

Author(s)

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Presenter

Jacob Melchiors MD, ORL-HNS specialist, PhD fellow

Institution(s), Department(s), Country/Countries

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³ Dept. of Otorhinolaryngology, Rijksuniversiteit Groningen, The Netherlands.

⁴ Servicio de Otorrinolaringología, Hospital Universitario La Paz, Madrid, Spain.

⁵ Boston Medical Center, Otolaryngology – Head & Neck Surgery, Boston University School of Medicine, Boston, USA.

⁶ Dept. of Otorhinolaryngology - Head and Neck Surgery, Montefiore Medical Center, New York, USA.

⁷ Dept. of Otorhinolaryngology, Head and Neck Surgery, University of Cape Town, South Africa.

⁸ Sydney Voice and Swallowing, University of Sidney, Sidney, Australia

Introduction

The flexible pharyngo-laryngoscopy (FPL) is essential in the otolaryngologists examination of the upper airway and digestive tract. The sensitivity of the FPL as an diagnostic tool is increasing, but advances in staff training and accreditation/certification have lacked behind.

No international consensus exist on what is considered essential and desirable when conducting FPL. This is needed for valid assessment and ultimately; evidence based training programs.

A Delphi methodology offers a proven structure for an international collaboration encompassing both geographical differences as well as relevant subspecialties.

The aims of this study were to identify the essential technical elements of the FPL and to develop an assessment tool based on these elements.

Methods

An international Delphi panel was established via a collaboration with ten international key opinion leaders. Each leader recruited 6 clinicians thus assembling a Delphi panel consisting of 60 otorhinolaryngologists from 10 countries on 5 continents.

During four rounds of communication the panelists defined key technical elements of the procedure and rated their relative importance. The elements were expressed in the form of a global rating scale and its items and anchors for assessment reviewed, rated and ultimately approved by the Delphi panel with consensus defined as more than 80% agreement.

Results

We present an assessment tool for the diagnostic flexible pharyngo-laryngoscopy as well as the Delphi process to illuminate content validity.

Conclusions

An assessment tool is essential in the design, execution and continuous quality control of training programs for technical skills. It can be created utilizing a Delphi-methodology.

MASTERY: THE FOUNDATION OF CLINICAL COMPETENCE

Author(s)

Patricia Green, Tracy Nielson, Jo Bishop

Presenter:

Patricia Green

Institution(s), Department(s), Country/Countries:

Bond University, Faculty of Health Sciences & Medicine, Gold Coast, Australia

Abstract (maximum 250 words)

Introduction:

Historically, students undergo assessment of procedural skills (e.g., indwelling catheterisation, IV cannulation, IM injection) during OSCE examinations. OSCE format however, provides limited sampling from the programmatic blueprint and restricts the number of skills assessed each pre-clinical year of the medical curricula. We wanted to ensure *all* students were competent in *all* procedures prior to their clinical years of training.

Methods:

We undertook a mastery approach to teaching procedural skills. Mastery was defined as a level of expected proficiency (and safety), such that students undertook continual assessment (at a pass or fail level) to demonstrate achieved 'mastery'. Assessment involved demonstration of skill proficiency using 1:1 simulated patient encounters with written (i.e., checklist, anecdotal etc) and oral feedback provided by experienced tutors.

Results:

We established this mastery approach to teaching procedural skills during 2013 in our medical program, and less than 2% of students have required repeat attempts to demonstrate skill proficiency. Further, students have reported that mastery assessments are less stressful than OSCE, and the personalised approach to teaching makes them feel competent and more confident.

Conclusions:

Mastery approach to procedural skills provides a collaborative approach to teaching, learning and assessment and ensures students are confident and proficient with procedural skills prior to clinical placements.

Take-home message:

The mastery approach to teaching procedural skills provides consistent and transparent assessment processes and encourages collaboration rather than competition.

DEVELOPING AN INNOVATIVE DIGITAL TOOL TO TEST COMPETENCE IN TUMOUR ASSESSMENT

Author(s)

V Davison¹, D Gonzalez-de-Castro², M Salto-Tellez³, M Bishop¹, A Seller¹, Nicki Latham and Sue Hill⁴

Presenter

V Davison

Institution(s), Department(s), Country/Countries

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Through the 100,000 Genomes Project, England aims to become the first country to introduce genomic technologies into routine healthcare. Working through 11 Genomic Medicine Centres (GMCs), Genomics England will sequence 100,000 genomes from patients with rare disease or cancer by December 2017. Cancer patients will have their own genome, as well as the genome of tumour cells, sequenced. To ensure successful sequencing, submitted tissue samples are required to have a minimum of 40% tumour cells. Using tissue samples for genome sequencing is a relatively new method, and there has been no standardised training or competence assessment of tumour cellularity available. Small face-to-face training sessions and assessment improves consistency in sample quality, but this approach is not scalable. We have therefore developed a digital tumour assessment tool to standardise training for staff across all GMCs. Following two training modules, staff will access a series of slides using specially developed digital software that allows 20 times magnification. Learners will be tested on their competence in determining the percentage of tumour cells and total cellularity on 60 slides per tumour type. Responses will be judged against data submitted and verified by a panel of independent experts. We predict that staff undertaking this training will be more confident and competent in their ability to assess tumour tissue, and that the number of suitable samples submitted for sequencing will increase. It is hoped that this highly specialised tool will serve as a blueprint for using this type of digital assessment in healthcare training.

CAN A USMLE CS NOTE-SCORING RUBRIC BE ADAPTED AMONG DIFFERENT INSTITUTIONS?

Authors:

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Presenter:

Khiet D. Ngo

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Introduction

While greater importance is placed on the note-writing portion of the USMLE-CS examination, there is no single note-scoring rubric used across institutions. Park et al. published validity evidence for a rubric developed at a single center. Aim: explore the feasibility of adapting the Park rubric at our institution.

Methods

A modified Park rubric(MPR) was used to score notes from a senior comprehensive clinical skills exam(CPX) (8cases,15minutes/case,10minutes/note) in 5of8 cases(abdominal pain, back pain, headache, knee pain, shortness of breath) were scored. The MPR included 5 sub-dimensions within 3 dimensions (Documentation-History[15points] & Physical examination[15points];Diagnostic Justification-Differential[30points] & Justification[30points];Workup[10points]).

A generalizability study(G-study) was performed to estimate the reliability(G and phi coefficient) of the patient note scores. A fully crossed design was used, p(students)xc(cases)xd(rubric dimension), using unweighted scores from each dimension of the rubric. Student CPX-exam scores were compared to their approximated performance on the ICE portion of the CS-exam.

Results

G-study(N=169): Source of Variation(and corresponding % of total variance): Person (p)=41.05, case(c)=10.56, dimension(d)=2.72, pxc=12.94, pxd=7.19, cxd=4.49, pxcxd=21.05, Generalizability(Ep²)=0.50, Dependability coefficient(Φ)=0.41. The Kruskal-Wallis test(N=77) showed that the mean rank of CPX scores of students who achieved ICE scores in the highest quartile was higher than students who achieved ICE scores in the lower quartile(44.7vs14.5;p<0.007).

Conclusions

- G-study results using a MPR are comparable to results using the original Park rubric.
- Our results lend external validity for application of a MPR for scoring notes at other institutions.
- Higher CPX-exam scores are associated with better performance on the CS-exam.

Take-home message

Rubric adaptation may be feasible between institutions.

DEVELOPMENT OF HYBRID CLINICAL PERFORMANCE EXAMINATION ASSESSMENT IN GYNECOLOGIC CASE

Author(s)

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Presenter

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Introduction

In Busan-Gyeongnam, 5 medical colleges make a consortium for education of OSCE/CPX.

Since 4 years ago, we have taken a clinical performance skill test every year, we found some problems. One of the problems is not authentic. Especially, in gynecologic problem, students are not allowed the pelvic exam to SP, so SP give observation cards to students instead of physical exam. Thus we would make a new case of hybrid form, that combined the CPX and OSCE

Methods

The committee of consortium consists of six professors. First, at March 2014 gynecologic professor developed the case and checklists, after that the other committees reviewed and modified that case in three times workshops for 8 months. December 1st ~ 3rd, 2014, we take the exam. Third grade medical school students (n=335) in the Busan-Gyeongnam Consortium were included in the study. And we analyzed the applicants' questionnaire survey feedbacks at the end of the examination.

Results

The score was 57.30 out of 95 points. (SD=10.24), The satisfaction of applicants was relatively good. They were thought to be more realistic and appropriate to assess of clinical performance.

Conclusions

Overall satisfaction of hybrid CPX was high. But hybrid CPX took more time compared to previous CPX cases, so we have difficulty to allocate the other OSCE/ CPX.

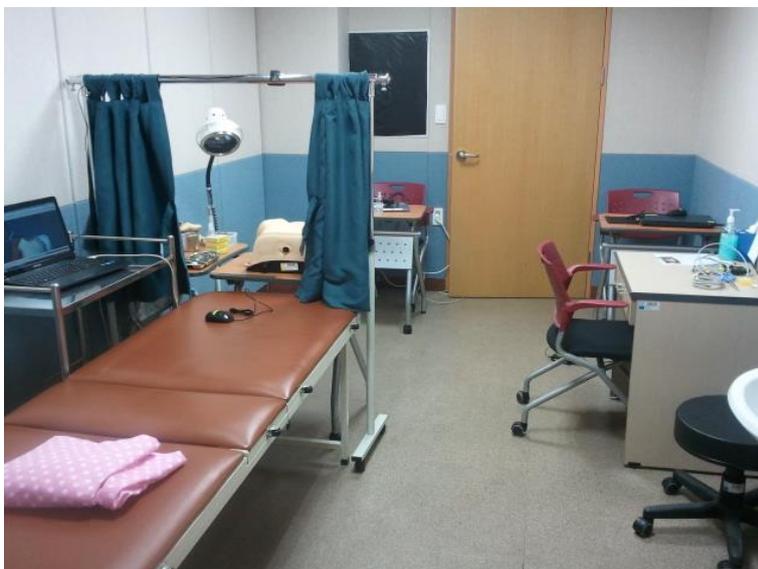
Take-home message

We should make more efforts to develop more authentic test questions.

Table 1. Overall Satisfaction of applicants

No	Category	Excellent	Good	Neutral	Poor	Very poor	N	average
1	The situation guidance was appropriate.	46 13.8	205 61.4	76 22.8	6 1.8	1 0.3	334 100	3.87
2	The performance was experienced.	31 9.3	122 36.4	137 40.9	41 12.2	4 1.2	335 100	3.40
3	This case was more difficult than usual case..	62 18.6	154 46.1	107 32.0	11 3.0	0 0	334 100	3.80
4	This case was more realistic than usual case.	61 18.3	178 53.3	85 25.4	7 2.1	3 0.9	334 100	3.86
	Testing time(15 minutes) was appropriate.	32 11.1	127 44.1	88 30.6	38 13.2	3 1.0	288 100	3.51
5	5-1) If inappropriate (1) Too long time (16(21.9%)) (2) too short time (57(78.1%)) What do you think of appropriate time? (17.15 min) (N=99)							
6	This case was appropriate about test the ability of clinical performance.	39 11.6	147 52.3	88 31.3	5 1.8	2 0.7	281 100	3.77

Fig. 1. Setting of station



OTTAWA2016
ANZAHPE2016



Fig 2. Setting of station



FORMATIVE AND SUMMATIVE EVALUATION TOOLS DURING CLERKSHIP: WHICH ONE, WHEN AND WHY?

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Introduction:

Identifying feasible tools that promote direct observation of medical students' clinical skills, provide point of care feedback, and meaningful assessment is critical. The University of Toronto (UofT) Family Medicine (FM) Clerkship had a reliable and valid FM objective structured clinical exam (FM-OSCE). As a consequence of curriculum renewal, funding was no longer available for FM-OSCE necessitating a new plan for summative evaluation. The FM Clinical Evaluation Exercise (FM-CEX) was developed in response to this need.

Methods:

We report on four years of experience with FM-CEX, comparing it to other clinical evaluation measures. FM-CEX and FM-OSCE are directly compared in a subset of 33 students in 2012-13.

Results:

FM-CEX is feasible and provides real time feedback about clinical skills. It is individually teacher intensive but less expensive than FM-OSCE. FM-CEX identifies fewer students in academic difficulty compared to FM-OSCE. Faculty value FM-CEX for direct observation and early feedback opportunities while students describe feedback from FM-CEXs as often inactionable or too general. Overall reliability of FM-CEX across 4 evaluations is 0.78 and correlates with clinical evaluation scores in all domains ($r=0.65-0.71$, $p=0.001$). Correlation between FM-CEX and FM-OSCE sub-scores is weak ($r=0.2-0.3$) except for communication ($r=0.49$). Principal component analysis suggests common factors across all evaluations are the medical expert competency and synthesis/communication of patient information.

Conclusions/Take-home message:

FM-CEX has good potential as a formative tool but faculty development on feedback is required. FM-CEX and clinical evaluations measure similar constructs whereas FM-OSCE taps others. FM-OSCE provides standardized unique information and is an excellent summative evaluation tool.

ARTS AND SURGERY: DOES DRAWING SKILL CORRELATE WITH SURGICAL SKILL?

Author(s)

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Introduction

There has been an increasing interest in developing selection criteria focussing on surgical competence. However, the method/instrument which is valid, reliable and practical has yet to be agreed.

Methods

201 pre-clerkship medical students voluntarily participated in the study. They performed three tasks: (1) drawing a picture from a provided original, (2) drawing a picture from their imagination, and (3) cutting paper in a laparoscopic setting. Participants were classified into the high group (73rd percentile or above) and the low group (27th percentile or below) using scores obtained from the third task. Various parameters from the first and the second tasks were compared between the high and the low groups. Correlation between these parameters was also studied.

Results

The scores obtained from the picture-copying task of the high group were statistically significantly different from the scores of the low group ($p = .008$). However, there was no statistically significant difference of the scores obtained from the free drawing task between these two groups ($p = .392$). The correlations between the 1st and the 2nd, the 1st and the 3rd, and the 2nd and the 3rd tasks were .236 ($p = .001$), .219 ($p = .002$) and .078 ($p = .275$), respectively.

Conclusions

Laparoscopic skill correlates more with the picture-copying task than the free-drawing task. This suggests that the picture-copying task requires mainly visual-spatial perception while the free-drawing task might include some other artistic attributes which are not surgically-relevant.

Take-home message

Drawing might be used as surgical skill screening tool in the future.

DO SUBJECTIVE COMMENTS BY EXAMINERS MATCH THE NUMERICAL SCORES IN THE LONG CASE COMPONENT OF THE FINAL PROFESSIONAL MBBS EXAMINATION

Author(s)

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Presenter

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Introduction

In the final clinical examination for undergraduate students, real patients are used in Malaysia to assess the clinical competence of the students. The numerical scores based on usual methodology were awarded to decide the status of the students. Subjective comments by examiners were encouraged to assess concordance. The aim of the study is to find out if the subjective comments match the numerical scores for the students undertaking the examination.

Methods

This is a cross sectional study for a batch of 106 students. The mark sheet was framed with standard criteria for a long case and examiners were briefed to give marks according to the criteria, they were allowed to give free comments. These were collected and thematic analysis was conducted. The categories used were "do not tally", "tally" and "no comment".

Results

In medicine and surgery, 0% – 4.5% of the responses did not tally whereas 38%-50% tallied. In the "no comment" category, all students passed excepting one in medicine. In paediatrics and psychiatry, 35%-50% of the responses did not tally, while 25%-50% were with no comments but clear passes. Obstetrics and Gynaecology (O&G) and Orthopaedics had 18%-30% responses which did not tally, 18%-40% responses which showed concordance. The significance observation was 0% of "do not tally" in surgery and 0% "tally" in psychiatry.

Conclusions

Disparity of subjective comment was lowest in medicine and surgery whereas it was highest in Psychiatry. Paediatrics, O&G and Orthopaedics has considerable concordance.

Take-home message

A global rating system needs to be introduced to ensure objectivity in long-case examinations.

VALIDATION OF 5-ITEM DOCTOR-PATIENT COMMUNICATION COMPETENCY INSTRUMENT FOR MEDICAL CLERKS (DPCC-MC)

Author(s)

Jean-Sébastien Renaud
Luc Côté

Presenter

Jean-Sébastien Renaud

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Introduction

The DPCC-MC instrument was developed for the summative assessment of doctor-patient communication competency at the end of clerkship rotations. The purpose of this study was to validate the instrument.

Methods

Sample: 634 medical clerks assessed between 2011 and 2013, yielding 4679 complete and error-free assessments. Instruments: DPCC-MC instrument (4-point rating scale: 4=Superior, 3=Expected, 2=Borderline, 1=Insufficient), and Multiple Mini Interviews (MMI, an admission tool that assesses non cognitive skills. Analysis: descriptive statistics, Cronbach's alpha, classical item analysis, confirmatory factor analysis, and correlation with MMI scores.

Results

DPCC-MC' scores ranged from 2.60 to 4.00 (Q1=3.00, Mdn=3.20, Q3=3.40), with a mean of 3.24 (SD=.30), a mode of 3.00, a skewness of 1.28, and a kurtosis of .70. Cronbach's alpha was .78. Standard error of measurement was .14. Item means ranged from 3.15 to 3.48 out of 4. Inter-item correlations ranged from .30 to .55. Item discrimination indices ranged from .45 to .63, corresponding to an excellent level of discrimination (< .40) according to Ebel and Frisbie's (1991) classification. Confirmatory factor analysis showed that a unidimensional model provided a good fit to the data (GFI = .998, AGFI = .995, RMSR = .0301, SRMSR = .0301), explaining between 53% and 82% of each item's variance. Correlation with MMI scores was .22 ($p = .001$).

Conclusions

The DPCC-MC is a short unidimensional instrument that provides a reliable and valid assessment of the doctor-patient communication competency of medical clerks.

Take-home message

We propose a short, 5-item scale, to assess the doctor-patient communication skills of medical clerks.

Session 5T

MEDICAL EDUCATION VIDEOS: TRANSLATING STRATEGIC HEALTH INITIATIVES INTO CLINICAL PRACTICE ACROSS UNIVERSITY AND WORKPLACE EDUCATIONAL SETTINGS.

Author(s): Waldron H¹, Waldron N^{1,2}

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Presenter: Dr Heidi Waldron

Introduction:

Medical education is delivered in both university and clinical settings. Video resources addressing strategic governmental priorities can support both medical student and junior doctor learning by targeting graduate medical outcomes.

Purpose:

Translation of concept into clinical best-practice is likely to be most effective when introduced early and developed across the continuum as medical students transition to role of junior doctors. National standards defining optimal patient care are formalised in consensus statements and accreditation criteria issued by 'Australian Commission on Safety and Quality in Health Care' and 'Australian Medical Council'. Presenting this information using blended-learning videos makes it accessible and engaging.

Issues:

University-based simulation creates safe-learning environments for development of clinical competency while minimising patient risk. However, authenticity and immediacy inherent in clinical settings provide significant drivers motivating learning. It enables learners to envisage themselves as the professionals they aspire to become. Post-graduate education is hampered by variable quality of available resources and teaching delivery.

Results:

Medical educators and clinicians from School of Medicine at Notre Dame Fremantle collaborated to create videos that span agendas meeting learning requirements balanced with health system needs. Videos address communication themes eliciting patient-care preferences and responding to clinical deterioration.

Discussion and Conclusion:

Benefits of collaboration include clinical contextualisation of issues for the university setting and incorporation of educational principles into the post-graduate setting. The long-term goal is sustainable resource integration into curriculum to achieve outcomes of improved patient care.

LED TV/ LCD COMPARED TO WHITEBOARD AS LEARNING MEDIA IN PBL TUTORIAL DISCUSSION IN MEDICAL EDUCATION: WHICH ONE OF THEM IS MORE EFFECTIVE?

Author(s):

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Department of Medical Education, Medical Faculty Universities Gadjah Mada

Presenter: Mr Prattama Santoso Utomo

Introduction/background:

Learning media plays vital role in facilitating learning for medical students, especially in problem-based learning (PBL) curriculum. LED TV, LCD, and whiteboard both are learning medias and each of them having their own benefits. LED TV and LCD are considered as digital technology that more sophisticated while whiteboard is easier to use and simple. Students' in Medical Faculty Universitas Gadjah Mada are supposed to do tutorials 2 meetings every week and always need to use learning medias to facilitate their discussions. It's important to learn about the effectivity of those both LED TV and LCD compared to whiteboard as learning media in tutorial.

Purpose/objectives:

This study conducted to explore the benefits and effectivity of LED TV/LCD and whiteboard as learning media in PBL tutorial discussion based on students' perception.

Method:

This is a cross-sectional study with both qualitative and quantitative approach (mixed method). Samples 200 medical students which 3rd and 4th year students in Medical Faculty Universitas Gadjah Mada which chosen based on assumption that students in higher year may have more experience doing tutorial with both LED TV/ LCD and whiteboard. Questionnaire is used to collect data which consists of closed-ended questions with likert-scale (quantitative data) and open-ended questions with narrative answer (qualitative data).

Results:

It is expected that LED TV and LCD may show more benefits and more effective to support tutorial discussions. This study is still commencing when this abstract was written. We expect that this study will be finished on October 2015.

FLIPPING ASSESSMENT: TOWARDS THE USE OF AN E-PORTFOLIO ACROSS A DIETETICS DEGREE FOR DEVELOPMENT OF REFLECTIVE PRACTICE AND ASSESSMENT

Author(s): Stuart-Smith W¹, Henderson M², Lockwood J², Weeks R,² Nicholson M¹

University of Sydney School of Molecular Bioscience¹, Institute for Teaching and Learning²

Presenter Wendy Stuart-Smith

In dietetics, students are encouraged to develop reflective practice skills to underpin life-long learning, but traditionally, whilst involved in discussions around competency development, most assessment came from the supervisor, active engagement of students in the process being less than optimal.

In 2012, a pilot group of students utilised student-led assessment, utilising the PebblePad e-portfolio platform for 10 weeks of their clinical placement. During 2013, this was rolled out across all sites and practice domains. During 2015, the e-portfolio system was utilised by 63 students, each having placement at 4+ sites (70+ sites, 100+ external supervisors). In 2016 the project will be extended, incorporating elements of the whole degree relating to competency development, using key assessment tasks.

The program was evaluated utilising surveys and focus groups, including students, new-grads, staff and supervisors. Final results are not available at this time but anecdotally supervisors have reported decreased supervisor workload, increased student engagement and discussion, improved reflective practice and identification of areas / strategies for improvement. It provides real-time dialog between all stakeholders, and competency development can be assessed over time, rather than only the end of a placement block, allowing more focused goal setting.

In conclusion, utilising a student-led approach to assessment may lead to deeper learning, and better communication between student and supervisor. It may assist students to develop reflective practice and critical thinking skills and promote self-driven practice development.

Take home message: Student-led assessment during competency development may lead to more self-aware practitioners better able to reflect and grow.

SUITABILITY OF ELEARNING MODULES TO DELIVER CONTINUING CLINICAL EDUCATION TO RURAL AND REMOTE ALLIED HEALTH PROFESSIONALS.

Author(s): Sims S¹, Blayden C², Hughes S³, Nicol J¹

NSW Children's Healthcare Network Southern Region¹, NSW Children's Healthcare Network Western Region², NSW Children's Healthcare Network Northern Region³

Presenter: Ms Susan Sims

Introduction/background:

There is substantial evidence that identifies both lack of access to professional development and professional isolation as challenges faced by rural practitioners, contributing to ongoing issues of adequate service provision and retention of staff (World Health Organisation 2010). ELearning is part of the blended learning approach used by the Children's Healthcare Network Allied Health Educators to allow equity of access to educational material for all clinicians across the state.

Purpose/objectives:

Allied health practitioners from across NSW identified congenital talipes equino-varus, plagiocephaly and child-centred interactions as topics that would benefit from the further development of already existing resources into e-Learning modules.

The Children's Healthcare Network Allied Health Educators facilitated the design and production of three interactive eLearning modules, accessible by all NSW Health employees through the Health Education & Training Institute learning management system.

Issues/questions for exploration or ideas for discussion:

The aim of the project was to determine whether eLearning is an effective tool for the delivery of continuing clinical education to allied health professionals working in rural and remote areas.

Results:

The number and location of participants registering for, and completing the eLearning modules was recorded and a questionnaire was used to collect qualitative data regarding the suitability of the clinical content as an educational resource and its applicability to clinical practice.

Discussion:

Initial responses indicate that the three eLearning modules developed provide accessible evidence based continuing clinical education that impacted positively on participant's clinical practice.

CAUGHT ON FILM: PILOT STUDY ASSESSING A FORMATIVE VIDEOED CLINICAL SKILLS AND FEEDBACK PROGRAM.

Presenter: Dr Louise Prentice

Author(s): Lo A, Prentice L, Clifford C

School of Medicine, University of Tasmania

Introduction/background:

Students in their third year of medical training at the University of Tasmania face the challenge of transitioning basic history taking and examination abilities in to more sophisticated clinical skills that are assessed in an OSCE format. The use of filmed formative OSCEs with immediate student self-assessment and lecturer feedback has the potential to enhance performance based-learning, as well as start the process of developing critical self-reflection.

Purpose/objectives:

To evaluate a formative program of videoed clinical skills, with structured self-assessment, combined with lecturer assessment and feedback.

Issues/questions for exploration or ideas for discussion:

- Consistencies and inconsistencies in student self-assessment verses lecturer assessment
- Comparisons of formative history taking and examination skills performance to summative OSCE performance
- Using filmed videoed clinical skills to identify the struggling student

Results:

Initial results suggest that “anxious students” tend to under rate their performance compared to “struggling students” who over rate their performance. A small number of students were identified who would benefit from a formal remediation program. Direct comparisons of formative results to summative results indicated an improvement in the number of students achieving the required standard.

Discussion:

Future directions for this program include introducing a student self-assessment after viewing of their videoed performance and further refinement and assessment of a formal remediation program for “struggling students”.

Session 5U

NUTRITION COMPETENCIES IN MEDICAL EDUCATION : AN INTERNATIONAL INITIATIVE

Authors: Caryl Nowson¹, Sumantra Ray², Lauren Ball³, Pauline Douglas⁴, Robyn Perlstein¹, Jennifer Crowley⁵

¹School of Exercise and Nutrition, Deakin University, Australia; ²Medical Research Council (Human Nutrition Research), Cambridge, United Kingdom; ³Menzies Health Institute Queensland, Griffith University, Australia; ⁴Biomedical Sciences, University of Ulster, Ireland; ⁵Faculty of Medical and Health Sciences, The University of Auckland, New Zealand.

Presenters: Prof Caryl Nowson, Sumantra Ray

Introduction:

A key priority for addressing nutrition-related health issues is supporting medical and health care professionals to promote the importance of healthy eating to patients. However, medical and healthcare students across the world report inadequate nutrition education and skills to include nutrition in usual practice.

Methods:

In Australia, four universities have partnered to develop a "Web Based Nutrition Implementation Toolkit", which includes 9 nutrition competencies for medical graduates, teaching exemplars, a curriculum mapping tool and nutrition resources. Concurrently, in the United Kingdom, the "Need for Nutrition Education/Innovation Programme"(NNEdPro) at The University of Cambridge has been strengthening the nutrition education and competence of medical and healthcare professionals.

Results:

A collaborative group has just been formed: The Australia and New Zealand NNEdPro Network.

Conclusions:

The Network aims to strengthen the nutrition education and competence of healthcare professionals in Australia and New Zealand through innovation in research, resource development and learning opportunities. The partnerships facilitated will assist in the development of initiatives to embed nutrition into medical education, allied health and nursing education in Australia and New Zealand.

DEVELOPING INTERPROFESSIONAL PRACTICE THROUGH STRUCTURED SESSIONS WITH VOLUNTEER RESIDENTS IN AGED CARE FACILITIES.

Author(s): Symons V¹, Chan P², Ellam F³, O'Shea M⁴, Randall C⁵, Woodbridge S⁵, Shaw J⁶, Townsend J³, Parker-Tomlin M⁷, Reher V⁸, Rogers G^{1,2}, Morrissey S^{2,7}, Khoo T¹

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Presenter: Ms Virginia Coull Symons

Introduction/background:

As multidisciplinary teams largely constitute the healthcare workforce, health students as future team members need to collaborate competently, in order to better prepare them for the future workforce. Interprofessional skills are fundamental to safe, patient - centred care. Students from the health disciplines at Griffith University interviewed volunteer aged residents in a unique mini placement experience.

Purpose/objectives:

This paper summarises the interprofessional learning experience and reflections of students from the health disciplines at Griffith University who participated in structured IPL activities in aged care facilities during 2015.

Issues/questions for exploration or ideas for discussion:

Can aged care suitably offer collaborative and interprofessional learning opportunities?

Does structuring interprofessional student teams so that they can practice interviewing and planning care for aged residents enhance their collaborative skills?

Results:

120 students participated in 3-hour interprofessional sessions whereby students interviewed volunteers from aged care facilities, and then collaboratively designed intervention plans. Students and aged care staff reflected on their experiences and provided outcome data for the project. This paper presents preliminary data from this unique pilot project.

Discussion:

This project found that offering students the opportunity to participate in interprofessional practice with volunteer aged residents was highly successful and this type of experience should become part of the preparation for all health students.

HOW WILL WE KNOW THAT CBME 'WORKS'? A FRAMEWORK FOR MEASURING FIDELITY OF IMPLEMENTATION

Author: Van Melle E

Royal College of Physicians and Surgeons of Canada, Office of Specialty Education, Canada.

Presenter: Elaine Van Melle

Introduction:

Competency-based medical education (CBME) is a complex service intervention in that there are several interacting components. Consequently, evaluating the impact of CBME programs can be challenging. A 'Fidelity of Implementation' (FOI) model identifies the critical components of CBME. FOI therefore is a key tool in understanding if CBME has been implemented as intended and under what conditions CBME is making a significant contribution. The purpose of this presentation is to describe the development of a FOI model for CBME.

Methods:

Creating a FOI model is a challenging task, particularly in the case of CBME where there is an absence of empirical data identifying which components may be critical. Consequently, development of a model began with a review of the literature and written materials. This information was organized into critical components. These components were then further divided into essential features.

Results:

The resulting FOI model features five critical components; the determination of competencies, the description of progression, appropriate learning experiences, teaching practices and a system of assessment. These components are further described according to the key features.

Conclusions:

This FOI model can give insight into the 'black box' of CBME and can serve as a tool to assist in understanding program outcomes. Developing a FOI tool however is an iterative process. Future work will focus on convergent validation of the tool as it is applied across programs.

Take-home message:

Fidelity of implementation provides insight into program implementation and therefore is an important tool in understanding why CBME succeeds or fails.

LOWEST QUARTILE CANDIDATES ADOPT TEST-WISE STRATEGIES IN ANSWERING SCRIPT CONCORDANCE TEST QUESTIONS.

Author(s): Wan SH¹, Duggan Paul²

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Presenter: Wan SH

Introduction:

The Script Concordance Test (SCT) is a modality for assessing clinical reasoning. Candidates are presented with a clinical scenario and assessed the effect an additional piece of information has on the probability of the suggested diagnosis or the usefulness of a proposed investigation/management. To score these questions, the candidate's decision is compared to that of a reference panel of experts. A test-wise student might choose to avoid the extreme anchors (-2 or +2) hoping to receive a better score. Our hypothesis was that lower quartile students were more likely to use a test-wise strategy in answering a SCT.

Methods:

In 2013, a total of 401 clinical year students from 3 cohorts in the 2 schools sat the SCT examination. The proportion of students who had chosen to avoid extreme options were analysed according to the quartiles of their total SCT scores.

Results:

26.4% of the lowest quartile compared to 8.1% of the top quartile students had chosen to avoid the extreme options (more than 15% difference in the distribution of selections from the median response). The differences were statistically significant and were consistent among the 3 cohorts in the 2 schools.

Conclusions:

Students in the lowest quartile display a test-wise approach in answering SCT questions.

Take-home message:

Particular care should be taken to develop SCTs choosing items whose modal response is evenly spread across the 5 anchors available.

GOOD TO GO: DEVELOPING A SET OF COMPETENCIES FOR SPECIALIST GLOBAL HEALTH PRACTICE

Author(s): Aldrich R^{1,6}, Hill P^{2,6}, Morgan C^{3,7}, Zwi A^{4,6}, **Madden L**^{5,6}

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Presenter: Prof Lynne Madden

Introduction/background:

Many health professionals think about contributing to the global health workforce, often while pursuing or on completion of specialist qualifications. However, there is increasing recognition that global health effectiveness requires specific skills; professional approaches applicable in a high-income setting do not simply translate to low or middle-income settings. The Australasian Faculty of Public Health Medicine (AFPHM) of the Royal Australasian College of Physicians recognised a gap in training for people already specialists in their field and developed a set of competencies for global health practice to guide both self-directed learning and content of short courses.

Purpose/objectives:

Developed through a series of workshops attended by experienced global public health practitioners, educators, doctors-in-training and researchers, the global health competencies comprise 73 learning objectives organised into three domains. These domains cover global health context and knowledge, extending population health skills to global health practice, and acquiring skills through supervised experience of global health practice.

Issues/questions for exploration or ideas for discussion:

The competency document has potential to guide preparation for global health practice for doctors working in complex settings. The AFPHM is seeking to develop a short course for training and a capacity to certify or accredit candidates who demonstrate competence in global health practice.

Discussion:

This paper describes the method for development of the global health competencies, and will invite discussion around the need for such a document and its capacity to frame competence in global health practice.

Session 5V

IS FORMATIVE FEEDBACK USING MULTI-SOURCE FEEDBACK ACCEPTABLE TO MEDICAL STUDENTS?

Author(s): Jones, A., Montgomery, J., Vincent, T., Wright, J., Haq, I.

Brighton and Sussex Medical School, Division of Medical Education, UK.

Presenter: Jones, A., Montgomery, J.

Introduction:

Multi-source feedback (MSF) has emerged as the dominant method in the assessment of interpersonal skills and professionalism in doctors. Team Assessment of Behaviour (TAB) is one of the tools for obtaining such feedback and is available in the NHS ePortfolio, used by postgraduate trainees and some specialty colleges. Brighton and Sussex Medical School (BSMS) is collaborating with twelve UK medical schools in using this e-portfolio in the undergraduate curriculum with the aim of providing students with an authentic electronic portfolio.

Methods:

Year 4 students at BSMS were invited to undertake the TAB assessment within the e-portfolio. Structured feedback is requested across the following four domains: Maintaining trust / professional relationship with patients; verbal communication skills; team-working / working with colleagues; and accessibility. Prior to inviting eight of their peers to assess them, students complete a self-assessment of behaviour (Self-TAB) to reflect on their own performance across these domains. Focus groups will be conducted to explore the impact of this assessment in greater detail.

Results:

The majority of Year 4 students (93%) engaged with this formative assessment. Those that did not had external factors thought to have affected their participation. The large majority of feedback was positive with raters indicating 'no concern' throughout the domains. A small number of raters indicated "some concern", with a significant degree of inter-rater agreement with peers or with the student themselves. Focus group data will also be reported.

Conclusions:

Conclusions from the data will be presented.

Take-home message:

Undertaking peer MSF through an e-portfolio appears to be acceptable to medical students.

DEVELOPING A UNIVERSAL CURRICULUM FOR RURAL GP SUPERVISORS

Author(s): Kangru K 1,2, Stewart R 1,2, Higgins N 1, Coombes J 1

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Presenter: Dr Konrad Kangru

Background:

Historically, delivery of General Practice training in rural areas of Australia remained the domain of one College only, with Supervisors who have continued to teach in many of the same methods they were themselves exposed to during training. This has led to many GP Supervisors feeling poorly prepared to deliver modern teaching appropriate to the Curricula of both Colleges, and a disengagement of Hospital or Remote Supervisors from the mainstream Supervisor Education program.

Aim:

To develop a hybrid Supervisor Curriculum, ensuring coverage of all domains for each College.

Methods:

Review was undertaken of the Primary Curriculum statements of both ACRRM and RACGP pathways. The individual training outcomes included in the various domains were collated, and assessed against the training needs and activities of Tropical Medical Training. From these, a set of unique TMT Supervisor Fields were developed, incorporating all of the listed Training Outcomes in a format which can be easily used to assess the relevance of Supervisor teaching activities to both College pathways.

Results:

Six TMT Supervisor Fields were developed;

- a) Applied Professional Knowledge
- b) Clinical Reasoning
- c) Culturally Appropriate Population and Community Health
- d) Professionalism and Ethics
- e) Settings of Generalist Practice
- f) Communication and Professional Relationships

These Fields were then applied to the 2015 Supervisor Education program of our RTP, to determine which domains were being represented strongly, and which required further attention.

Discussion:

This Supervisor Curriculum framework provides a concise overview of the teaching requirements of both Colleges, allowing efficiency of program delivery without duplication of sessions. Utilisation of this framework will ensure consistent delivery of Supervisor Education activities across all training posts of our very geographically diverse area.

STUDENT PERCEPTIONS OF PRACTICAL PRESCRIBING TEACHING AND LEARNING IN UK MEDICAL SCHOOLS

Author(s): Kennedy M 1, Haq I 1, Williams S 2, Okorie M 1

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Presenter: Miss Maria Kennedy

Introduction:

Aspects of the teaching and learning of practical prescribing in the UK do not appear to be fit for purpose, with medical graduates not feeling adequately prepared to prescribe. Knowledge of the student perceived value of various approaches might facilitate appropriate curriculum design.

Aim:

To determine the student perceptions of approaches to the teaching and learning of practical prescribing in UK medical schools

Methods:

An online questionnaire, available for completion from November 2014 – May 2015, was sent to each UK medical school to distribute to its' medical undergraduates in years three, four and five. Descriptive statistics were completed.

Results:

1023 medical undergraduates responded. 94% of final year students reported that they receive practical prescribing teaching (n=396, CI=92-96%), in comparison to 87% of fourth year students (n=328, CI=83-91%), and 74% of third year students (n=166, CI=67-81%).

71% receiving pre-prescribing seminars (informally practicing prescribing on actual drug charts). Simulation was not widely used (25%). The 3 methods associated with the highest perceived effectiveness were those, which addressed the gap between theory and practice (84% pre-prescribing validated, 79% simulation and 73% pre-prescribing seminars).

Self-directed learning, was reported as being the most widely used method (79% of students), however it was deemed to be an ineffective method by almost half of the students (42%).

Conclusion:

There seems to be a mismatch of teaching and learning methods students perceive to be beneficial versus the actual content of the curriculum. There needs to be a coherent drive towards a medical school curriculum that is fit for purpose in the teaching and learning of practical prescribing.

Take-home message:

Pre-prescribing is reportedly widely used in UK medical schools and is associated with high levels of perceived effectiveness.

Students appear to value methods aimed at bridging the gap between knowledge and its application in practice.

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Session 5W

CREATING EFFECTIVE MULTIMEDIA LEARNING RESOURCES

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Dept Pharmacology, Monash University, Clayton, VICTORIA.

Presenter: Miss Chau Khuong

The past few decades have seen an increase in the use of multimedia learning in the teaching of medical and biomedical sciences, where these resources provide an invaluable mean to demonstrate complex biological processes and simulate clinical environments. However, many areas of medical and biomedical sciences, such as pharmacology, currently lack accessible high-quality multimedia resources. We aimed to develop multimedia resources for the teaching of pharmacology, and to evaluate the effectiveness of these resources as self-directed learning materials. Multimedia activities such as diagrams, animations and simulations illustrating various pharmacology learning concepts were created with reference to relevant instructional design frameworks, such as the cognitive load theory (Young *et al.*, 2014), the cognitive theory of multimedia learning (Maye, 2010), and Gestalt's theory of visual screen design (Graham *et al.*, 2008). The multimedia activities were subsequently organized into comprehensive modules, which can be made accessible to students online. We conducted a preliminary evaluation to compare the effects between the multimedia modules and traditional lectures on learning outcomes of Monash University medical students. The evaluation results suggest that these resources are effective in replacing the lecture delivery of theoretical concepts. The use of multimedia resources in this context can improve the quality of teaching and learning, and can be adopted by other disciplines to facilitate a move to more flexible and engaging tertiary courses.

EDUCATION TECHNOLOGY FOR PATIENT BLOOD MANAGEMENT: A REVIEW OF IMPLEMENTATION OF TRANSFUSION ONLINE LEARNING

Author(s): Flores C, Quedsted B, Saxon B

Australian Red Cross Blood Service

Presenter: Dr Cindy Flores

Introduction/background:

Patient blood management (PBM) is now established practice in Australia. The Blood Service implemented a learning management system (LMS) in 2012 to host its transfusion and PBM education curriculum. Transfusion Online Learning (learn.transfusion.com.au) manages and delivers transfusion and PBM education content to for the transfusion community.

Purpose/objectives:

To review learner feedback to inform quality improvements for the LMS, which enhance learners' experience to access transfusion & PBM education.

Issues/questions for exploration or ideas for discussion:

- Investment of a learning management system in continuing professional development

Results:

An LMS continuous improvement project started with 134 active users completing a survey. Learners outlined preferences and suggestions on access frequency and navigation to webinars, eLearning and certificates. Recording of webinars and improving navigation were recurring comments. Learners commented the LMS was a great resource relevant to transfusion and PBM. In May 2015, the LMS was improved with faster registration, improved navigation to topics, and recording of learning activities.

Discussion:

Investments in improving the LMS made accessing the transfusion & PBM relevant curriculum easier. If learners can't attend in real time they can access recordings and eLearning self-paced. Learners can track sessions they've commenced or completed, and have direct access to certificates for continued professional development. We now have 5,340 active LMS learners (June 2015) and their ongoing feedback continues to inform quality improvements to our systems.

TECHNOLOGY ENHANCED LEARNING: AN EXERCISE IN DEVICE MEDIATED EDUCATIONAL CHANGE

Author(s): Moore M, Ash J

¹ Health Professional Education, School of Medicine, Flinders University, ² Health Professional Education, School of Medicine, Flinders University

Presenter: Dr Maxine Moore

Introduction/background:

To assist student self-regulated learning towards course outcomes, the Flinders medical course sought a web-based, updatable curriculum map linked to activity materials. Flinders Centre for Educational ICT (CEdICT) sponsored the project as a trial. This collaboration between academics and education ICT designers provides an example of device-mediated change (Nespor 2011).

A prototype Online Curriculum Framework, (OCF) populated with course and topic outcomes demonstrated the alignments and gaps. Curriculum updating required online tools with inbuilt workflow and permissions. Three input types defined were learning outcomes, assessment requirements and learning activities. Conceptualising how such inputs would align with existing university processes and routines lead to the development of an online tool for submission of topic assessment statements.

Purpose/objectives:

To examine the affordances created by the development of the OCF as an example of device-mediated change.

Issues/questions for exploration or ideas for discussion:

Complex educational technology projects can create affordances that lead to change.

Results:

Development of the OCF with CEdICT unexpectedly resulted in an online 'SAMs' tool now available to courses across the university. This tool populates the OCF with aligned assessment details ensuring consistency of data across information systems.

Challenges for implementation of this tool include complex medical course governance, newly established topic coordinator role and a low level of familiarity with online systems. Successful implementation achieved project aims but also clarified course governance needs, reinforced the topic coordinator role and provided faculty development on assessment.

Discussion:

Educational technology represented a device for change agency. Beyond intended enhanced student learning the OCF has served course accreditation and educational improvement purposes.

CHANGING THE SCOTTISH LANDSCAPE FOR REMOTE AND RURAL HEALTHCARE STAFF USING TECHNOLOGY ENABLED LEARNING.

Author: Nicoll P

NhS Education for Scotland

Presenter: Mrs Pam Nicoll

Introduction/background:

Digital technology offers the opportunity to transform the way public services are delivered across Scotland, both in the cost of their delivery and to improve the experience of those using services. The strategic priority to achieve at scale change now is workforce education, confidence and capability in exploiting technology and information to improve and transform services.

Summary of Work:

NHS Education for Scotland (NES) completed a baseline survey of 13,000 health and social care staff in 2014 to determine current access to and use of digital technology in workplace and at home.

Purpose/objectives:

The results provide a baseline against which progress can be measured and inform development of targeted workforce core capabilities frameworks and training programmes.

Results:

The results confirm a clear set of learning domains to guide development of technology enabled learning (TEL) programmes. Staff currently make greater use of technology outside work than within. Almost 80% of the survey group agree technology could help with training and learning and capability at work. Only half of the group currently use technology to support care delivery, with TEL options limited and basic. Over 50% of the group indicated a need for more education to use technology.

Issues/questions for exploration or ideas for discussion:

How do we achieve an effective change at scale in the use of technology across the workforce to increase access to learning and improve services? Is it helpful to share and compare examples across international public and commercial sector landscapes?

OPENNESS TO ONLINE LEARNING: EXPLORING THE EFFECTS OF COURSE DESIGN AND STUDENT MOTIVATION

Author(s): Osborne E, Kenwright D, Dai A, Gladman T, Gallagher P

University of Otago, Wellington

Presenter: Ms Emma Osborne

Introduction/background:

Online learning platforms are an increasingly popular form of educational delivery. However, little is known about factors that influence students' receptiveness to these approaches. The kuraCloud™ platform was incorporated into three undergraduate medical courses at Otago University. It supplemented lectures in one course and was used to deliver lecture snippets and activities in two other papers which used a flipped classroom design.

Purpose/objectives:

This presentation reports on students' attitudes towards kuraCloud™ in flipped and traditional classrooms.

Issues/questions for exploration or ideas for discussion:

What aspects of course design and the overall structure of the medical curriculum influence students' openness to participating in activity-based eLearning?

Results:

Student evaluations and focus groups indicate a high degree of openness to using kuraCloud™ in two of the three courses: as a supplement to lectures in a large pathology course, and in a flipped-classroom, small-group course which ran parallel to obstetrics and gynaecology clinical placements. Students in the third course (pathology with a flipped classroom design) indicated a strong dislike of the way kuraCloud™ was implemented.

Course evaluations suggest that where students' primary focus was examinations rather than the clinical application of their knowledge, students preferred kuraCloud™ as a supplementary revision tool. However, students were more receptive to using kuraCloud™ for higher-level thinking tasks when it was used alongside their clinical placements.

Discussion:

Whilst eLearning platforms may be a promising means of engaging students in constructing knowledge in medical education, students' perception of the role of eLearning may be shaped by motivational drivers such as preparing for examinations or learning for clinical work.

SUPPORTING THE TRANSITION FROM STUDENT TO QUALIFIED PROFESSIONAL

Author/s: Holmes D¹, Poot A²

PebblePad United Kingdom¹, PebblePad, Australia²,

Presenter: Ms Alison Poot

Introduction/background:

This presentation uses a case study from health education and healthcare in the UK to illustrate how an eportfolio platform can be used to support the transition from student to qualified professional. Students from the University of Northampton use PebblePad to record and reflect on placement experiences, with the aim that they will see the value of these reflective practices and continue them through into their working lives. St Andrew's Healthcare also use PebblePad to support the transition of new nurses providing true continuity for those students that they employ from the University of Northampton.

Purpose/objectives:

Continuing Professional Development (CPD) is central to healthcare professions; introducing the concept of lifelong and life wide learning in nursing programmes is thought to encourage the practice. In reality, when students qualify they are often more occupied with the responsibilities of being part of the workforce.

Issues/questions for exploration or ideas for discussion:

How do we help our student nurses to appreciate the value of CPD?

How do we assist individuals along the journey from student to professional?

How can we help health professionals manage busy lives and meet employer and professional requirements?

Results:

As well as encouraging ongoing recording and reflection, the structure provided by PebblePad helps new nurses articulate their practice learning experiences for multiple purposes: career progression; competency; evidencing development for professional body registration; and for appraisal.

Discussion:

In this example the provision of a single platform at both the University of Northampton and St Andrew's Healthcare seamlessly supports students in the journey from student to qualified professional.

Session 5X

AUGMENTING STUDENTS' LEARNING FOR EMPLOYABILITY THROUGH POST-PRACTICUM EDUCATIONAL PROCESSES

Author(s): Sweet L¹, Billett S²

¹ Flinders University, ² Griffith University

Presenter: Prof Linda Sweet

Introduction/ Background:

The provision of and engagement in professional experience placement or 'clinical placement' are commonplace in the health professions but occurs with considerable institutional and personal cost. The primary intent of these placements is to enable the student to develop their capacity for occupational practice and prepare them for graduate employment. However, healthcare workplaces have diverse requirements for occupational performance. It is the role of the educational institutions and educators to secure the best educational return on its investment in students' practicums.

In the field of health professions education, much is known about enhancing learning before and during clinical placements, such as requisite preparatory knowledge, simulated learning for procedural skills, providing feedback, and formative and summative assessments. However, it is common that after the completion of a clinical placement the pedagogical efforts are directed at the next aspect of the curriculum, and valuable learning opportunities may be overlooked. Clinical placements provide rich experiences as a basis for students to critically appraise, evaluate and compare with those of others. Engaging with these experiences through post-practicum interventions has the potential to enhance student development into roles as active, interdependent critical learners.

Purpose/Objectives:

This OLT funded project aims to maximise learning outcomes for midwifery students' clinical experiences. This will be achieved by identifying how post-placement educational interventions can most effectively secure learning outcomes associated with graduate employability.

Issues for exploration/ideas for discussion:

What pedagogical approaches (post-practicum interventions) enhance student learning after clinical placements?
What aspects of graduate employability are best enhanced through post-practicum interventions?

THE ROLE OF ACADEMICS IN STUDENT WELLBEING

Author(s): Hayes M, Ryan B

Presenter: Dr Melanie Hayes and Ms Brenda Ryan

¹ The University of Melbourne, ² The University of Melbourne

Introduction/ Background:

In the scholarship of teaching and learning, common themes that emerge include student's engagement, resilience, professionalism and employability skills. While these have been researched individually, one of the key influences on all of these factors is the issue of student well-being. Students experiencing psychological distress, or who are ill-equipped to cope with stress and its effects are less likely to engage with their studies or clinical experiences, and lack resilience, which may contribute to enrolment attrition. Psychological stress can impact on the professional behaviour of students, with research suggesting that it contributes to a poorer quality of clinical care, as well as decreased empathy.

The pressures of tertiary education and rapid independence create a stressful environment, which students may be unprepared for. It is already known that the prevalence of burnout is high among practicing health professionals. It is imperative that we equip the future generation of health professionals with strategies and approaches to prevent this from happening – but who is responsible for this?

Purpose/Objectives:

In this PeArLs session participants will discuss their observations of student well-being, including how it influences professional behaviour. This session will provide opportunities for participants to share their own observations of student well-being and discuss strategies for improving student wellbeing.

Issues for exploration/ideas for discussion:

What is the role of the academic in student wellbeing? Are we prepared for what this role might entail? How does student wellbeing influence their professional behaviour? How can we foster wellbeing in our students?

Session 5Y

ENHANCE ACTIVE LEARNING WITH QUIZZING AND VIDEO SCREENCAPTURE TOOLS

Author(s): Nga M¹, Charlton A², Kenwright D³

¹ Yong Loo Lin School of Medicine, National University of Singapore, ² The Children's Hospital at Westmead, Australia ³ University of Otago, New Zealand

Presenter(s): Dr Min En Nga, Dr Amanda Charlton, Dr Diane Kenwright

Purpose:

Free online tools can make learning more self-directed, interactive and dynamic. This workshop introduces two such tools, with the opportunity for immediate hands on practice. The first is Screencast-o-matic (a screen recording tool); and the second is Socrative (an audience response and quizzing tool).

These tools are useful in both small and large group teaching, for pre-class student reading (eg. team –based learning or flipped classroom) as well as for real time interaction.

Workshop outcomes:

- I. Screen recording: Participants will learn how to create a simple screen recording video.
- II. Quizzing: Participants will learn how to create quizzes in this App, and will have the chance to try it out.

Proposed Outline: (45 minutes)

Introduction to screen recording tool and Socrative (10 min).

Part I: Screen recording creation (10 min)

- Participants will be shown how to use free online screencast software. Participants will then individually create a short screencast video. Selected participants will be asked to demonstrate their screen recording to the group.

Part II: Socrative (20 min)

- Participants will answer a quiz in Socrative in order to experience the student interface. Thereafter, they will learn simple steps on how to create a quiz and access performance reports.

Debrief and short feedback (5 min)

Who should attend:

Educators keen on exploring simple, free, and effective tools to enhance learning.

Level:

Introductory

ENHANCING CLINICAL EDUCATION THROUGH MOBILE TECHNOLOGY

Presenter: Prof Franziska Trede

Author(s): Trede F, Goodyear P, Macfarlane S, Tayebjee F, Markauskaite L, McEwen C

¹ Charles Sturt University, ² The University of Sydney, ³ Deakin University, ⁴ University of Western Sydney, ⁵ The University of Sydney, ⁶ Charles Sturt University

Purpose:

The purpose of this workshop is to:

- share new insights into ways of enhancing clinical education through the use of mobile technology;
- seek feedback on online resources for students, clinical educators and academics; and
- examine the role of workplace cultures and personal or professional preferences for using mobile technology to prepare students for work.

Workshop intended outcomes:

In this 90 minutes workshop participants will:

- learn about the OLT funded project titled "Enhancing workplace learning through mobile technology";
- hear about the processes used to develop mobile resources for learning in clinical education settings;
- trial a preliminary set of resources; and
- develop a better understanding of the possibilities and challenges of effectively using mobile technology to enrich learning experiences on placement.

Proposed Outline:

Clinical placements and technology-mediated learning are two key foci for university education. However, they often remain separate discourses and practices, though the integration of clinical and technology-mediated learning can provide important opportunities to bridge education and work contexts and build students' digital capacities, online professional identities and technology-mediated work practices. The session will draw on the method and the preliminary findings of an OLT funded project, aimed at helping students, academics and clinical educators make better use of personal, mobile technologies to connect learning and work.

Who should attend:

This workshop is open to all delegates, but more particularly to academics and other professionals/practitioners involved with students on placement or clinical education components.

Level of workshop (introductory/intermediate/advanced)

Intermediate

Session 5Z

WHAT MAKES A GOOD DOCTOR? USING Q SORT TO EXPLORE THE INTERPRETATIONS OF TRAINEES IN DIFFERENT SPECIALTIES

Author(s): Muddiman E¹, Bullock A¹, Webb K¹, Pugsley L², MacDonald J², Allery L²

¹ Cardiff University School of Social Sciences, ² Cardiff University School of Postgraduate Medical and Dental Education

Presenter: Prof Alison Bullock

Introduction:

Changing patient demographics affect the relevance of different medical skills and the 'generalist' is rising in importance¹. These changes have implications for training. Two-year broad-based training (BBT) programmes were recently introduced in England. These provide placements in four specialties (General Practice, Core Medicine, Psychiatry, Paediatrics). BBT aims to develop: practitioners adept at managing complex, patient-focussed care; specialty integration; and conviction in career choice. Commissioned by Health Education England via Academy of Medical Royal Colleges, we are evaluating BBT. The evaluation is longitudinal and mixed-methods, using comparator groups.

Objectives:

Here we report Q-sort data and associated factor analysis from BBT trainees (n=16) which we compare with those on traditional postgraduate specialty training pathways (n=22). We explore whether BBT trainees have a different view on what makes a good doctor compared with those on traditional training pathways.

Ideas for discussion:

Given the changing demands on doctors, is it helpful for medical educators to have a more nuanced understanding of the perspectives of future doctors?

Results:

Distinct groups of participants emerge according to their perspective on 'being a good doctor'. Some variation is linked to participants' specialty. Issues to do with sense of career, altruism, generalism, and leadership all appear to play a role in understanding these different interpretations.

Discussion:

Not all of these differences in perception of what it means to be a good doctor can be explained by specialty choice. How trainees understand 'being a good doctor' can impact on their sense of belongingness and professional identity^{2,3}.

References:

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NO TALL TALES: USING EXPERIENCE-SHARING STORIES TO PROMOTE MEDICAL EDUCATION RESEARCH

Authors: Foo Y, Cook S

AMEI, Duke-NUS Graduate Medical School, Singapore

Presenter: Yang Yann FOO

Introduction:

Medical abstract submissions for poster competitions seem to dominate the conferences organized by SingHealth-Duke NUS Graduate Medical School (DNUS). Of the 45 education research abstracts submitted to 2014's Scientific Congress, 60% were by doctors, and 33% by nurses and allied health professionals (non-doctors). To boost the sharing of educational activities by non-doctors, DNUS introduced a 'Stories' abstract category in addition to the 'Research' category for its Education Conference (Educon) in September 2015. The hypothesis is that by exposing non-doctors to poster sessions, they might become interested in education research.

Methods:

This mixed methods study is conducted in two parts. The quantitative part compares the participation rates among doctors, and non-doctors in the stories and research categories. The qualitative part, to be conducted post-conference, will be a series of interviews looking at whether non-doctors' participation at Educon 2015 paves their way for more education research participation in future.

Results:

61 stories and 49 education research abstracts were received by the Educon 2015 organising committee. Of the 61 stories, 54% were submitted by doctors, and 43% by non-doctors. Of the 49 education research abstracts, 80% were submitted by doctors, and 14% by non-doctors. (The qualitative part of the study will be ready to report at the March meeting.)

Conclusions:

Stories boosted the total number of Educon abstract submissions (including education research) to 110 compared to the 45 received at 2014's Scientific Congress. Almost an equal number of stories were submitted by doctors and non-doctors when compared to the research category where doctors' participation was 80%.

Take-home message:

Stories make it easier for non-doctors to participate in education conferences. Our hope is that with greater exposure they will also become more interested in education research.

DEVELOPING AN INTEGRATED GENERAL PRACTICE EDUCATIONAL FRAMEWORK

Author(s): Rowe M, **Lynne V**

Royal Australian College of General Practitioners

Presenter: Mark Rowe/Vanessa Lynne

Introduction/background:

Australian General Practice is unique in the context of international family medicine. Whilst it replicates that which is embedded in many countries, the overlay of multiple stakeholders, including that of the Commonwealth government directly engaging in training for domestic doctors adds considerable complication for the role of a professional medical college. In 2014 the Royal College of General Practitioners embarked on an ambitious journey to develop an integrative general practitioner career framework that sought to embody all perspectives in this unique environment. Divided into three phases the initial focus has been the production of outcome driven curriculum, competency standards, proposals for pathway entry and assessment methodologies anchored to a competency profile of a newly fellowed general practitioner.

Purpose/objectives:

The achievement of comparable and consistent outcomes between three different pathways to fellowship in the absence of compulsory RACGP assessment of entry and obligatory education has delivered considerable variance in fellowship performance. To improve candidate performance across all pathway cohorts the RACGP has embarked on a restructure of its education and assessment program informed by domestic and international best practice. The RACGP has begun an extensive consultation process on its strategic framework and component elements.

Issues/questions for exploration or ideas for discussion:

Does the framework appropriately balance applicant guidance and responsiveness and pathway consistency and legitimacy?

Are the proposed innovations the most apt in providing improved guidance and support to candidates on the experience pathway route?

Do the strategies outlined represent the most apt assessment methodologies to accurately reflect expected general practice competence?

Results:

Guidance on the development and applicability of the framework.

Discussion:

What are the issues, concerns and improvement opportunities promulgated by the RACGP integrated education framework?

CAN VISITING THE THAI'S FATHER OF MODERN MEDICINE MUSEUM INSPIRE THAI MEDICAL STUDENTS?

Author: Laohawilai S

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Presenter: Sithtichok Laohawilai, MD.

Introduction/background:

To have a professional behaviours, medical students should have a good role model. One of these activities to achieve the goal is assigning medical students to visit the museum of His Royal Highness Prince Mahidol of Songkla as an extracurricular activity. This study aimed to find out whether visiting the museum inspire medical students and to describe what did they learned from this activity.

Purpose/objectives:

To find out whether visiting a role model museum in Thailand inspire medical students and to describe what did they learned from this activity.

Issues/questions for exploration or ideas for discussion:

What are the characteristics of role models?

Results:

There were 14 medical students volunteered to participate the activity (4 were second year students, 10 participants were fifth year students), supervised by 4 medical staffs. All of them perceived that this activity was very worthwhile. They indicated loads of evidence shown in the museum shows HRH mind set, lifestyle, determination to improve Thai health inspire them. HRH is very distinguished in humanized health care, dedication to others, and well-planned of work. They also concluded that his way of life could inspire them not only during in their study life but also in their future career.

Discussion:

Visiting the HRH Prince Mahidol of Songkla can inspire medical students to have a professional behaviours.

FEMALE PELVIC EXAMINATION IN MEDICAL CURRICULA: OPPORTUNITIES AND BARRIERS

Author(s): Bhoopatkar H¹, Wearn A¹, Vnuk A²

¹ University of Auckland, ² Flinders University

Presenter: Dr Harsh Bhoopatkar

Introduction/background:

The teaching and learning of the female pelvic examination as part of the medical curriculum is potentially challenging. One of the challenges is the extent of practice opportunities in the clinical setting for medical students.

An anonymous, self-completed, electronic survey was developed as part of a multi-centre study. Data were collected in the immediate period after graduation from the medical programmes at the Universities of Auckland and Flinders in 2013.

Purpose/objectives:

To quantify (using incremental categories) how many authentic pelvic examinations have been performed by medical students at the point of graduation, and to explore barriers to performing the pelvic examination of patients.

Issues/questions for exploration or ideas for discussion:

- How many pelvic examinations are enough?
- Should the pelvic examination be part of the medical curricula?
- How do we overcome the barriers?

Results:

The combined response rate for the survey was 42.9% (134/312). The median category for the number of pelvic examinations performed in patients who were not in labour was 6-9 and in labour was 2-3. Thirty-three percent of medical students had never performed a pelvic/vaginal examination in labour. Self-reported barriers to performing the pelvic exam include gender of the student, obstruction from other health professionals, lack of confidence, patient factors and time pressure.

Discussion:

For some students, their only experience is simulation (manikin or live teaching associate) or anaesthetised patients. Opportunities to perform pelvic examination can be rare and serendipitous. The content and delivery of the medical curricula needs to address these issues.

TRANSITIONING FROM UNDERGRADUATE TO POSTGRADUATE STUDIES FOR ORAL HEALTH THERAPISTS

Author(s): Gardner S¹, Roberts-Thomson K²

¹ School of Dentistry, The University of Adelaide, ² Australian Research Centre for Population Oral Health, The University of Adelaide

Presenter: Dr Suzanne Gardner

Introduction:

Oral health Therapists (OHTs) are relatively new to the dental workforce and their scope of practice is not fully understood within the dental profession or the wider community. Encouraging a healthy climate of research both inside and outside the university environment may improve the profile of the OHT graduates and lead to a better understanding and utilisation of their skills. The aim of this study is to report the intentions of first year OHTs to undertake postgraduate studies. This has implications to ensure enablers are in place to support their career aspirations.

Methods:

On-line questionnaire was administered to first year Bachelor of Oral Health (BOH) students. Data collected included: socio-demographic characteristics, career preferences and future intentions to undertake postgraduate study. Descriptive statistics summarised the data and Chi square tests were conducted for statistically significant associations between variables.

Results:

269 questionnaires were completed by first year BOH cohorts between 2005 and 2014 (Response rate 85%).

Intending to undertake postgraduate studies was significantly associated with preferring to be in a program other than the BOH, when students decided to study BOH, Age, Sex, studying Chemistry ($p < 0.001$), having a parent with a degree, and studying Physics and Biology ($p < 0.05$).

Discussion:

Students missing out on preferred career options could be supported and offered advice on alternative career pathways. Fostering a climate of research through academic collaboration, mentoring by junior and senior researchers/supervisors, being transparent about funding, scholarships and employment opportunities, will aid undergraduate OHTs and the profession.

STUDY ON PHARMACY STUDENTS' PREPAREDNESS FOR CLINICAL LEARNING: SUPERVISORS AND STUDENTS PERSPECTIVE

Authors: Srinivasan Ramamurthy¹, Benny Effendie², Vishna Devi Nadarajah¹

¹International Medical University, No 126, Jalan Jalil Perkasa 19/155B, Bukit Jalil, 57000 Kuala Lumpur, Malaysia, ²Monash University Malaysia, Jalan Lagoon Selatan, 47500 Bandar Sunway, Selangor Darul Ehsan, Malaysia

Presenter: Srinivasan Ramamurthy

Introduction:

Clinical learning is an important component of health professions education. Literature also reveals that there is mismatch between students and supervisors expectation of the clinical learning experience in terms of knowledge, skills and attitudes. The present study aims to determine the characteristics important for pharmacy students' preparedness for clinical learning from the perspectives of supervisors and students.

Methods:

A descriptive cross sectional study was conducted. Three groups, undergraduate pharmacy students, clinical supervisors and non-clinical supervisors were invited to participate voluntarily in this study. Chipchase *et al.*, questionnaire was modified and validated. The 7 point Likert scale questionnaire consist of 62 items covering student preparedness on demonstrating knowledge and understanding, willingness to learn, professionalism, communication and interaction, personal attributes and interpersonal skills. Kruskal-Wallis test was used to evaluate differences in mean ranks to assess the null hypothesis that the medians are equal across the groups. Mann Whitney post hoc analysis was performed to determine the difference between the groups.

Results:

Post hoc analysis showed that there is a significant difference ($p < 0.05$) in demonstrating knowledge, willingness, professionalism, communication and personal attributes between clinical supervisors and students. In the case of non-clinical supervisors and students, significant difference was only in the professionalism domain. Overall, the mean rank scores for students were lower compared to both clinical and non-clinical supervisors.

Conclusions:

The findings identify student characteristics that are necessary for clinical practice and assessment and will reduce the mismatch between students and clinical supervisors during clinical learning.

Take-home message:

Identifying gaps in supervisor and student perception of characteristics important for clinical learning may enhance the learning outcomes and experience

UNEXPLOITED OPPORTUNITY TO REINFORCE THE PRACTICE OF FAMILY HISTORY TAKING

Author(s): Crowhurst JR¹, Langlands AR², Prentice DA¹, Ravine D^{3,4}

¹Royal Perth Hospital, Western Australia; ²Swan District Hospital, Western Australia; ³PathWest, Queen Elizabeth Medical Centre, ⁴ School of Pathology and Laboratory Medicine, University of Western Australia.

Presenter: Dr David Ravine

Introduction/background:

Family history can aid the diagnostic process, both for individuals and relatives, and is emphasised in undergraduate medical training as a component of the clinical assessment.

Purpose/objectives:

We conducted a prospective observation study of family history accessibility among patients requiring acute medical admission to a large public teaching hospital, as well as the extent to which family history is included in the clinical assessment of these patients.

Issues/questions for exploration or ideas for discussion:

Family history taking can -

- aid the diagnostic process
- offer efficient insights into the extent and quality of available family support
- yield health gains for high-risk relatives, particularly those with unrecognised inherited morbidities that would benefit from therapeutic or preventative interventions
- target personalised disease prevention strategies for common diseases, or “personalised medicine”, with higher potency than whole genome sequencing

Results:

Three quarters (73.8%) of all patients requiring acute admission to hospital are both willing and able to provide a detailed family health history. Despite this, two thirds (68.2%) of medical staff from consultant level downwards do not evaluate patient family histories at any stage during an acute hospital admission.

Discussion:

Bearing in mind the importance of physician consultant role-modelling and supervision in the teaching hospital environment for both medical students and pre-registration junior doctors, our observations reveal a large unexploited area of opportunity to teach and reinforce the practice of family history taking in routine clinical practice.

OTTAWA2016
ANZAHPE2016



THE STUDENT EXPERIENCE OF LEARNING ANATOMY: A COMPARATIVE STUDY IN UNDERGRADUATE HEALTHCARE EDUCATION

Submitted by Mrs Maria Birch

Author(s) C.Smith¹ Fiona Ponikwer², Reetu Sinha¹ and Maria Young³

¹ University of Brighton, ² Brighton and Sussex Medical School, University of Sussex, UK, ³ University of Brighton, UK,

Presenter Miss Maria Young

Introduction:

Students of healthcare courses report that anatomy is a difficult subject to learn. Yet time for teaching anatomy in the modern curriculum competes with an increasing number of other more recently added subjects. Criticism is being voiced at the level of knowledge newly qualified healthcare professionals display in practice, and medical litigation has been on the increase. Teachers of anatomy therefore need to understand better how their students learn anatomy in order to design the optimum learning environment with classroom activities that enrich and promote effective learning.

Method:

This study explored students' perceptions and experiences of learning anatomy using a validated questionnaire with a 5 point Likert scale. Two cohorts of students from year one of a medical and a podiatry degree (n=103) answered questions on their preferred learning activities, attitude to dissection, problems they had with learning anatomy, and general perceptions of applying anatomy knowledge in practice.

Results:

Overall, the medical students expressed extremes of opinion, whereas the podiatry students tended to be more restrained in their responses. The medical students were strongly in favour of learning through dissection, valuing the opportunity. The podiatry students were less enthusiastic about this method of learning. Both groups considered learning activities such as the use of texts and on line materials to be effective and both groups felt that the assessment of anatomy did not match their learning experience.

Conclusion:

Medical and podiatry students may have preferences to learn anatomy in different ways.

Take Home Message:

To improve the learning of anatomy by students for effective application to clinical practice, an appreciation of preferences for learning activities is necessary.

Session 7A

7A Symposium Tuesday 1015-1145

Tim Wilkinson, University of Otago, New Zealand (Chair)
Richard Hays, University of Tasmania, Australia
David Ellwood, Australian Medical Council, Australia
John Norcini, FAIMER, USA
Chris Skinner, University of Notre Dame, Australia

Benchmarking of medical schools is a way to assure the public and us of quality and to share good practice. However, like assessment, sometimes benchmarking activities focus on what can be counted, not necessarily what counts. Professionalism is something that counts and is hard enough to assess, but possibly even harder to benchmark. We focus on benchmarking of how medical schools assess their students' professionalism by looking at pitfalls of benchmarking, intercultural/international differences, medical school culture differences, decision making processes, and standards that could be applied to medical schools.

Session 7B

IMPROVING THE EARLY EXPERIENCE OF THE FOUNDATION YEAR 1 IN A LOCAL EDUCATION PROVIDER IN NHS IN UNITED KINGDOM-“FIRST 4MONTHS PROJECT”

Author(s)

Dr Ali Bokhari

Dr Mathias Toth

Dr Kevin Kelleher

Presenter:

Dr Ali Bokhari

Institution(s), Department(s), Country/Countries

Dartford and Gravesham NHS Trust. United Kingdom

South Thames Foundation School

Introduction

Foundation year's training is the most challenging time in a medical trainee's career. Working lives for doctors are more challenging despite limits of hours junior doctors can work for. Trainees report more dissatisfaction during their Foundation years than at any other time in their careers. Following a review by Collins of the Foundation training and taking account of the responses to the Annual GMC survey and Foundation trainees surveys the need to improve the Foundation Programme experience was identified

Methods

A literature search to see what is likely to improve trainee satisfaction.

Previous years' Foundation survey reviewed across the South Thames

A trainee survey of outgoing trainees and current trainer was undertaken

Working with trainees a number of initiatives were introduced:

Initiatives designed to enhance trainee experience in their first four months including their enhanced contact with their supervisors, revamp of and better quality assurance of their teaching programme, engagement with “Schwartz Rounds”, use of more Simulation and Technology enhanced learning

Regular trainee forums to improve communication and timely management of trainee issues were introduced

Improved departmental induction

Increased community placement e.g. Psychiatry

Improved trainees' needs awareness by service and general management

Results

There are early indications from new trainees that the educational opportunities have improved and are fulfilling the requirements of the Collins recommendations.

This will be tested via Foundation School survey data collection on the local programme experience and by the NTS 2016.

Conclusions

A managed change to the experience of the Foundation Programme trainees is possible and requires a blended approach

Take-home message

THE WA EXPERIENCE – DEVELOPING CONTINUING EDUCATION IN ACUTE CARE NURSING FOR TANZANIA

Author/s

Jenni Ng, Caroline Browne, Amanda Fowler, Pamela Bell, Renee De Prazer

Presenters

Jenni Ng, Caroline Browne, Amanda Fowler

Institution(s), Department(s), Country/Countries

Department of Health, Global Health Alliance Western Australia Program

Murdoch University

Edith Cowan University.

Introduction

The Global Health Alliance Western Australia Program established strategic partnerships in Australia and Tanzania to provide education support that builds capacity for Tanzanian nurses. The Acute and Emergency Care Course (AEC) was initiated as continuing education to enhance the theoretical and practical knowledge of delivering care to the acutely unwell patient in the Tanzanian healthcare setting.

Methods

The AEC course was initially implemented in 2012. It became apparent at the time that course adaptation had to be done 'on the go' by GHAWA facilitators to enable a practical teaching/learning opportunity that was relevant to Tanzanian context and needs. In 2014, this was reviewed and restructured as a foundation course. Two courses were then delivered to 33 participants from three healthcare facilities. The course ran over two weeks, consisting of theoretical and clinical practice. Course attendees and the facilitators provided feedback which was used to guide further evaluation and development.

Results

Significant restructuring and development of this continuing education course included implementing the use of case based inquiry into the theoretical component; this ensured that the course is closely linked to common clinical presentations in the Tanzanian healthcare setting.

Conclusions

The program is committed to ensuring that best evidence based nursing and education practice is used to support the development of continuing education, and the content is presented in a culturally appropriate and clinically relevant structure.

Take-home message

Continuous and timely program evaluation has ensured that course development and implementation is effective, sustainable and importantly meets the education requirements of a changing Tanzanian nursing workforce.

A PILOT OF POST TRAINING FELLOWSHIPS IN THE UK

Authors:

Tim Battcock, David Black, Winnie Wade

Presenter:

Dr Tim Battcock

Institution(s), Department(s), Country/Countries:

Joint Royal Colleges Physicians Training Board

Introduction

Formal UK Postgraduate training is completed with the award of a certificate of completion of training (CCT). The UK Physicians Training Board has implemented a 3 year program of structured one year post-CCT fellowships. These were centrally approved and planned with an educational structure and governance. We present the first evaluation of the pilot.

Method

Recruitment ran from September 2013 to March 2015. Evaluation will continue until April 2016. Evaluation includes review of prospective approval process, interim and final reports from the fellow and educational guide, and a questionnaire for Hospital medical director.

Results

Forty-one applications have been processed (covering 23 different specialty areas); of these twenty four Fellows have taken up post. All posts were approved by the relevant national speciality advisory committee.

Full data will be available for presentation at the Conference but emerging themes show a very positive response to the post CCT Fellowship role and the development of an educational standards and assessment framework. More work is needed on quality assurance of the Fellowships, and the long term funding arrangements

Conclusion

We have shown that a system for prospective national approval of post-CCT Fellowships is feasible and that a review of the doctors' work and learning is possible to achieve a satisfactory outcome.

**CHALLENGES IN PROGRAM EVALUATION ACROSS LANGUAGE AND CULTURAL BARRIERS:
CALGARY - LAO EXPERIENCE**

Author(s):

Gwendolyn Hollaar, Jane Lemaire, Ketsomsouk Bouphavanh, Vanphanom Sychareun

Presenter:

Dr. Gwendolyn Hollaar

Institution(s), Department(s), Country/Countries:

University of Calgary Faculty of Medicine & University of Health Sciences Lao PDR, Canada and Lao PDR

Abstract

The University of Calgary (UC) and the University of Health Sciences (UHS) in Lao PDR have collaboratively developed and administered a postgraduate Family Medicine training program with a distributed learning model that targets healthcare delivery in smaller communities. Our initial attempts at program evaluation met several culture and language-based challenges. Our surveys had poor response rates and generated mostly brief general answers to open-ended questions. Group discussions were impeded by bi-directional language limitations for UC and UHS faculty, with limited access to formally trained, content knowledgeable and objective Lao moderators and interpreters. The multiple rural training site locations added travel complexity. Strategies were implemented to overcome these challenges. We constructed semi-structured interview schedules that could be used one-on-one, in small groups, and adapted to graduate or medical educator participants. We identified and provided training to skilled Lao individuals available for travel, encouraging them to maintain appropriate cultural norms during the interviews. UC faculty were in attendance providing opportunities to participate, clarify questions, add probes, and provide iterative feedback to the interviewers. The interviewer and UC faculty concurrently reviewed the digitally recorded interviews for clarification around content, and to situate and embed its significance within the culture and context. UC faculty scripted in-depth English notes. Although a labour intense project, the resulting detailed perspectives from 26 graduates and 20 medical educators have provided us with rich insight into the impact of this training program and clear direction for program improvement.

BURNOUT AND QUALITY OF LIFE AMONG ORTHOPAEDIC TRAINEES IN A MODERNISED EDUCATIONAL PROGRAMME: IMPORTANCE OF THE LEARNING CLIMATE

Authors

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P.L.P. Brand, MD, PhD, Paediatrician and Professor of clinical medical education (2)
C.C.P.M. Verheyen, MD, PhD, Orthopaedic surgeon (1)

Presenter

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- (2) Princess Amalia Children's Centre, Isala Hospital, Zwolle, and UMCG Postgraduate School of Medicine, University Medical Centre, Groningen, The Netherlands

Introduction

We aimed to determine the effect of a modernised orthopaedic curriculum with strict compliance to a 48-hour workweek on quality of life and burnout among orthopaedic trainees and to evaluate the effect of the clinical learning climate on trainees' emotional well-being.

Methods

In 105 orthopaedic trainees, we assessed burnout, quality of life and the clinical learning climate by the Maslach Burnout Inventory, linear analogue scale self-assessments, and Dutch Residency Educational Climate Test (D-RECT), respectively.

Results

Nineteen trainees (18%) had poor quality of life and 49 (47%) were dissatisfied with the balance between personal and professional life. Symptoms of burnout were found in 29 (28%) trainees. Higher D-RECT scores (indicating better learning climate) were associated with better quality of life ($r = 0.31$, $p = 0.001$), more work-life balance satisfaction ($r = 0.31$, $p = 0.002$), and fewer symptoms of emotional exhaustion ($r = -0.21$, $p = 0.028$) and depersonalisation ($r = -0.28$, $p = 0.04$).

Conclusions and Take-home message

Poor quality of life and symptoms of burnout, though still common, were less frequently found among orthopaedic trainees in a modernised curriculum with strict compliance to a 48-hour workweek than in traditional programmes with longer workweeks. Better clinical learning climate was associated with better emotional well-being.

OBJECTIVE ASSESSMENT IN POSTGRADUATE MEDICAL EDUCATION

Author(s):

Dr Ian Graham, MBBS, MHP, FRACMA ¹; Dr Mark Keough, PhD ²

Presenter:

Dr Ian Graham; Dr Mark Keough

Institution(s), Department(s), Country/Countries:

Dean of Education, Australian and New Zealand College of Anaesthetists; Executive Director of Medical Services, West Wimmera Health Service; SED Clinical Education Practice and Learning. Australia

Meechi Road Consulting; Obvious Choice Consulting. Australia

Abstract

Competency-based postgraduate medical education curricula are becoming increasingly complex and difficult to represent in conventional relational database structures. Object-oriented technologies offer the opportunity to represent competencies as clinical learning objects and to attach metadata to these objects that allow them to be processed through a network of 'engines', workflows and processes.

Clinical learning objects are stored in a Learning Object Repository where they can be linked to volume of practice requirements, roles in practice and assessment objects. An assessment object might be an examination item (MCQ, SAQ) or a formative assessment tool (mini-CEX, DOPS or CbD).

Smartphone apps can access these assessment objects and allow supervisors to assess their trainees using intuitive and informative user interfaces. The results of assessments are stored in a Learning Record Store, linked to the individual being assessed as well as to each of their assessors. 'Big data' analysis and data visualisation techniques allow the progress of individuals and cohorts of trainees to be measured and evaluated. Each assessment object can also be associated with a series of individual results, supporting psychometric analysis, evaluation and improvement of assessment items.

International standards, specifications and messaging protocols, including Medbiquitous (e.g. Curriculum Inventory and Virtual Patient); IMS standards (e.g. LTI and QTI); and ADL's Experience API are informing the development of these new, object-oriented approaches to educational informatics.

The CLAIRE model (Competency-based Learning, Assessment, Information, Resources and Experiences) will support the development of the next generation of postgraduate medical education systems, tools and apps.

Session 7C

MEDMAP: A MOBILE ASSESSMENT PLATFORM

Author(s)

Deborah O'Mara, Kevin Keay, Sean Lal, and Imogene Rothnie

Presenter

Deborah O'Mara

Institution(s), Department(s), Country/Countries

Office of Medical Education and Discipline of Anatomy & Histology School of Medical Sciences, Sydney Medical School, Australia

Introduction

Sydney Medical Program conducts Anatomy Competency Assessments in which students rotate through a 10 station circuit answering questions on anatomical specimens. The entire cohort is assessed using 6 parallel circuits (repeated 5 times), and produces 300 answer papers, creating a substantial administrative load.

The Assessment Unit and the Discipline of Anatomy & Histology were awarded an Education Innovation Grant to develop an iPad application and web based platform that enables secure scheduling, assessment and data collection for this assessment process.

Methods

MedMAP development so far has included contracting the successful tenderer, design visualisation, testing with staff and post-graduate students. The web based administration component enables creation of examinations with different question types, uploading of student lists, allocation of parallel forms, scheduling and invigilation. Students carry secured iPads to record answers. We are currently in the final testing phase of a secure login integrated with the university's ICT system, and the deployment of a tablet security lockdown program.

Results

Already the impact of MedMAP includes improved invigilation, increased flexibility for parallel forms, faster turnaround of student results and enthusiastic engagement of anatomy staff. Full evaluation data will be obtained when MedMAP is implemented in summative assessments in September 2015.

Conclusions

MedMAP will significantly reduce the administrative load of current paper based assessments in the laboratory and improve the assessment experience and feedback for students. MedMAP will also have widespread applicability to any field based assessment.

Take-home message

Technological innovations have intended and unintended outcomes but the positive impact outweighs the angst.

USING MOBILE DEVICES TO SUPPORT UNDERGRADUATE WORKPLACE-BASED ASSESSMENTS – LESSONS LEARNED A YEAR ON

Author(s)

Luke Woodham, Terry Poulton

Presenter

Luke Woodham

Institution(s), Department(s), Country/Countries

St George's, University of London, e-Learning Unit, UK

Introduction

Workplace-based assessments (WPBAs) are key elements of undergraduate training in medicine and healthcare, allowing learners to receive valuable formative feedback while offering a summative measure of student performance in a clinical environment. However, attempts to use e-Portfolio systems to deliver WPBAs electronically have received heavy criticism for being desktop and web-based, and therefore unsuitable for use in many clinical environments.

Methods

In 2014-15 St George's, University of London introduced Myprogress, an e-Portfolio system which allows completion of WPBAs on mobile devices without requiring network access. Students across selected medicine and healthcare courses have been provided with Android tablets on which they have completed their WPBAs for both formative and summative assessment.

Results

The system has been positively received, and is being rolled out more widely in the 2015-16 academic year. There were a number of unanticipated challenges in developing the implementation, providing key lessons that will be used to better prepare future implementations in other courses and years of study.

Conclusions

A mobile, off-line solution can be an effective tool for managing WPBAs that brings numerous advantages to learners. However, the use of such a system has to be prepared in consort with a review of the processes and infrastructure around it.

Take-home message

It is crucial that key areas such as support, infrastructure, assessment design and the allocation of responsibility are considered when developing implementations of tools using mobile devices for WPBAs.

EMBRACING THE FUTURE: MULTIMEDIA ONLINE ASSESSMENT

Author(s)

Guerandel A, Campion M

Presenter

Guerandel A, Campion M

Institution(s), Department(s), Country/Countries

University College Dublin

Introduction

In our undergraduate medical course, in University College Dublin, increasing number of students has become a challenge in terms of teaching delivery and assessment. We took an evidence based approach to design an assessment for a large group of students for the Psychiatry component of a joint subject module in pre-clinical year 3 of the medical course.

Method

A literature review on large group assessment was done. This allowed us to identify methods that aligned well with our existing learning outcomes and teaching delivery. We ensured the assessment fitted with the criteria for good assessment (Ottawa 2010/UCD). We discuss the rationale of choosing an online assessment and how it contributes to enhance active learning and how it meets the principles of assessment in Higher Education. We then piloted the online assessment by introducing the formative component of the assessment FOR/AS learning and the summative component; assessment OF learning. Feedback was obtained at the end of the module from students, examiners and teachers.

Conclusion

Positive feedback was obtained from students, examiners and teachers. Well designed and aligned online assessment can be an effective method of assessment for a large group of students. However we identified potential resource difficulties such as IT support that needs to be addressed. Feedback is on the process of the assessment we now need to evaluate its effect on learning.

ENGAGE, EDUCATE AND ORIENTATE: INTEGRATION OF ONLINE ASSESSMENT SYSTEMS

Author(s)

Lucy Donaldson and Claire Spooner

Presenter

Lucy Donaldson

Institution(s), Department(s), Country/Countries

Australasian College for Emergency Medicine (ACEM), Education department, Australia

Abstract

The Australasian College for Emergency Medicine (ACEM) is responsible for the training and assessment of emergency physicians across Australasia. A revised training program launched in 2015 that included a new suite of assessment, progression and remediation pathways. Prior to, and following implementation, of the planned changes, three online platforms (eLearning, ACEM website, member portal) were utilized to support stakeholders responsible for training and assessment.

A dedicated eLearning site was set up for stakeholders as a way to engage, educate and provide orientation to the revised requirements. This forum was predominately ACEM staff facilitated initially. Following implementation of the changes, the peer-to-peer forums were utilized by stakeholders to share implementation strategies, discuss assessor calibration, discuss assessment modalities and problem-solve.

The ACEM website includes educational resources and information on the assessment requirements, transition requirements and other organisational-level details. Information and resources are open-access and feature targeted training sessions, user guides and assessor training module series.

A trial of the Workplace-Assessment (WBA) system was conducted via online fillable forms. Following a formal evaluation process, a bespoke IT system was developed that includes features such as online submission of WBAs, dashboard of training and assessment requirements updated in real-time, data reports for assessment decision-making groups.

Online platforms were used to familiarise stakeholders with the new training and assessment requirements. Many resources were provided and rolled out in staged campaigning. This model of engage, educate and orient contributed to the successful implementation of the training programme changes across geographically dispersed training sites.

ONLINE PRACTICAL EXAMINATIONS USING ADAPTIVE TUTORIAL TECHNOLOGY

Author(s)

Gary M Velan, Patrick de Permentier, Mark Hill, Stephanie Dowdell

Presenter

Stephanie Dowdell

Institution(s), Department(s), Country/Countries

School of Medical Sciences, Faculty of Medicine, UNSW Australia

Introduction

The UNSW Medicine program employs progressive practical examinations across multiple discipline groupings to drive learning of important practical skills. These examinations function as a barrier to progression for students in Phase 1 (years 1 and 2). The histology, embryology and pathology component of the examination has three iterations annually, employing whole slide images to test both diagnostic skills and feature identification. Ordering and interpretation of diagnostic investigations are also addressed. Marking these examinations previously required 30 hours for cohorts of 280 students. Moreover, provision of specific feedback to students is difficult and time-consuming.

Methods

We utilised the Adaptive eLearning Platform (Smart Sparrow™) to develop timed online practical examinations in histology, embryology and pathology. The exam incorporated: feature identification through drag and drop questions and dropdown lists; multiple response; and multiple choice items. Each examination took 5-10 hours to develop. Students accessed the assessments securely in a computer laboratory. Answers were automatically graded upon submission.

Results

The format was well-accepted by students, with minimal technical difficulties. Mean grades were similar to paper-based examination methods. Analytics enabled constructive feedback to students, including heat maps showing common misidentifications. Items exhibiting greatest difficulty were referred to discipline coordinators to inform their teaching.

Conclusions

Online practical examinations are well accepted and efficient, saving approximately 20-25 hours of academics' time per iteration. They also provide valuable and effective feedback on learning for the benefit of both students and teachers.

Take-home message

Online practical examinations may be the way of the future for image-based disciplines.7c

Session 7D

'ROLE-PLAY AS MEANS OF ASSESSING ON-THE-SPOT COLLABORATIVE LEARNING SKILLS IN TIME-STRAPPED MEDICAL EDUCATION SETTINGS'

Author/s

Tan P, Sarvari S

Presenter/s

Sarvari S

Institution(s), Department(s), Country/Countries

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Introduction:

Role-plays, being interactive, instructive and educational, can be used as assessment methods to collectively evaluate communication and critical thinking skills related to collaborative learning within short class sessions. In our course, Fundamentals in Medicine, we evaluated the use of role-plays in assessing these skills in tasks requiring transfer of basic clinical knowledge.

Methods:

5 classes of first year medical students participated in role-playing basic mechanisms of signs and symptoms of endocrine diseases. Students wrote and enacted their own skits based on a predefined list. Impact of the role-play as assessment method, in addition to skit performance and accuracy of the details presented, was analysed by means of post-performance student survey evaluations, peer evaluation, and instructors' comments.

Results:

A high percentage of students (>85%, with n = 174) agreed that the role-play developed communication, social, research and critical thinking skills required in collaborative learning. The activity seemed to break the usual silent-shy barrier attitude amongst Chinese students as 80% of them reported developing confidence in presentation and answering questions. The skits, (50% of which were about patient consultations), were rated well by peers and instructors.

Conclusion:

Teaching and assessment using role-plays enhances the realism of teaching and helps demonstrate students' views about clinical situations. This helps them understand disease processes in their own terms, and also improves skills needed in self-directed collaborative learning.

Take home message:

We suggest that role-playing be used more frequently in medical education as this is a valuable assessment tool of students' learning.

TRUE COMMUNICATION SKILLS ASSESSMENT IN INTERDEPARTMENTAL OSCE STATIONS : STANDARD SETTING USING THE MAAS-GLOBAL AND EDUG

Author/s

Winy Setyonugroho¹; Thomas Kropmans²; Ruth Murphy²; Peter Hayes²; Kieran Kennedy²; Jan van Dalen³

Presenter

Winy Setyonugroho

Institution(s), Department(s), Country/Countries

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Background

Comparing uncalibrated outcome of clinical skills assessment is challenging. Our aim is to determine the differences in CS to identify the characteristics of each test using calibrated assessment forms.

Method

Three academic terms of the year 4 communication skills OSCE (n=380) were analysed retrospectively. The MAAS-Global proportion is the percentage of station checklist items that can be considered as 'true' COMMUNICATION SKILLS. Initial station scores were therefore multiplied by the MAAS-Global proportion and acknowledged as the newly established MAAS-Global scores. The reliability of the OSCE was calculated with G-Theory analysis whereas nested ANOVA was used to compare mean scores of all years.

Results

The portion of section 3 items of the MAAS-Global was larger than the proportion section 1 and 2 items. MAAS - Global scores for General Practice ranged from 44 (sd=4) to 48 (sd=5). For Psychiatry stations the MAAS-Global scores ranged from 59 (sd=8) to 66 (sd=8). MAAS-Global CS scores in Pyschiatry stations are significantly higher (p<0.03) and above the initial passmark of 50%.

Conclusion

The outcome of this study can be considered as valid and reliable. The most striking finding is the fact that we consider the true characteristic of CS for each department or for each station.

Take –home message:

The MAAS-Global is used as a single validated instrument and is suggested as gold standard. Future research needs to determine what to do about CS scores in 'mixed stations' that appears to be below the pass mark of 50%.

RELIABILITY AND VALIDITY OF OSCE CHECKLISTS USED TO ASSESS THE COMMUNICATION SKILLS OF UNDERGRADUATE MEDICAL STUDENTS: A SYSTEMATIC REVIEW

Author(s)

WINNY SETYONUGROHO¹, KIERAN KENNEDY², THOMAS KROPMAANS²

Presenter

Winnie Setyonugroho

Institution(s), Department(s), Country/Countries

¹Faculty of Medicine and Health Sciences of the Universitas Muhammadiyah Yogyakarta, Indonesia, ²School of Medicine, College of Medicine, Nursing & Health Sciences, National University of Ireland Galway, Ireland.

Introduction:

To explore inter-rater agreement between reviewers comparing reliability and validity of checklist forms that claim to assess the communication skills of undergraduate medical students in Objective Structured Clinical Examinations (OSCEs).

Methods:

Papers explaining rubrics of OSCE checklist forms were identified from Pubmed, Embase, PsycINFO, and the ProQuest Education Databases up to 2013. Included were those studies that report empirical validity or reliability values for the communication skills assessment checklists used. Excluded were those papers that did not report reliability or validity.

Results:

Papers focusing on generic communication skills, history taking, physician-patient communication, interviewing, negotiating treatment, information giving, empathy and 18 other domains (ICC -0.12 – 1) were identified. Regarding the validity and reliability of the communication skills checklists, agreement between reviewers was 0.45.

Conclusions:

Heterogeneity in the rubrics used in the assessment of communication skills and a lack of agreement between reviewers makes comparison of student competences within and across institutions difficult.

Take –home message:

Consideration should be afforded to the adoption of a standardized measurement instrument to assess communication skills in undergraduate medical education. Future research will focus upon evaluating the potential impact of adoption of a standardized measurement instrument.

COMPARISON OF COMMUNICATION SKILLS (MAAS-GLOBAL SCORE) BETWEEN GROUPS OF STUDENTS: A RETROSPECTIVE STUDY

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Presenter :

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Background

Non-native students have to perform an excellence language capability in order to compete with native students. Understanding how CS continuously is being assessed in the education process is crucial due to missing calibrated OSCE forms. The aim of this study is to determine whether there are differences in characteristics of CS that affect the performance of native and non-native students.

Method

A retrospective analysis of 1MB, 2MB, and 3MB results retrieved from OMIS (n=135, 126 and 137 respectively). We calculated the MAAS-Global score as a proportion of the overall scores in OSCE stations. For reliability analysis we used G-Theory analysis and multilevel ANOVA to compare mean scores between groups of all years.

Result

Non-native students performed better than native students in early pre-clinical years. Native students perform better in year 3. In our stations only 40-30% items indicate non-CS. Of 60-70% CS items; 57%, 69% and 89% are section 3 items in year 1, 2 and 3 respectively. Only 15 – 20% and even a smaller percentage in year 3 is reserved for stage(s) of consultation (1), and generic communication skills (2).

Conclusion

Non-natives do better in the first two years compared to year 3. Comparing outcome is only valid and reproducible when forms are calibrated and standardised. Interpreting language through appropriate communication is a sensitive matter for clinicians, patients and last but not least their educators.

Session 7E

ADDING STANDARDIZED PATIENT (SP) SCORING TO A HIGH STAKES OSCE

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Introduction

While SP scoring is common in some contexts, SP scoring within a physician-scored licensure OSCE is not. Canada's Qualifying Examination Part II (QEII) is being revamped for a new blueprint, creating an opportunity to add SP scoring. Therefore, a scoring instrument was piloted and SP score impact on pass/fail decisions was explored.

Methods

Four SP focus groups lead to five-point rating scales for Listening, Communication, Empathy and Rapport, plus a global rating. Data were from one site (12 stations, n=60). SPs completed an on-line orientation and practiced during training. SPs (n=43) each scored an average of 18-26 candidates. The impact of adding SP scores to total scores was assessed with descriptive statistics, reliability coefficients, correlation to physician examiner scores and pass decisions.

Results

SP scoring was feasible, despite increased preparations. SP ratings were higher than physician examiner scores but total scores were correlated ($r=0.74$). When SP total score was treated as 5%, 10%, and 20% of the total, alpha improved (from 0.73 to 0.85 at 20%). Without changing the pass mark, incorporating SP scores resulted in 6 fail to pass changes; and one fail to pass change. Decision accuracy and decision consistency were minimally impacted.

Conclusions

While SP ratings differed from examiner ratings, SPs assess from a unique perspective that arguably should be captured. The increasing reliability of test scores and pattern of correlations with examiner scores are supporting evidence. Next steps are scale revision and re-piloting to ensure results are replicable with a larger, more representative candidate cohort.

THE LONGITUDINAL IMPACT ON STUDENT ACHIEVEMENT OF SEQUENTIAL TESTING IN OSCES

Author(s):

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Presenter:

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Introduction

Earlier work tracking poorly performing students showed that the traditional model of test, remediation, re-test was ineffective in promoting improved longitudinal performance in OSCEs. As a consequence, sequential testing for high stakes assessments was introduced for years 4 and 5 at the University of Leeds, where candidates who fail the full sequence must repeat the year. To evaluate this change of assessment methodology, we investigate these students' subsequent performance relative to their peers.

Methods

We compare the percentile rankings of failing students from Years 4 and 5 after they have repeated a full year to the rest of their respective cohorts (five cohorts in total). There is also a single Year 4 group who had to repeat Year 4 and have now completed Year 5.

Results

Overall there is a substantial improvement in rankings for the majority of previously poorly performing students at the end of the repeated year. For the single cohort (as above), there is a smaller but still positive improvement in their relative performance when comparing between their original Year 4 outcomes and those in Year 5 two years later.

Conclusions

This work indicates that sequential testing is beneficial in performance terms to the majority of failing students, as well as bringing wider benefits in terms of cost-savings and better pass/fail decision making.

Take-home message

Sequential testing in such contexts is a win-win strategy – improving the quality of decision-making, reducing costs and providing those students who need it with appropriate and effective additional study time.

A STATISTICAL METHODOLOGY TO ELUCIDATE THE OPTIMAL CHARACTERISTICS OF THE SCREENING STAGE OF A SEQUENTIAL OBJECTIVE STRUCTURED CLINICAL EXAMINATION IN AN UNDERGRADUATE MEDICAL COURSE.

Author(s)

Giovanni Mancuso¹, Stephanie Strachan¹ & Steve Capey²

Presenter

Steve Capey

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Introduction

Objective Structured Clinical Examinations (OSCEs) are currently used as the gold standard of clinical assessment throughout UK undergraduate medical student curricula. The OSCE is however the most resource intensive component of undergraduate assessment.

Methods

We have analysed and compared the results of a cohort of final year medical student OSCE data to identify the positive and negative predictive values of a theoretical smaller screening OSCE together with the Standard Error of Measurement (SEm) to estimate the error component. We have performed a range of metrics to identify the optimal station blueprint that should form this screening assessment.

Results

We identified an optimum theoretical 9-station OSCE required to achieve a similar level of accuracy to the actual 18-station OSCE assessment from which it arose. From the 48,620 possible combinations of 9 stations from one cohort of 421 students we have identified the blueprint that, combined with an appropriate SEm, could provide a reliable first stage of a sequential test.

Conclusions

A sequential OSCE can be reliably utilised to identify the cohort of competent candidates requiring only the first screening component of testing and a cohort of borderline candidates that require further rounds of testing to accurately elucidate their readiness for the award of a United Kingdom primary medical qualification (PMQ).

Take-home message

We have described a methodology that allows the characteristics of a shorter screening OSCE to be defined to enable resources to be concentrated on those candidates that require further testing to evaluate their suitability for the award of a UK PMQ. To achieve acceptable validity, the blueprint of the initial screening OSCE needs to be well considered.

A USER FRIENDLY TOOL FOR OSCE ANALYSIS: ROLL-OUT OF QUALITY ASSURANCE PROCEDURES IN GENEVA AND FIRST OBSERVATIONS

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Presenter:

Bernard Cerutti, Unit of research and development in medical education, University of Geneva, Switzerland.

Introduction:

OSCE exams require an important mobilization of resources and staff. Quality assurance is therefore essential. But the absence of support in methodology, the potentially cumbersome and error prone data handling, can be a significant deterrent, especially for small institutions. Our centre recently switched from a priori fixed pass/fail threshold to the borderline regression (BLR) method.

Methods:

Following the AMEE Guide on OSCE quality measure, user friendly spreadsheet macros were developed by the faculty and made available freely to the community, compatible with a classic OSCE result table (one line per student, column per item), or a tOSCE output format (www.ucan-assess.org). Single item difficulty and discrimination index, inter-examiner variation, Cronbach's alpha are automatically computed. If a global performance evaluation is available, BLR estimates the inter-grade discrimination and pass/fail threshold with confidence interval, and tests linearity.

Results:

The roll-out of BLR for the first 2015 exam session (Year 2, preceding the clinical rotation, and Year 3) dealt with 12 OSCE stations. The average coefficient of determination, inter-examiner variability, and Cronbach's alpha, were respectively $0.48(\pm 0.11)$, $19.3\% (\pm 8.7\%)$, and $0.69 (\pm 0.07)$. For Year 2 final pass/fail thresholds computed with the BLR were higher than the a priori thresholds.

Conclusions:

Very early results showed encouraging figures, with no major deviation from recommended standards, but suggested to define more precisely what an expected level competence is for bachelor students.

Take-home message:

Systematic OSCE quality metrics are easy to implement on simple spreadsheets without specialized statistical package.

DOES THE PRESENCE OF OUTLIERS IN HIGH STAKES OSCE EXAMINATIONS UNDULY AFFECT THE PASS MARK

Author(s)

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Presenter

Mrs Kiranjeet Grewal

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Introduction

The borderline regression approach for setting the pass mark for OSCE's is an increasingly popular one, but should only be conducted after an interrogation of the data and assurances that assumptions of regression analysis have been met. Whilst much is published on the use of borderline regression methods, there is very little about what/if any diagnostics were undertaken, their impact, and the steps taken to rectify any violations of assumptions.

Method

Diagnostics were conducted to check for violations of assumptions on the MRCPsych's 16 station OSCE, where Borderline regression is used to standard set, with particular attention to identifying outlying cases with standardized residuals with absolute values greater than 3, as these represent cause for concern (Field, 2013).

14 such standardised residuals ranging from -3.5 to +4.6 were identified. Borderline Regression analysis was conducted including these outlying cases, and again after substituting values with predicted values. Resulting station level and exam level cut offs and pass rates were compared.

Results

The differences in station level cut scores ranged from -0.6 and +0.3. This resulted in an additional 19 station level passes and 8 station level fails, and one additional exam level pass.

Conclusions

Results show the impact of outlying cases on station and exam level scores. Whilst the impact on the MRCPsych examination was minimal, the impact on smaller examinations and cohorts, or when using new examiners, may be larger.

Take-home message:

Detecting and addressing outlying cases in borderline regression is an important yet often overlooked step in medical assessments.

DESIGNING REASONABLE ADJUSTMENTS IN THE ASSESSMENT OF CLINICAL SKILLS FOR A STUDENT WITH A SIGNIFICANT PHYSICAL DISABILITY.

Authors:

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Presenter:

Liz Fitzmaurice, Dinesh Palipana, Linda Humphries

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Introduction:

In 2015 Griffith University School of Medicine re-admitted a student with a significant physical disability. The University Guidelines for Students with Disabilities, reflects the Australian Disability Standards for Education 2005 (Cth), which requires education providers to make reasonable adjustments in assessment tasks for students with disability. However, the guidelines do not account for the task complexity of Medical School OSCEs. Review of the literature found few details relating to the designs of assessments, within Medical Schools for students with significant disabilities. Therefore, the School has been innovative in its design and delivery of a fair and equitable clinical skills assessment for the student.

Methods:

The first assessments faced by the student during a week of simulation-based learning included both cardiopulmonary resuscitation and a medication prescribing exercise. The team determined that cardiopulmonary resuscitation remains a time critical task when considered from a patient welfare perspective. A "reasonable adjustment" to the CPR assessment was created keeping the same 8-minute timeframe as other candidates. The second assessment involving the prescribing task required different adjustment considerations. A time-based adjustment for the end of year summative OSCE has also been undertaken.

Results:

Reasonable adjustments relating to examination of clinical skills were undertaken using a student, patient and task specific approach.

Conclusion:

Designing reasonable adjustments in clinical skills assessments for students with significant physical disabilities is possible, using an authentic approach.

Take-home message:

The academic team believes that in designing a fair and equitable clinical assessment for the student with the significant physical disability, the process undertaken also honed the design of all OSCE stations and so benefited all students.

Session 7F

AN APPROACH TO ASSESSING PROFESSIONAL DEVELOPMENT (PD) IN UNDERGRADUATE MEDICAL STUDENTS BASED ON PPDPORTFOLIOS

Author(s)

Professor Isobel Braidman, Dr Maria Regan and Dr Julia Humphreys

Presenter

Professor Isobel Braidman

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Introduction

Assessing Professional Development (PD) in undergraduate medical students is complex. Regulatory bodies (e.g. the GMC in the UK) now require graduates proficient in knowledge, skills and PD, including conduct and behaviour, and ascribe each with equal importance. How do we identify those whose standards of PD are unacceptable?

Methods

Since 2004, Manchester medical students continuously maintain PPDportfolios, structured on GMC Good Medical Practice headings. The GMC identifies key Learning Objectives (LOs) for "Doctor as Professional", which we introduce to students appropriately to each stage of the Programme. We identify suitable evidence for students' PPDportfolios which demonstrates that they are meeting the LOs. Summative PPDportfolio Reviews, conducted face to face by students' Tutors or Advisors, are either satisfactory or unsatisfactory to ensure high inter-assessor agreement. They consist of several sections, each covering a specific LO. Criteria for satisfactory sections are clear e.g. for "Recognising own professional limitations", assertions of strengths and weaknesses must be supported by specific evidence in the PPDportfolio. Further examples will be discussed. Each section must be satisfactory for an overall satisfactory Review, which is required for progression through key transitions from Years 2 to 3, 4 to 5 and for graduation.

Results

In years 2, 4 and 5 routine inter-assessor agreement is >95% (n= 34, 62, 64 respectively). In each of 2013-2014 and 2014- 2015 , 12 Year 5 students had unsatisfactory reviews at first attempt (n=474). Nine remediated and graduated, but three could not and did not graduate.

Conclusions

We can identify students who do not meet satisfactory criteria for PD by assessing PPDportfolios using clear criteria.

Take-home message

Robust assessment of PPDportfolio must be based on clear evidence for meeting specific LOs.

SUPPORTING AND ASSESSING MEDICAL STUDENTS IN PPD: TUTOR ROLES

Author(s):

Dr Maria Regan, Dr Julia Humphreys and Professor Isobel Braidman

Presenter:

Dr Maria Regan

Institution/Country:

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Introduction:

The General Medical Council (GMC) has identified 'Doctor as Professional' as a key theme for undergraduate medical curricula. At Manchester Medical School, Personal and Professional Development (PPD) is therefore a significant aspect of the MBChB programme. Students provide evidence of addressing 'Doctor as a Professional' through their ePPDportfolios which must be satisfactory to progress from Year 2 to a more clinically based environment in Year 3, from Year 4 to Year 5 and for graduation.

Methods:

In Years 1 and 2 each student has a Tutor for Personal and Professional Development (TPPD) generally with a bioscience background. In Year 3 they have an Academic Advisor who is a clinician. The role of a TPPD and Academic Advisor is to provide students with support for PPD, maintenance of their ePPDportfolios and conduct formative and summative assessments of their ePPDportfolios.

Results:

All TPPD and Academic Advisors attend training sessions for reviewing the ePPDportfolios. The sessions focus on providing a background to the review and criteria for a satisfactory ePPDportfolio including evidence of understanding GMC's Good Medical Practice, development as a reflective learner, recording clinical cases, identifying strengths and weaknesses and formulating learning plans. Benchmarking processes are also adopted with group discussion and reviewing of sample ePPDportfolios.

Conclusions:

In 2014-15 data showed 97% of our students in Year 2, 91.5% in Year 4 and 97% in Year 5 had a satisfactory ePPDportfolio. Quality assurance processes indicate little variable in the outcome of these results.

Take home message:

It is possible for Tutors to provide students with PPD support as well as being the assessor of their PPDportfolios.

PORTFOLIO ASSESSMENT COMPETENCY FOR CLINICAL SPECIALIZATION

Author(s)

Christine Leyden, RN, MSN & Lee Skinner, MA

Presenter

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Abstract

The traditional approach to competency assessment has centred on test examinations of defined standards of practice through the process of specialty certification. The rapidly changing health care landscape has created opportunities for sub-specialty areas of nursing practice evolving from the pathway of medical surgical nursing to the area of genetics, rheumatology, forensics and hemostasis subspecialties. The portfolio framework applies peer review to assess a framework of four defined domains; quality and safety, professional and ethical nursing practice, teamwork and collaboration and professional development. The demonstrated inter-rater reliability of the portfolio peer review process is a robust method of competency assessment.

Introduction

Certification through portfolio is designed to objectively assess specialized knowledge, understanding, and application of professional nursing practice and theory through the review of a collective body of work present in a nurse's portfolio by clinical peers in the specialty area.

Methods

Content expert panels developed scoring elements that are used to standardize appraisers (peer reviewers) to ensure consistency in the results rendered. The component of the portfolio includes; professional development record, performance evaluation, and the narrative clinical exemplar. The four defined domains of quality and safety, professional and ethical nursing practice, teamwork and collaboration and professional development is assessed via peer review process.

Results

Peer review inter-rater reliability was found by using Intra-class Correlation Coefficient to determine a mean overall inter-rater reliability of .54.

Conclusions

Peer review inter-rater reliability can be assessed in a statistically valid manner. Competency assessment via portfolio is a cost effective method for clinical certification of emerging subspecialty practice areas.

Take-home message

Increasing specialization in health care provides an opportunity for nursing peer review

Peer Review is an essential component of quality assessment of competency

FIRST YEAR MEDICAL STUDENTS READINESS TO USE PORTFOLIO AS LEARNING SKILLS ASSESSMENT

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Presenter:

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Introduction

High schools in Indonesia employ teacher-centered education system. Assessment process in high school also in a very conventional manner using MCQ. Students never been assessed according their work or process of their learning. Faculty of Medicine UGM introduces portoflio for learning skills assessment. To help students tackle the assessment task we make structured guideline. It is completed with the assessment criteria. Thus, this study is aimed to measure how far students portoflio meet the assessment criteria.

Methods

The students portfolio result descriptively analysed. The subjects of this study was 254 first year students enroled in Block A.1 in year 2014. Analysis done by showing distribution of student grade acquisition based on assessment criteria.

Results

There were 6 main themes, with 1 – 3 sub-themes, of assessment according to the learning skills taught. Each sub theme used 4 point line scale with 0 = do not perform and 3 = meet all the assessment criteria. More than 70% students achieved the high rating (3) for most sub-theme. Only one of 13 sub-themes, the high rating (3), achieved by 60% students.

Conclusions

Structured instruction helped first year students who never been exposed to portfolio could meet the assessment criteria.

Take-home message

Student expertise need to be considered in choosing assessment method. Novice students need more structured instruction to meet the expectation.

MANAGING EXTERNAL ASSESSORS/SUPERVISORS TO SUPPORT AND ASSESS HEALTHCARE STUDENTS ON PLACEMENTS

Author(s)

Debbie Holmes

Presenter

Debbie Holmes

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PebblePad UK

Introduction

In this presentation a case study from The University of York is used to illustrate how an eportfolio platform can be used to provide external assessors/supervisors with quick, easy and secure access to the work of healthcare students on placement.

Methods

Online PebblePad workbooks are used to support the clinical placement and contain everything that the students, mentors, and clinical educators need in a single, secure place. Students log hours of practice within the workbook and document and reflect upon their placement experiences.

Clinical practice is verified as being passed by the external mentors, who, via secure, permissions-based access to PebblePad, can only see the workbooks of the students assigned to them. Tutors, both in practice and from the university, contribute to the portfolio with real time comments and feedback, adding valuable guidance to the assessment process.

Results

The capacity for both external mentors and tutors to view and comment on student work in real time resulted in significantly improved dialogue between students, mentors, and educators. This enabled issues to be identified and addressed early and supported enhanced reflection and learning by the students. Externals were also able to understand student progress in context by viewing student work and feedback from previous placement experiences.

Conclusions and Take-home messages

- Easy administration of external access to student work
- Improved security and portability
- Improved dialogue between students, mentors, and educators
- Continuity of feedback across placement experiences

Session 7G

A PATIENT CENTERED APPROACH TO DEVELOPING ENTRUSTABLE PROFESSIONAL ACTIVITIES

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Presenter

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Introduction

'Entrustable professional activities' (EPAs) are an important tool to assess on-the-job performance of training health professionals. But research is needed to determine how EPAs can be developed so they align with best clinical practice and societal expectations. Although published models of EPA development include engaging stakeholders, no studies have investigated the potential role of patient input. Consulting both patients and clinicians aligns with widely accepted principles of patient-centered care (PCC). In this qualitative study we aimed to explore what patient input may add to the process of EPA design.

Methods

Low back pain (LBP), a common, but often not well managed condition, was chosen for a new EPA for rheumatology specialists in training. Patients presenting to hospital with acute LBP participated in semi-structured interviews to explore their illness experience and expectations of doctors. Clinician input was obtained in a multidisciplinary focus group.

A phenomenological approach was adopted to analyse patient input. The Framework Method was applied to thematically organise data into a matrix with rows (patients or clinicians) and columns (PCC-based codes). The matrix facilitated comparison of patient and clinician input.

Results

Results show that patients and clinicians have overlapping as well as distinct expectations of a competent trainee in the management of LBP.

Conclusions

Patients provide valuable, unique and complementary input to clinicians, which can be incorporated into descriptors for an EPA.

Take-home message

Involving patients in designing EPAs is feasible, and consistent with a patient-centered approach to assessment that meets with community expectations for good medical practice.

OTTAWA2016
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AN INTERNATIONAL REVIEW OF COMPETENCY BASED PROGRAMMES TO CONTEXTUALISE THE DEVELOPMENT OF A NEW NATIONAL FRAMEWORK FOR INTERNSHIP IN IRELAND

Author/s

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Presenter

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Introduction

The Medical Council commissioned a review of internship (junior residency) in Ireland in 2015, when moving from an apprenticeship to a competency-based model. Ireland's one-year internship programme is currently organised in regional networks, with over 700 posts annually. A review of competency based and entrustable professional activity (EPA) frameworks was conducted to inform future developments and to draw on best international practice.

Methods

Five frameworks were selected, all in the English language and focusing on the activities of a junior resident/intern. Guidelines, curricula, assessment, websites and electronic platforms were reviewed and analysed for approach, scope and content. Outcomes and/or competencies from other national frameworks were mapped against core Entrustable Professional Activities (EPAs) which were drafted by key stakeholders in Ireland, using a grounded approach.

Results

While certain commonalities exist, differences between frameworks reflect significant differences in context. The review informed the development of an approach to a competency-based framework and competencies which are relevant for interns in the Irish healthcare system, using Entrustable Professional Activities (EPAs). The review provided valuable tools for benchmarking competencies for this significant stage of transition in Ireland.

Conclusions

A review of international systems is an important precursor to a grounded approach to the development of a new national framework for internship.

Take-home message

While national developments in CMBE need to be informed by best international practice, stakeholder involvements is essential to contextualising any national framework.

OTTAWA2016
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USING ENTRUSTABLE PROFESSIONAL ACTIVITIES TO HIGHLIGHT DISCREPANCIES IN ATTENDING PHYSICIANS' EXPECTATIONS OF TRAINEES FROM UNDERGRADUATE TO POSTGRADUATE EDUCATION.

Author(s)

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Introduction:

In the transition from medical school to residency, there may be discrepancies between the expectations of preceptors with regards to the level of supervision that a trainee requires to accomplish a given clinical activity. Entrustable professional activities (EPAs) are examples of clinical activities that encompass multiple competencies and are readily assessed. By surveying undergraduate and postgraduate educators, using the Association of American Medical Colleges' list of Core EPAs, we aimed to answer the following question: For a given EPA, are the expectations postgraduate educators for new first-year residents in accordance with the expectations of undergraduate educators for students at the end of clerkship?

Method:

Undergraduate clerkship directors, residency program directors and clinical preceptors participated in an online survey where they were given a detailed description of twelve EPAs. Respondents selected the level of supervision (direct versus indirect) they believed was required by a trainee to complete the EPA, either at the end of clerkship or on day-1 of residency. Response frequencies from preceptors on each item on the questionnaire were compared using a Pearson chi-square statistic.

Results:

There was not a significant discrepancy in terms of expectations of direct versus indirect supervision for most EPAs. Interestingly however, when direct supervision was selected, it was predominantly geared towards postgraduate rather than undergraduate trainees.

Conclusions:

Counterintuitively, there may be a trend to perform more direct observation of first-year residents as opposed to clerkship students. A focus group with local preceptors will explore these results in more detail and will be discussed.

ENTRUSTABLE PROFESSIONAL ACTIVITIES IN NEONATAL-PERINATAL MEDICINE

Author/s

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Presenter

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Introduction:

To be practical, Entrustable Professional Activities (EPAs) must be broad enough to avoid a disabling number of individual entrustment decisions yet narrow enough to avoid arguable inferences regarding capability across varying clinical situations.

Methods:

We employed Delphi methodology to achieve consensus regarding EPAs for Neonatal-Perinatal Medicine. A list of candidate EPAs was distributed to 35 Program Directors (PDs) of ACGME-approved fellowship programs. Two Delphi survey rounds were required. Respondents were asked assign a 5-point Likert rating to, and comment on, 19 EPAs regarding importance (essential to not at all important) and scope (too narrowly to too broadly specified).

Results:

Twenty (57%) PDs responded. >75% of respondents rated entrustment in each of the 19 EPAs as "very important" or "essential." Four EPAs were considered somewhat or too broad by $\geq 50\%$ of respondents. In round two, essential criteria for entrustment for these 4 EPAs was provided. With those clarifications, each one was scored as more meaningfully specified though slightly less important. Asked to consider one EPA of the four as 3 narrower, nested EPAs, the majority preferred the original broad specification. In addition, when asked to evaluate 2 additional EPAs proposed in round 1, respondents were evenly split as to whether either should be adopted.

Conclusions:

These data suggest that entrustment for practice without supervision in Neonatal-Perinatal Medicine can be summarized with 19 EPAs.

Take-home message:

Delphi methodology is a useful approach to achieve consensus on the importance and scope of candidate EPAs.

Session 7H

A JOB ANALYSIS AND DESIGN OF A PILOT SITUATIONAL JUDGEMENT TEST FOR ENTRY INTO UK DENTAL CORE TRAINING

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Introduction

Whilst research shows that an array of non-academic attributes are important predictors of training outcomes, it was recognised that there is a need to better understand, and select for, the non-academic attributes required to work effectively in Dental Core Training (DCT); during DCT, trainees gain experience across multiple hospital specialties. Best practice selection is based on defining a model of job-relevant competencies through job analysis (Arnold et al., 2010); situational judgement tests (SJTs) are a suitable methodology for assessing these non-academic attributes, in other contexts. This study involved a job analysis, and design of an SJT, for the varied DCT role.

Methods

The job analysis followed established methodology (Patterson et al. 2013), including a review of relevant literature, stakeholder consultation, and validation survey. The resulting framework was used to inform the SJT test specification, which was designed following best practice, including subject matter expert involvement during item development, review and concordance.

Results

The job analysis identified eight competencies; four of which were assessed by the SJT. Psychometric analysis of the pilot SJT demonstrated that it is reliable ($\alpha=.74$), differentiates between applicants, has minimal group differences, and receives favourable applicant reactions.

Conclusions

The results demonstrate that the SJT is appropriate for the assessment of non-academic attributes in this context. Further research examining the validity and performance of the SJT is required.

Take-home message

Following best practice methodology in job analysis and SJT design enables the development of an effective tool for assessing non-academic attributes, even where the role is varied.

A SITUATIONAL JUDGEMENT TEST FOR SELECTION INTO THE ROYAL AUSTRALIAN & NEW ZEALAND COLLEGE OF OBSTETRICIANS & GYNAECOLOGISTS

Author(s):

Emma Rowett¹, Lyn Johnson², Máire Kerrin¹, Fiona Patterson^{1, 3}

Presenter:

Emma Rowett

Institution(s), Department(s), Country/Countries:

¹ Work Psychology Group, UK / Australia; ² Royal Australian and New Zealand College of Obstetricians and Gynaecologists, Australia; ³ University of Cambridge, UK

Introduction

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) sought to refine the existing selection process onto their training programme, utilising best practice to assess approximately 280 applicants annually for 80 places. Situational judgement tests (SJTs) present a cost-effective method for assessing the non-academic skills of large groups of applicants in selection processes (Lievens, 2013). Evidence shows that expertly designed SJTs can be reliable, valid, fair, positively perceived, and show fewer subgroup differences than other methods (Patterson et al. 2016). This project aimed to develop, pilot and evaluate an SJT for possible implementation as part of the selection process for entry into the RANZCOG training programme.

Methods

The SJT was developed utilising best practice, including: development of the test specification, item development and review, concordance panel, piloting and psychometric analysis. Subject matter experts were involved throughout each development phase to ensure relevance and realism.

Results

The psychometric evaluation of the SJT will be presented, including: reliability, scoring distributions, group differences and candidate reactions.

Conclusions

The results will provide insight into the implementation of an SJT for high-stakes selection in postgraduate medical training in Australia and New Zealand, informing the utility and effectiveness of the methodology in this context.

Take-home message

SJTs are an evidenced methodology for assessment of non-academic skills within healthcare, however are not currently used for selection across all postgraduate medical training contexts. This emerging research will broaden existing knowledge of the applicability of SJTs for high-stakes selection in postgraduate medical training internationally.

PILOTING A SITUATIONAL JUDGEMENT TEST AS A NEW APPROACH TO THE SELECTION OF VETERINARY STUDENTS IN NEW ZEALAND

Author(s):

Fiona Patterson^{1,2}, Máire Kerrin², Eloise Jillings³, Helena Edwards², Rachael Shaw², Stuart Martin², Emma Rowett²

Presenter(s):

Máire Kerrin and Eloise Jillings

Institution(s), Department(s), Country/Countries

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² Work Psychology Group, UK

³ Institute of Veterinary, Animal and Biomedical Sciences, Massey University, NZ

Introduction

Selection into the competitive undergraduate veterinary programme at Massey University has traditionally been based largely on academic attainment. In 2015, the institute piloted a new approach to include non-academic attributes. A bespoke Situational Judgement Test (SJT) designed to measure: Team working; Problem Solving and Critical Thinking; Integrity, Professionalism and Ethical Behaviour; and, Empathy and Compassion was introduced.

Methods

Based on best practice SJT development (Patterson *et al.*, 2009b), items were developed through collaboration between expert veterinarians and experts in SJT design. Thirty scenarios (with 174 items nested within these) were piloted with existing applicants and first year students (n= 118). The test was delivered via computer in a proctored setting.

Results

Pilot analysis reveals the SJT to show good levels of reliability (Cronbach's alpha > 0.70) and favourable candidate reactions (85% of candidates agreed they had a positive experience with the SJT and 97% agreed the SJT was relevant to the role of a vet student). The administration of the SJT (computer-based, proctored) was considered to be appropriate (92% of candidates agreed that taking the test on the computer did not disadvantage them in any way).

Conclusions

The pilot SJT demonstrated good evidence of reliability and was received favourably by candidates. The approach to item development combining input from expert veterinarians and expert SJT writers appears to offer an efficient development process.

Take-home message

The SJT offers a reliable mechanism for assessing non-academic attributes of applicants to veterinary school in way which is considered fair and efficient.

MEDICAL AND DENTAL SCHOOL ADMISSIONS: PREDICTIVE VALIDITY OF A SITUATIONAL JUDGEMENT TEST (SJT) TO ASSESS NON-ACADEMIC PROFESSIONAL ATTRIBUTES IN THE UK

Author/s

Martin S, Patterson F, Edwards H, Rosselli A, Cousans F, Greatrix R, Nicholson S, Ashworth V

Presenter

Stuart Martin

Institution(s), Department(s), Country/Countries:

Fiona Patterson (Work Psychology Group & University of Cambridge, UK)

Helena Edwards, Stuart Martin, Anna Rosselli, Frances Cousans (Work Psychology Group, UK)

Rachel Greatrix (UKCAT Consortium, Nottingham, United Kingdom)

Sandra Nicholson (UKCAT Consortium, London, United Kingdom)

Introduction:

The UK Clinical Aptitude Test (UKCAT) is used by a consortium of universities to help make informed choices from amongst the many highly qualified applicants who apply for UK medical and dental degree programmes. A new Situational Judgement Test (SJT) was launched live in 2013 as part of the UKCAT ($\alpha=.75-.79$, $N=25,679$) to evaluate important non-academic professional attributes deemed crucial in medical/dental students (e.g. integrity, empathy, teamwork). The first SJT cohort began their courses in 2014, enabling an exploration of the relationships between SJT scores and in-training performance.

Methods:

First years from four medical/dental schools participated ($N=223$). The predictors were their SJT score and band (1 to 4). The outcome variable was their in-training performance, judged by their tutors via a bespoke criterion-matched questionnaire.

Results:

A significant relationship was found between SJT and in-training performance ($N=217$, corrected $r = .34$). Analysis of performance ratings by SJT band found significant differences between those in the top and bottom performing bands.

Conclusions:

Findings provide encouraging early evidence to support the SJT as a shortlisting tool for entry into medicine/dentistry. This study furthers understanding of the benefits and challenges of selection validation research in an early career high-stakes healthcare context.

Take-home message:

The SJT is a reliable and valid selection methodology for testing important non-academic professional attributes for entry into a medical or dental career.

AN INVESTIGATION OF THE EVIDENCE IN SUPPORT OF A PILOT SITUATIONAL JUDGEMENT TEST

Author/s

Hay M, Hodgson W, Tran S, Martin S, Rowett E, Patterson F

Presenter

M Hay

Institution(s), Department(s), Country/Countries

¹ Monash University, ² Monash University, ³ Monash University, ⁴ Work Psychology Group, ⁵ Work Psychology Group, ⁶ Work Psychology Group

Introduction

SJTs present candidates with a set of hypothetical scenarios that are contextualised within a workplace. SJTs are included in the selection of u/grad medical students in the UK but not in Australia. This project aimed to develop and pilot an SJT for u/grad medical student selection in Australia, and to determine the concurrent validity of the SJT via a comparison with applicant selection data.

Methods

We developed an 82 item (11 ranking, 71 rating) SJT during medical student selection interviews in January 2015 and on course commencement (N=165, 59.4% female). The SJT measured integrity, resilience, empathy and team involvement. Delivery was via an online survey. Participants provided quantitative (numerical ratings) and qualitative (open text responses) on the difficulty and relevance of the SJT relative to Year 12, UMAT, and MMI.

Results

The reliability of the SJT was 0.72. SJT and MMI total scores were correlated ($r_{163} = .173, p < .05$). No correlation between SJT total and Year 12 mark (ATAR/IB) was found. Qualitative results indicate high acceptability of the SJT. MMI was ranked first by 63% of participants as the most useful selection tool. The SJT ranked higher than the aptitude test (UMAT), which was ranked lowest.

Conclusions

This study, the first to implement the SJT to undergraduate medical students in Australia, has developed an SJT with good psychometric properties. Correlation with MMI scores indicates construct validity. Ranking with other selection tools indicates good face validity.

Take-home message

The SJT has potential as a selection tool for u/grad medicine in Australia.

CAN A SITUATIONAL JUDGEMENT TEST REPLACE A STANDARDISED INTERVIEW AS PART OF THE PROCESS TO SELECT UNDERGRADUATE MEDICAL STUDENTS?

Authors:

Dr Paul Lambe and Professor David Bristow (Plymouth University Peninsula Schools of Medicine and Dentistry).

Presenter:

Paul Lambe

Institution(s), Department(s), Country/Countries

Introduction:

We have previously shown the validity of our selection process for predicting student performance on the undergraduate medical programme, using prior academic achievement, the UK Clinical Aptitude Test (UKCAT) and a standardised interview. However, the use of situational judgement tests (SJT) in selection is increasing. Moreover, a recent report on the UKCAT SJT's ability to predict performance in the first year at medical school supports its use as a selection tool. This study evaluates the validity of replacing a standardised interview with the UKCAT SJT to select undergraduate medical students.

Methods:

Correlation analysis of SJT score, interview score of applicants for entry in 2014, and scores in 16 assessments taken by first year medical students in academic year 2014-2015.

Results:

SJT was positively associated with interview scores ($n=275$, $r_s= 0.13$, $p<.05$). However, SJT Band discriminated poorly between interview scores (i.e. low scoring interviewees within the highest performing SJT Band 1, and vice versa). Moreover, using SJT Band 1 status as the criterion for an offer to those with above-entry threshold UKCAT cognitive scores ($n=135$), only 61% of offers would have been made to applicants who performed above the interview threshold for entry in 2014. SJT bands and performance in all first year assessments were not significantly associated.

Conclusions:

These findings show that the UKCAT SJT does not identify the same candidates as our current validated selection process, does not correlate to student performance on the first year of the medical course, and therefore does not offer an acceptable alternative to the selection interview.

Take-home message:

Within our selection process the SJT does not offer any advantage over a standardised interview at predicting the best students to study on the undergraduate medical programme.

Ssession 71

MANAGING CONFLICT WHEN PROVIDING FEEDBACK: AN ESSENTIAL SKILL FOR HEALTH PROFESSIONALS

Author(s):

A/Prof Margaret Potter, W/Prof Fiona Lake

Presenter(s):

A/Prof Margaret Potter, W/Prof Fiona Lake

Institution(s), Department(s), Country/Countries:

University of Western Australia, School of Medicine and Pharmacology, Australia

Background

All health professionals have experience providing feedback in a range of contexts including with students to support their learning; staff as part of their performance development or review, and with patients during assessment and management. When this goes well it is a thoroughly rewarding process, however, providing effective feedback can be challenging when there is disagreement resulting in conflict.

Consequently, it is important to increase awareness of the stages of conflict and to assist health professionals to recognise that the skills they utilise to analyse patient problems and plan treatment are readily transferrable to managing conflict.

This workshop will focus on assisting health professionals to improve their feedback and communication skills in conflict situations involving students and/or colleagues.

Intended outcomes:

In this workshop we will:

- Explore the key elements of effective feedback
- Identify and discuss the five stages of conflict
- Implement a framework for managing conflict
- Increase confidence to manage conflict when providing feedback

Structure

An experiential session involving:

- Facilitated discussion
- Role play activities
- Cooperative learning

Who should attend:

Health professionals involved in supervision of staff and students who would like to improve their skills in managing difficult situations.

Level of workshop (introductory/intermediate/advanced):

Intermediate-Advanced

Session 7J

INTEGRATING STANDARDIZED PATIENTS INTO THE INTERPROFESSIONAL EDUCATIONAL EXPERIENCE

Author(s)

Dawn M Schocken, MPH, PhD, CHSE-A, Stephen C Charles, MS, MABMH, PhD, CHSE

Presenter(s)

Dawn M Schocken, MPH, PhD, CHSE-A(1, Stephen C Charles, MS, MABMH, PhD, CHSE(2)

Institution(s), Department(s), Country/Countries

University of South Florida Morsani College of Medicine, Office of Educational Affairs, Tampa, FL USA

University of Kansas School of Medicine – Wichita, Department of Medical Education, Wichita, KS USA

Background:

Healthcare is undergoing a comprehensive paradigm shift to Interprofessional team-based practice. Most of our accrediting bodies are requiring that we embed authentic Interprofessional education (IPE) into the trainee curriculum.

An IPE team of healthcare professionals has developed several preclinical training modules utilizing Standardized Patients (SPs) to offer IPE sessions to learners across four colleges. Evaluations have shown the learners' gain an appreciation of their team members' skills and competencies and increased communications across these disciplines have been noted both in and out of the classroom.

Intended outcomes:

The course participants will develop SP case scenarios, assessments and teaching materials incorporating the IPEC competencies, to utilize at their home institution.

Structure:

The IPE faculty plans to utilize small group sessions, large group discussion, role playing/modelling and simulation to establish the effectiveness of the case scenarios developed. This session will utilize the following learning activities – Content demonstration, large and small group discussion, and feedback and evaluation: As part of the workshop, each participant will develop their own IPE preclinical outpatient curriculum adapted for their home setting. This unique IPE curriculum is founded on the core competencies as outlined by IPEC and includes case development, tools, and learning activities and outcomes evaluation that can be used by the participants in their home institution.

Who should attend:

Individuals who teach at academic settings with more than one healthcare profession would gain from this workshop.

Level of workshop

Introductory

Session JK

GLOBAL HEALTH TEACHING IS DEVELOPING AND EXPANDING: WHAT ARE STUDENTS LEARNING, AND HOW SHOULD THEY BE ASSESSED?

Author/s

Wylie A, Takeda Y

Presenter

Takeda Y

Institution/s

King's College London GKT School of Medical Education, ² Juntendo University, School of Medicine, Tokyo, Division of Medical Education

Background

Global health curricular content is developing and increasing in medical curricula with enthusiastic and well informed students contributing to decisions about content in some UK schools. Assessment however is more complex. Teaching may be centred on the learning outcomes suggested by Johnson et al (Lancet 2012) but what learning is demonstrable? What are the pragmatic, efficient and equitable ways to assess learning?

Intended outcomes

Participants should be familiar with current suggested learning outcomes in and around global health for medical undergraduate curricula; have shared current approaches and debated the strengths and limitations of various assessment modalities; have discussed the value and pragmatics of essay marking with examples of standard setting.

Structure

Introduction to the challenge and an assessment of participants' interest and expectations; Identifying common ground and rationale for global health core content; Sharing examples of assessment – strengths and limitations; transferable approaches

Summary and possible recommendations

Who should attend?

Those involved with medical undergraduate curricula development in global health teaching and assessment; medical education evaluation and assessment researchers; medical students with an interest in student participation in curriculum development

Level of workshop

Intermediate and advanced

Session 7L

ASSESSMENT OUTCOMES THAT COUNT: DEVELOPING EVIDENCE-BASED SELECTION CRITERIA TO CREATE A RURAL GENERALIST WORKFORCE

Author(s):

Walters L. (1,2), Campbell D. (1,3), Stewart R. (1,4), McIver L.(1,4), Sen Gupta T.(1,4), Cowie M (1)

Presenter(s):

Walters L, Campbell D

Institution(s), Department(s), Country/Countries:

1. Australian College of Rural and Remote Medicine, Australia
2. Flinders University, Rural Clinical School, Australia
3. Monash University, School of Rural Health East/South Gippsland, Australia
4. James Cook University, College of Public Health, Medical & Veterinary Sciences, Australia

Background

In Australia and, in many cases, internationally, applicants compete for general practice/family medicine training places via multiple choice tests and interviews.

These tests can predict an applicant's licensing exam performance but have not been shown to predict recruitment and retention in broad scope comprehensive rural practice – i.e. that which includes one or more elements of primary care, emergency, hospital, procedural and public health practice in the rural and/or remote setting.

This workshop will present the evidence for predictive factors for rural and remote practice at the time of selection into a relevant training pathway and encourage participants to workshop selection processes that align with and may add to this body of knowledge.

Intended outcomes

Develop a consensus statement of selection criteria for rural general practice postgraduate training which will maximise the ability of organisations like the Australian College of Rural and Remote Medicine to deliver on their vision to have “the right doctor with the right skills to provide medical services for every rural and remote community across Australia.”

Structure

Selection is the first and arguably the most important assessment for an organisation and a trainee. This workshop will provide participants with the opportunity to consider how to evaluate such factors as rural origin, rural practice self-efficacy, motivation, context and personality attributes that are predictive of rural workforce outcomes and rural practice resilience.

Who should attend?

Clinicians, Academics and College staff with interest in postgraduate registrar selection processes for Medical Colleges training in general practice and rural generalism.

Level of workshop (introductory/intermediate/advanced):
intermediate

Session 7M

USING ITEM ANSWERS AND RESPONDENT'S CERTAINTY RATINGS IN WRITTEN ASSESSMENT: A PRACTICAL INTRODUCTION

Author/s

Mike Tweed, Anna Ryan

Presenter/s

Mike Tweed, Anna Ryan

Affiliations

University of Otago, University of Melbourne

Introduction

Certainty rating involves examinees stating not only their answer, but also their certainty in that answer. Healthcare professionals need to be appropriately certain in their clinical decisions. Mistakes made with high certainty lead to adverse outcomes, and are likely to be repeated. Feedback highlighting high certainty when wrong, or low certainty when correct, both offer important directions for learning.

Objectives

Participants will:

- experience an assessment with certainty ratings
- explore the utility of examinee certainty ratings in written assessments
- review examples of the use of certainty ratings from published educational research and practice
- envisage circumstances when certainty rating have potential benefits in their own institutions' assessments

Structure

There will be 3 interactive activities.

During activity one, participants will answer a general knowledge quiz using a variety of certainty ratings. Then there will be round table and wider group discussion of the utility and impact of these.

Activity two is an interactive presentation by facilitators to build on this discussion and review the literature and personal experience.

In activity three, participants will individually consider how to apply certainty ratings at their own institution. Round table and wider group discussion will explore advantages and disadvantages of different certainty formats and practicalities of implementation.

Who should attend?

Healthcare professional educators with interest and involvement in assessment

Level of workshop

Introductory (certainty based assessment)

Intermediate (general assessment)

Session 7N

THE CONTINUING TALE OF TWO CITIES: BEYOND KNOWLEDGE - HOW TO ASSESS CASE BASED LEARNING OUTCOMES?

Author(s) :

Sharon Peters, David Davies, Jane Kidd, Juanita Barrett

Presenter(s):

Sharon Peters, David Davies, Jane Kidd, Juanita Barrett

Institution(s), Department(s), Country/Countries

Medical Education, Memorial University, Canada

Medical Education, Warwick University, UK

Background

The Medical schools at Memorial and Warwick Universities independently began a process of curriculum renewal implementing case-based learning aiming to assess the range of outcomes that would demonstrate that students met the competencies required by the national medical governing bodies in each country as well as specific outcomes of a case-based learning methodology and spiral curriculum. Both schools have completed two years of their renewed curricula and it is an appropriate time to take stock of what has been achieved.

Intended outcomes

An enhanced understanding of the assessment methodologies that can be used to effectively assess the range of anticipated outcomes, other than knowledge, from a case-based learning curriculum.

Structure

The workshop will begin with introductions from all participants and a very brief outline of the experiences of both medical schools to date. In small groups participants will then be given the opportunity to draw on their experience by designing assessments for a range of elements and outcomes of the case based curricula that are running at each medical school: doctor as collaborator, professional, communicator, advocate. Each group will report back and open the discussion to the larger group to consider how to assess the case-based learning experience in an integrated manner effectively.

Who should attend

Those interested in assessing medical education outcomes that go beyond the knowledge required to practise medicine in the initial postgraduate stages.

Level of workshop (intermediate)

OTTAWA2016
ANZAHPE2016



This workshop is designed for those with some experience of assessment of case based learning in a medical education curriculum.

Session 70

TEACHING AND ASSESSING CRITICAL THINKING IN THE PRECLINICAL YEARS THROUGH CONCEPT MAPPING AS A VISUAL REPRESENTATION STRATEGY

Autor:

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Presentors:

Amina Sadik and Mabelle Linsenmeyer, Ed.D. West Virginia School of Osteopathic Medicine, USA

Background:

Concept mapping is one of the most effective visual strategies and methods to formatively assess students' knowledge and provide them with opportunities to show what they know and to receive feedback. More importantly, it is a means to teach critical thinking — a skill critical to lifelong learning. Concept mapping exercises introduce students to the physician-like thought process early in the curriculum, which we expect to become beneficial as they advance in their studies. Using concept mapping as a tool for formative assessment, gives faculty an opportunity to meet with students and go over their reasoning, discuss their decision-making, and justify the flow of the concept map. Students have an opportunity to receive feedback to help inform their critical thinking on various cases. In this capacity, both faculty and students benefit from the concept mapping exercises.

Intended outcomes:

Participants will be able to make the connection between using concept mapping as a visual strategy to teach and assess critical thinking. The session will address how to select a clinical case for cognitive integration and the steps to take for formative assessment.

Structure:

Participants will be given time to work in small groups. In these small groups, they will construct a concept map on a topic of their choice demonstrating their understanding of how to teach and assess critical thinking skills.

Who should attend:

Medical educators who are willing to learn visual strategies to assess critical thinking of medical students at all levels.

Level of workshop:

All levels

Session 7P

CASTING BOULDERS OR PEBBLES: THE DESIGN AND ASSESSMENT OF ENTRUSTMENT TASKS IN HEALTH EDUCATION

Author(s)

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Presenter(s)

Marie-Louise Stokes

Martin Veysey

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Affiliations

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University of Western Sydney, School of Medicine, Australia

Background

The concept of Entrustable Professional Activities (EPAs) has been taken up by many medical education institutions as a means of focusing learning and assessment on that which is important and high risk. It also aims to provide systematic methods of assigning the level of supervision to trainees based on their competence (ten Cate 2005).

The Royal Australasian College of Physicians (RACP) is undertaking a significant program of change with the renewal of curricula for its 61 training pathways. A hallmark of this change is to make the curricula far more practical by incorporating EPA based assessment.

Intended outcomes

Following a brief background to the RACP curriculum renewal project and the concept of EPAs, this session aims to explore with participants three key design issues:

- how can the appropriate balance be struck between the size of the EPAs so that they are meaningful but also manageable;
- how should these EPAs be framed i.e. with a focus on patients, practice or the practitioner;
- how are these EPAs best assessed?

Participants will leave the session with a clear understanding of EPA based assessment, and a practical approach to designing and implementing EPA based curricula.

Structure

OTTAWA2016
ANZAHPE2016



Using an interactive workshop format, participants will define EPAs, discuss pros and cons of various approaches to selecting EPAs and vote on their preferred model. The session will close with a group activity designed to share ideas on how best to assess EPAs.

OTTAWA2016
ANZAHPE2016



Who should attend

Health Educators, Supervisors, Health Education Leaders, Health Administrators

Level of workshop

Introductory/Intermediate

Session 7Q

TRANSLATING QUALITY IMPROVEMENT THEORY INTO PRACTICAL PROJECTS FOR POSTGRADUATE MEDICAL TRAINEES WITHIN THE WORKPLACE - HOW TO GIVE SUPPORT AND FORMATIVE FEEDBACK BASED ON EXPERIENCES FROM THE SCOTLAND DEANERY

Author/s

MeiLing Denney (1,2)

Presenter

Dr MeiLing Denney

Institution/s,

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Background

Quality improvement activity forms an increasingly important part of a clinician's daily work, and learning related to this is reflected in many postgraduate medical curricula. We found that many educational supervisors lacked confidence in teaching on quality improvement and its application at practice level, this acting as a potential barrier to the trainee embarking on a QI project. Using a structured approach, educational supervisors were able to support and guide their trainees, providing valuable formative feedback at each stage of the process.

Who should attend

Educators with an interest in developing, supporting and assessing practical leadership and quality improvement skills for learners.

Structure

Short presentations and small group work. After giving an overview of the process, we intend to share details of how supervisors were skilled up to support their trainees in these projects. Using materials from a GP setting, the workshop should be applicable to a wide range of clinical disciplines and contexts.

Discussion will include how these processes could translate into a variety of training situations, and lessons learned from the first two years.

Intended outcome

Participants should leave with new ideas about supporting and assessing their trainees in the practical application of leadership and quality improvement in the work place, and an appreciation of the possible challenges and some of the solutions they might face.

Level

Intermediate

Session 7R

NBME-COMPREHENSIVE BASIC SCIENCE SELF-ASSESSMENT EXAM (CBSE) IS A STRONG EARLY INDICATOR FOR PERFORMANCE IN CLINICAL CLERKSHIPS AND UNITED STATES MEDICAL LICENCING EXAMINATIONS (USMLE)

Author(s):

Jyotsna Pandey, Sandeep Bansal, Vijay Rajput, Iriana Hammel

Presenter:

Jyotsna Pandey

Institution(s), Department(s), Country/Countries

Ross University School of Medicine, Office of Faculty Affairs and Medical Education, USA

Introduction:

The utility of NBME-CBSE as a predictor for academic performance during the clinical clerkship years and on USMLEs is not established.

Methods:

Data for all students in clinical training during Jan 2013 to Jan 2015 that had passed USMLE 1 on their first attempt was analysed and collated by the number of attempts taken to pass NBME-CBSE. For the students that met this criterion (n=3201), USMLE Step 1, USMLE Step 2CK, and average NBME Clinical Science Subject Examinations (NBME-CSSE) scores were compared against the number of attempts to pass NBME-CBSE.

Results:

There was a strong linear correlation with the number of attempts at NBME-CBSE to the performance on all high stakes exams during clinical years. Students that passed NBME-CBSE (n=1747) on first attempt significantly ($p=0.001$) outperformed their peers (n=1554); by an average 14 points (USMLE 1, 226 SD \pm 15 vs 212 SD \pm 11.91), 15 points (USMLE step 2 CK, 232 SD \pm 16.2 vs 217 SD \pm 14.07) and an average of 4-5% points on the NBME-CCSEs.

Conclusions:

The strong relationship between attempts at NBME-CBSE and academic performance during clinical years suggests that gaps in knowledge in the foundations of medicine subjects translate into sub-par application of knowledge in the clinical years. Therefore multiple attempts to pass NBME-CBSE is a strong early-indicator for "at-risk students" during the clinical years to help plan support strategies.

Take-home message:

Attempts at passing NBME-CBSE identifies "at-risk students" that need focused academic mentoring during the clinical training years in order to improve their knowledge base and final outcomes.

EVALUATION OF A NEWLY INTRODUCED INTEGRATED FINAL MD EXAMINATION

Author(s):

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Presenter:

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Introduction

The final certifying MD examination (FMD) at the end of the undergraduate medical programme in our College was changed from a discipline-based examination to an integrated examination with written and clinical components. Given the high stakes nature of this examination, the College wanted to ensure that it was robust, fair and defensible. Key factors, which determine fairness and defensibility of assessment, include reliability, validity, acceptability and practicality. We describe the reliability of the individual components, the overall composite reliability of the whole examination and the quality assurance procedures accompanying it.

Methods

Data from 2 cohorts of students who sat for the FMD examination in June 2014 and June 2015 were used. Generalizability and multivariate generalizability theory were used to estimate the reliability of individual components and the overall reliability of the composite examination. Pearson correlations between different examination components were also determined.

Questionnaires and reports were used to collect feedback regarding the content and conduct of the exam from staff, students and external examiners.

Results

The reliability for the written component ranged from 0.77-0.83 and for the clinical component from 0.52 to 0.58. The reliability of the composite exam was 0.72. Pearson correlations between the components ranged from 0.5 to 0.6 suggesting that different parameters of competence were being assessed. Staff, students and external examiners were generally satisfied with the examination.

Conclusion

The reliability for the written component was acceptable. Reliability for the clinical component needs to improve, however, it is in line with what is reported in literature.

DISSECTING QUESTIONS – THE EFFECTS OF DEMOGRAPHIC DIFFERENCES IN MEDICAL SCHOOL ANATOMY ASSESSMENT PERFORMANCE

Author(s)

Siobhan Moyes, Paul Lambe

Presenter

Siobhan Moyes

Institution(s), Department(s), Country/Countries

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Introduction

Demographic differences in Medical School examination performance have frequently been cited, however, there is little information on the causes of such disparities. When gender and ethnicity performance differences were identified in some Anatomy questions, further investigation was undertaken to uncover the extent and underlying causes.

Methods

Data from anatomy items in progress tests, end of year 1 tests and formative anatomy assessments was analysed by Differential Item Functioning (DIF) to identify those performing differently across student subgroups. Uniform DIF items were identified using ordinal logistic regression. A two-step process tested the effect of a grouping variable on the outcome and item score, before/after conditioning on student ability (total test score). A statistically significant likelihood ratio test of the two sets of estimates provided the test for uniform DIF. Identified items were then analysed to identify common themes in question format or subject matter.

Results

Items resulting in performance differences with gender and ethnicity were identified across different test modalities, although typically t-tests revealed no overall significant difference in mean scores. To ensure test bias is minimised, these items were analysed to identify whether question format negatively impacted on a subgroup's ability to perform.

Conclusions

Question formats are likely to affect student performance from different demographic subgroups, and therefore may not be a true representation of their ability.

Take-home message

While an awareness of performance differences in anatomy assessment across demographics is helpful, it is essential to identify their cause. An initial focus on question structure and subject matter can allow for interventions that could mitigate these differences.

AN AUTHENTIC ASSESSMENT – THE IPA!

Author(s)

Jo Bishop, Carmel Tepper, Neelam Doshi, Allan Stirling

Presenter

Jo Bishop

Institution(s), Department(s), Country/Countries

Bond University, Faculty of Health Sciences and Medicine, Gold Coast, Australia

Abstract

In year two of our medical program we have developed an authentic assessment method that integrates multiple disciplines and their unique teaching methods. Whilst anatomy is often assessed as a practical, disciplines such as pharmacology and pathology have traditionally been delivered in isolation and only didactically. Faculty members are encouraged to develop interactive learning sessions where multiple disciplines jointly create and deliver active, practical, outcomes-driven workshops. The challenge then, is to assess this learning in an authentic manner that rewards good learning habits and encourages attendance in these practical sessions.

Methods

The integrated practical assessment (IPA) is a timed, sequential practical exam, based in the laboratory. This setting permits the use of multimedia stimulus such as models, videos, cadaveric specimens, pathological pots and X-rays together with charts, lab results and ECGs. We have even incorporated live models and simulation resources such as mannequins. . Academics are encouraged to develop stations together that integrate session outcomes. Stations are rich in context and the stimulus requires students to apply their higher order reasoning skills across disciplines.

Results

Statistically, the IPA is a reliable exam (Cronbach alpha 0.71) that has been endorsed by both faculty and student feedback. Evaluation of the cohort indicates a high satisfaction rate and strong correlation with their teaching and curriculum outcomes.

Students who participate in scheduled sessions will see strong links between their learning journey and this assessment. The IPA encourages good learning habits as students are rewarded for completing self-directed learning activities and participation in practical sessions.

EVALUATION OF SUMMATIVE ASSESSMENT PATTERN FOR UNDERGRADUATE PHARMACOLOGY PRACTICAL EXAMINATION

Author

Dr. Bharatkumar Gajjar

Presenter/s

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Introduction:

According to Medical Council of India Regulations (MCI, 1997), the goal of teaching undergraduate students in Pharmacology is to inculcate a rational and scientific basis of therapeutics. For practical, certain skills are recommended.

The study was carried out to evaluate summative assessment pattern for undergraduate Pharmacology practical examination in all medical colleges of Gujarat state.

Methods:

This was a cross sectional, observational study. Heads of Pharmacology departments of one medical college from each university of Gujarat state were sent by e-mail, a 'Letter of intent' and their summative assessment pattern for practical examination was gathered. Data collected were evaluated and compared in the terms of contents and mode of assessment.

Results:

All universities conduct practical examination of total 40 marks. Majority of the universities conduct theory viva of 15 marks and skill exercises of 25 marks. Majority of universities take two table viva of 15 marks each and then makes an average for viva. All the universities include Prescription related exercises in the practical examination of 10 marks but pattern of conduction is different. All universities had different distribution of other skill exercises like experimental pharmacology, ADR reporting, p-drug concept, spotting, journal writing etc.

Conclusion:

Though the pattern of Pharmacology Practical Examination in the Universities of Gujarat State serves the objectives laid down in the MCI regulations; there is a wide range of variation in exercises and their marks.

Take-Home Message:

There is a need for making a common pattern, which can be implemented for uniform assessment.

DEVELOPMENT OF TEAM-BASED LEARNING AS A FORMATIVE ASSESSMENT TOOL DURING THE FIRST CONSOLIDATION WEEK AT PENINSULA SCHOOL OF MEDICINE, PLYMOUTH, UK

Author/s

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Presenter:

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Introduction

Previous Consolidation Week activities afforded Year 1 medical students opportunities to assess their learning progress and address any perceived gaps, following several study blocks. Unfortunately, these sessions suffered from poor attendance and student engagement. This presented an opportunity to enhance student engagement, develop lifelong learning skills and test knowledge transfer ability, using formative Team-Based Learning (TBL) principles within an integrated Problem-Based Learning (PBL) medical programme.

Methods

Preceding PBL case units were used as TBL pre-reading material. Students (n=86) were tested with MCQs, both as individuals and in their PBL groups, using a variety of learning outcomes, blueprinted to the prior PBL cases to help improve construct validity. The best performing TBL team was awarded a small prize.

Results

First analysis of this assessment suggests it has good construct validity, providing impetus for its continued use and development within our course. We surmise that student participation to further develop the design and assessment framework is paramount to its future success.

Conclusions

We have been encouraged by the enthusiasm and engagement of the students in this assessment, which provides a welcome opportunity for students to be stakeholders in their learning and assessment. The results so far suggest that this methodology can be modified using various question styles to promote innovative and active approaches to study skills development.

Take-home message

- 1) Student engagement in lifelong learning skill development sessions can be improved by the introduction of competitive, formative assessment using existing student groups.
- 2) Inviting student participation in developing such events is paramount to student engagement in the process.

**PROMOTING NON-TECHNICAL SKILLS IN THE SIMULATED SETTING OF THE ANATOMY LABORATORY:
CREATING A CULTURE FOR SAFE CLINICAL PRACTICE**

Author/s

Wojciech Pawlina and Nirusha Lachman

Presneter/s

Wojciech Pawlina and Nirusha Lachman

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Abstract

Quality improvement and patient safety remain at forefront of health care delivery. Literature highlights importance of non-technical skills in health care and reinforces that these skills require practice and repetition. Studies in surgical environment show that non-technical skills both cognitive (e.g., decision making, situation awareness) and interpersonal (e.g., teamwork, communication) are linked to surgical skills especially when evaluated during intraoperative crisis management situations. Medical educators share responsibility for finding opportunities to promote early development of non-technical skills and emphasize their relevance for safe clinical practice. In current basic science medical curriculum there is little emphasis on teaching and assessment of non-technical skills. In the team based student-centered, environment, anatomy courses provide unique opportunity to teach and evaluate non-technical skills. Interaction between anatomy dissection team members simulate surgical team environment providing opportunity to evaluate team interaction, communication, leadership and professionalism. At Mayo Medical School non-technical skills are integrated into team-based learning curriculum in a 7-week gross anatomy course. Students assess and interpret information from their dissection field to project and anticipate future individual approaches to dissection of assigned cadaver. Several modalities are used to assess skills including: self, peer, near-peer and faculty evaluation, quality of dissection and team based formative assessments. Assessment of non-technical skills contributes 30% of student's final anatomy grade. Awareness of non-technical skills assessment in anatomy curriculum has shown positive effect on team cohesiveness and interaction and had no effect on academic performance as measured by the NBME subject examination and USMLE part 1 Anatomy scores.

THE ROLE OF ASSESSMENT IN CURRICULUM RENEWAL: A CASE STUDY OF A CONSTRUCTIVE ALIGNMENT APPROACH

Author(s)

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Presenter

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Introduction

We have undertaken a comprehensive renewal of our traditional pre-clerkship curriculum. This created an opportunity to integrate assessments at the design level. A literature review revealed a paucity of data on how to best accomplish this. This case study examines the importance of assessment in curriculum renewal.

Methods

Our curriculum design framework is a flexible, individualized learning approach. The enhanced role of assessment for learning positions assessment as a key driver for the redesign. We chose programmatic assessment as our core assessment strategy. We used constructive alignment (Briggs 1996) to guide our integration of assessment and curriculum design. The initial step was to determine learning outcomes. We then conducted an environmental scan and consulted international experts regarding assessments. An assessment sub-committees was established and a specific faculty development plan was created.

Results

Our first year three-week pilot has provided evidence of feasibility and acceptability. We found faculty development was a key enabler of this process. Our second year pilot will incorporate progress testing, mentors and ePortfolio elements. Next steps include evaluating early outcomes, and further disseminating lessons learned.

Conclusions

Curriculum renewal creates an opportunity to align objectives, learning activities, and assessments. Our collaborative approach will be further evaluated to determine effectiveness through the first several years of implementation.

Take-home message

Assessments are central to curriculum renewal and can be effectively integrated at the design level using a constructive alignment paradigm but this requires adequate resources and consultation from experts in curriculum design, assessment and faculty development.

AN AUTHENTIC ASSESSMENT – THE IPA!

Author(s)

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Presenter

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In year two of our medical program we have developed an authentic assessment method that integrates multiple disciplines and their unique teaching methods. Whilst anatomy is often assessed as a practical, disciplines such as pharmacology and pathology have traditionally been delivered in isolation and only didactically. Faculty members are encouraged to develop interactive learning sessions where multiple disciplines jointly create and deliver active, practical, outcomes-driven workshops. The challenge then, is to assess this learning in an authentic manner that rewards good learning habits and encourages attendance in these practical sessions.

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Statistically, the IPA is a reliable exam (Cronbach alpha 0.71) that has been endorsed by both faculty and student feedback. Evaluation of the cohort indicates a high satisfaction rate and strong correlation with their teaching and curriculum outcomes.

Students who participate in scheduled sessions will see strong links between their learning journey and this assessment. The IPA encourages good learning habits as students are rewarded for completing self-directed learning activities and participation in practical sessions.

QUIZ AFTER PROBLEM BASED LEARNING (PBL) TUTORIAL SESSION: DOES IT STRENGTHEN STUDENTS' LEARNING?

Author/s

Umatul Khoiriyah

Presenter

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Introduction

To increase students' engagement in Problem Based Learning (PBL) tutorial, Faculty of Medicine Islamic University of Indonesia (FM IUI) conduct some innovations one of which is by giving a quiz after finishing one unit PBL tutorial (2-3 tutorial meetings). The quiz consists of 10 -15 multiple choice questions developed based on the learning objectives of each unit. This quiz contributes 7 till 10 % to the block score. The study was aimed to evaluate whether this innovation assists students' learning in PBL tutorial.

Method

The study was conducted in Academic Year 2013-2014 qualitatively by applying case study design. Data was collected through semi-structured interviewed with 16 students with at least one-year experience in PBL tutorials. Data was analysed using thematic analysis based on self-regulated learning perspective (Zimmerman, 2000).

Result

Three themes were identified from the study; direction to external motivation, flexible cognitive strategies and inducing self-reflection. The summative quiz directed students to be score oriented by applying some cognitive strategies that were appropriate with the cognitive level asked in the quiz. Students did not try to have deep understanding about the knowledge when the questions in the quiz were in recall level. On the other hand, students used the quiz score as one of the parameters in conducting self-reflection.

Conclusion

The quiz had both negative and positive effects on students' learning. Students' learning motivation tended to be directed externally. On the other hand, the quiz also stimulated students to conduct self-reflection by using the score achieved in the quiz as the parameter.

Take home message

Quiz after tutorial may give more benefits to students' learning when it is applied formatively.

STUDENTS OF COMENIUS UNIVERSITY IN BRATISLAVA, THE JESSENIUS FACULTY OF MEDICINE IN MARTIN IN A REPEATED FEEDBACK PROCESS

Author(s):

Renata Pecova, Oto Osina, Michaela Simkova, Petra Morgosova, Peter Cingel, Ivan Majling, Jan Danko

Presenter:

Renata Pecova

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Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, Slovak Republic

Introduction:

Each of us would like to have feedback that is critical yet helpful and useful for improving the subject design, subject quality and students' learning experience.

Methods:

We carried out evaluation of subjects and educational process by the students of general medicine study program in the academic years 2012/2013, 2013/2014 and 2014/2015. The students had an opportunity to evaluate the following 7 areas: the subject in general, teaching conditions, organization of the subject, knowledge and preparation of the teachers teaching the subject, teaching skills of the teachers teaching the subject, relationship of the teachers to students, insights and opinions. The scale A – FX, with a possibility to mark with X (I do not know, I have no information), was used.

Results:

918 students participated in the evaluation of winter semester 2012/2013, 951 in the evaluation of winter semester 2013/2014 and 901 in the evaluation of winter semester 2014/2015. The total response rate was 68%. The questionnaire conclusions are processed after years of the study, subjects ranking evaluation according to the grades, each subject is processed in detail according to the structure of questions, open questions are at the end of the questionnaire (positive/negative/proposed changes and other comments on the passed subjects).

Conclusions:

Repeated feedback by the medical students not only provides information about the teaching process at the Faculty and helps to improve and refine this process but also points out that remedies were successful.

Take-home message:

It's the constructive feedback we dissect to determine how we can improve our subjects.

INNOVATION IN MEDICAL EDUCATION: TRAINING AND ASSESSING UNDERGRADUATE STUDENTS IN HANDOFF PERFORMANCE - FINDINGS FROM THE EU-PATIENT PROJECT

Author(s)

Gilles L¹, Stieger L¹, Schroeder H^{1,2}, Henn P³, Drachsler H⁴, Sopka S¹

Presenter

Stieger L

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Introduction

Handoffs are a critical point of patient care and a significant source of adverse events for patients. The urgent need to train young medical professionals for handoff has been clearly confirmed. Until now there is no standardized European curriculum for handover training [1]. To address this deficiency, the EU-founded PATIENT project undertook a research, development and implementation strategies in handoff training.

Methods:

The project partners undertook a multi-country needs analysis that addressed the local training needs of medical students on handoff training. Following the identification of learning outcomes for handoff training experts defined the learning outcomes using GCM (GCM) [2]. These learning outcomes were used to design an open source curriculum, based on the pillars of effective communication, risks and error management, and simulation in handoff trainings. Three implementation pilots of handoff training took place in Germany (n=49), Spain (n=40) and Ireland (n=13).

Results

The needs analysis from all countries outlined that students had limited experience with handoffs. However, there was overall agreement on the competencies needed in handoff training. Results of the pilot implementation in Germany showed an increase in self-confidence for the use of standardized handoff tools and accurate handoff performance. Results from Ireland showed improvement in handoff performance in simulation.

Conclusions

The PATIENT project has taken first steps towards standardized handoff training for medical students at a multi-country level.

Session 7S

CREATION AND IMPLEMENTATION OF A NEW WORKPLACE-BASED ASSESSMENT FOR INTERNATIONAL MEDICAL GRADUATES: CHALLENGES AND LESSONS LEARNED

Author(s):

Shannon Murphy and Jean Rawling

Presenter:

Shannon Murphy

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University of Calgary, Alberta International Medical Graduate Program, Canada

Introduction

The Alberta International Medical Graduate (AIMG) Program assesses IMGs for suitability to pursue Canadian postgraduate medical training. Current mandatory point-in-time assessments include a national knowledge-based multiple-choice exam, a national OSCE, and local multiple mini-interviews. To assess candidate's skills in a relevant Canadian generalist clinical environment we implemented an optional 4-week workplace-based assessment (WBA).

Methods

Over two years, 60 IMGs who were not selected for traditional entry into Alberta postgraduate residency programs participated in the WBA. Candidates were placed with assessors specializing in either general internal medicine or family medicine.

Results

Unanticipated challenges were encountered when implementing the new WBA.

Assessor recruitment and scheduling was particularly difficult. Developing and delivering an assessor-training program in different cities was also challenging. Assessors' lack of previous experience with supervision and assessment increased the support they required throughout the process.

Of concern was the mismatch between the level of entrustability at which candidates were being assessed and the level associated with the category of licensure available from the credentialing body.

Finally, managing candidate availability/scheduling, and coordinating candidate licensing, liability insurance and medical services credentialing was complex and time consuming.

Conclusions

Significant unanticipated resources, both financial and administrative, were invested in the WBA. The impact of the WBA upon candidate selection for residency has yet to be determined.

Take-home message

Addressing the challenges encountered during the first iteration of a new WBA for IMGs will result in a smoother and less resource-intensive implementation for future years.

OBSERVING MEDICAL STUDENT COMPETENCE IN PRIMARY CARE SETTINGS

Authors:

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Presenter:

Anna Bui

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Introduction

Within medical education, there is an increasing emphasis on work based assessment (WBA), teamwork and multidisciplinary care, in tandem with increasing use of primary care placements. There is evidence that multisource feedback (MSF) is an effective form of WBA, but has mostly been limited to postgraduate training in primary care settings. This study examines the observations made by multidisciplinary primary care teams in determining medical student competence, with the aim of exploring the potential use of MSF for assessing students in primary care placements.

Methods

Semi structured interviews were conducted with medical and nursing (n=5) and administrative (n=6) staff from three teaching practices in an Australian rural setting. Data were thematically analysed and interpretation of results was informed by Lave and Wenger's community of practice (CoP) model.

Results

The domains of medical student competence observed by these potential assessors were: understanding the essence of general practice, student engagement and patient interaction. The range of perspectives from different staff and existing informal assessment processes support(?) the use of multisource feedback as a rich source of assessment information about student performance on clinical placements.

Conclusions

Medical student competence in primary care is defined by the key values and features of the multidisciplinary team, or CoP, in that setting. Understanding the essence of general practice is important for students on placement as it is perceived to facilitate participation and learning. The CoP model is consistent with the way different primary care staff view competence, and supports the use of MSF as one form of assessment in such settings.

Take-home message

Primary care staff views on medical student competency reflect what they see as unique to their setting and work. Learning opportunities within the social context of a cohesive multidisciplinary team are well suited to multisource feedback.

MULTISOURCE-FEEDBACK IN MEDICAL TRAINING: DEVELOPMENT OF A QUESTIONNAIRE FOR GERMAN-SPEAKING REGIONS

Author(s)

Eva K Hennel, Zineb M Nouns, Felicitas M Lahner, Andrea C Lörwald, Christoph Berendonk, Sören Huwendiek

Presenter

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Introduction

In medical settings Multisource-feedback (MSF) is a recognized form of formative assessment, which is expected to improve physicians' performance [1]. It collects feedback on a doctor's performance from several co-workers' perspectives in form of questionnaires. For this purpose, it is necessary to use one's native language. To date, there is no German questionnaire for the MSF- process.

Methods

We developed a MSF-questionnaire in German informed by literature on MSF-questionnaires [2-7] and based on Mini-PAT [8], which is regularly used and validated. We translated this tool and added few items deemed relevant. Two source of validity evidence were investigated: Content validity was established discussing in an expert-group and the response process was analysed performing a think-aloud study with doctors and co-workers and continued during the implementation.

Results

Our questionnaire contains 15 questions, which cover main aspects of the construct of clinical competence as described for example in the CanMEDS framework. The questions are answered on a 5-point-scale with spaces for narrative comments. Additional items cover a global rating, strengths and weaknesses, health and integrity of the doctor, and the learning environment.

The expert-group argued the content to be adequate. Response processes have shown that the questions clearly and comprehensively address the construct of clinical competence.

Conclusion and Take-home message

We developed a questionnaire for Multisource-feedback in medical training, which is supported by two sources of validity evidence. Investigation of further sources of validity evidence is planned to provide a valid instrument for future practitioners who implement MSF in German-speaking regions.

FOUNDATION DOCTORS' ASSESSMENT OF WORKPLACE BASED ASSESSMENTS

Author:

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Introduction

Workplace based assessment (WPBA) are tools used to assess professional competence and performance. They were utilised in the United Kingdom Foundation Programme as instruments of formative assessment to assess and enhance the achievement of the desired competencies.

Methods

An in-depth semi-structured one to one qualitative interview technique was utilised to explore the learning related concepts of Foundation Doctors on achieving the competencies as assessed by workplace based assessments. A grounded theory approach was utilised to analyse the qualitative data and to arrive at themes.

Results

The main themes identified indicate that assessments in general are acknowledged and accepted by foundation doctors as necessary and important. WPBA possess the potential to function well as formative assessments but fail to deliver due to flaws associated with the learning environment, the assessors as well as the foundation doctors. The failure in providing effective feedback was the major drawback in using these assessments as assessments for learning.

Conclusions

In theory, WPBA are the most suitable assessment instruments available to assess the complex competency needs of doctors. However, their actual use in practise both to assess and especially promote learning are marred by numerous deficiencies.

Take-home message

WPBA are best placed to assess complex competencies and performance of doctors, however to achieve their full potential considerable investment both by the assessors and assesses is required to utilise this tool successfully.

OBJECTIVE STRUCTURED CLINICAL EXAMINATIONS TO ASSESS CLINICAL SKILL COMPETENCIES FOR TRAINEE PSYCHOLOGISTS

Author(s):

Rachel Roberts¹, Anna Chur-Hansen¹, Helen Winefield¹, Diana Dorstyn¹, Helena Ward² & Simon Patten²

Presenter

Rachel Roberts or Anna Chur-Hansen (TBC)

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Abstract

Objective Structured Clinical Examinations (OSCE) have been used to assess competencies in medicine, nursing and dentistry for many years, where they have been demonstrated to be an authentic, reliable and valid way to assess competency. However, they have only very recently been piloted in professional postgraduate psychology training programs in Australia, and do not appear to have been adopted to date in other countries. There are very little data available to ascertain whether OSCE methods of assessment can be transferred to psychology, which differs quite markedly in content and approach from biomedical disciplines. We will report on an initiative to assess Year 5 trainee psychologists' competency in Motivational Interviewing through OSCE. Data collected will include ratings by examiners (teaching staff who are qualified psychologists), feedback from standardised patients, a survey on the fidelity and acceptability of the assessment process as perceived by the trainees, and a reflective piece completed by the trainees based on their experiences with this approach to teaching and learning, which in their context is unfamiliar and novel. The experiences and reflections of teaching staff involved in the use of OSCE for psychology for the first time will also be reported.

Take-home message:

We will report on whether OSCE are an acceptable, reliable and valid method of the assessment of competencies for trainee psychologists.

Please note: Our data collection commences in August 2015, hence we cannot provide details of findings with this Abstract.

MEDICAL ETHICS AND COMMUNICATION SKILL OSCE: ESSENTIAL FORMATIVE ASSESSMENT FOR NEW RURAL DOCTOR

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Presenter

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Introduction

Good attitude with medical ethics, and skillful communication is needed for solving conflict with patient, avoiding medical error or non-ethical manner, and promoting patient safety in rural hospital. Medical ethics OSCE was initiated as a formative assessment for last year medical students since 2006. This study is to evaluate the satisfaction and utility of this created OSCE.

Methods

Fifteen OSCE stations; 10 video-based stations (VCD) and 5 Standardized-patient-based stations (SP) were arranged to test knowledge, attitude, and communication skills related with medical ethics issues. Test items validated by multidisciplinary teachers. After examination, Meeting for addressing pitfalls and give suggestion was done. Self-administered questionnaires were collected immediately after the examination and at the follow-up visiting 96 doctors at rural hospital, 2-year after their graduation.

Results

Immediately after activity survey showed 90% greatest satisfaction. They reflected useful of "feedback and comment" activities, examination promoting good attitude and communication skill practice. Quality of test and updated issues was developed year by year. From follow-up visiting at rural hospital, 94.5 % agreed that test was useful for preparing them to face real situation and addressed most common issues in their practice which presenting as in test items, including end of life decision, patient counseling, breaking bad news, medical errors, asking permission to stop CPR, and Double standard.

Conclusions

Medical ethics OSCE show very useful for graduated doctor for preparing them to confront with ethical issues in rural workplace.

Take-home message

Medical ethics OSCE should maintain quality and regularly update current ethical issues, with regarding multidisciplinary team involvement.

FEASIBILITY, EFFECTIVENESS AND SATISFACTION OF STUDENT-LED FORMATIVE OSCEs: THE GRIFFITH UNIVERSITY MODEL

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Presenters:

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Introduction

The Objective Structured Clinical Examination (OSCE) is a key assessment tool for medical schools worldwide. In 2015, The Griffith University Medicine Society (GUMS) in collaboration with the Medical School ran a student-led formative OSCEs for first, second and third year postgraduate students.

Methods

A qualitative and quantitative study was conducted to explore the feasibility, effectiveness and satisfaction of student-led formative OSCEs. The experience of individuals who had been involved in student-led formative OSCEs was explored through the use of stakeholder interviews.

Three formative OSCEs totalling over 400 students assessed effectiveness and satisfaction for both participants and volunteers. Each student completed five stations, which mirrored the Medical School's assessment structure. The use of near-peer examiners cemented the student-led aspects of this program. At the completion of the OSCE, students received written feedback.

The use of a written survey was employed to gauge participant opinions at three time points. Furthermore, a comparison of summative OSCE results was made between students who participated in the formative OSCE and those who did not.

Results

This study is differentiated by its high participation rate, scale and resource utilisation. Student perceptions of the OSCE were explored. Data collection was undertaken from August until November with analysis of formative and summative results.

Conclusions

Student led formative OSCEs are a useful learning tool helping students prepare for assessment and clinical practice. This initiative is feasible, effective and has a high rate of participant satisfaction. Student-led formative OSCEs are a practical way to maximise clinical skills performance.

THE EFFECT ON INTERNSHIP CLINICAL SKILLS IN DIFFERENT HOSPITAL LEVELS EVALUATED BY OSCE.

Author(s)

Yaowalak Jariyapongpaiboon, Satit Lukkraisorn, Supalert Nedsuwan

Presenter

Yaowalak Jariyapongpaiboon

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Introduction :

A one-year program of internship in the provincial hospitals is the requirement for Thai doctors after obtaining a medical degree. The new doctors were allocated to qualified provincial hospitals either Advanced level (A) or Standard level hospitals (S). The A level hospitals have more staffs capacities and number of patients whereas the staffs at the S level hospital give more close attention to interns. We hypothesized that the different levels of the hospitals where interns were allocated may affect the clinical skills.

Methods :

Interns of two hospitals included A and S level hospitals were invited to undergo Objective Structured Clinical Examination (OSCE) at the end of the program. The examination consisted of 9 clinical skills which were the Medical Council of Thailand requirements.

Results :

Thirty-eight interns of A level hospital and 16 interns of S level hospital were enrolled. Grade Point Average (GPA) after graduated from medical school (3.2 vs. 3.1 $P=0.20$) and gender ratio ($P=0.08$) were not significantly different. Interns at A level hospital got higher score on assisted breech delivery skills ($P<0.01$) but got lower score on trauma management skills ($P=0.03$). After adjusted for GPA and gender there were not significantly different of overall clinical skills between interns of two hospitals ($P=0.79$).

Conclusions :

The levels of hospitals for internship program are not affect the overall of clinical skills. Some specific skills in each hospital may need to explore and standardized to reach the requirements.

Take-home message :

Assessment by OSCE should be performed to evaluate intern competency.

PERFORMANCE COMPARISON BETWEEN ART STUDENTS AND COMMON PEOPLE AS STANDARDIZED PATIENTS IN OSCE

Authors

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Introduction

In OSCE, the standardized patients (SP) should adequately provide context for the examinee. The increasing use of SP in assessment and training makes it necessary to provide more people for the role. In the other hand, care should be taken to keep the quality. One amongst other ways for quality control of the SP can be done in the selection of the recruits.

Methods

We compare the performance between SP who have acting study background with the ones who don't. Using questionnaires completed by examiners and examinee, SP are assessed for their global performances, acting, and interaction with the examinee. Length of experience becoming SP is also analyzed. Both examiners and examinee are blind to the background of the SP.

Result and conclusion

Data analysis is still on progress. SP are grouped as art students and common people. Each group is further divided based on years in experience as SP. We expect to be able to draw conclusion about the SP performance in relation to the art study background.

Take home message

We hope to provide recommendation about whether it is important to consider the art study background for SP recruitment.

GLOBAL RATING IN OBJECTIVE STRUCTURED CLINICAL EXAMINATION OF MEDICAL STUDENTS

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Presenter :

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** The Medical council in Thailand

Introduction

Objective structured clinical examination (OSCE) is used to assess the clinical competence of medical students in the National Licensing Examination (NLE) step3 in Thailand. Medical teachers provide students' performance in 4 skills: history taking, physical examination, communication, and manual skill. However there are several categories of performance ratings in each station which may introduce error into ratings due to a short time (5 minute per station). In this study raters were asked to check the global rating at the end of the encounters comparing with the total scores of students' performance from checklist.

Objectives

To study the correlation between global rating and the total scores of students' performance in OSCE.

Methods

We used the data from three cycles of OSCE in the NLE step3 in the year 2015 for analyzing. The 5-point rating scale was used for global rating in each station. All raters rated the score for each category, also checked global rating at the end, but they did not know the total scores and minimal passing level. The correlation coefficient between global rating and the total scores was analyzed.

Results

The analysis obtained from 585 raters who assessed 2,590 medical students in 45 stations . Correlation coefficients between global rating and the total scores are very high ($>.81$) in 1 station, high (.61-.80) in 36 stations, moderate (.41-.60) in 7 stations, and low (.20-.41) in 1 station. All of the physical examination skills had high correlation coefficients. Only few students who received clear fail in global rating got the total scores more than minimal passing level and few students who received clear pass got the total scores more than minimal passing level except in communication skill.

Conclusions

Most global rating are highly correlated with the total scores in OSCE.

Take home message

Global rating may help to make decision into pass or fail in each station especially in case of total scores slightly lower than minimal passing level.

IMPLEMENTATION OF COMPREHENSIVE OBJECTIVE STRUCTURED CLINICAL EXAMINATION FOR ASSESSING THE CLINICAL COMPETENCE OF MEDICAL STUDENTS: LESSON LEARNT

Author/s

Yeny Dyah Cahyaningrum

Presenter

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Institution(s), Department(s), Country/Countries:

Medical Education Unit, Faculty of Medicine, Islamic University of Indonesia

Background

Objective Structured Clinical Examination (OSCE) as a performance-based assessment method is a well established student assessment tool. As the whole assessment for preparing the doctor competence, Faculty of Medicine, Islamic University of Indonesia holds Comprehensive OSCE in the final of the clinical education stage. In this research, it will see whether the comprehensive OSCE has the good role for assessing the medical students.

Method

This research will be held by an existence of Comprehensive OSCE followed by all the students who will finish their stage in February and May 2015. The students will follow the national OSCE in a month after following the comprehensive OSCE. The station kind and number will be given in the comprehensive OSCE equal with the national OSCE. The cases which given is the case that is the medical students competence.

Result

This research was followed by 164 students which finished the stage in February and May 2015. The students followed the comprehensive OSCE and the national OSCE in 12 stations. There were the significant correlation between the comprehensive OSCE and the national OSCE ($r: 0,7; p < 0,05$). Moreover, there was the improvement of the average of the students' final score in the national OSCE compared with the comprehensive OSCE.

Conclusion

The comprehensive OSCE is the comprehensive final assessment which could be used to assess the competence as the medical students. The students' participation in the comprehensive OSCE improve the students' competence average in following the national OSCE.

ENHANCE OSCE LEARNING EFFICIENCY BY EXAM SCHEDULING ELECTRONIC SYSTEM

Author/s

CHIH-MING H, CHIH-CHENG H, LENG-CHIEH L

Presenter/s

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Institution(s), Department(s), Country/Countries:

Introduction/background:

In order to strengthen the quality of care and establish a good doctor-patient relationship, national examination system for medical doctors in Taiwan had a major change. After graduating from medical school, including internship, the medical students must pass the first stage of national exams and the qualified test of OSCE before being allowed to participate in the second stage of national examination. After that, they can obtain a certificate. With the construction of OSCE management platform and the effective management of the quiz, students can immediately feedback to promote learning effect at the end of each test, therefore achieve the purposes that is "doing, learning and recording at the same time".

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Through the technology of information connection and integration, the managers shorten the time of data entry, avoid manual transcription errors and reduce potential human work hours.

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According to the needs of managers, we build "OSCE management platform," the integration of three major components of management including the examiners, candidates and device. After discussions between managers and IT staff, we integrate the examination system, the examination planning, exam records, equipment management, teacher data, systems management, administrator data and file import in the platform (Fig 1). The administrative staff will enter the list of candidates and the examiners, upload to this platform, and automatically connect to the examination planning, examiner allocation, candidate examination room arrangements, schedule, and automatic file conversion to shorten working hours.

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To enhance the efficiency of manpower and cost-effectiveness, the construction of OSCE management platform has reduced error rate of manual schedule with an average of 6.78 minutes saved each time (Fig 2). The use of automatic file conversion and image storage system has significantly reduced 72 minutes per echelon, result in a labor cost down of 66,400 New Taiwan dollars (Table 1), and fulfill the original expectations of benefits. After the exam, immediate feedback helps to achieve the purpose of teaching and satisfaction raises from 3.6 points to 4.7 (Fig 3). We hope that the feedback from the examiners and videos assisted learning will help the students to pass the national exam.

Discussion:

In this project, we used the technology of information processing to create schedule, saved manpower, and improved the disadvantages of previous OSCE exam processing system. The OSCE management platform significantly reduce working hours and manual errors.

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ASSESSING CLINICAL REASONING SKILLS OF MEDICAL STUDENTS USING OBJECTIVE STRUCTURED CLINICAL EXAMINATION(OSCE).

Author(s)

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Presenter

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⁵Department of Obstetrics & Gynecology, Kosin University College of Medicine, Busan, Korea

⁶Department of Pediatrics, Gyeongsang National University School of Medicine, Jinju, Korea

Introduction

The purpose of this study is to evaluate students' clinical reasoning ability using performance assessment method.

Methods

Third grade medical school students (N=335) in the Busan-Gyeongnam Consortium were included in the study. The examination was consisted of 12 Objective Structured Clinical Examination (OSCE) stations, one of stations was developed to assess clinical reasoning skills. The scenario and checklists of the station was revised by 6 content and test experts through the discussion and simulation. Students' tasks of the station were 1) identifying main problem, 2) focused history taking and physical examination, 3) discussing diagnostic and management plan with patients, 4) writing SOAP note. The students were divided into groups to take the exam in 4 sites during 3 days. Two professors assessed students simultaneously.

Results

The Cronbach's α within the station across items was 0.878 and interrater agreement was 0.785. The mean score was 47.2 points. 116(34.6%) students identified essential problem early in the station and only 61(18.2%) performed focused history taking and physical examination logically. 180(53.7%) explained accurate diagnosis and management plan. Students thought that the station was more authentic but more difficult. Especially they had difficulties in writing SOAP note during patient encounter.

Conclusions

Students' clinical reasoning skills were not enough in this OSCE exam.

Take-home message

Students need to learn problem identification and focused interview. Well-organized authentic OSCE station should be developed to assess clinical reasoning skills.

Session 7T

CREATION AND IMPLEMENTATION OF A NEW WORKPLACE-BASED ASSESSMENT FOR INTERNATIONAL MEDICAL GRADUATES: CHALLENGES AND LESSONS LEARNED

Author(s):

Shannon Murphy and Jean Rawling

Presenter:

Shannon Murphy

Institution(s), Department(s), Country/Countries:

University of Calgary, Alberta International Medical Graduate Program, Canada

Introduction

The Alberta International Medical Graduate (AIMG) Program assesses IMGs for suitability to pursue Canadian postgraduate medical training. Current mandatory point-in-time assessments include a national knowledge-based multiple-choice exam, a national OSCE, and local multiple mini-interviews. To assess candidate's skills in a relevant Canadian generalist clinical environment we implemented an optional 4-week workplace-based assessment (WBA).

Methods

Over two years, 60 IMGs who were not selected for traditional entry into Alberta postgraduate residency programs participated in the WBA. Candidates were placed with assessors specializing in either general internal medicine or family medicine.

Results

Unanticipated challenges were encountered when implementing the new WBA.

Assessor recruitment and scheduling was particularly difficult. Developing and delivering an assessor-training program in different cities was also challenging. Assessors' lack of previous experience with supervision and assessment increased the support they required throughout the process.

Of concern was the mismatch between the level of entrustability at which candidates were being assessed and the level associated with the category of licensure available from the credentialing body.

Finally, managing candidate availability/scheduling, and coordinating candidate licensing, liability insurance and medical services credentialing was complex and time consuming.

Conclusions

Significant unanticipated resources, both financial and administrative, were invested in the WBA. The impact of the WBA upon candidate selection for residency has yet to be determined.

Take-home message

Addressing the challenges encountered during the first iteration of a new WBA for IMGs will result in a smoother and less resource-intensive implementation for future years.

OBSERVING MEDICAL STUDENT COMPETENCE IN PRIMARY CARE SETTINGS

Authors:

Anna Bui, Jannine Bailey, Wendy Hu

Presenter:

Anna Bui

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Introduction

Within medical education, there is an increasing emphasis on work based assessment (WBA), teamwork and multidisciplinary care, in tandem with increasing use of primary care placements. There is evidence that multisource feedback (MSF) is an effective form of WBA, but has mostly been limited to postgraduate training in primary care settings. This study examines the observations made by multidisciplinary primary care teams in determining medical student competence, with the aim of exploring the potential use of MSF for assessing students in primary care placements.

Methods

Semi structured interviews were conducted with medical and nursing (n=5) and administrative (n=6) staff from three teaching practices in an Australian rural setting. Data were thematically analysed and interpretation of results was informed by Lave and Wenger's community of practice (CoP) model.

Results

The domains of medical student competence observed by these potential assessors were: understanding the essence of general practice, student engagement and patient interaction. The range of perspectives from different staff and existing informal assessment processes support(?) the use of multisource feedback as a rich source of assessment information about student performance on clinical placements.

Conclusions

Medical student competence in primary care is defined by the key values and features of the multidisciplinary team, or CoP, in that setting. Understanding the essence of general practice is important for students on placement as it is perceived to facilitate participation and learning. The CoP model is consistent with the way different primary care staff view competence, and supports the use of MSF as one form of assessment in such settings.

Take-home message

Primary care staff views on medical student competency reflect what they see as unique to their setting and work. Learning opportunities within the social context of a cohesive multidisciplinary team are well suited to multisource feedback.

MULTISOURCE-FEEDBACK IN MEDICAL TRAINING: DEVELOPMENT OF A QUESTIONNAIRE FOR GERMAN-SPEAKING REGIONS

Author(s)

Eva K Hennel, Zineb M Nouns, Felicitas M Lahner, Andrea C Lörwald, Christoph Berendonk, Sören Huwendiek

Presenter

Eva K Hennel

Institution(s), Department(s), Country/Countries

University of Bern, Institute of Medical Education, Bern, Switzerland

Introduction

In medical settings Multisource-feedback (MSF) is a recognized form of formative assessment, which is expected to improve physicians' performance [1]. It collects feedback on a doctor's performance from several co-workers' perspectives in form of questionnaires. For this purpose, it is necessary to use one's native language. To date, there is no German questionnaire for the MSF- process.

Methods

We developed a MSF-questionnaire in German informed by literature on MSF-questionnaires [2-7] and based on Mini-PAT [8], which is regularly used and validated. We translated this tool and added few items deemed relevant. Two source of validity evidence were investigated: Content validity was established discussing in an expert-group and the response process was analysed performing a think-aloud study with doctors and co-workers and continued during the implementation.

Results

Our questionnaire contains 15 questions, which cover main aspects of the construct of clinical competence as described for example in the CanMEDS framework. The questions are answered on a 5-point-scale with spaces for narrative comments. Additional items cover a global rating, strengths and weaknesses, health and integrity of the doctor, and the learning environment.

The expert-group argued the content to be adequate. Response processes have shown that the questions clearly and comprehensively address the construct of clinical competence.

Conclusion and Take-home message

We developed a questionnaire for Multisource-feedback in medical training, which is supported by two sources of validity evidence. Investigation of further sources of validity evidence is planned to provide a valid instrument for future practitioners who implement MSF in German-speaking regions.

FOUNDATION DOCTORS' ASSESSMENT OF WORKPLACE BASED ASSESSMENTS

Author:

Adrian Simoes

Presenter:

Adrian Simoes

Institution(s), Department(s), Country/Countries

Directorate of Medical Education, East Kent Hospitals University NHS Foundation Trust

Introduction

Workplace based assessment (WPBA) are tools used to assess professional competence and performance. They were utilised in the United Kingdom Foundation Programme as instruments of formative assessment to assess and enhance the achievement of the desired competencies.

Methods

An in-depth semi-structured one to one qualitative interview technique was utilised to explore the learning related concepts of Foundation Doctors on achieving the competencies as assessed by workplace based assessments. A grounded theory approach was utilised to analyse the qualitative data and to arrive at themes.

Results

The main themes identified indicate that assessments in general are acknowledged and accepted by foundation doctors as necessary and important. WPBA possess the potential to function well as formative assessments but fail to deliver due to flaws associated with the learning environment, the assessors as well as the foundation doctors. The failure in providing effective feedback was the major drawback in using these assessments as assessments for learning.

Conclusions

In theory, WPBA are the most suitable assessment instruments available to assess the complex competency needs of doctors. However, their actual use in practise both to assess and especially promote learning are marred by numerous deficiencies.

Take-home message

WPBA are best placed to assess complex competencies and performance of doctors, however to achieve their full potential considerable investment both by the assessors and assesses is required to utilise this tool successfully.

OBJECTIVE STRUCTURED CLINICAL EXAMINATIONS TO ASSESS CLINICAL SKILL COMPETENCIES FOR TRAINEE PSYCHOLOGISTS

Author(s):

Rachel Roberts¹, Anna Chur-Hansen¹, Helen Winefield¹, Diana Dorstyn¹, Helena Ward² & Simon Patten²

Presenter

Rachel Roberts or Anna Chur-Hansen (TBC)

Institution(s), Department(s), Country/Countries:

(1) University of Adelaide, School of Psychology, Australia (2) University of Adelaide, School of Medicine, Australia

Abstract

Objective Structured Clinical Examinations (OSCE) have been used to assess competencies in medicine, nursing and dentistry for many years, where they have been demonstrated to be an authentic, reliable and valid way to assess competency. However, they have only very recently been piloted in professional postgraduate psychology training programs in Australia, and do not appear to have been adopted to date in other countries. There are very little data available to ascertain whether OSCE methods of assessment can be transferred to psychology, which differs quite markedly in content and approach from biomedical disciplines. We will report on an initiative to assess Year 5 trainee psychologists' competency in Motivational Interviewing through OSCE. Data collected will include ratings by examiners (teaching staff who are qualified psychologists), feedback from standardised patients, a survey on the fidelity and acceptability of the assessment process as perceived by the trainees, and a reflective piece completed by the trainees based on their experiences with this approach to teaching and learning, which in their context is unfamiliar and novel. The experiences and reflections of teaching staff involved in the use of OSCE for psychology for the first time will also be reported.

Take-home message:

We will report on whether OSCE are an acceptable, reliable and valid method of the assessment of competencies for trainee psychologists.

Please note: Our data collection commences in August 2015, hence we cannot provide details of findings with this Abstract.

MEDICAL ETHICS AND COMMUNICATION SKILL OSCE: ESSENTIAL FORMATIVE ASSESSMENT FOR NEW RURAL DOCTOR

Author(s)

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Khon Kaen Medical Education Center (KKMEC), Khon Kaen Regional Hospital, Khon Kaen, Thailand

Introduction

Good attitude with medical ethics, and skillful communication is needed for solving conflict with patient, avoiding medical error or non-ethical manner, and promoting patient safety in rural hospital. Medical ethics OSCE was initiated as a formative assessment for last year medical students since 2006. This study is to evaluate the satisfaction and utility of this created OSCE.

Methods

Fifteen OSCE stations; 10 video-based stations (VCD) and 5 Standardized-patient-based stations (SP) were arranged to test knowledge, attitude, and communication skills related with medical ethics issues. Test items validated by multidisciplinary teachers. After examination, Meeting for addressing pitfalls and give suggestion was done. Self-administered questionnaires were collected immediately after the examination and at the follow-up visiting 96 doctors at rural hospital, 2-year after their graduation.

Results

Immediately after activity survey showed 90% greatest satisfaction. They reflected useful of "feedback and comment" activities, examination promoting good attitude and communication skill practice. Quality of test and updated issues was developed year by year. From follow-up visiting at rural hospital, 94.5 % agreed that test was useful for preparing them to face real situation and addressed most common issues in their practice which presenting as in test items, including end of life decision, patient counseling, breaking bad news, medical errors, asking permission to stop CPR, and Double standard.

Conclusions

Medical ethics OSCE show very useful for graduated doctor for preparing them to confront with ethical issues in rural workplace.

Take-home message

Medical ethics OSCE should maintain quality and regularly update current ethical issues, with regarding multidisciplinary team involvement.

FEASIBILITY, EFFECTIVENESS AND SATISFACTION OF STUDENT-LED FORMATIVE OSCEs: THE GRIFFITH UNIVERSITY MODEL

Author(s):

Hayman Lui, Patrick Owens, Maddi Taylor, Kelvin Upton, Dr Liz Fitzmaurice Dr Kathy Brochie

Presenters:

Hayman Lui, Patrick Owens

Institution(s), Department(s), Country/Countries:

Griffith University, School of Medicine, Australia

Introduction

The Objective Structured Clinical Examination (OSCE) is a key assessment tool for medical schools worldwide. In 2015, The Griffith University Medicine Society (GUMS) in collaboration with the Medical School ran a student-led formative OSCEs for first, second and third year postgraduate students.

Methods

A qualitative and quantitative study was conducted to explore the feasibility, effectiveness and satisfaction of student-led formative OSCEs. The experience of individuals who had been involved in student-led formative OSCEs was explored through the use of stakeholder interviews.

Three formative OSCEs totalling over 400 students assessed effectiveness and satisfaction for both participants and volunteers. Each student completed five stations, which mirrored the Medical School's assessment structure. The use of near-peer examiners cemented the student-led aspects of this program. At the completion of the OSCE, students received written feedback.

The use of a written survey was employed to gauge participant opinions at three time points. Furthermore, a comparison of summative OSCE results was made between students who participated in the formative OSCE and those who did not.

Results

This study is differentiated by its high participation rate, scale and resource utilisation. Student perceptions of the OSCE were explored. Data collection was undertaken from August until November with analysis of formative and summative results.

Conclusions

Student led formative OSCEs are a useful learning tool helping students prepare for assessment and clinical practice. This initiative is feasible, effective and has a high rate of participant satisfaction. Student-led formative OSCEs are a practical way to maximise clinical skills performance.

THE EFFECT ON INTERNSHIP CLINICAL SKILLS IN DIFFERENT HOSPITAL LEVELS EVALUATED BY OSCE.

Author(s)

Yaowalak Jariyapongpaiboon, Satit Lukkraisorn, Supalert Nedsuwan

Presenter

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Institution(s), Department(s), Country/Countries

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Introduction :

A one-year program of internship in the provincial hospitals is the requirement for Thai doctors after obtaining a medical degree. The new doctors were allocated to qualified provincial hospitals either Advanced level (A) or Standard level hospitals (S). The A level hospitals have more staffs capacities and number of patients whereas the staffs at the S level hospital give more close attention to interns. We hypothesized that the different levels of the hospitals where interns were allocated may affect the clinical skills.

Methods :

Interns of two hospitals included A and S level hospitals were invited to undergo Objective Structured Clinical Examination (OSCE) at the end of the program. The examination consisted of 9 clinical skills which were the Medical Council of Thailand requirements.

Results :

Thirty-eight interns of A level hospital and 16 interns of S level hospital were enrolled. Grade Point Average (GPA) after graduated from medical school (3.2 vs. 3.1 $P=0.20$) and gender ratio ($P=0.08$) were not significantly different. Interns at A level hospital got higher score on assisted breech delivery skills ($P<0.01$) but got lower score on trauma management skills ($P=0.03$). After adjusted for GPA and gender there were not significantly different of overall clinical skills between interns of two hospitals ($P=0.79$).

Conclusions :

The levels of hospitals for internship program are not affect the overall of clinical skills. Some specific skills in each hospital may need to explore and standardized to reach the requirements.

Take-home message :

Assessment by OSCE should be performed to evaluate intern competency.

PERFORMANCE COMPARISON BETWEEN ART STUDENTS AND COMMON PEOPLE AS STANDARDIZED PATIENTS IN OSCE

Authors

Noviarina Kurniawati, Prattama Santoso Utomo, Siti Rokhmah Projosasmito, Savitri Shitarukmi

Presenter

Noviarina Kurniawati

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Introduction

In OSCE, the standardized patients (SP) should adequately provide context for the examinee. The increasing use of SP in assessment and training makes it necessary to provide more people for the role. In the other hand, care should be taken to keep the quality. One amongst other ways for quality control of the SP can be done in the selection of the recruits.

Methods

We compare the performance between SP who have acting study background with the ones who don't. Using questionnaires completed by examiners and examinee, SP are assessed for their global performances, acting, and interaction with the examinee. Length of experience becoming SP is also analyzed. Both examiners and examinee are blind to the background of the SP.

Result and conclusion

Data analysis is still on progress. SP are grouped as art students and common people. Each group is further divided based on years in experience as SP. We expect to be able to draw conclusion about the SP performance in relation to the art study background.

Take home message

We hope to provide recommendation about whether it is important to consider the art study background for SP recruitment.

GLOBAL RATING IN OBJECTIVE STRUCTURED CLINICAL EXAMINATION OF MEDICAL STUDENTS

Authors:

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Presenter :

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ENHANCE OSCE LEARNING EFFICIENCY BY EXAM SCHEDULING ELECTRONIC SYSTEM

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CHIH-MING H, CHIH-CHENG H, LENG-CHIEH L

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Author(s)

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Conclusions

Students' clinical reasoning skills were not enough in this OSCE exam.

Take-home message

Students need to learn problem identification and focused interview. Well-organized authentic OSCE station should be developed to assess clinical reasoning skills.

Session 7U

VOCATIVE ANECDOTE WRITING AS A TOOL FOR STUDENT INTERPROFESSIONAL IN-DEPTH REFLECTION

Author/s

Croker C¹, Tinlin L¹, Wakely L², Croker A²

Presenter/s

Tinlin L¹, Croker A²

Affiliation

¹ The University of Newcastle School of Health Sciences, ² The University of Newcastle Department of Rural Health

Introduction:

This descriptive paper (co-authored by students and academic mentors) details a process of facilitating student interprofessional reflection on how they learn about other health disciplines.

Methods:

During a four week clinical placement two physiotherapy students were guided through an ongoing process of vocative anecdote writing to facilitate when and how they had learnt about other roles in health. They were asked to write accounts that would allow the reader to imagine their experience. The primary mentor shared a scene-setting reflective piece as an example.

Results:

Student-generated anecdotes were used for further discussion of complex issues such as the socialisation of our learning, the difficulty understanding the similarities and difference within professional roles and the difficulty of trying to understand other professional roles while trying to establish their own professional identity. Findings have been incorporated into teaching of other students. Anecdotes have been published.

Conclusions:

This method of reflection was excellent for facilitating deep thinking around complex issues. The student's anecdotes demonstrated that early in their learning they struggle with complex concepts such as professional identity and fitting into the health system. Vocative anecdote writing allowed them to reflect on their own experiences in an on-going way that was safe and non-judgemental.

Take-home message:

Vocative anecdote writing is a useful tool for facilitating reflective practice for students. Students begin to grapple with complex practice areas such as professional identity early in their learning. Educators need to recognise these issues that students are grappling with in order to facilitate learning.

PILOT AND EVALUATION OF AN INNOVATIVE MULTI-SITE INTER-PROFESSIONAL TRANSITION SUPPORT PROGRAM FOR ALLIED HEALTH GRADUATES

Author/s

Karen Donald, Glenn Trainor, Brooke Paisley, Vicki Staikos, Catherine Mancuso

Presenter

Karen Donald

Affiliation

¹ Monash University, ² Peter MacCallum Cancer Centre, ³ Royal Victorian Eye and Ear Hospital, ⁴ Melbourne Metropolitan Cross Site Cluster

Background

In 2014, Peter MacCallum Cancer Centre, Royal Victorian Eye and Ear, Royal Children's and Royal Women's hospitals pooled their collective skills and resources to design, pilot and evaluate cross-site transition support program for Allied Health (AH) new graduates and interns. This collaboration known as the Melbourne Metropolitan Cross-site Cluster (MMCSC, was supported by Department of Health and Human Services funding.

Objective

The MMCSC working group developed a six-session program that ran from July to December 2015 with each site taking turns to host a session. Sessions included Organisational development (Who's who in the Zoo?), Professional resilience and wellness (Who cares?), Shadowing activities (Who are you looking at?), Clinical communication skills (Look who's talking?), Responding to emotional cues (Whose shoes?) and Professional development (Where are you headed and who will you be?).

A paper and pencil participant evaluation was performed at the conclusion of each session. An online evaluation of the program was undertaken by participants, working party members/facilitators and Directors of AH at the end of the program.

Results

Selected aspects of the development and delivery of the content development and session delivery will be discussed and the results of the online facilitator/working group evaluation of the program will be presented.

Discussion

This cross-site transition program is the first of its kind in Melbourne. This multi-site approach will appeal to rural or specialist services, that have small graduate numbers or any health service interested in developing activities to support the transition of new graduates to health professionals.

EVALUATING THE QUALITY OF POSTGRADUATE MEDICAL EDUCATION: DOES IT IMPROVE THE QUALITY OF TEACHING? RESULTS OF A LONGITUDINAL STUDY

Author/s

Fluit C, Klaassen T, De visser M

Presenter

TBA

Affiliation

¹ Radboud University Center Health Academy, ² Radboud University Center Health Academy, ³ Radboud University Center Health Academy

Background

There is mixed evidence whether evaluations lead to more effective teaching and higher ratings. We assessed changes in resident ratings of their teachers, using a validated questionnaire (EFFECT). We interviewed supervisors to understand what changes they plan to make, and how they realise them.

Methods

Supervisors of nine medical specialities were evaluated, using EFFECT. Mean overall scores (MOS) and mean scale scores were calculated and compared using paired T-tests. Semi-structured interviews were conducted based on predefined topic lists. Interviews were transcribed and analyzed in ATLAS-Ti.

Results

89 Supervisors were evaluated at two subsequent years. 12 Out of 18 supervisors (67%) with a MOS <4.0 at year 1, demonstrated a relevant increase of their MOS (mean increase 0.4). 15 Out of 71 supervisors (21%) with an MOS higher than 4.0 demonstrated an increase >0.2 in their MOS.

We interviewed 12 supervisors. A first analysis shows that supervisors experience a high job autonomy concerning teaching, improve their teaching but are not aware of their strategies, and don't expect support from the head of the department. Supervisors rarely learn from their colleagues. Feedback from residents is useful.

Conclusions

Evaluating teachers with EFFECT is associated with a positive change in residents' ratings, predominantly in supervisors with low initial scores. Supervisors formulate intentions but do always not have clear strategies on how to realise them.

Take home message

Evaluating supervisors helps to further improve teaching. Supervisors could be supported in realising their intentions after an evaluation.

THE MRCGP [INT] INTERNATIONAL PROCESS (INTERNATIONAL MEMBERSHIP OF THE ROYAL COLLEGE OF GENERAL PRACTITIONERS)

Author(s):

Freeman¹, Wass², Withnall³ and Howard⁴

Presenter:

Val Wass

Affiliations:

- 1) University of Exeter Medical School & RCGP, UK
- 2) University of Keele Medical School, UK
- 3) Royal Centre for Defence Medicine & RCGP, UK
- 4) University of Nicosia Medical School, Cyprus

Introduction.

Although family medicine (FM) curricula around the world have aspects of commonality, there are also country-specific differences that reflect varying cultural influences and healthcare delivery systems. The UK Membership of the Royal College of General Practitioners International qualification (MRCGP[INT]) aims to achieve standardisation through assessment methodology and validity, in order to enhance the standing of FM as a speciality and improve the quality of patient care. Has this been achieved?

Methods.

The MRCGP[INT] process enables individual sites to develop assessment methodologies that are appropriate for their country/region. Assessment experts make site visits to help support educational development and the establishment of rigorous examinations consistent with international standards. Different external UK evaluators then assure the process and accredit the examinations.

Results.

MRCGP[INT] currently operates in eight sites over four continents. Over 800 doctors have achieved the MRCGP [INT] qualification. We will present data illustrating: the types of assessment chosen by different countries; the varying amounts of time and support required to reach accreditation; and the parameters chosen for evaluation. Changes that have occurred as a result of the process will be presented, including inter-site support and impact.

Conclusions.

The expanding UK MRCGP[INT] programme illustrates the importance of empowering the contextual development of FM accreditation within its local health care system and culture.

Take-home message.

By focusing on assessment methodology, commonality and standardisation across countries can be established to support improvements in patient care.

EXPLORING TRANSITION EXPERIENCES OF HIGHER-STAGE MEDICAL TRAINEES: A LONGITUDINAL AUDIO-DIARY STUDY ACROSS THE TRAINEE TO TRAINED DOCTOR TRANSITION.

Author/s

Lisi Gordon,¹ Divya Jindal-Snape,¹ Jill Morrison,² Gillian Needham,³ Sabina Seibert,² Charlotte Rees,⁴

Presenter

Lisi Gordon,¹

Affiliation

¹University of Dundee, ²University of Glasgow, ³University of Aberdeen, ⁴Monash University.

Introduction/background:

Doctors experience numerous transitions throughout their careers that can affect adversely their health and well-being.^{1,2} While extensive research exists on early transitions (e.g. final year medical student to doctor), little research has explored the trainee to trained doctor transition.^{3,4}

Purpose/objectives:

This two-year study aims to explore how higher-stage trainees (i.e. within one year of completion of their training) develop their identities as they undertake the transition from trainee to trained doctor and into formal leadership roles.

Issues/questions for exploration or ideas for discussion:

This longitudinal audio-diary (LAD) study is following a diverse sample of 24 higher-stage trainees in the UK over an 8 to 12-month period as they complete their training and move into their trained doctor roles (e.g. consultant). Each participant has been interviewed at the beginning and will be interviewed at the end of the LAD period.⁵

Results:

A team approach to data analysis is planned. Primary thematic framework analysis will be undertaken in August 2015. In addition, multiple, complementary forms of secondary data analysis will be undertaken (e.g. discourse analysis). Initial results are expected autumn 2015 and will be ready for presentation at ANZAPHE 2016.

Discussion:

This research will give unique insights into this important transition within a medical career. Our results should influence the ways in which doctors plan for, and are supported as they move through this transition.

Session 7V

TEAM-BASED LEARNING VS PROBLEM BASED LEARNING: YEAR 1 OF A MEDICAL PROGRAM

Author/s

Annette Burgess, Tom Ayton, Craig Mellis

Presenter

Annette Burgess

Institution(s), Department(s), Country/Countries:

¹ The University of Sydney, Sydney Medical School, Office of Medical Education, ² The University of Sydney, Sydney Medical School - Central, ³ The University of Sydney, Sydney Medical School - Central

Introduction/background:

A traditional and effective form of teaching within medical education has been Problem Based Learning (PBL). However, this method of teaching is resource intensive, normally requiring one tutor for every ten students. Team-based learning (TBL) has gained recent popularity in medical education, and can be applied to large groups of up to 100 students. TBL makes use of the advantages of small group teaching and learning, but in contrast to PBL, does not need large numbers of teachers.

Purpose/objectives:

This study sought to explore the efficacy of using TBL in place of PBL in Year 1 of a medical program.

Issues/questions for exploration or ideas for discussion:

Two iterations of TBL, with 20 students, were run following four iterations of PBL within the Year 1 Cardiology teaching block. Student feedback following PBL and TBL was collected by questionnaire and focus groups. Individual and team tests were held, and results of each week were compared.

Results:

19/20 (95%) of students completed the questionnaires regarding their PBL and TBL experiences, and 14/20 (70%) of students attended focus groups. All students (n=20) participated in the test in week 1, and 18/20 students participated in week 2. There was a significant improvement ($p=0.004$) in students' individual score from the week 1 assessment (median = 2) to the week 2 (median = 3.5) assessment. All teams but one achieved a lower score on their second week assessment than on their first. However, the lowest performing team in week 1 outperformed all other teams in week 2. The use of small groups, the readiness assurance tests, immediate feedback from an expert clinician, as well as time efficiency were all aspects of the TBL experience that students found positive. The clinical problem-solving activity, however, was considered to be less effective with TBL.

Discussion:

Students favoured many aspects of the TBL process. The application of TBL principles meant the sessions were not reliant upon a large teacher to student ratio. Students, however, highlighted the need for more time within TBL for clinical problem-solving.

PSYCHIATRY TERMS FOR JUNIOR DOCTORS: SHOOT FOR THE STARS

Author/s

Louise Nash^{1,2}, Aspasia Karageorge^{1,2}, Anthony Llewellyn¹, Brian Kelly³,
Claire Maddocks¹, James Edwards^{1,4}, Harsimrat Sandhu⁵, David Burke⁶, Kate Reynolds¹, Tina Hoang¹.

Presenter

TBA

Institution(s), Department(s), Country/Countries:

¹The Health Education & Training Institute of NSW Health

²The Brain and Mind Centre, University of Sydney

³University of Newcastle

⁴Royal Prince Alfred Hospital

⁵Hunter New England Psychiatry Training

⁶St Vincent's Hospital

Background

The need for psychiatry services in Australia is high, but recruitment of the junior medical workforce into psychiatry is low. This project aims to increase the quality and quantity of psychiatry and drug and alcohol (D&A) terms in the first and second postgraduate years (PGY1 and PGY2) in the Australian state of NSW.

Method:

A mixed-methods evaluation of doctors who had undertaken a PGY1 or PGY2 term in psychiatry or D&A was conducted. Data pertaining to favourable and unfavourable aspects of terms were collected through literature review, eight focus groups with junior doctors across NSW, and a survey administered to doctors completing a PGY1 or PGY2 psychiatry term in late 2015.

Results:

Literature review and NSW focus group data revealed similar themes. Factors associated with positive training experiences were related to personal role (orientation to the term, sense of autonomy), patient contact (witnessing positive patient outcomes, variety of presentations), and high-quality supervision (mentorship, appropriate training). Survey results from 72 psychiatry or D&A positions across NSW are forthcoming and will serve to further refine our knowledge of the aspects of psychiatry terms which are most favourably received.

Discussion and take home message

There is a need to increase high-quality experiences in psychiatry and drug and alcohol terms. The results of this study will be reported at the conference and will inform the development of future terms with a clear focus on training and appropriate clinical competencies.

A DELPHI STUDY TO REVISE THE CORE ANATOMY SYLLABUS FOR MEDICAL STUDENTS

Author/s

GM Finn, C F Smith, J Stewart, S McHanwell

Presenter

GM Finn

Institution(s), Department(s), Country/Countries:

Centre for Education Development, Hull York Medical School, University of York

Background

The Anatomical Society Core Syllabus¹ sets out outcomes medical schools are expected to deliver. This study reviewed employed a modified Delphi to produce an updated syllabus.

Methodology

A Delphi panel (n=39) was constructed involving 'expert' (individuals with at least five years' experience in teaching medical students anatomy at the level required for graduation). The experts were asked in two stages to 'accept', 'reject' or 'modify' (first stage only) each learning outcome. A third stage, which was not part of the Delphi method then allowed the original authors of the syllabus to make changes to either correct any anatomical errors or to make minor syntax changes.

Results

From the original syllabus of 163 learning outcomes, 23 remained unchanged, 7 were removed and 2 added. The remaining 133 outcomes were modified. Reasons for modification of outcomes were varied e.g. corrected syntactical errors, altered content or clinical application. All new outcomes achieved over 90% acceptance.

Conclusion:

This syllabus could be applied to any medical curricula and is intended to address 'how much anatomical knowledge is required by the time of graduation' so to ensure a level of knowledge that is fit for practice. The syllabus is not a definitive list of what anatomy an individual will need to know over their professional career as post graduation knowledge is, of course, dependant on the specialty they choose. This core syllabus should not be considered in isolation to other aspects of a curriculum.

MEDICAL STUDENTS AS PEER TEACHERS: EXPLORING MOTIVATORS AND BARRIERS

Author/s

Corinne Fulford, Iman Hegazi, Wendy Hu.

Presenter

Corinne Fulford

Institution(s), Department(s), Country/Countries:

University of Western Sydney

Introduction/background:

Teaching colleagues and patients is a widely recognised professional responsibility for all health professionals. In medical student education, this is increasingly reflected in program requirements and extracurricular activities that provide teacher training and experience.

Peer teaching is one such activity and has been shown to be at least as effective as teaching provided by graduate doctors. Understanding medical student motivators and barriers to take up peer teaching will assist in program optimisation and build capacity for future medical educators.

Purpose/objectives:

To identify and explore the motivators and barriers influencing Australian and New Zealand medical student participation in peer teaching, using Self Determination Theory (SDT) to inform data collection and analysis.

Questions for discussion:

- What peer teaching programs and activities are Australian and New Zealand medical students currently involved in?
- What are the effective strategies for including peer teaching activities and teacher training in undergraduate health professional curricula?

Results

Focus group data with 22 medical students suggests that time, access to resources and lack of confidence are perceived as barriers to becoming and continuing peer teaching. Motivations include reinforcement of own learning, and the opportunity to influence peer learning.

Discussion

Our focus group data suggests that self-determination theory has explanatory value in understanding the motivations and barriers to participation in peer teaching. Further results from a national survey will be discussed, and their implications for program design.

PREPARING MEDICAL STUDENTS FOR FUTURE TEACHING

Author(s):

Simone Ross and Kimberley Owens

Presenter:

Simone Ross

Institution(s), Department(s), Country/Countries:

College of Medicine and Dentistry, James cook University, Townsville QLD 4811, AUSTRALIA

Introduction:

Students at the James Cook University College of Medicine (JCU) can access medical teaching skill training via an elective subject Tutoring in Health (TIH) and/or facilitating in the Home Group (HG) program. This study determines if these programs have contributed to producing medical graduates who have a current teaching role with medical students or recent graduates such as junior colleagues.

Methods:

A cross-sectional survey online or via the telephone was given to 338 early career doctors - the first six cohorts of medical graduates. Bivariate relationships were assessed using Chi-square tests or independent T-tests as appropriate. Content analysis was conducted by three authors for investigator triangulation.

Results:

Of the responding graduates (n=185, 55%), more than half had a current teaching role; and a further quarter would have, if not for barriers. The graduates who facilitated in the HG program were more likely to have a strong intention to teach at graduation ($p = 0.001$); to be either a current clinical teacher or wanting to be a clinical teacher but unable to because of external factors ($p = 0.013$); and also to have a formal Associate Lecturer or adjunct position with a university compared to graduates who had not been HG tutors ($p = <0.001$).

Conclusions:

Providing medical students with access to teaching skills training and peer teaching practice opportunities via the HG program and TIH curriculum is associated with stronger participation in medical teaching after graduation.

Take-home message:

It is in the best interest of a medical college to train students to become future teachers.

PLANNING A NEAR-PEER STUDENT TEACHING PROGRAM FOR MEDICAL STUDENTS.

Author/s

Rudaks I, Linn A, Raw L, Khaw C

Presenter/s

Dr Inta Rudaks¹, Dr Andrew MJ Linn¹, Dr Lynne E Raw¹

Institution(s), Department(s), Country/Countries:

¹Medicine Learning and Teaching Unit, School of Medicine, The University of Adelaide, South Australia

Background:

Teaching is integral to the roles of a physician; as a teacher of patients, peers and the wider community. There is growing interest in near-peer teaching of medical students to prepare medical students with educator skillsets for future practice. Near-peer teaching within a medical curriculum has been shown to be effective for programs and valuable for students, but there remains limited agreement on both the optimal selection process of the student teachers and the training requirements or competencies to be achieved.

Intended outcomes:

Participants will be able to identify the value and barriers to implementing a near-peer teaching program for medical students, and have the opportunity to plan a near-peer teaching program for their institution.

Structure:

Participants will receive an overview of the current literature on the effectiveness and value of a near-peer teaching program. They will engage in discussion around the experiences of institutions adopting such programs, including selection of student teachers for the program and curriculum and assessment approaches. Participants will then use the principles discussed to design a near-peer teaching program suitable for their institution.

Who should attend:

Medical educators, students interested in near-peer teaching, program directors, curriculum and assessment designers, anyone interested in near-peer teaching

Level of workshop (introductory/intermediate/advanced):

Intermediate

Session 7W

THE ROLE OF INDIVIDUAL DIFFERENCES IN PERSONALITY TRAIT AND INTELLECTUAL ABILITY IN CURRICULUM DESIGN

Author/s

Dry M, Strelan P, Chur-Hansen A, Powell C, Crisp M

Presenter

Dr Matthew Dry, Dr Peter Strelan, Professor Anna Chur-Hansen, Mr Christopher Powell (PhD candidate), Ms Michaela Crisp (Honours Student)

Affiliations

University of Adelaide School of Psychology

Introduction/ Background

Research indicates that there are meaningful and reliable individual differences between students in regards to psychological variables such as intellectual ability, personality traits, and learning style. Importantly, it has been demonstrated that these factors have a significant impact upon academic outcomes. For example, numerous studies have demonstrated that there is a positive relationship between academic success and personality traits such as conscientiousness, epistemic curiosity, and openness to experience. Further, factor analytic studies have indicated that tertiary-level students can be reliably classified in terms of four different learning styles: meaning directed, reproduction directed, application directed, and undirected.

These patterns are reasonably easy to measure, and have been demonstrated to reliably generalize across different cohorts and discipline areas. Given this, we might ask whether there is any utility in tailoring curricula to meet the needs of these different student “types”.

Purpose/Objectives

To discuss the role of individual differences in learning style, personality trait and intellectual ability in regards to academic outcomes (both positive and negative).

To identify ways in which this information can be used to influence curriculum design (e.g., interactive learning, adaptive learning, the role of technology, etc).

To debate whether or not there is any utility in tailoring curricula to suit the needs/preferences of individual students.

Issues for exploration/ideas for discussion

Measuring individual differences in an educational setting

Adapting existing curricula

Designing personalized curricula

The ethics of using individual difference data in assessing the suitability of selection for enrolment in programs such as medicine and clinical psychology.

CONSULTATION AND REQUIREMENTS OF ACCREDITATION STANDARDS - WHO, WHAT, WHEN AND HOW

Author/s

O'Connor B, Bagg W

Presenter

Barbara O'Connor

Affiliations

Associate Professor Warwick Bagg, Head of Medical Programme, University of Auckland

Introduction/background:

The University of Auckland implemented a medical programme in 1968. In the “formative” years, extensive multi-level consultation and engagement occurred to ensure the region was actively engaged with its development and delivery. An early benefit of engagement was the establishment of substantial funds for Faculty research.

Over time, and with more maturity, attendance at and frequency of meetings associated with the curriculum and its delivery diminished, to the extent that some fora were stopped. This coincided with developments for accreditation of medical programmes to meet more demanding requirements standards.

The Australian Medical Council (AMC) introduced revised accreditation standards in 2012 and requires providers to demonstrate how they “consult with relevant groups on key issues relating to its purpose, the curriculum, graduate outcomes and governance (AMC standard 1.1.3)”. There are other AMC closely-linked standards e.g. provider has defined its purpose in consultation with stakeholders (e.g. teaching, research, community responsibilities); and there are effective partnerships with health-related sectors of society, government, relevant organisations and communities to promote medical education and training.

Purpose/objectives:

The purpose of this PeArLS is to share what medical schools present as evidence to accrediting bodies of what meets the required standard and to also discuss how members of accreditation panels may interpret what evidence is required.

The anticipated condition for the Auckland programme (under Standard 1.1.3) is to establish a mechanism to ensure that community and health service consumers are consulted on key issues relating to the curriculum, graduate outcomes and governance.

Issues for exploration/ideas for discussion:

- What does “consultation” mean and how is tokenism avoided?
- How could a medical programme meet this standard, taking account the history of development and who has been involved?
- What role does social accountability play in consultation?

Session 7X

YOUR JOURNEY TO LEADING INTERPROFESSIONAL EDUCATION: A PROGRAM TO EMPOWER YOU

Author/s

Brewer M, Flavell H

Facilitator/s

Margo Brewer, Director Practice & Interprofessional Education

Helen Flavell, Coordinator, Scholarship of Teaching and Learning

Institutions

Faculty of Health Sciences, Curtin University

Purpose:

This workshop aims to provide participants with an overview of a national interprofessional education leadership program suitable for educators and practitioners. The workshop will explore the program resources and their applicability to a range of contexts. Notably, the program draws on the renowned leadership development work by the University of Toronto's Centre for Interprofessional Education.

Workshop outcomes:

Following this workshop, participants will be aware of the range of resources available to support academics and practitioners who wish to deliver leadership development for interprofessional education or engage as leaders themselves.

Proposed Outline:

1. A brief overview of the program and the resources on the website (10 minutes)
http://healthsciences.curtin.edu.au/faculty/leadership_programme.cfm
2. Provide several models and examples of IPE in action (10 minutes)
3. Complete several activities from the program including identifying the key ingredients of IPE, a video critique of IPE, and an organisational readiness tool (50 minutes)
4. Explore how participants can lead IPE utilising the program (10 minutes)
5. Final question and answer session (10 minutes)

EMPATHY AND ENGAGEMENT IN MEDICAL TRAINING

Author/s

O'Connor W

Facilitator:

Professor William T. O'Connor

Institution:

Graduate Entry Medical School, University of Limerick, Limerick. Ireland.

Purpose:

To address a gap in medical education by providing the scientific rationale for establishing opportunities for creative and effective empathy and engagement in medical practice,

Workshop outcomes:

The specific skills/knowledge acquired includes the following:

1. *Understanding one's own emotions as a basis for self-regulation of disruptive emotions and as a help in adapting to changing circumstances.*
2. *Understanding how and why empathy is generated in the brain and its importance in therapeutic interventions.*
3. *How best to engage the patient using bridging data with storytelling and reducing preventable harm, and by improving patient safety.*

Proposed Outline:

This highly interactive workshop is 50% devoted to an on-line question-and-answer session and discussion and deploys recent findings from evidence-based clinical research which is underpinned by a paradigm-shift in our understanding of the nature of emotion in terms of brain function, due in part to the discovery of the brain mirror neuron system. The workshop explains how brain mirror neurons fire both when we act and when we observe a similar action performed by another and the way in which the mirror neuron system allows for the instinctive recognition and imitation of emotion in others thereby releasing our human emotions from determinism - in short, by allowing us to learn emotionally. In this way the workshop also reveals how patients themselves can become educators in medical education. Learning objectives covered include the following:

1. *Recognising emotion in oneself and in others.*
2. *Disorders of empathy and empathic distress*
3. *Emotional intelligence, flow theory and optimal performance.*

Session 7Y

COMMUNITY ENGAGED LEARNING AS A MEANS OF EMBEDDING SOCIAL ACCOUNTABILITY INTO THE CURRICULUM

Author/s

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Presenter

TBA

Affiliations

¹ Lifecourse Institute, National University of Ireland Galway, ² School of Medicine, National University of Ireland Galway, ³ Department of Occupational Therapy, Trinity College Dublin, ⁴ Campus Engage, ⁵ Community Knowledge Initiative, National University of Ireland Galway, ⁶ Department of Public Health, Health Service Executive, ⁷ Western Training Programme (General Practice)

Background:

While the concept of social responsibility features widely in competency based medical education, addressing relevant competences within the curriculum is challenging. This workshop aims to explore and exemplify how these can be articulated, incorporated and assessed, by embedding community engaged learning within the curriculum.

Participants will be able to

- Explore opportunities community engagement offers for promoting social accountability
- Draft key elements of a community engaged curriculum
- Map potential student outcomes against domains within a competency framework
- Consider appropriate approaches to assessment

Structure

This interactive workshop is structured around a deliberative process of planning a curriculum for community engaged learning/research (CEL/R). Key characteristics of CEL/R will be explored and alternative curriculum models will be presented, highlighting key decisions to be made.

Participants will work collaboratively to identify opportunities for a student engagement experience, drafting learning outcomes which can be mapped to core competencies in medical/health education. Principles of sustainable community partnerships will inform the process. Appropriate assessment strategies will be explored, drawing on the principles of assessment blueprinting.

The workshop aims to prompt participants to reflect critically upon the rationale for incorporating community engaged learning in medical/health education and to clarify their expectations.

The workshop draws on the facilitators' experience promoting and implementing community engaged learning/research, nationally and internationally, and their research and publications.

It will be of interest to medical school leaders, medical educators, faculty developers and community partners.

Intermediate level

A BRIEF INTRODUCTION TO LEARNING THEORIES FOR MEDICAL EDUCATION

Author(s)

Stefanie C Hautz¹, Stefan K Schaubert², Wolf E Hautz³, Zineb M Nouns¹

Presenter(s)

Stefanie C Hautz, Stefan K Schaubert, Wolf E Hautz, Zineb M Nouns

Institution(s), Department(s), Country/Countries

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² Centre for Health Education Research & Centre for Educational Measurement at the University of Oslo (CEMO), Oslo, Norway

³ Dept. of Emergency Medicine, Inselspital Bern, Bern, Switzerland

Background

In face of the complexity and variety of topics medical students have to master, we seldom address a basic question: How is it possible that such learning actually occurs at all? What makes it easy to remember a telephone number you did not use since you were 10 years old but difficult to remember what you had for lunch a week ago or vice versa? The scientific study of learning is now more than 130years old and has found answers to these questions. In this workshop, we offer a brief introduction into this history of research on human learning. To this aim, we will illustrate key positions such as behaviorism, cognitivism, constructivism and social learning and how they relate to instructional practices in the field of medical education.

Intended outcomes

- 1) Being able to name and outline the basic learning theories and their historical development.
- 2) Relate practices in Medical Education to the paradigm they originate from.
- 3) Reflect implicit assumptions on learning.

Structure

First, the participants are invited to talk about learning theories they know of. After a theoretical input, the participants work in groups, collating abstracts to the paradigms they might belong to. In a discussion, the groups present and defend their decisions. In the end there will be a self-created overviews illustration of the basic theories to take home and work with.

Who should attend

Medical educators who aim to apply knowledge from the learning sciences into their Medical Education practice.

Level of workshop (introductory/intermediate/advanced):

Introductory

OTTAWA2016
ANZAHPE2016



Session 7Z

WHAT'S IN A NAME?

Author/s

M Veysey, R Duvivier

Presenter/s

M Veysey, R Duvivier

Institution(s), Department(s), Country/Countries

School of Medicine and Public Health, University of Newcastle, Australia

Introduction/Background

Over recent years, there has been a change in the names attached to a number of medical degrees in Australia, from the traditional MBBS or BMed to MD or doctorate programs. But what is the driving force behind these moves? Is there really a difference between the MBBS degree course and the MD programs? These names changes may have a significant impact on various aspects of medical education, including choice of medical school, selection criteria into medical programs, curriculum design and content, graduate attributes, and subsequent career opportunities, choices or potential for graduates of these new courses. Discussion is required to determine the rationale behind these changes, their potential impacts and what it all means to students considering medical training.

Purpose/Objectives

To discuss the reasons behind the name changes to medical degrees and explore how these impact the design of curricula and medical practice.

Issues for exploration/ideas for discussion

Why have many medical programs changed the title of their medical degree?

What curriculum changes have there been as a consequence of these changes?

How will graduates of these new medical programs be different?

What will be the impact for students applying for medical school?

What difference will the changes make on subsequent career choices and opportunities for graduates of these courses?

THE EXPERIENCE OF MEDICAL STUDENTS LEARNING INTIMATE EXAMINATIONS

Authors/s

Vnuk A

Presenter

Vnuk A

Institution(s), Department(s), Country/Countries

Flinders University

Introduction/background:

Medical students need to learn intimate examinations in order to be able to perform them for diagnostic and management purposes in patients.

Purpose/objectives:

This presentation is part of a larger piece of research undertaken to explore medical students' experience of learning physical examination using phenomenology as the research methodology. Students in years 2-4 of a four year graduate medical course were invited to attend semi-structured individual or focus group interviews (25 students in total). The interviews were transcribed, de-identified and analysed using Interpretative Phenomenological Analysis (Smith & Osborn, 2008). Only the data from the interviews related to learning intimate examinations are discussed in this presentation.

Issues/questions for exploration or ideas for discussion:

How do the medical students experience learning intimate examination in the structured teaching of the medical school and during clinical placements?

Results:

The results are centred on three main experiences of the students:

1. Plastic models: obviously fake but a useful bridge for learning technique.
2. First experience on patients: feigning confidence and transforming emotions
3. Opportunities for intimate examinations in clinical placements: the role of gender, supervisors and luck

Discussion:

Whilst the experiences reported here are unique to the university where the research was undertaken, they are useful to promote discussion and to reflect upon whether the experiences of students in our own institutions are adequate enough to provide them with the necessary skills they require to practise as doctors.

ANATOMY MADE EASY

Author/s

Dr Eugenie Phyu Aye Thwin

Presenter

Dr Eugenie Phyu Aye Thwin

Institution(s), Department(s), Country/Countries

School of Health Sciences, Nanyang Polytechnic

Introduction

Learning anatomy is often a difficult task for students as it is a content-rich subject. Student-centred, task-based learning approach increases students' engagement, compared with conventional teaching methods.

Methods

A single group intervention study was conducted to allied health students from School of Health Sciences, Nanyang Polytechnic, Singapore. In the first half of the semester, anatomy laboratory classes were conducted by teacher-led activities. In the second half of the semester, students-led learning methods were introduced. These included pre-class activities (colouring of anatomical illustrations and watching selected YouTube videos), in-class activities (small group learning and peer-teaching) and after-class activities (sharing and discussion). A lecturer was present and provided frequent feedback. The impact of the intervention was evaluated quantitatively by students' academic performance and qualitatively by reflective writing.

Results

There were 56 students in this cohort and 88% submitted reflective reports. The majority of students (78%) valued peer-learning as they felt that learning from each other facilitated their learning process. Almost all of the students (98%) practised colouring and they commented that coloured diagrams helped them to differentiate different anatomical structures. Selected YouTube videos also helped them to identify the structures from anatomy models. Some were nervous about sharing sessions but later they acknowledged that sharing and helping each other deepened their comprehension of the subject. There was a significant improvement in their academic performance after the intervention ($p < 0.05$).

Conclusion

The intervention increased students' interactivity and academic achievement.

Take home message

Students-led learning strategies promote deep learning of information-rich subjects

THE DECISION ENHANCEMENT TOOL (DET)

Author(s):

Chinthaka Balasooriya¹, Joel Rhee¹, Asela Olupeliyawa¹

Presenter:

Chinthaka Balasooriya

Institution(s), Department(s), Country/Countries

¹ School of Public Health & Community Medicine, UNSW Medicine, UNSW Australia

Introduction

The Decision Enhancement Tool (DET) is designed to guide medical students through a systematic process of reflecting on their clinical-decision-making processes. The instrument provides a framework for students to explore analytical and intuitive decision-making processes. The instrument also provides a basis for structured feedback from clinical supervisors, to enable iterative development of students' decision-making processes.

Methods

The DET was developed following the trial of an instrument named the GET (Guideline Enhancement Tool) that was designed for and used within a General Practice training program. The design of these instruments builds on the strengths of the dual-processing theory by exploring analytical and intuitive decision-making processes through deliberation, metacognition and justification. The design draws on script theory to facilitate effective activation of and engagement with illness scripts.

The DET is being incorporated into a series of blended learning modules that are being developed at UNSW Medicine.

Conclusions

The DET has the potential to be a significant addition to the suite of clinical educational instruments that are currently available.

Take-home message

The DET is a versatile instrument that can be adapted to a range of clinical conditions. The presentation will demonstrate how the DET can guide students' decisions-making, and how educators can use the DET to develop tailored approaches to suit specific clinical conditions.

EVALUATION OF AN INTERPROFESSIONAL PEER GROUP MENTORING PROGRAM TO IMPROVE THE QUALITY OF STUDENT SUPERVISION ON PLACEMENT

Author/s

Gillian Nisbet, Lindy McAllister

Presenter

Gillian Nisbet

Institution(s), Department(s), Country/Countries

¹ The University of Sydney, ² The University of Sydney

Introduction:

Student learning on placement is strongly influenced by the quality of supervision provided. However, ongoing support and development for staff involved in student supervision is often ad hoc. Peer group mentoring potentially offers an efficient and effective means to provide this support. However, there is little empirical research supporting this.

Purpose/objectives:

This study aimed to evaluate the effectiveness of a peer group mentoring program for student placement supervisors and the elements contributing to its success.

Issues/questions for exploration or ideas for discussion:

In relation to student placement supervision:

1. What is the perceived impact of a peer group mentoring program on:
 - a. Supervisors?
 - b. Student supervision capacity?
 - c. Quality of student supervision as identified by students?
2. What elements contribute to the long term success or otherwise of a peer group mentoring program?
3. Can a peer group mentoring program be successfully maintained by peers?

Results:

Participants of a 2014 pilot peer group mentoring program reported improvements in student supervision and co-mentoring skills and highly valued the interprofessional nature of the program. This presentation will report findings from a larger scale program currently being implemented.

Discussion:

This study will provide important empirical evidence and insights into how best to implement and sustain a peer group mentoring program to support and develop our student placement supervisors, thus enhancing quality learning experiences for our students.

UNDERSTANDING THE WORK OF PUBLIC HEALTH MEDICINE SPECIALISTS AND THE IMPLICATIONS FOR TRAINING

Author/s

Lee Ridoutt and Carla Cowles Human Capital Alliance, Lynne Madden* (School of Medicine Sydney, UNDA, Australasian Faculty of Public Health Medicine (AFPHM)), and Greg Stewart (AFPHM)

Presenter/s

Lee Ridoutt and Carla Cowles Human Capital Alliance, Lynne Madden* (School of Medicine Sydney, UNDA, Australasian Faculty of Public Health Medicine (AFPHM)), and Greg Stewart (AFPHM)

Institution(s), Department(s), Country/Countries

¹ Australasian Faculty of Public Health Medicine, ² Human Capital Alliance, ³ School of Medicine Sydney, University of Notre Dame Australia

Introduction/background:

The Australian public health physician (PHP) workforce provides a unique contribution to public health work (Ridoutt, Madden & Day, 2010). To quantify the need for training and maintain alignment between education and practice, an investigation of the emerging demand for the PHP workforce is required. Ways to readily do this do not currently exist.

Purpose/objectives:

To describe the development and implementation of a novel method to identify PHP input to public health work; quantify the consequent demand for PHP and the training implications for AFPHM.

Issues/questions for exploration or ideas for discussion:

A traditional approach to estimating demand is not suitable for the PHP workforce. Can a new approach for estimating demand, taking a benchmark and targets approach as well as a 'best practice' or 'models of care' approach, help? The latter also allows for exploration of PHP workforce in non traditional areas of public health work. Each of these pathways will deliver independent estimates of current and future demand for the PHP workforce.

Results:

The development of the method and trial of this to deliver valid and acceptable demand scenarios for PHPs are the major anticipated outcomes.

Discussion:

The Australian PHP workforce has grown little and in comparison to other medical and health professions is shrinking in real terms. Ways to estimate demand that allow an alternative workforce vision to that dictated by trend analysis is essential to enable planning. Identifying within that vision current and future areas of PHP work, both traditional and non traditional, will allow informed education/training.

HIDING THE P'S UNDER THE CARROTS: FACILITATING STUDENT ENGAGEMENT WITH RESEARCH APPRAISAL TOOLS AND TECHNIQUES THROUGH THEIR INTEGRATION WITH THE SCIENCES.

Authors:

Peter L McLennan¹, Judy R Mullan¹, Kathryn M Weston¹, Warren C Rich¹

Presenters:

Peter L McLennan, Judy R Mullan, Kathryn M Weston, Warren C Rich

Institution(s), Department(s), Country/Countries

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Purpose

One of the truisms of medical education is that students will always prefer the thrill of clinical medicine over learning about biostatistics, epidemiology and the many other important research skills that can enhance medical practice.

To become evidence-based practitioners and clinical researchers, students need to be competent in critical appraisal of the research literature. This in turn demands understanding of research methods and biostatistics, which are traditionally of low regard amongst medical students who prefer to focus on the thrill of clinical medicine. To prevent marginalisation of research methodologies and biostatistics and facilitate student engagement, we have successfully integrated this learning within the context of medical sciences disciplines, clinical medicine and public health.

Workshop outcomes:

- Viewing your curriculum with a different lens
- How to identify learning opportunities where research can be integrated within the sciences
- Aligning curricula and assessment tasks with graduate attributes and competencies

Proposed Outline:

- Decide the learning outcomes of your course
- Identify the key learning and teaching components you want included in a research and critical analysis curriculum
- What modes of delivery are available within your course?
- Where can research and critical appraisal be integrated into your curriculum?
- Map a timetable alongside your parallel course components for effective integration
- Create pathways to student-driven appraisal of research; e.g. the student journal club as a model for integrating research methods with the learning of medical sciences.

Who should attend:

Curriculum developers; teaching academics. Persons looking to incorporating research and critical analysis curriculum within a science heavy course structure without losing their interest. Those wanting to provide students with skills and awareness to analyse critically not criticise analytically whilst encouraging engagement through stimulating interest in the science content.

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Level of workshop:

Intermediate

EVALUATING PREPARATION AND PRACTICE EXPERIENCES OF ADULT SCOPE DENTAL THERAPY GRADUATES IN VICTORIA, AUSTRALIA

Author/s

Ryan BM, Satur JG

Presenter/s

Ryan BM, Satur JG

Institution(s), Department(s), Country/Countries

Melbourne Dental School, The University of Melbourne, Victoria, AUSTRALIA

Introduction/background:

Dental Therapists are registered dental practitioners who provide diagnostic, preventive and restorative dental services in collaboration with dentists, traditionally limited to people under 26 years of age in Australia. Both Dental Therapists and Oral Health Therapists provide dental therapy services.

The Dental Board of Australia (responsible for registration of dental practitioners in Australia) determined in 2010, that completion of a university-based educational program would enable dental therapists and oral health therapists to qualify to provide services, within the scope of dental therapy practice, for patients of all ages.

The Melbourne Dental School's Graduate Certificate in Dental Therapy (Advanced Clinical Practice) (GCDT-ACP) was developed to meet the Dental Board of Australia's competency requirements for this type of practice. In July 2013, the first delivery of this program began with thirteen participants. This study evaluated the student learning experience and practice outcomes in the first cohort, 6 months after program completion.

Purpose/objectives:

1. to evaluate the student learning experience offered in the program
2. to assess participants' self-perceived preparedness for adult scope of dental therapy practice
3. to describe the utilization of adult scope of dental therapy skills and models of care in participants' practice settings

Issues/questions for exploration or ideas for discussion:

1. recognise changes in dental and oral health therapy practice in Australia
2. evaluate educational outcomes of a graduate clinical preparation program for dental therapy
3. consider the models of care in which all age dental therapy is practiced in Australia

Results:

Participants in the study were working in a wide range of rural and metropolitan public health practices. Findings indicate a mistrust of regulatory recognition among employers, high levels of respect for clinical skills among dentist colleagues and widening use of skills over time.

Discussion:

The GC DT (ACP) program provides a practitioner group to complement and grow the existing dental workforce offering more cost-effective service delivery. The program augments employment opportunities and workforce retention by offering, for the first time, a career development pathway in a clinical stream.

ENGAGING AND SUPPORTING RESIDENT MEDICAL OFFICERS THROUGH A PEER-TO-PEER PRESENTATION PROGRAM

Author/s

Ms Erin Furness, Professor Greg Sweetman

Presenter

Ms Erin Furness, Professor Greg Sweetman

Introduction/background:

The Medical Education Unit (MEU) at Fiona Stanley Hospital (FSH) implemented the *RMO Peer-to-Peer Presentation Program* in 2015 as part of the weekly Resident Medical Officer (RMO) tutorial program to provide RMOs with the opportunity to develop skills and confidence in medical presentation. A lecture by a senior clinician is followed by a 15 minute presentation by an RMO on a related topic. The RMO was able to receive a critical review of the proposed presentation with a medical education registrar prior to the peer presentation. Following the formal peer presentation, feedback was provided to the RMO from a medical education registrar and his / her peers.

Purpose/objectives:

The objective of the *RMO Peer-to-Peer Presentation Program* was to provide a supportive and non-threatening environment for RMOs to improve their presentation skills and confidence in presenting to their peers.

Issues/questions for exploration or ideas for discussion:

- RMOs' perception of the value in presenting to peers.
- Selection biases with the potential for those who would benefit most not necessarily represented (RMOs volunteer to present).
- Whether the method be extended to other aspects of professional activity, e.g. formal handover of patients or critical review of communication to general practitioners.

Results:

A mid-year survey of the participants found that 100% of respondents perceived:

- Improved presentation skills
- Improved confidence in presenting to peers
- Increased understanding of the topic.

Discussion:

RMOs value the opportunity to receive formative feedback on their performances of a medical presentation in a non-threatening and supportive environment.

FACILITATING CONNECTIONS: DEVELOPING A NETWORK OF EARLY-CAREER MEDICAL EDUCATORS IN AUSTRALASIA

Author/s

Yu, Tzu-Chieh Wendy ¹. Bartle, Emma ². Esteves, Sharyn ¹. Rogers, Gary D. ³. Weller, Jennifer ¹. Hu, Wendy ⁴

Facilitator/s:

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3. School of Medicine and Health Institute for the Development of Education and Scholarship (Health IDEAS), Griffith University, **QLD Australia**
4. **School of Medicine, University of Western Sydney, NSW Australia**

Purpose:

Globally, medical education is emerging as an academic field. It includes educators from a wide range of healthcare and non-healthcare disciplines and encompasses professional entry-level education, postgraduate training, and continuing professional development. Medical educators have to establish themselves in the unique environment of medical schools and professional colleges and grasp the field's unique language, culture, and philosophies. They also face a constantly changing landscape of educational theory, evidence-based research, workplace re-structuring, as well as uncharted career pathways.

To foster and support a sustained and high-quality medical educator workforce, the Early-Career Medical Educators Network of Australasia (ECMENA) was formed in April 2015. The network's current priorities are to:

- Identify and approach potential participants
- Describe the career experiences of participants and the challenges they face
- Develop ways the network can provide career support

Workshop Outcomes:

- To describe the experiences of early career educators and identify enablers and barriers to building a career in medical education
- To explore current priorities, practical strategies, and other future directions for a professional network to develop a community of practice supporting early career educators across Australasia

Who Should Attend:

Self-identified early-career medical educators

Proposed Outline:

Facilitators will initiate by co-presenting a brief PowerPoint presentation (15 minutes), orientating participants to the history and progress of ECMENA. The remaining time will be dedicated to a “speed-dating” style activity that facilitates connections and mentoring, both between early-career educators and senior colleagues.

Session 8A

8A Symposium Tuesday 1300-1430

Becoming Interprofessional: What questions do we need to ask?

Jill Thistlethwaite, University Technology Sydney, Australia

Fred Hafferty, Mayo Clinic, Rochester, USA

Chris Roberts, University of Sydney, Australia

Koshila Kumar, Flinders University, Adelaide, Australia

Gary Rogers, Griffith University, Gold Coast, Australia

This symposium is aimed at those wishing to conceive, implement, assess, and evaluate curricular activities that aim to promote Interprofessionalism in order to advance clinical education. Professional programs in healthcare education focus on preparing students for practice through the acquisition of appropriate and relevant knowledge, skills, and behaviours. They should also facilitate students' integration into the profession: their *becoming* a professional and subsequently *being* a professional. There is, however, a frequently held assumption of one profession, one identity, though a professional is acknowledged as having multiple roles. In this symposium, we question what happens to professional identity in the context of modern healthcare and contemporary health professional education, which is increasingly characterized by teamwork and collaborative practice. We reflect on whether health care professionals also need to nurture and sustain an interprofessional identity. The question then follows as to whether their interprofessional identity subsumes the uniprofessional or whether an individual may move between the two identities depending on context and inclination. The presenters bring a wealth of diverse experiences of interprofessionalism from North America, and Australia and will share innovative theoretical insights. By debating and defining interprofessional competencies, and their translation into behaviour in the workplace, health professional educators may gain a greater sense of the additional attributes that constitute being interprofessional. They will be able to critically reflect on the role of assessment and how such programs might be evaluated. The symposium will provide ideas for all medical and health professional schools wishing to incorporate some of the general principles of interprofessionalism, its assessment, and evaluation in their clinical education programmes.

Session 8B

ASSESSING PROFESSIONALISM: ONE COURSE ACROSS THREE CONTINENTS

Author(s)

Hilton SR¹, McCrorie P¹, Nicolaidis P¹, Ibison J², Nicolaou S¹ and Baig S²

Presenter

Prof Sean Hilton

Institution(s), Department(s), Country/Countries

1. University of Nicosia Medical School, 93 Agiou Nikolaou Street, Engomi, Nicosia 2408, Cyprus (UNic)
2. St. George's, University of London, Cranmer Terrace, London SW17 0RE, UK (SGUL)

Introduction

Longitudinal assessments of professional behaviours for primary medical qualification are now widespread. We report on implementation of such a system for a single UK MBBS course, franchised to a University in Cyprus, with clinical placements in Cyprus, Israel and the USA.

Methods

In the SGUL 4yrs MBBS course, assessment matches learning outcomes domains specified in the UK General Medical Council's guidance *Tomorrow's Doctors*: Doctor as Scholar and Scientist; as Practitioner; and as Professional (DaP). Throughout years 1 and 2, DaP is assessed using multiple indicators of professional behaviours e.g. attendance, contribution to small group work, reflective writing. For clinical attachments and in years 3 and 4, these are enhanced by overall professionalism assessments (based on the American Academy of Pediatrics rating scale) and a workplace based assessment (WPBA) portfolio. Students are placed at one of three sites for their 3rd and 4th years. Faculty training for WPBAs takes place at each site.

Results

UNic has now admitted four cohorts, totalling approx. 300 students, and the first cohort graduated in May 2015 (27/28). Students come from >50 countries (largest proportion from North America). The challenges of assessing professionalism in these groups across three different healthcare structures and cultures will be discussed. To date, fitness to practise procedures have been invoked in a small number of cases – formally in Year 1 and informally across all years.

Conclusion

Longitudinal assessment of professionalism is both necessary and feasible in a wide range of learning environments

Take-home message

Professionalism assessment must take account of the environmental culture

“I FELT THAT IF I CHALLENGED HIM IT WOULD MAKE MY LIFE DIFFICULT”: EXPLORING GENDERED IDENTITIES, RETENTION AND SUCCESS IN HEALTHCARE EDUCATION

Author(s)

Arun K Verma (1), Charlotte Rees (2) Lynn Monrouxe, (3), Rola Ajjawi (1)

Presenter

Arun K Verma

Institution(s), Department(s), Country/Countries

(1) University of Dundee, Centre for Medical Education, United Kingdom.

(2) Monash University, HealthPEER (Health Professions Education & Education Research), Faculty of Medicine, Nursing & Health Sciences, Australia.

(3) Chang Gung Memorial Hospital, Chan Gung Medical Education Research Centre, Taiwan.

Introduction

Increasing numbers of abuse cases concerning professionalism lapses in healthcare have been identified in the literature (1, 2). Evidence suggests that these negative experiences could be influenced by the intersection of healthcare students' identities such as gender, age and race/ethnicity (1-2). These experiences can adversely affect students' success (or performance) and retention. Little research has been conducted to explore these issues explicitly so the current research aims to address this gap.

Methods

This study conducted secondary analysis of 2262 Personal Incident Narratives (PINs) of professionalism dilemmas collected by Rees and Monrouxe (3-7). All PINs were assessed to explore whether they contained identities, success and retention issues. Those that met the criteria were included for further scrutiny using positioning analysis (8).

Results

Healthcare students in hostile environments were often subjected to sexual harassment and gender discrimination (SH/GD). In such narratives, students would position themselves as powerless victims in relation to senior staff who were positioned as powerful villains. There were gender differences in the ways that students resisted perpetrators (e.g. female students seeking support before resisting). Such SH/GD could impact negatively on their performance (e.g. “he has the power to fail me”), and could deter students from certain healthcare specialities.

Conclusions

Healthcare students' intersecting personal and professional identities within gendered environments impacts their learning experiences. These experiences can influence students' performance and career decision-making (6).

Take-home message

Attention should be paid to how gendered identities can play an influential role in workplace learning experiences, and can result in students' fear of their assessors and of failing.

THE USE OF SITUATIONAL JUDGEMENT SCENARIOS AS A TOOL FOR THE ASSESSMENT AND DEVELOPMENT OF PROFESSIONALISM

Author(s):

Fiona Patterson^{1,2}, Vicki Ashworth¹, Amy Aitkenhead¹, Charlotte Flaxman¹, Emma Rowett¹, Máire Kerrin¹

Presenter:

Fiona Patterson

Institution(s), Department(s), Country/Countries:

¹ Work Psychology Group, UK / Australia; ² University of Cambridge, UK

Introduction

Research demonstrates that non-academic attributes related to professionalism, such as integrity and empathy, are important predictors of future job performance and training outcomes in healthcare. This research investigates the effectiveness of tools (including Situational Judgement Scenarios (SJS) and face-to-face workshops) designed to assess and develop professionalism within healthcare trainees.

Methods

The SJS was developed in a written format (for assessment) and video-based format (for development) alongside subject matter experts to ensure relevance and face validity. The SJS for development encouraged trainees to reflect on their responses and explore expert rationales to develop their self-awareness in relation to professionalism. This development was complemented by face-to-face workshops to reinforce learning. The SJS for assessment was piloted upon entry into dental school and Year 5 to explore whether professionalism developed during training.

Results

When the SJS was used for development, alongside workshops, trainees' non-academic skills increased significantly (F values ranging from 7.12 to 139.37, $p < .001$). Results for the assessment SJS indicated it was a reliable tool ($\alpha = .81$) and distinguished between trainees at different levels ($t(204.6) = 10.7$, $p < .001$) with a large effect size ($r = .56$), indicating that professionalism is influenced throughout training.

Conclusions

Using SJSs during healthcare training is an effective means of monitoring progression of professionalism and can be used as a diagnostic tool for development. When SJSs incorporate feedback and are used alongside workshops they can effectively develop core professionalism attributes.

Take-home message

Initial findings suggest that SJSs are a useful tool for measuring progression of professionalism and developing professionalism, alongside high-fidelity training.

PROFESSIONALISM AS A MULTI-DIMENSIONAL CONSTRUCT: MEASUREMENT AND EDUCATIONAL UTILITY

Author/s

Carter M, Hesselgreaves H, Burford B, Tiffin P, Rothwell C, Morrow J, McLachlan J, Illing J

Institution(s), Department(s), Country/Countries

¹ Newcastle University, ² University of Glasgow, ³ Newcastle University, ⁴ Newcastle University, ⁵ Newcastle University, ⁶ Durham University, ⁷ Durham University, ⁸ Newcastle University

Introduction

Despite growing research interest, concept of 'professionalism' in healthcare remains conceptually unclear. We describe the development of a questionnaire designed to measure different aspects of professionalism and its relationship to performance outcomes.

Methods

A 79 item questionnaire was completed by paramedics, including three global items (also completed by trainers) in three NHS Trusts in England. 646 responses were obtained. 121 participants completed questionnaires on two occasions during their training, allowing analysis of changes to professionalism over time.

Items were subject to exploratory and confirmatory factor analysis. Regression analysis examined the factors prediction of academic performance and cases for concern.

Results

Six factors of professionalism were identified: (1) feeling valued by the public, (2) appropriate behaviours, (3) organisational and professional care, (4) positive/proactive professional behaviours, (5) professional identity and pride, and (6) learning orientation.

Higher levels of academic performance were associated with professionalism. In general, scores on five of the professionalism factors declined over time (except feeling valued by the public), suggesting a reduction in professional attitudes and behaviours. However, global self-ratings of overall professionalism tended to increase over time.

Conclusions

This measure of professionalism demonstrates potential to identify over-confident individuals, especially when compared with trainer ratings. This measure may also identify cases for concern, potentially predicting students' challenges around fitness to practice, attendance, and academic or practice concerns.

Take home message

Interpretation of self-rated scores on this measure must take account of the role of situational judgement, and possible inaccuracies in self-assessment. These lend themselves to reflective educational discussions.

ASSESSING PROFESSIONALISM: TOWARDS A MODEL ACCEPTABLE AND USEFUL TO STUDENTS

Authors:

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Dr Lynne Raw: Evaluation & QA Coordinator for MBBS Program School of Medicine, University of Adelaide

Presenters:

Dr Tiana Della-Putta, Dr Lynne Raw

Institution(s), Department(s), Country/Countries

School of Medicine, University of Adelaide. South Australia

Introduction:

Assessing student professionalism is as an important but difficult area of health professional education. Adding to the complexity are reports in the literature of negative student perceptions of professionalism assessment. This paper reports on student perceptions of an assessment method based on observed performance of professionalism competencies and on factors which affect the acceptability and usefulness of this method to students.

Methods:

The 2015 Year 3 medical student cohort was surveyed. Student perceptions were sought on: the assessed professionalism competencies; the professionalism teaching and learning method; the acceptability of the assessment method; the usefulness of the assessment to students' professional development. Focus groups were then conducted to further explore the students' perceptions.

Results:

77% of 150 students participated. Students rated all components of the professional competencies assessed as important for their professional development. The majority of students perceived the method for assessing professional competencies as acceptable and useful. Factors contributing to the positive perceptions included: relevance of the assessment criteria; teaching and learning method used; quality of the assessors; the usefulness of the feedback.

Conclusions:

Positive student perceptions of professionalism assessment can be fostered by: ensuring the assessment criteria and the professionalism teaching and learning methods are relevant to students; the assessors have a good understanding of professionalism issues; the assessment is constructive and allows for personal and professional development.

Take-home message:

Professionalism assessment methods can be designed to be acceptable and useful to students by attention to identified factors.

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USING EPAs TO ASSESS PROFESSIONALISM

Author(s)

Tim Wilkinson, Winnie Wade

Presenter:

Tim Wilkinson, Winnie Wade

Institution(s), Department(s), Country/Countries

University of Otago, Christchurch, New Zealand

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Introduction

Entrustable professional activities (EPAs) are increasingly used as a framework for workplace based assessment. Professionalism is multifaceted and therefore its assessment is likely to require a programmatic combination of EPAs. We aimed to determine what combination of EPAs might cover a professionalism blueprint.

Methods

We searched for published EPAs that included components from within the professionalism domain. We mapped these EPAs against a previously published blueprint to assess professionalism. From this we determined which aspects of professionalism are best suited to specific EPAs, and which are better suited to integration within other EPAs.

Results

Some sets of EPAs made no explicit acknowledgement of professionalism. From the EPAs that specifically included professionalism, some had professionalism as the focus. For many elements of professionalism, there would need to be integration within EPAs that relate to clinical roles and tasks. We found no EPAs that related to altruism.

Conclusions

Some EPAs are targeted to elements of professionalism but a complete coverage of all elements of professionalism will require a combination of (1) targeted EPAs, (2) explicit integration within EPAs that relate to clinical tasks, and (3) development of new EPAs. An EPA focused on balancing availability to others with care for oneself is needed.

Take-home message

A blended approach will be needed if EPAs are used to assess professionalism:8b

Session 8C

TWO DISTINCT METHODS OF EXAM BLUEPRINT CONSTRUCTION - DOES IT MAKE A DIFFERENCE?

Author/s

Canning C, Stratford-Martin J, Low-Beer N, Boursicot K

Presenter

TBA

Institution(s), Department(s), Country/Countries

¹ Lee Kong Chian School of Medicine, ² School of Medicine, Imperial College London, ³ Lee Kong Chian School of Medicine, ⁴ Lee Kong Chian School of Medicine

Background

To ensure alignment of assessment with the taught curriculum, it is standard practice to develop an examination blueprint where test items are mapped to learning outcomes. A blueprint is generally a two-dimensional matrix that correlates an assessment item to a learning outcome and defines the numbers of items within curriculum domains to be assessed. Two distinct methods of blueprint construction were employed and compared for item content.

Methods

Two distinct exam blueprints for the same year 1 MBBS programme were constructed. The first method utilised the relative proportion of time devoted to different modules in the curriculum. The second method employed faculty subject specialists choosing test items they deemed important for students to know.

Results

As an initial study, four standard curriculum domains were analysed and compared across the two different blueprints for a Year 1 undergraduate medical exam. No significant differences were found between the number of domain items sampled in the two distinct blueprints. However, when analysed further, certain domains displaying different types of characteristics (e.g. those pertaining to vertically integrated courses) highlighted some important differences.

Conclusions

Our results demonstrate that there were no substantial differences in the composition of an exam blueprint constructed by Course Lead domain sampling versus analysis of time devoted to distinct curriculum modules.

Take home message

When careful attention to all domains and consensus between multiple faculty members is ensured, a robust exam blueprint can be constructed by faculty-led test item sampling.

EMBEDDING A CURRICULUM FRAMEWORK IN ASSESSMENT: THE USE OF A STRATEGIC APPROACH AND MIXED METHODS

Authors:

Claire Spooner, Mary Lawson, Claire Byrne, Simon Chu and Liz Mowatt

Presenter

TBA

Institution(s), Department(s), Country/Countries:

¹ The Ardnell Group, ² Australasian College for Emergency Medicine

Introduction

There is potential disjuncture between a curriculum on paper and a curriculum in action. To address this pragmatic concern, the Australasian College for Emergency Medicine developed and used a strategic approach to embed their curriculum framework into its new postgraduate specialist level programmatic assessment suite.

Process

Fundamental to designing a clinically relevant curriculum framework is involvement of the clinical community in all stages of development. A working group of clinicians and trainees authored the learning outcomes, with facilitation from medical education professionals. A staged implementation was adopted, which promoted iterative refinement to fit with the real world of practice.

Development of the framework formed part of a larger process of curriculum revision, which allowed development of assessment modalities to be blueprinted to the curriculum in a parallel iterative process.

Preparation of the roll out of the curriculum was supported by a variety of multimedia initiatives, including: an online animation, videos on the College website and a series of 'talking head' podcasts.

Ongoing developments included preparing a dynamic online framework search engine, allowing users (trainees and supervisors) to create a unique set of personal learning goals whilst progressing through their summative assessments.

Conclusion

Assessment drives learning. By truly blueprinting all assessments to a curriculum framework, which is firmly embedded in clinical practice, trainees and supervisors are driven to utilise the framework to plan teaching, learning and preparation for assessment.

Take home message

A sequential and iterative development process produced a curriculum framework embedded in practice and assessment.

ANALYTICS FOR CURRICULA MAPPING

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Yew-Beng Kang

Presenter:

Yew-Beng Kang

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Introduction

Curriculum databases have data sets that include teaching and learning information. As the information in the database grows, the data can be mined for relevant trends, treated as a monitoring tool, and used for academic planning purposes. The International Medical University employs a curricula database comprising of 15 undergraduate and 3 taught postgraduate programmes.

Methods

The university curricula database is a structured set, containing 58 fields, using a relational database structure. The database can be viewed via the intranet by both faculty and students and only the programme directors have editing privileges. The database is updated in a timely fashion after changes are approved and there is a log to track these changes for audit purposes.

Results

The analytics allows any key word be searched and queries can be made to list activities for any programme, module or semester, topic, delivery type or specific lesson outcomes. Additionally, the query results can be mined and sorted by curriculum descriptors including credit hours, teaching type, or domains such as affective, cognitive, psychomotor or soft skills domains.

Conclusions

The relational database structure used for the curricula database enables big data analytics and enables the administrators to look for teaching overlap, management to construct detailed reports for accreditation purposes, students to review and locate the where the teaching and learning occurs within their or other programmes, and for faculty to review assessment blueprint.

Take-home message

Big data analytics can be obtained using a relational database curricula map.

ASSESSMENT OF EDUCATION GAPS IN HEALTH PROFESSIONS PROGRAMMES BASED ON INSTITUTIONAL ASSESSMENT FRAMEWORK AND ASSESSMENT BLUEPRINT

Author(s)

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Presenter

Hui Meng Er

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Introduction

The International Medical University (IMU) offers a range of health professions programmes, which adopt the outcome-based education philosophy. An institutional assessment framework (IAF) was developed to document the best practices in assessments which in turn ensure quality training to produce graduates with the desirable competencies. The components of the assessment framework include the use of appropriate assessment tools, blueprinting, analysis and governance.

Methods

The IAF was developed through inter-programme collaborations. This document forms the standards for quality assurance of assessment activities in all IMU programmes. To assess the gaps between the standards in the IAF with the current assessment practices, a new assessment blueprint template was developed and completed by each health professions programme.

Results

A number of shortcomings in the curricula have been identified from the assessment blueprinting exercise. Learning outcomes that are not written according to the SMART principle (specific, measurable, attainable, relevant, time-focussed) pose challenges in mapping the assessment activities to the knowledge, skills and attitude domains. Over-assessment was identified in most programmes and there is a general lack of assessments in the attitude domain. The blueprints also highlight the misalignment between the assessment and curriculum structure in programmes that claim to have an integrated and spiral approach.

Conclusions

The IAF enables sharing of information and best practices amongst the programmes. Assessment framework and blueprint serve as important quality assurance tools for education programmes.

Take-home message

The analysis of education gaps through institutional assessment framework contributes to decision making on curricular improvement and resource allocation.

AUTOMATED CURRICULUM MAPPING

Author(s)

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Presenters

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Introduction

Gathering faculty to discuss, reach consensus, and document precisely what and how a curriculum is delivered can be a considerable challenge. We will demonstrate a novel, powerful technology, "Automated Curriculum Mapping" (ACM), that greatly minimizes effort of curriculum mapping, occurs in real time, and yields a much more detailed, clear, accurate, and precise representation of the curriculum as it is actually delivered.

Methods

Faculty upload all learning items into an easy to use web interface, indicate all pertinent information regarding the associated learning activity through a series of ontologically controlled, required, simple, quick web controls. ACM automatically generates the curriculum map from this information into an easily searchable, downloadable, analysable, pivotable grid of every learning activity and their associated metadata.

Results

Faculty use ACM to analyse the curriculum from broad, multiple course spanning topics, such as institutional, program, professional licensing board learning outcomes, to granular levels, such as course learning outcomes, standardized (e.g., MeSH) terms, and Bloom's taxonomy. It has replaced our learning management, curriculum calendar, and curriculum management tools with one easy to use, single entry system, where faculty upload and classify all of their materials, and students find and download them from the same system.

Conclusions

Our solution has proven highly successful: For the past three years our medical college faculty have used ACM data and analyses to revise their courses and learner activities.

Take-home message

ACM may represent a new, effective, powerful, automated, generalizable technology for mapping curriculum in ways that were previously impractical or impossible.

Session 8D

INDONESIAN MEDICAL STUDENTS PERCEPTION OF COMPETENCY-BASED NATIONAL BOARD EXAMINATION IMPLEMENTATION

Author/s

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Presenter

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Introduction

Indonesia has 74 medical schools around the archipelago with increasing demand of better quality of health care. Government, medical school association, physician council, and physician society is working together to conduct competency-based nation board examination since 2007 to assure quality of medical school graduate. Traditionally, Indonesian medical student is not very engaged into their medical education system planning. Perception about competency-based national board examination implementation of medical student, as the key stakeholder, is needed. Moreover, competency-based national board examination is become exit exam to get MD degree for student and basis for government to make policy in medical education.

Methods

We are using our communication harierechy tool through nationwide medical student organization connection. Our officers in medical education issue were asked to spread out our web-based questionnire link.

Results

Final analysis were conducted on subset data of data collected from 623 medical student from all region in Indonesia (Sumatera 119, Java 421, Bali-Nusa Tenggara 22, Borneo 12, Sulawesi 47, Papua 2) with 81,7% said that already get informed about competency-based national board examination. 83,9% of medical student believes that competency-based national board examination is needed due to diversity of health professional quality, meanwhile only 67,9% of medical students believes that competency-based national board examination is benefit to increase people trust to health professionals. When those intending to get involved in competency-based national board examination planning, 97,2% either agreed and strongly agreed with the statement. 78,6% student is agree and strongly agree to competency-based national board examination implementation but only 53,7% student is agree and strongly agree that competency-based national board examination implemented as exit exam.

Conclusions

Indonesian medical student is predominantly well informed and understand the urge of quality assurance that framed on its perception in competency-based national board examination. Perhaps this result promise endorsement from Indonesian medical student for the continuing improvement of quality assurance. Further longitudinal research is need to measure the dynamics.

OTTAWA2016
ANZAHPE2016



Take-home message

Medical students understand the essential of QA and it is good to all stakeholders to collaborate to achieve the continuing quality improvement (CQI). It is worthy to establish a system that friendly for medical students' involvement in quality assurance includes their competency-based national board examination.

DOCUMENTING AND ASSESSING CLINICAL COMPETENCIES IN UNDERGRADUATE VETERINARY STUDENTS – A SOLUTION FOR THE CLINICAL EDUCATOR

Author(s)

Dr Melinda Bell, Dr Cristy Secombe, Dr Pyara Dhillon, Mr Shri Rai.

Presenter

Dr Melinda Bell

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Murdoch University, School of Veterinary and Life Sciences, Australia (Drs Bell and Secombe)

Murdoch University, School of Engineering and Information Technology (Dr Dhillon and Mr Rai)

Introduction

Undergraduate veterinary students are required to observe and competently perform a range of skills in a clinical setting. The challenge for veterinary educators lies in efficiently and robustly documenting competency acquisition in clinical situations such as stall-side, in a paddock, or in a consultation room. Poor compliance in documentation is in part caused by time constraints, the mobile nature inherent to clinical veterinary practice and the requirement to undertake clinical service delivery while educating students.

Design

Veterinary educators working collaboratively with Computer Science Capstone Project students have developed a competency based software system with both mobile and conventional interfaces allowing competencies to be assessed quantitatively and qualitatively within a clinical setting. This robust, adaptable and secure system accurately and efficiently records assessments, providing students with immediate feedback, and educators with the ability to track achievement of curriculum objectives.

Implementation

The software has been widely adopted by clinical veterinary educators at Murdoch University, in part due to thoughtful design by clinical educators. Feedback from clinical staff and students has been encouraged and resulted in improvements to the capabilities of the software. Report generation is designed to assist with daily teaching and to meet accreditation requirements.

Conclusion

The software has a generic design and can be modified for any context requiring competency tracking, with the mobile interface allowing this to occur in any setting.

Take-home message

This software solution encourages assessment in a clinical setting by meeting clinical educators' need for mobility and speed.

INTEGRATION OF COMPETENCY ASSESSMENT WITHIN THE EXISTING VETERINARY MEDICINE PROGRAM STRUCTURE AT THE UNIVERSITE DE MONTREAL

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Introduction:

A competency-based approach was implemented within the existing DVM program structure thus avoiding a costly and complex curriculum overhaul.

Methods:

Course content was aligned and integrated using concept mapping. A competency framework was developed in three steps: 1) definition of essential knowledge, skills and attitudes for each competency; 2) determination of expectations for each competency and for each level of the program; and 3) creation of evaluation criteria and descriptive rubrics for assessing competency. Teaching personnel and other stakeholders' (support staff, students, VTH staff...) adhesion, commitment and involvement in the project was insured by an effective change management and communication strategy.

Results:

A competency development and evaluation pathway (CDEP) was designed to place complex and authentic tasks called "learning-evaluation situations" (LES) within existing courses and rotations of the program. The LES created by faculty allow students to practice each competency and receive formative feedback several times before submitting to certifying evaluations corresponding to each level of the program. An electronic portfolio was designed to allow students to reflect on their progress within the CDET.

Conclusions:

The new hybrid DVM program at the Université de Montréal will combine traditional summative evaluations of knowledge and skills with competency assessment without requiring a costly major change in program structure.

Take-home message:

Effective change management is essential to implement a competency-based approach without changing the existing structure of a professional program.

COMPETENCIES IN PRACTICE: ASSESSING A NEW FLEXIBLE CURRICULUM FOR INTERNAL MEDICINE

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Presenter

Professor David Black

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Introduction

Medical training in the UK is being reshaped to meet the increasing challenges of ageing, chronic disease and complexities of practice. As part of these radical changes, a new flexible curriculum for Internal Medicine with an outcomes-based assessment system is under development.

Methods

A new overarching model of physicianly training for all specialties has been developed. A number of "competencies in practice" have been designed based on the concept of entrustable professional activities. These will assess both clinical and generic curriculum content. Descriptors linked to the competencies have also been developed to support educational supervisor and multiple consultant reports.

Results

The 'competencies in practice' targeted to clinical and generic curriculum content will be presented prior to piloting to ensure that they are fit for purpose for the new flexible internal medicine curriculum. This project will identify how this new innovative assessment system supports workplace-based assessments currently in use.

Conclusions

The new model of physicianly training demonstrates how an approach of 'competencies in practice' can be used to assess a flexible internal medicine curriculum, including generic capabilities.

Take-home message

'Competencies in practice' are suggested as one model to assess clinical and generic content in an outcomes-based curriculum.

A CONTEMPORARY APPROACH TO NURSING AND MIDWIFERY COMPETENCIES IN REGIONAL WESTERN AUSTRALIA

Author(s)

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Presenter

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Introduction

In 2013 the West Australian Country Health Service (WACHS) took a contemporary approach to how we defined, supported, monitored and managed our geographically very disperse nursing and midwifery workforce to enable safe quality health care.

Methods

Standardised evidence-based toolkits were developed through extensive scope of practice focus groups and snowballing techniques with clinicians and managers across the rural and remote sites. Existing policies and supportive learning pathways were identified and bought together to inform staff of the required skills and knowledge for specific areas roles and proficiency levels.

In 2015 the WACHS Practice Framework and Guidelines and toolkits were launched. The line managers and staff collaboratively determined the skill-mix and proficiency levels required at their sites.

The tailored electronic tools used for on-boarding and ongoing performance development provided defined and measurable achievement targets for staff to self-assess against current policies and education resources available in WACHS. The tools also provided structure for sometimes difficult discussions around performance management.

Results

Managers were able to conceptualise skill-mix within their service to benchmark with similar services whilst the tools enabled flexibility for them to activate site-specific content from a broader selection of tasks.

It eliminated the common problem of regional and site-based variability in roles, allowing managers to select only those clinical tasks/skills and level of clinical proficiency required for specific roles relevant to their service.

The capacity to link specific policies, procedures and educational materials to each task/skill, supported learners to take an independent approach to seek out the learning they require to meet the requirements of their role as well as enhanced aspirations for further professional development.

Other disciplines are considering adopting this framework. We are also developing a senior nursing and midwifery leadership and management framework using our successful practice framework.

Conclusions

The WACHS *Practice Framework and Guidelines* moved away from routine yearly completion of multiple learning programs and competency assessment, to instead focus on demonstrating accountability through currency of practice, reflection and self-assessment of their scope of practice.

This standardisation boosted the efficiency of the limited clinical education workforce capacity and improved staff mobility across the seven regions.

Take-home message

The implicit movement away from tick and flick “competence” toward a “performance” approach, supports clinicians to reflect on their skills, seek out information, and work collaboratively with senior staff regarding how they will demonstrate safe high quality evidence based practice across a range of rural and remote settings.

TEACHING GENDER IN HEALTH PROFESSIONAL EDUCATION

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COLVILLE, Deb; GREEN, Catherine YEH, Chi-Chuan, BENJAMIN, Joan

Presenter(s)

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- (4) Teaching Associate, HealthPEER, Faculty of Medicine, Nursing and Health Sciences, Monash University, Victoria, Australia

Background

Gender affects everything we do as educators. Gender is important because there are widespread gender inequities in health care and health status, in selection for professional training, delivery of training, professional career development and workforce issues. An example of gender in clinical practice is a lack of a recognition that serious blunt eye injuries are associated with domestic violence. This means that the serious associated mortality risk of this condition is neglected. Gendered career segregation is pervasive in health care, for instance the stereotyping of surgery as a male 'calling'. A significant gender pay gap exists across all health professions.

Teachers have the capacity to facilitate the many changes in clinical and educational practices that can rectify this inequity. 'Teaching gender' rests on applying definitions of sex, gender, and gender-inclusive curriculum in the context of all health professional education.

Intended outcomes

Participants will define and apply definitions of gendered medicine and of gendered health professional education at large. Workshop participants will gain a broader repertoire of strategies for gender education applicable to each participants' own teaching and learning setting.

Structure

Teaching and learning scenario based discussion, focussing on cases of educational decision-making and program evaluation. Theoretic contributions based on verbatim quotes provided to participants from Australian and international experts in feminist pedagogy, such as Malterud, Phillips, Bleakley, Grumet, Jipson et al, Lather, hooks, Rosser, Colville, Aroni & Wainer and Wainer & Bryant.

Who should attend:

Interested health professional educators, male and female

Level of workshop (introductory/intermediate/advanced)

Advanced

Session 8E

AGENCY OF THE CHECKLIST: RECONCEPTUALISING THE OSCE FROM A SOCIOMATERIAL PERSPECTIVE

Authors

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Introduction

The Objective Structured Clinical Examination (OSCE) is a ubiquitous part of medical education in many countries. Literature regarding the OSCE is most often situated within the psychometric or competency discourses of assessment. Conceptualising the OSCE as a sociomaterial practice reveals some alternative ways of understanding this assessment phenomenon.

Methods

We have applied some of the major concepts from Actor Network Theory (ANT) and ANT related theorists to the OSCE checklist. ANT highlights the role of the material, that is, the objects and spaces of assessment. By systematically considering the role of the OSCE checklist, we challenge commonly held views on validity and competence.

Results

From a sociomaterial perspective, OSCEs can be considered *assemblages*, or networks of associations. The OSCE checklist is one part of the overall *assemblage*. A psychometric perspective might be concerned with standardisation, but from an ANT perspective standards are viewed rather differently. In this latter view, the checklist is *performed* to produce a score. The checklist itself, whether as a paper object or on an electronic tablet, can be considered to co-produce outcomes, for example, through directing examiners choices; in this way, the checklist can be considered *agentive*.

Conclusions

Thinking about the OSCE checklist from an ANT perspective raises more questions than it answers: how are checklists actually being performed in practice? how do these performances affect the conduct of the OSCE? what is the agency of the checklist?

Take-home message

Sociomaterial theories applied to the OSCE checklist may reveal new understandings about the assessment processes.

A COMPARISON OF PROGRESSION DECISION-MAKING METHODOLOGIES IN OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE) AND OBJECTIVE STRUCTURED SKILLS EXAMINATION (OSSE) IN A GRADUATE ENTRY MEDICINE COURSE

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Presenter

Steve Capey¹

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Introduction:

The progression rules for OSCE examinations can be calculated by various methodologies. The number of stations successfully passed is one method of making progression decisions; however aggregation of scores where the overall percentage for the assessment could also be used. The validity of both methodologies have relative merits and relative considerations for the robustness of the progression decisions made in these type of assessments.

Methods:

Each station has an individual standard set and these were combined to produce an overall passing score for the whole assessment. We have analysed and compared the results of the OSCE and OSSE assessments over the last three years to compare the rates of progression of candidate utilising the two methodologies. We conducted a regression analysis to estimate the predictive value of both methodologies as to the rank order of the cohorts.

Results:

We found that the progression rates utilising the two methods achieved substantially different outcomes depending on the progression rules used. Making progression decisions based on the 75% criteria of stations passed failed more students than the aggregated method.

Conclusions:

The passing rates using both methodologies provide substantially different results. The validity of the two methods has been explored and the number of students that fail to remediate the assessment during the supplementary exam period is similar to the aggregated method. This suggests that scoring by number of stations passed may overestimate the number of borderline/fail candidates within the cohort.

Take-home message:

We have considered two potential models of progression rules for clinically based assessments in a graduate entry medical course. The two different methods produce markedly different outcomes for the candidates. The validity of the two methodologies would suggest that the aggregated method produces a number closer to the true fails and a more reasoned outcome.

MARKING RELIABILITY: THE RESULTS OF AN OSCE MARKING STANDARDISATION EXERCISE WITH A LARGE COHORT OF NEWLY TRAINED ASSESSORS.

Author(s)

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Presenter

Dr Suzanne Chamberlain

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Introduction

The National School of Healthcare Science provides standardised assessment for clinical scientists across the UK. The school utilises a pool of approximately 200 assessors, mostly consultant clinical scientists, to deliver 20 science-based OSCEs. An online marking standardisation exercise was designed and completed by 187 assessors.

Methods

Assessors who were blinded to domain weightings and the station pass mark watched and assessed a video of one candidate at one OSCE station, and submitted their marks anonymously using an online system. Marks, global judgements, and pass/fail outcomes were analysed, and the findings reported to and discussed with the cohort of 187 assessors.

Results

The exercise produced a range of total scores from 0.0% to 92.7% (mean = 30.9%; SD = 22.0%). Based on total scores alone, 23 assessors passed the candidate, while 164 failed the candidate. An analysis of global judgements showed that 96% of assessors identified the performance as either Borderline or Clear Fail.

Conclusions

The discussion of results highlighted significant discrepancies in the interpretation and application of the mark scheme, and in assessors' expectations of what would be an appropriate response to the station task in the workplace. The exercise served as a useful reminder of the importance of marking reliability and consistent application of mark schemes.

Take-home message

Marking standardisation is an essential exercise prior to the delivery of large-scale, high stakes assessments to allow assessors to self-calibrate against their peers, and practice marking skills.

CLINICIAN EXAMINER JUDGEMENTS DURING OSCES: WHAT FEATURES DO THEY REALLY CONSIDER?

Author(s)

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Presenter

A/Professor Katharine Boursicot

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Introduction

While rater cognition is an area of interest in medical and healthcare professional education, studies have focused on work-place based assessors in the context of postgraduate training. This study investigates the thinking processes of examiners during undergraduate OSCEs.

Methods

Twenty clinicians were recruited from two medical schools in different English-speaking countries. Participants individually watched two 10-minute digital videos of students performing at OSCE stations, in the presence of the researchers. Participants were asked to express their thoughts about the student performance as the clip was playing. The recording was repeated: the participant could stop the video at any time to elaborate on their thoughts. Every session was recorded and transcribed. Thematic analysis was undertaken on the transcribed interviews.

Results

There were no differences between comments made by examiners from the two schools. Some common themes emerged from all the recorded interviews:

- focus on interpersonal interactions
- history taking: relevance of content and specific communication skills
- examination: systematic as well as accurate
- logical synthesis and reporting of findings important
- emphasis on overall readiness for graduation and safety

Conclusions

Clinician examiners make judgements about candidate performance according to their own schemas of 'competence' mainly based on their personal clinical practice. Marking schemes were not considered especially relevant to the clinicians' judgements. Less experienced OSCE raters tended to judge more stringently than more experienced examiners.

Take-home message

Clinician examiners have certain expectations of what constitutes a 'good performance' in OSCEs. These expectations are based more on their personal experience than marking schemes.

IMPROVING OSCE ASSESSOR STANDARDISATION AND RELIABILITY: KEEPING IT SIMPLE

Author/s

Rienits H, Tran A

Presenter

TBA

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Introduction

Our relatively new medical school has struggled to achieve standardisation and reliability of results in the clinical assessment of senior medical students by OSCE. The majority of our assessors are experienced external clinicians though many are not experienced in this form of assessment. Past attempts at training have met with limited success yet studies show assessor training and experience can significantly affect reliability. In 2014 we introduced 3 changes for our assessors:

- We filmed 2 versions of each station for assessors to view beforehand along with suggested grades for the performance.
- The mark sheet was changed to a simpler and clearer format based on global judgement of domains with descriptors of expected performance.
- A 'buddy' system was introduced for training 'novice' assessors on the job.

Methods

The assessors were surveyed to gather information regarding their previous training and experience with OSCE as well as their response to the innovations this year. The overall pattern of our student's results was compared with previous cohorts.

Results

Our assessors appreciated the films and engaged with the new mark sheets well. Our results showed a better correlation between marks and global ratings, and were more in line with other medical schools of similar size and curriculum.

Conclusions and take-home messages:

- Films are very helpful but a lot of work
- Global score judgement for each domain is much simpler for assessors and stops them 'playing with numbers'
- 'On the job' training for novice assessors is a workable option that is appreciated by all.

Session 8F

ASSESSING THE EDUCATIONAL OUTCOMES OF INTERNATIONAL PLACEMENTS FOR VISITING HEALTHCARE PROFESSIONALS

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Presenter:

Natasha Mellor & Lucie Byrne-Davis

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Introduction

Qualitative studies of benefits to healthcare professionals of international placements provide crucial insights into volunteering. The qualitative nature of these data, however, can lead to difficulties in a) proving benefit to policy makers and b) comparing types of placement on outcomes. We are developing a tool measuring the outcomes of international placements and the variables (contextual factors) that lead to optimal returns. We present the development of the core outcome set underpinning this tool, as part of the MOVE project (<http://www.salford.ac.uk/nmsw/research/research-projects/move>).

Methods

To develop the core outcome set we:

1. Extracted benefits and costs at the most granular level and contextual variables proposed to influence outcomes from a) a systematic review of papers on international placements for UK healthcare professionals and b) qualitative reports of volunteers from a project in Uganda.
2. Refined the set of outcomes using Delphi methodology with international placement stakeholders.

Results

From 55 published papers and unpublished project reports we identified 156 benefits and costs. 59 participants took part in the Delphi: Benefits and costs were reduced to 109 benefits and 4 costs. We found 34 contextual factors.

Conclusions

There was agreement over a large number of benefits across a large stakeholder group. There was little agreement about costs. These 113 items are being developed into a tool, to be administered pre and post international placements.

Take-home message

Stakeholders agree that there are a large number of benefits and few costs to international placements. Tool development will allow us to examine this quantitatively.

CAPTURING THE LEARNING OUTCOMES ASSOCIATED WITH UNDERGRADUATE ELECTIVE PLACEMENTS IN LOW RESOURCE SETTINGS: RESULTS OF A PILOT STUDY COMMISSIONED BY HEALTH EDUCATION ENGLAND

Author(s)

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Presenter

Professor Louise Ackers

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Abstract

This paper reports on the findings of an action-research study assessing the learning outcomes associated with ethical elective placements in low resource settings. The pilot study involved the placement of 40 undergraduates representing the whole spectrum of medical, nursing, midwifery related health professions in Uganda in 2015. Elective placements have become part of the culture of medical education yet little is known about the risks associated with some placements and the outcomes associated with them. This Health Education England funded project extended opportunities for elective placements to all professional cadres through a carefully structured program designed to ensure that the placements not only provided important and in many respects unique learning opportunities but also contributed to sustainable development in the host location (Uganda). The paper will present the outcomes of the evaluation detailing the specific learning outcomes both in terms of clinical skills and more generic soft/transferable skills. It also presents the model developed as an example of good practice.

Introduction

The project built on previous expertise of deploying long term (professional) clinical volunteers to Uganda and linked this long term professional volunteering to the deployment of undergraduate elective students to ensure effective supervision, optimise learning opportunities and mitigate damage (to local health systems). The empirical findings are carefully contextualised within existing research review at international level.

Methods

The evaluation of this action-research project involved a multi methods approach combining a detailed applications process and longitudinal tracking of students from the pre departure induction through to placement itself and post return interviews. We have also included some focus groups and interviews with program leads, long term professional volunteers and host partners.

Results

The results are in the process of being analysed and will continue to develop as the final group returns to the UK in September 2015. At this stage results suggest that placement in low resource settings can make an important and unique contribution to the learning of British undergraduates in medicine and allied professions. The key lies in careful risk assessment, structure and in-depth engagement with partners in both locations. The model used in the pilot study has been refined and will be presented in this paper as the basis for scaling up and policy transfer to other locations.

Take-home message

Elective placements have tended to be the preserve of more wealthy medical students. However they often take the form of individually-driven, unstructured and unsupervised forms of volunteer tourism that has little benefit to host regions.

It is important that the risks associated with such placements are recognised and more carefully structured opportunities made available to wider cohorts of students. Such placements have the potential for unique and accelerated learning which offers significant benefits to the sending country (in this case the NHS)

ASSESSMENT OF STUDENT SATISFACTION WITH THEIR INITIAL PROGRAM ELECTIVES

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Introduction:

King Saud University began incorporating electives into its curriculum, at the end of the fourth year of a six year program, in 2012-2013. Previously, formal electives were only in the internship year.

Methods:

Fourth year Students were all given assessment forms at the end of their respective electives. These were voluntary and did not affect their grades. Forms were collected at the end of the elective in each of 2013, 2014 and 2015. The students gave quantitative scores reflecting their satisfaction with both the pre-elective process (online registration, email, discussions) and the elective experience itself.

This data was collected and analysed using SPSS.

Results:

The response rate over the three years was 64.1% from 778 students. The average overall satisfaction level for the pre-elective process was 76.7%. The average satisfaction for the electives was 82.4%. Women students were significantly less satisfied than male students in two out of the three years. Students in highly competitive electives (ophthalmology, otolaryngology, orthopaedics, dermatology, and cardiology) showed no significantly greater satisfaction with either the pre-elective process or with the electives. However, students assigned to emergency medicine showed significantly less satisfaction ($p = .029$) in both areas. In contrast, those in family medicine showed significantly higher satisfaction ($p < .001$) for both the preclinical process and the electives themselves.

Conclusions:

Student satisfaction can be more closely correlated with expectations and preparation than the choice of discipline.

Take-home message:

Communication and preparation continue to be a challenge especially in departments where they students are less familiar with the protocols.

KIRAKIRA, SOLOMON ISLANDS: A UNIQUE INTERNATIONAL CLINICAL PLACEMENT

Author

Professor Peter Jones

Presenter:

Professor Peter Jones

Institution(s), Department(s), Country/Countries

Bond University, Gold Coast, Australia

Abstract

Between 2013 and 2015 Bond University has placed 95 Medical, 10 Project Management, 4 Physiotherapy and 8 Nutrition students in Kirakira, Solomon Islands. All 117 students gained formal University credit for their placement time in Kirakira. 39 Academic and Clinical Faculty visited Kirakira as supervisors. The health services in Kirakira are limited. There are two local doctors and 30 nurses providing care to an Island population of 40,000. The students and supervisors have been accepted as a welcome support for the local health care services and have been valued by the people of Kirakira. The project has earned competitive grant funding from Health Workforce Australia, Queensland Health and the New Colombo plan.

This presentation will outline the academic and organisational principals that have ensured the success and sustainability of this project. The key steps have been:

1. Working with the Ministry of Health and the Australian Government in Solomon Islands.
2. Having pre-departure preparation, a formal position description outlining scope of practice and expectations and finally a debriefing for students.
3. Offering the local doctors and nurses Academic titles allowing them to assume responsibility for assessing student performance in Kirakira.
4. Having rigorous academic expectations and assessment.
5. Placing students across the full academic year.
6. Evaluating the perceptions of both the local community members and staff and students to assess the value of the placement.
7. Working in partnership with the local community to identify clinical research opportunities.
8. Funding the placement as part of the standard clinical curriculum.

EVALUATING AN EXTENDED RURAL COHORT (ERC) PROGRAM

Author/s

Peardon M, Caygill R, Waite C, Wright J

Presenter

Caygill R

Institution(s), Department(s), Country/Countries

The University of Melbourne Department of Rural Health

Introduction

The research aims to evaluate the Extended Rural Cohort (ERC) program at the Rural Clinical School. The research will run for the 2014 and 2015 academic years. ERC students undergo an equivalent curriculum to their urban, hospital-based counterparts, carrying out specialist learning in a series of short intensives within a primary care environment, in lieu of the standard 6 to 8-week hospital based rotations in aged care, mental health, child and adolescent health and women's health.

Ongoing reports point to a positivity concerning the delivery of medical education in rural areas. Some report qualitative data from the perspectives of students themselves, however most determine impact and quality using exam results or other quantitative factors. Therefore, while research on this area is by no means scarce, qualitative, in depth studies from the perspective of students, regarding learning experiences, are much less common. Lack of systematic student feedback was also identified as a limitation in an independent review of the ERC program conducted in 2012. Therefore, collecting data concerning experiences and perspectives from students themselves is vital to determining the relative success of the program, assessing the learning experience, and to clarify any problems.

Methods

Participants will be invited to take part in four focus groups throughout each academic year (2014-15) between February and October. All focus groups will be recorded and transcribed to text. Written transcripts will be analysed and coded thematically. These codes will be used to determine changes, if any, in student perceptions and attitudes throughout the year-long program. They will also be used to compare students in the ERC program with those in the traditional MD program to determine differences or similarities.

Results

The study is ongoing and the results are pending. They will be ready to present at the conference in March 2016.

Conclusions

This research aims to evaluate, and consequently provide quality assurance for an important educational program. Feedback is sought to ensure the best possible service is offered to the medical students, and rural communities at large.

Take-home message

This research will provide vital insights into the implementation of the ERC program. There are few accounts in the medical education literature which privilege student perspectives with regards to curriculum delivery in rural, primary care contexts, particularly over time. Therefore, the findings of this project will assist the development of the ERC program and could potentially inform other medical schools and their implementation of rural, primary care based medical education.

MEASURING THE “ICEBERG”- QUANTIFYING THE HIDDEN AND INFORMAL CURRICULUM IN CLINICAL ROTATIONS USING THE HIDDEN INFORMAL CURRICULUM ASSESSMENT TOOL (HICAT)

Author(s)

Paul McGurgan, Di Carmody, Lexi Tregonning

Presenter

Paul McGurgan

Institution(s), Department(s), Country/Countries

c/o The School of Women’s Health, The University of Western Australia, Perth, Western Australia, Australia.

Introduction

The study aimed to develop and validate an instrument- the Hidden Informal Curriculum Assessment Tool (HICAT) to quantify both the frequency of positive and negative aspects of the hidden / informal curriculum and the “impact factor” of these experiences for medical students.

Methods

The authors developed a questionnaire which was distributed to medical students undergoing a clinical rotation over the course of an academic year. To examine internal validity the authors compared the results of the HICAT for students based on their gender, level of entry in the course and overseas status.

Results

99 students participated in the survey (response rate 60%). The most influential student experiences were positive examples of the hidden/ informal curriculum. The commonest negative experience which had a significant influence on the students was the experience of being disadvantaged due to gender. Males more often felt disadvantaged by their gender than female students. International students more often felt disadvantaged by their ethnic background than domestic students.

Conclusions

The HICAT was user friendly and demonstrated internal validity. Further research is needed to determine external validity. HICAT may be a useful instrument for educational and health professional organisations to benchmark and identify the strengths and weaknesses of their hidden/ informal curricula.

Take-home message

The hidden/informal curriculum is an important part of the learning environment which may be positive or negative, but by its nature is difficult to measure. Different groups of students experience this in different ways which have significant impacts on their educational experience.

Session 8G

LONG-MENU QUESTIONS IN COMPUTERIZED MEDICAL ASSESSMENTS: A RETROSPECTIVE STUDY OF THE PAEDIATRIC EXAMS IN GENEVA

Authors:

Bernard Cerutti, Susanne Aujesky, Katherine Blondon, Elisabeth van Gessel, Annick Galetto

Presenter:

Bernard Cerutti,

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Introduction:

Computerized paediatric assessments in our centre use series of clinical cases, where information is progressively delivered to the students in a sequential order. Three types of formats are mainly used: Type A (single answer), Pick N, and long-menu questions. Long-menus require a long, hidden list of possible answers: based on the student's initial free text response, the program narrows the list, allowing the student to select the answer. In this study we analyse the psychometric properties of long-menu questions.

Methods:

we reviewed the difficulty level and discrimination index of the items in the paediatric exams from 2009 to 2014, and compared the long-menu questions with the Type A and Pick N questions, using multiple-way analyses of variances.

Results:

our dataset included 15 exam sessions with 794 students and 502 items, with 193 (38%) long-menus, 180 (36%) Pick N, and 129 Type A (25%) items. The format was significantly associated with both level of difficulty ($p=.001$) and discrimination index ($p < .001$). Long-menus were easier than Type A (+6.2%; 95%CI 1.9%-10.5%), and more discriminant than both Type A (+0.07; 95%CI 0.01-0.13), and Pick N (+0.11; 95%CI 0.06-0.17).

Conclusions:

long-menu questions show good psychometric properties. They provide more variety, reduce the cueing effect, and may be closer to real life practice than other item formats.

Take-home message:

Long-menu questions are more discriminating than type A and Pick N items, without being more difficult, and allow examiners to vary the formats during computerized assessments.

MCQ RESPONSES: CONSISTENCY OF BEING CORRECT, CERTAIN AND SAFETY

Author(s)

Mike Tweed, Tim Wilkinson, Sarah Stein, Jeff Smith

Presenter

Mike Tweed

Institution(s), Department(s), Country/Countries

University of Otago, New Zealand

Introduction

MCQs including response certainty and safety (RCSQs) provide additional information for staff and students apart from just numbers correct. However, consistency of responses is needed to support scoring interpretation. This study looks at consistencies of response correctness, certainty and safety.

Methods

RCSQs were used as part of the assessment package for 329 Year 5 medical students over 4 years, each split into six groups. Incorrect responses had been classified by safeness by an expert panel. Six 20 RCSQ examinations were developed from a question pool to maintain content balance and difficulty. Correctness was coded as 0/1. Certainty was coded as 0/1/2/3. Unsafeness was coded 0/1/2/3. Internal consistency of each of these parameters was analysed for each examination using Cronbach's alpha.

Results

Overall, a mean of 12.3 responses were correct, 4.0 incorrect not unsafe, 2.4 low level unsafe, 0.4 moderate level unsafe, 0.1 high level unsafe. A mean of 5.3 responses were low certainty, 8.6 moderate certainty, 5.2 high certainty. Across the six iterations of the examination, the consistency of correctness varied between 0.1 and 0.71, mean 0.40. The consistency of certainty varied between 0.75 and 0.88, mean 0.83. The consistency of unsafeness varied between 0 and 0.48, mean 0.17.

Conclusions

Response certainty is more consistent than correctness, and unsafeness is almost random. Certainty may be based on topics rather than individual questions, so be more consistent than correctness, causing inappropriate certainty.

Take-home message

Make decisions on unsafe responses with caution. Inappropriate certainty may be a function of broader reflection.

PRO'S AND CON'S OF NEGATIVE MARKING AT MULTIPLE-CHOICE POSTGRADUATE MEDICAL ASSESSMENTS

Author(s)

Danny G.P. Mathysen, Zeev Goldik

Presenter

Danny G.P. Mathysen

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Introduction

European postgraduate medical assessments use multiple-choice questions (MCQs) for knowledge assessment purposes. While in 2008, the *European Society of Anaesthesiology* decided to abandon negative marking, the *European Board of Ophthalmology* did the opposite in 2010. Both Examination Boards report satisfactory results as a consequence of this contrasting change.

Methods

Statistical performance parameters of test items (P-statistics, pearson correlation, Cronbach- α , and 3-parameter item-response [IRT] analysis) are compared with and without negative marking.

Results

When comparing the statistical performance of the comprehensive *European Board of Ophthalmology Diploma* (EBOD) examination with negative marking, the following was observed: P-statistics decrease, Pearson correlation increase, Cronbach- α increase, 3-parameter IRT improvement. Additionally, the results clearly contra-indicate discrimination of female candidates.

On the other side at the *European Diploma in Anaesthesiology* examination negative marking has lead to candidates omitting the answer to a variable high number of questions. The fact that many candidates omitted to answer questions may affect consistency of the examination.

Conclusions

The comprehensive EBOD examination consisting of a minimal number of test items, has improved in terms of consistency after the introduction of negative marking. These benefits have been demonstrated to be valid not only for the organisers, but also for the candidates.

On the other side, suppression of negative marking in the Anaesthesiology examination has lead to a situation where candidates did not feel afraid to answer all questions.

Take-home message

It seems that depending on the nature of the examination, negative marking can either have positive or negative impact for postgraduate medical assessments.

Session 8H

THE SOCIAL VALIDITY OF A NATIONAL ASSESSMENT CENTRE FOR SELECTION INTO GENERAL PRACTICE TRAINING

Author(s)

Annette Burgess, Chris Roberts, Tyler Clark, Karyn Mossman

Presenter

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Institution(s), Department(s), Country/Countries

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Introduction

Internationally, recruiting the best candidates is central to the success of postgraduate training programs and the quality of the medical workforce. We explored candidates' perception of the fairness of a National Assessment Centre (NAC) approach for selection into of Australian general practice training, where candidates were assessed by a Multiple Mini Interview (MMI) and a written Situational Judgment Test (SJT), for suitability to undertake general practice (GP) training.

Methods

In 2013, 1,930 medical practitioners, who were eligible to work in Australia attended one of 14 NACs in each of 5 states and 2 territories. A survey was distributed to each candidate at the conclusion of their assessment, which included open-ended questions aimed at eliciting candidates' perceived benefits and challenges of the selection process. A framework analysis was informed by the theoretical lens of Social Validity Theory.

Results

Qualitative data was available from 46 % (n= 886/1,930) candidates, who found the NAC experience fair and informative for their training and career goals, but wanted to be provided with more information in preparation. Candidates valued being able to communicate their skills during the MMI, but found some difficulty in interpreting the questions, and a significant minority had concerns that a lack of relevant GP experience may inhibit their performance. They also expressed a desire for formative feedback during the interview process.

Conclusions

A focus on the candidate experience throughout an organisation's selection process may provide benefits to both candidates and the organisation, regardless of whether or not candidates secured the job.

Take-home message

During any job selection process, not only is the organisation assessing the candidates, but the candidates are also assessing the organisation.

ARE MMI SCORES FOR SELECTION INTO SPECIALTY TRAINING BIASED AGAINST PARTICULAR CANDIDATES?

Author(s)

Chris Roberts, T Clark¹ N Zoanetti,² P Sureshkumar,¹ M Grant¹

Presenter:

Nathan Zoanetti

Institution(s), Department(s), Country/Countries:

¹ Sydney Medical School, University of Sydney, ² Victorian Curriculum & Assessment Authority.

Background

Entry into general practice in Australia is determined by a National Assessment Centre (NAC) approach where 17 Regional Training Providers (RTPs) provided 14 NACs across the country. Eligible candidates were required to sit a six station Multiple Mini Interview (MMI) and a written 50 item Situational Judgement Test (SJT). We wished to determine whether there was any bias within the MMI against candidates of equal ability because of their age, year of postgraduate training, gender, country of primary medical qualification, preferred training pathway (general vs rural) and shortlisting for their preferred Regional Training Provider.

Methods

Differential Item Functioning (DIF) using a Rasch model explored whether individual MMI questions appeared to be differentially easy or difficult for applicants by virtue of one or more of their characteristics after controlling for overall MMI performance.

Results

Data was available for 2254 candidates, scored by 340 interviewers. There was a good fit of the Rasch model. Expected score curves showed little evidence of DIF. A slight tendency of DIF on some questions suggested further MMI question review.

Conclusion

Cultural factors need to be taken into consideration when quality assuring MMI questions. The MMI questions were conceptually equivalent and thus suitable for testing all applicants for training in general practice regardless of background.

Take home message

Candidates can be assured that MMI questions in the NAC are fair whatever the candidates gender and culture.

SELECTION OF INTERNATIONAL MEDICAL GRADUATES FOR POST-GRADUATE TRAINING: HOW DO THE SURROGATE MEASURES OF ABILITY COMPARE TO WORKPLACE-BASED ASSESSMENT?

Author(s):

Jean Rawling^{1,2}, Shannon Murphy¹, and David Topps²

Presenter:

Jean Rawling

Institution(s), Department(s), Country/Countries:

University of Calgary, Alberta International Medical Graduate Program¹ and Department of Family Medicine², Canada

Introduction:

The Alberta International Medical Graduate (AIMG) Program assesses IMGs for suitability to pursue Canadian post-graduate medical training in the province of Alberta. Current assessments include the Medical Council of Canada's Evaluating Exam (knowledge-based multiple choice), the National Assessment Collaboration OSCE), as well as the AIMG Program's in-house multiple mini-interviews (MMI) and script concordance test. To allow candidates to demonstrate their skills in a recent, relevant, Canadian generalist clinical environment we have implemented a 4-week workplace-based assessment (WBA). The goal of the current study was to determine the relationship between scores on point-in-time measures of clinical ability and longitudinal performance during a clinical WBA.

Methods:

Over two years, 60 IMGs who were not selected for traditional entry into Alberta post-graduate residency programs were invited to participate. Candidates were placed with trained assessors specializing in either general internal medicine or family medicine. Each candidate received a minimum of 6 narrative and quantitative evaluations (2 case-based discussions, 2 minis- CEXs, 2 global ratings) completed by two different assessors. Evaluations were blueprinted against entrustable professional activities (EPAs) appropriate for graduating Canadian medical students, stemming from CanMEDS 2005 competencies.

Results:

Correlations based on multivariate analysis between point-in-time assessments and WBA provide interesting insights.

Conclusions/Take-home Message:

The extent to which each point-in-time assessment used currently by the AIMG Program relates to clinical ability has yet to be demonstrated. Correlation between different clinical performance surrogates and WBA may better inform selection of IMGs for post-graduate medical training.

FACTORS RELATED TO DOCTORS' CHOICE OF A RURAL PATHWAY IN GENERAL PRACTICE SPECIALTY TRAINING

Author(s):

Premala Sureshkumar¹, Chris Roberts¹, Tyler Clark¹, Michael Jones², Robert Hale³, Marcia Grant¹

Presenter:

Premala Sureshkumar

Institution(s), Department(s), Country/Countries

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Hale Consulting, Canberra, Australia

Introduction

Internationally, shortages of doctors persist in rural areas. Factors applicants consider in electing for a rural pathway into specialty training were investigated.

Methods

Applicants applied for the general and rural pathway into Australian General Practice Education and Training (AGPT). Suitability was assessed by a national assessment process. Applicant demographic and performance data on a situational judgement test (SJT) and a multiple mini-interview (MMI) were possible influencing factors.

Results

Of the 2,221 completing all assessments, 45% were Australian Medical Graduates (AMGs), 26% Foreign Graduates of (Australian) Accredited Medical Schools (FGAMS) and 29% International Medical Graduates (IMGs). Through government regulation, over two thirds (70%) chose their training preference and a third (30%) were required to go rurally. For applicants with a choice (n=1550), those with a rural background (OR=3.64), and a rural clinical school experience (OR=2.23) were more likely to choose the rural pathway. FGAMS were less likely to choose rural pathway when compared with IMGs (OR=0.33). For applicants, largely IMGs with no-choice (n=671), high SJT (OR=1.3) and low MMI (OR=0.69) scores were associated with being on a rural pathway.

Conclusions

For those with a choice of pathway, rural background and rural clinical school experience positively influence the decision to elect for rural training.

Take-home message

The career trajectory of rural doctors begins early on with rural background and rural clinical school experience influencing most AMGs and FGAMS in their choice of vocational training pathway. Targeted support for international and foreign graduates of local schools may influence them to train rurally.

SITUATIONAL JUDGEMENT TESTING IN MEDICINE - STUDENT AND FACULTY PERCEPTION

Author/s

Dr Neel Sharma

Presenter

Dr Neel Sharma

Institution(s), Department(s), Country/Countries:

National University Hospital, Singapore

Background:

The situational judgement test (SJT) is a mandatory assessment for exiting medical students in the UK. Its aim is to assess the aptitudes expected of a newly qualified doctor. Evidence highlights that research is needed to evaluate the extent to which SJTs predict performance. This study aimed to assess student and faculty perception of the SJT using a mixed methods format.

Methods:

UK medical students and faculty were invited to take part in the study. A mixed methods format was utilized.

1. Quantitative scoring (Likert scale 1- strongly disagree to 5 strongly agree) of the degree to which the test was a worthwhile measure of the defined test attributes
2. Qualitative perception of the positive and negative aspects of the test

Results:

100 medical students were invited to take part, with a 51 % response rate. 10 faculty members were invited to take part in a focus group with an 80 % response rate. Student quantitative scoring for several attributes: commitment to professionalism, coping with pressure, effective communication, patient focus and working effectively as part of a team ranged from 2.29 to 2.61. Faculty scoring ranged from 2.63-3.38. Student qualitative analysis demonstrated concerns allied to subjectivity, item ranking in relation to real life encounters, over reliance on SJT scores for job entry, lack of feedback and the risk of coaching for the test. Faculty qualitative analysis raised concerns allied to option ranking, an inability to convey real life situations accurately, a need for standardized UK medical testing as opposed to additional testing, an inability to test how doctors would actually behave and the lack of evidence linking SJT scores with better foundation training performance.

Conclusions:

This study is the first to demonstrate medical student and faculty perception of the SJT in the UK. Significant limitations have been raised with a test implemented on the basis of weak empirical evidence.

THE COMPLEMENTARY ROLES OF SITUATIONAL JUDGEMENT TESTS AND ACADEMIC ATTAINMENT IN POSTGRADUATE SELECTION

Author(s):

Fiona Patterson^{1,2}, Maire Kerrin², Kim Walker³, Fran Cousans², Helena Edwards², David Good¹

Presenter:

Kim Walker

Institution(s), Department(s), Country/Countries

¹ University of Cambridge, UK

² Work Psychology Group, UK

³ UK Foundation Programme Office, UK

Introduction

Both academic (McManus *et al.*, 2003) and non-academic (Patterson *et al.*, 2015) attributes are important for performance during training and clinical practice. We examined the predictive validity of an academic (Educational Performance Measure, EPM) and non-academic (Situational Judgement Test, SJT) measure for recruitment into the UK Foundation Programme. Applicants are ranked rather than selected, thereby offering a rare opportunity to examine prediction in lower scoring candidates.

Methods

The sample comprised foundation year one trainees from the 2013 cohort; 160 high and 231 low scorers on the SJT. Supervisor ratings of the professional attributes assessed within the SJT and the presence of remedial actions were collected as outcome measures at the end of the first year of training.

Results

The SJT and EPM were significantly positively correlated. Both the EPM and SJT predicted supervisor ratings in the sample as a whole. However, when examining this relationship within the high and low performing group separately, only the EPM was significant within the high group and the SJT within the low group. Those receiving remedial action scored significantly lower on both the EPM, and the SJT.

Conclusions

Both the SJT and EPM were associated with performance and incidence of remedial action within postgraduate training. Differential effects were found for the two measures, with the SJT more predictive of performance at the lower end of the distribution, and the EPM at the higher end.

Take-home message

Academic and non-academic attributes differentially predict performance in postgraduate medical training, suggesting they are complementary measures.

Session 8I

TEN WAYS TO PROVIDE FEEDBACK

Author/s

Fluit C, Klaassen T, De visser M

Presenter

Fluit C, Klaassen T, De visser M

Affiliations

¹ Radboud University Center Health Academy, ² Radboud University Center Health Academy, ³ Radboud University Center Health Academy

Background

Feedback is one of the most powerful learning tools we know in education. With the introduction of competency based medical training programs, the need for feedback for the learning process has been strongly emphasized. Several tools, like the mini-CEX and the multisource feedback are now used in order to stimulate clinical teachers to provide feedback to their learner.

Very often teachers use the Pendleton rules when providing feedback to their trainee (what goes well – what goes wrong). In many workshops this method is practiced with teachers. We have experienced that teachers are asking for alternative methods, as the Pendleton rules are not always applicable or effective. During this active workshop participants will gain more insight in the benefits and pitfalls of giving feedback, and will learn and practice more ways for providing feedback to their learners.

Intended outcomes

Participants will learn (1) evidence based conditions for effective feedback; (2) how to provide feedback using different methods; (3) discuss the pro's and cons of different methods for provide feedback

Structure

Role-playing will be used to let participants experience how to guide and act in feedback sessions. Small group discussions about different feedback methods will lead to an overview of the pro's and cons of different methods for providing feedback. During an interactive lecture evidence based tips are provided about feedback.

Who should attend

All who are involved in observation and feedback sessions in medical education.

Level of workshop (introductory/intermediate/advanced)

No special level

Session 8J

USING INTERACTIVE VIDEO ASSESSMENT TOOLS IN INTERPROFESSIONAL EDUCATION

Authors:

Viktor Sigalov, MD; LuAnn Wilkerson, EdD; Ming Lee, PhD

Presenters:

Viktor Sigalov, MD; LuAnn Wilkerson, EdD; Ming Lee, PhD

Institution:

David Geffen School of Medicine at UCLA, USA

Background:

Interactive video assessment tools provide the opportunity to use video stimuli to assess learners' comprehension, situational awareness, and the abilities to analyze and evaluate simulated or real situations as well as select alternative ways of responding to the situations demonstrated in the video. The integration of test questions into the video at selected points in time allows the learner to easily review the stimulus before responding, providing practice in observation and focused attention. This workshop will demonstrate an example of the use of one of these tools in interprofessional education.

Intended outcomes:

Upon completion of the workshop, participants are expected to:

1. Explain specifics in the design of interactive video assessment tools
2. Construct relevant assessment questions associated with video vignettes
3. Discuss common advantages and disadvantages of using videos as assessment tools

Structure:

In the first part of the workshop participants will experience the learning and assessment environments of Zaption application software by using a video "The Patient or The Protocol" that was created for the use in an interprofessional education course at UCLA. Participants will view the segments of the video, answer the embedded assessment questions, discuss their answers, and review assessment analytics. In the second part of the workshop, participants will work in small groups with a teamwork video vignette to create their own assessment questions. The workshop will end in a discussion about possible applications of interactive video assessment tools in health professions education.

Who Should Attend:

Health professional educators and administrators involved in assessment

Level of Workshop:

Introductory to intermediate

Session 8K

CLASSICAL TEST ITEM ANALYSIS FOR IMPROVING CLASSROOM TESTS: IT'S NOT AS HARD AS IT LOOKS

Author/s

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Presenter

Dennett M

Affiliation

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Background

A test is intended to provide quality data to inform a critical decision-making process. A test's quality depends upon the quality of its items and poorly constructed or performing items detract from the test data. Item analysis, although sometimes intimidating, can assist in identifying ineffective items and highlighting specific problems.

Intended outcomes

At the workshop's conclusion, attendees will be better able to:

- Describe the purpose of item analysis
- Discuss the components of an item analysis.
- Discuss the four basic statistics used in an empirical item analysis
- Use the item analysis to identify item deficiencies.
- Use the EXCEL workbook to conduct item analyses.

Structure

The session provides an active learning experience. Participants are provided with a memory stick containing an EXCEL workbook that performs item analyses. Using the workbook, participants will work along with the presenter. The session begins with a description of what item analysis is, how item analysis can improve test items, and why it is critical to fair assessment. The presenters describe the judgemental components of item analysis and demonstrate and explain the statistics used in the empirical component. Participants will be shown how to identify flawed items using data. The four main statistics used in item analysis will be explained and discussed and participants will have an opportunity to identify problem items using the workbook and sample data sets. The concept of reliability will be introduced and developed in a pragmatic manner.

Who should attend

Anyone interested in improving their classroom tests.

Level of workshop

Introductory/Intermediate.

Session 8L

SELECTING THE STUDENTS YOU WANT – DEVISING THE RIGHT PROCESS

Author(s)

Ian Wilson

Presenter(s)

Ian Wilson

Institution(s), Department(s), Country/Countries

University of Wollongong, School of Medicine, Australia

Background

Current selection processes are many and varied, ranging from academic performance to interviews to vocational testing to personality testing, etc. How a program of selection techniques is put together can have significant impact on the type(s) of students selected.

The workshop will explore the desired outcomes of medical student selection. It will examine the effectiveness of the different methodologies and then develop a matrix of outcomes against selection methodology. Examples of different methodologies will be given as will their psychometric and practical properties.

Intended outcomes

At the end of this workshop participants will be able to choose or develop methods to select the type of students that reflect their medical program. They will be able to explain the best methods to use for selecting on the basis of academic achievement, interpersonal skills, professional behavior, region of practice, etc.

Structure

The workshop will primarily use small and large group discussion. Didactic input will be limited and will be responsive to the ongoing discussions.

Appropriate handouts will be distributed.

Who should attend

The workshop should suit new members on selection committees

Level of workshop (introductory/intermediate/advanced)

Introductory

Session 8M

CLOSING THE FEEDBACK LOOP' AT THE INTERFACE BETWEEN HEALTH CARE DELIVERY AND EDUCATION

Author/s

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Presenter/s

Bowe C¹, Armstrong E², Holmboe E³, Norcini J⁴

Affiliations

¹ Harvard-Macy Institute, ² Harvard-Macy Institute, ³ Accreditation Council for Graduate Medical Education (ACGME), ⁴ Foundation for Advancement of Internat'l Medical Education & Research (FAIMER)

Abstract

While health profession educators emphasize the value of performance feedback to their learners, until recently they have had limited access to data relevant to the quality of care provided by their graduates in practice. Global efforts to improve health care delivery include the collection of large amounts of provider performance data. These data represent a potential source of assessment information on the quality of care provided by graduates of health care education programs to inform program improvement. It behooves medical educators to begin thinking about what questions they might ask of these data.

During this interactive workshop, participants will:

1. Examine the alignment and 'fit for purpose' of competency measures used during training with global social accountability goals for health care delivery: high quality care, accessibility and cost containment;
2. Identify 'performance in-practice' measures (ex. health care outcomes, morbidity, mortality, patient experience, functional status) indicative of health care education programs' advancement of global social accountability goals;
3. Explore how to select, manage, integrate, and interpret feedback on graduate performance to evaluate program efficacy in advancing social accountability goals for health care delivery, curriculum planning, assessment of performance in training, and program quality improvement.

Background:

Government agencies and insurers have expanded their capabilities to monitor health care outcomes as they relate to global social accountability goals. These data can now be linked to individual providers as well as to specific education programs in which they trained. Such data, analyzed in context, can provide valuable feedback to program planners, but only if educators proactively consider what combinations of data are most meaningful to inform improvements.

Intended outcomes:

An ongoing discussion of how provider performance data can best inform education program improvement is initiated.

Structure:

Four brief presentations will be interspersed among 50 minutes of participant discussions to address:

- *How institutions currently 'define' educational success in advancing Global Health Care Goals*
- *Key questions to be asked of in-practice provider performance data*
- *Approaches to usefully incorporate 'in-practice performance data' in program evaluation?*

Who should attend:

Health care education planners, evaluators, administrators, educators

Level of workshop:

intermediate/advanced

Session 8N

ORGANIZATIONAL ACCREDITATION FOR INTERPROFESSIONAL CONTINUING EDUCATION: STRUCTURE, PROCESS AND OUTCOMES

Author(s):

Kathy Chappell, PhD, RN, FAAN¹; Kate Regnier, MA, MBA²; Dimitra Travlos, PharmD, BCPS³

Presenter(s):

Kathy Chappell, PhD, RN, FAAN¹; Kate Regnier, MA, MBA²; Dimitra Travlos, PharmD, BCPS³

Institution(s), Department(s), Country/Countries:

1. American Nurses Credentialing Center, USA
2. Accreditation Council for Continuing Medical Education, USA
3. Accreditation Council for Pharmacy Education, USA

Background:

The Accreditation Council for Continuing Medical Education (ACCME), Accreditation Council for Pharmacy Education (ACPE) and the American Nurses Credentialing Center (ANCC) aligned three accrediting systems to create a unified "joint accreditation" process for organizations that develop education for the healthcare team. Goals of joint accreditation are to support interprofessional collaborative practice (IPCP) through interprofessional continuing education (IPCE), and to streamline the accreditation processes. IPCE is designed to address the professional practice gaps of the healthcare team using an educational planning process that reflects input from those healthcare professionals who make up the team. IPCE is designed to change skills/strategy or performance of the healthcare team, or patient outcomes.

The planning process for educational activities classified as "interprofessional" must demonstrate:

- a. An integrated planning process that includes health care professionals from two or more disciplines
- b. An integrated planning process that includes health care professionals who are reflective of the target audience members the activity is designed to address
- c. An intent to achieve outcome(s) that reflect a change in skills, strategy or performance of the health care team and/or patient outcomes
- d. Reflection of one or more of the interprofessional competencies to include: values/ethics, roles/responsibilities, interprofessional communication, and/or teams/teamwork

Intended outcomes:

The presentation will include a brief overview of this innovative accreditation, examples of IPCE activities, and outcomes achieved by Jointly Accredited organizations including universities, healthcare systems, governmental agencies and private education companies. Participants will engage in discussion of strategies to facilitate organizational accreditation, activity planning and evaluation of outcomes.

Structure:

Presentation followed by small group activities and discussion

Who should attend:

Individuals responsible for developing interprofessional continuing education using accreditation standards

Level of workshop (introductory/intermediate/advanced):
Intermediate

Session 80

OBJECTIVELY MEASURING CONSCIENTIOUSNESS IN HEALTH CARE PROFESSIONALS

Author(s)

Marina Sawdon, Andrew Chaytor, *Gabrielle Finn and John C. McLachlan

Presenter(s)

Marina Sawdon, Andrew Chaytor, Gabrielle Finn and John C. McLachlan

Institution(s), Department(s), Country/Countries

Durham University, School of Medicine, Pharmacy and Health. UK

University of York, *Hull York Medical School, Centre for Education Development, UK

Background

Robust measures of professionalism continue to be elusive. This may be attributed to the complex nature of professionalism, which goes beyond the application of knowledge and skills to encompass humanism, accountability, altruism and the pursuit of excellence. It is known from the wider literature on work psychology that conscientiousness is the single strongest predictor of work place performance, and an expanding body of research confirms that this is true in health care also. We have previously developed an objective, scalar measure of diligence or conscientiousness; a proxy measure of the trait of professionalism, which is being implemented in health care settings both nationally and internationally. We have now used it as a research tool, and more recently in a summative setting.

Intended outcomes

To enable colleagues to develop and implement a conscientiousness measure suitable to their environment, and demonstrate how to subsequently evaluate its reliability and validity, as well as how to develop a related cohort study in their institution.

Structure

The workshop will start with a brief introduction to 7 years of data in settings such as medical and pharmacy undergraduate students, foundation level undergraduate students, anaesthetic trainees, paramedics and podiatrists. Participants will be provided with exemplars of conscientiousness measures and divided into discipline groups to develop conscientiousness instruments suitable to their own particular health care setting. As a group we will consider these individual instruments, and then explore the necessary data collection required to determine validity and reliability, and develop a cohort study.

Who should attend

Colleagues interested in measuring professionalism in health care professionals and trainees in a variety of health care settings.

Level of workshop (introductory/intermediate/advanced)

Intermediate

OTTAWA2016
ANZAHPE2016



Session 8P

RATER BIAS: YOURS, MINE AND THEIRS

Author(s)

Timothy J Wood and Sydney Smee

Presenter(s)

Timothy J Wood and Sydney Smee

Institutions(s), Department(s), Country:

Department of Innovation in Medical Education, University of Ottawa, Canada and Medical Council of Canada, Canada

Background

Medicine has a long history of using rater-based assessments and the growing focus on competency-based assessment will only increase the use of these assessments as it emphasizes direct observation and feedback. Unfortunately, the quality of rater judgements can vary. Ensuring that rater-based results are valid requires an understanding this variance.

The purpose of this workshop is to help clinician educators understand rater biases.

Intendend Outcomes

By the end of this workshop, participants will

- 1) be able to define common rater biases
- 2) know strategies for mitigating these biases
- 3) be able to identify circumstances in which biases help or hurt an assessment

Structure

Phase 1: Participants will complete a brief self-assessment surveying assumptions about scoring tendencies. The survey results will be reported back as de-identified group data during discussions later in the workshop.

Phase 2: Participants will rate two short videos of OSCE candidates and then engage in short, interactive presentations on a) assessment principles, b) rater bias, c) research highlighting challenges to effective examiner training and d) circumstances where rater biases may help or hurt assessments.

Phase 3: Feedback comparing participant ratings to historical and gold standard ratings for the two videos will be shared with the group. The organizers will review how these results demonstrate influences of biases. The self-assessment survey will be repeated to assess the immediate impact of the workshop on self-perceptions.

Who should attend:

clinician educators with an interest in rater-based assessment.

Level

(introductory).

Session 8Q

E-PORTFOLIOS FOR WORKPLACE-BASED ASSESSMENT IN MEDICINE AND HEALTHCARE - A GLOBAL PERSPECTIVE

Author(s)

Prof. Terry Poulton, Dr Johmarx Patton, Dr Ian Graham, Luke Woodham

Presenter(s)

Prof. Terry Poulton, Dr Johmarx Patton, Dr Ian Graham, Luke Woodham

Institution(s), Department(s), Country/Countries

St George's, University of London, UK; University of Michigan Medical School, USA; Australian and New Zealand College of Anaesthetists

Background

Workplace based assessments (WPBAs) are widely acknowledged as a key component in health professions students' development, and a portfolio model is often used to assess disparate elements of professional development. In many institutions e-Portfolios are being introduced to simplify the collection and recording of data, but e-Portfolios bring their own complications that have slowed adoption. Globally, institutions and regions have addressed these challenges using varying modes of delivery, allocations of responsibility, and differing emphasis on formative/summative assessment.

Intended outcomes

This workshop will examine three international (Australia and New Zealand, UK and Europe, USA) approaches to WPBAs and portfolios to explore commonalities and best practices. It will explore the potential impact of the use of e-Portfolios to manage WPBA programmes, and the factors that influence the acceptance of these initiatives within clinical and academic environments. Participants will be able to consider the issues in the context of their own institutional and regional culture.

Structure

This three-part session will begin with a 15 minute summary presentation and demonstration of existing approaches in each international area. Participants will then collaborate in small group discussions to identify implementation possibilities and challenges at their own institutions. Finally, each group will share the outputs from their discussions back with the wider group in a concluding feedback session.

Who should attend

Faculty and staff responsible for assessment of health professions learners, including physicians and clinical teachers, who may wish to develop a portfolio approach to WPBAs at their own institutions.

Level of workshop (introductory/intermediate/advanced)

Introductory

OTTAWA2016
ANZAHPE2016



Session 8R

EXPLORING WHY HEALTHCARE PROFESSIONALS DO OR DON'T CHANGE THEIR PRACTICE AFTER EDUCATION AND TRAINING

Author(s)

Jo Hart¹ Ged Byrne² Marie Johnston³ Chris Armitage⁴ & Lucie Byrne-Davis¹

Presenter(s)

Jo Hart

Institution(s), Department(s), Country/Countries

¹Manchester Medical School, University of Manchester, UK; ²Health Education England, UK; ³University of Aberdeen, UK; ⁴Manchester Centre for Health Psychology, School of Psychological Sciences, University of Manchester, UK

Introduction

The many theories of behaviour change contain constructs that have been shown to determine change in professional practice (REF). We have developed a set of questions that assess known determinants of behaviour change that can be tailored to any professional practice. Assessment of determinants before and after education shows us what changes in the internal world of the learner. We piloted these assessments in two very different courses: Acute Illness Management in Uganda and Healthcare Scientist Communication Training in UK.

Methods

We identified key behaviours and piloted assessments of 18 determinants of practice including outcome expectancies, coping planning, action planning and attitudes to the behaviour. These were in addition to standard satisfaction evaluations.

Results

158 clinical officer students and healthcare scientist students took part in training and completed pre and/or post course assessments. Psychometric analyses showed that in both courses, some of the constructs had good internal reliability. Educators reported that these assessments would be useful to drive course quality improvement. There were significant changes in pre to post course assessments. There was significant variability across constructs.

Conclusions & take home message

Assessments of behavioural determinants are feasible, acceptable and useful additions to evaluations of satisfaction and assessments of competence

ASSESSING RESIDENTS' SKILLS AND ATTITUDES TOWARDS BREAST EXAM AND THE EFFECT OF GENDER DIFFERENCES, TRAINING LEVEL AND CULTURAL BACKGROUND.

Author(s).

Mai Mahmoud, Dora Stadlers, Thurayya Arayssi, Deema AL-Shiekhly and Lan Swan

Presenter;

Mai Mahmoud

Institution(s), Department(s), Country/Countries

Weill Cornell Medical College in Qatar, Doha, Qatar

Introduction

Physical exam skills are a cornerstone of clinical medicine. Studies have shown that doctor-patient gender differences impact the performance of chest examinations on female patients. Our informal observations at the local internal medicine residency program correspond with these studies. Potential factors include inadequate training, cultural differences and a lack of emphasis on the breast exam. Also, in some cultures, female patients may feel uncomfortable declaring breast symptoms to male doctors. However, little is known about physician attitudes to physical examinations and the impact of culture on practice, particularly in the Middle East.

Methods

A breast examination station was introduced as part of the OSCE for PGY 2&3 (n=65). A Standardized Patient (SP) wearing a breast model presented with a complaint of chest pain. Nurses trained in clinical breast exam skills were present at the OSCE stations. Both SPs and Nurses provided feedback to residents and also filled out forms to assess residents' knowledge, skills, and attitude in performing the exam. Residents also completed a self-assessment.

Results

Although 2/3 of residents correctly identified the location of the mass, the majority did not follow proper techniques. Gender and training level seem to correlate with the results. (will be presented)

Conclusions

The results of our findings demonstrate a deficit in residents' performance of the clinical breast exam. Improved training addressing breast physical exam skills is needed.

POST-GRADUATION IMPACTS OF NOTRE DAME MEDICAL SCHOOL'S CLINICAL AUDIT PROGRAM: VIEWS OF JUNIOR DOCTORS

Author(s)

Donna Mak¹, Ilse O'ferrall¹, Stephanie Davis¹, Richard Clifford¹, Sam Hoare²

Presenter

Professor Donna Mak

Affiliations

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Introduction

Doctors are responsible for providing high quality, safe care to their patients. The medical curriculum at the University of Notre Dame, Fremantle, addresses quality and safety throughout the 4-year undergraduate curriculum. This culminates in a capstone project, the clinical audit program, which is undertaken by all final year students. This study describes the post-graduation impact of the clinical audit program.

Methods

Qualitative data were collected using semi-structured interviews with doctors who graduated from Notre Dame Medical School between 2008-2013. Data were analysed using thematic analysis.

Results

Preliminary results from the first 13 doctor interviews indicate that the program provided them with knowledge, skills and confidence that enabled them to either assist or lead clinical quality and safety activities in their workplace within a few months of graduation.

Conclusions

This study demonstrates the post-graduation value of the clinical audit program. It enables newly graduated doctors to undertake clinical quality and safety activities in their workplace, which should ultimately improve patient care and outcomes. Other medical schools and health care professions, e.g. nursing and allied health, may wish to adopt this model in their undergraduate curricula to improve their graduates' knowledge and skills in quality and safety. These findings are consistent with a published evaluation of the program which demonstrated medical student learning in how to conduct an effective audit, and facilitation of quality improvement in health services.

Take-home message

Completion of the clinical audit program enabled medical graduates to participate in and/or lead quality improvement activities soon after graduation.

EVALUATING A TERTIARY RESIDENT TEACHING PROGRAM – WHY DO PEOPLE NOT ATTEND?

Author(s)

Dr Jing Shen Ong, Ms Stephanie Ho, Dr Deepan Krishnasivam

Presenter

Dr Jing Shen Ong, Ms Stephanie Ho, Dr Deepan Krishnasivam

Institution(s), Department(s), Country/Countries

Royal Perth Hospital. Post-Graduate Medical Education Department. Australia

INTRODUCTION

Royal Perth Hospital (RPH) is a 450 bed tertiary teaching hospital. Prior to 2015, Post-Graduate Medical Education (PGME) provided a twice-weekly interactive case based mandatory intern teaching over lunch-time (one hour).

In 2015, we introduced a Resident Medical Officer (RMO) specific teaching program after Junior Medical Officer (JMO) feedback for more teaching. This replaced one of the weekly sessions. Since introduction, attendance rates for RMO teaching have been consistently poor with an average of 8-10 RMOs per session.

METHODS

We obtained employment statistics from RPH clinical services to analyse the distribution of JMOs onsite at RPH. We then conducted a one-day snapshot survey of RMOs via Survey Monkey.

RESULTS

We received 50 RMO responses with the resident teaching survey. 52% have never attended resident teaching. 26% were unaware of the RMO teaching schedule. 42% think RMO teaching is mostly relevant and 30% think it should be mandatory. 69% of responders think that they are too busy with clinical work to attend resident teaching, 21% feel pressured by senior staff members to complete work tasks at the expense of resident teaching. 46% cite the provision of food as motivation to attend teaching.

CONCLUSION

RMOs consider the current teaching program to be relevant, however most cite busy clinical workloads as a barrier to attending teaching. Our results suggest that hospital executives should be approached to prioritise resident teaching. Intern teaching continues to have good turnout as it is mandated.

TAKE-HOME MESSAGE

Executive support should be approached to prioritise teaching for JMOs.

SENIOR DOCTORS DEVELOPMENT COURSE

Author(s)

Dr Tim Battcock, Dr Aurelia Butcher, Dr Jon Turner, Professor Keith Brown and Emily Rosenorn-Lanng

Presenter

Dr Tim Battcock

Institution(s), Department(s), Country/Countries

GP Education Dorset , Health Education Wessex, United Kingdom
Centre of Postgraduate Research and Medical Education (COPMRE), Bournemouth University, United Kingdom.

Introduction

An innovative professional development course has been running for two years; the format is four days over a year. Newly-appointed Consultants and newly-qualified General Practitioners in Dorset are invited to attend.

The course covers non-clinical areas of Senior Doctors' work: education, supervision, NHS structure/finance, professional practice, governance and leadership.

It allows networking between consultants and GPs, encouraging co-working and relationship-building between future clinical leaders. This enables connections to be made between the clinicians of Dorset and facilitates understanding of each other's roles and challenges faced. Clinicians undergo annual assessment of performance (including professional development), which this course helps to address. We assess the course by reviewing attendee feedback (last 2 years) to identify whether they found it useful in their professional practice.

Methods

Electronic questionnaires were sent to attendees in order to assess their (pre- and post-course) understanding of the areas covered in the course and the results were collated and analysed.

Results

We present results of the questionnaire to prove coverage of the targeted subject areas plus attendees opinions of the usefulness of the course.

Conclusions

Educational programmes should be tailored to the needs of members for learning to be specific, relevant and beneficial. Review of the feedback and revisions of the course have helped keep it learning-needs focussed, up-to-date and relevant to the ever-changing NHS.

Take-home message

Development of professional skills for Senior Doctors is key for the future of NHS clinical leadership. Importantly the course has allowed different types of clinicians in the local area to mix, promote team-building and collaboration.

SURGICAL RESEARCH ATTITUDE OF GENERAL SURGICAL RESIDENTS IN THAILAND

Author(s)

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Presenter

P. Tomtitchong¹

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³Health Systems Research Institute, Ministry of Public Health, Bangkok, Thailand

Introduction

In-training research for 4-years training curriculum of general surgical residents has been using in Thailand since 2006. This study aims to identify the area to improve the outcomes and to maintain good surgical research attitudes after completion of surgical training.

Methods

The study was carried out with the approval of Ethics Committee of Faculty of Medicine, Thammasat University and Ethical Committee of the Royal College of Surgeon of Thailand on 2012. Surgical graduates between the Year 2006-2011 were selected. Questionnaires were used with surgical alumni by postal and random telephone interviewing. Study focused on 1). participation of surgical residents during research process 2). percentage of alumni plan to continue research works after training 3). obstacles during the researches projects included recommendation for future curriculum development.

Results

Fifty-five questionnaires were collected, out of 488 sent, indicated the response rate of 11%. Ninety one percent is male and the mean age of surgeons is 34 years (SD = 3.4). Eighty eight percent of subjects had presented their researches during their 4th year residency program. Seventy four percent of surgeons had confident that they could conduct their own researches after graduation. As a result, 71% of alumni plan to continue their research works after graduation. Obstacles during their in-training researches were a lack of medical statistic knowledge, a lack of research experience and inability to search for the reference data base.

Conclusions

The attitude to research of young Thai surgeons after graduation is highly positive. Good feedback was collected for future curriculum development.

Take-home message

In-training research project during residency training is very useful and necessary which should be used in any surgical training program.

DOES HANDS-ON PRACTICAL UPPER GASTROINTESTINAL ENDOSCOPY TRAINING IMPROVE HAND-EYE COORDINATION SKILLS?

Author(s)

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Presenter

Andrew Kwek

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Introduction

Gastrointestinal endoscopy is an important diagnostic and therapeutic procedure. In the initial stage, training is provided via endoscopy workshops using plastic models and simulators. We aimed to determine the impact of hands-on endoscopy training on the hand-eye coordination skills of our first-year gastroenterology senior residents.

Methods

During a workshop, eleven first-year senior residents underwent hands-on training in stations consisting of 4 plastic gastric models and 1 endoscopy simulator (Symbionix GI Mentor). Hand-eye coordination skill was assessed using the Symbionix Endobubble module II, consisting of scores for duration to complete the module and number of balloons punctured. Shorter duration and higher number of balloons were considered to indicate better hand-eye coordination skill. Scores were obtained at baseline, during the simulator station of the workshop and after completion of the workshop.

Results

Mean duration scores for baseline, 2nd and final readings were 129.2, 103.7 and 101.3 seconds, respectively. There were significant differences between the baseline and second readings, and the baseline and final readings; $p < 0.05$. However, there was no significant difference between the second and final readings. Mean balloon scores for baseline, 2nd and final readings were 12.3, 16.5 and 20.3, respectively. There were significant differences between all three readings; $p < 0.05$. As the simulator station is one of five stations during the workshop, trainees underwent the second reading of the Endobubble module at different sequences. An analysis of the second readings did not show any significant differences between scores from different sequences. Active sports participation and video games experience were not significantly associated with higher scores.

Conclusions

Hand-eye coordination scores improved from baseline, with hands-on training. Repeated sessions did not improve the duration score beyond the second session. In contrast, there was continual improvement in the balloon scores beyond the second session, suggesting a continuous and incremental benefit in finer movements skills during endoscopy training.

Take-home message

In this study, hands-on training in an endoscopy workshop improved the hand-eye coordination scores of beginners. Different improvements in duration score and balloon scores suggest variable attainment of progressive skills.

THE PERCEPTION OF DOCTORS TOWARDS END-OF-LIFE CARE DECISION-MAKINGS – FOCUSED ON PALLIATIVE SEDATION

Author(s)

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Presenter

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Institution(s), Department(s), Country/Countries

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Introduction

Palliative sedation(PS) is one of the end-of-life care to deal with refractory symptoms in terminally ill patients when all other palliative approaches have failed, without the intention of hastening death, but, remains one of the most highly debated medical practices in the context of palliative medicine. This study aims to investigate perception of doctors towards PS and other end-of-life decision-makings, and to provide insight for developing post graduate medical ethics education program.

Methods

A written questionnaire survey was conducted among doctors in 5 hospitals in Republic of Korea. It presented 5 statements on end-of-life decision-makings including PS. Doctors were asked whether they agreed or disagreed with each statement before and after the medical ethics education.

Results

The response rate was 93.2% and 84 questionnaires were analyzed. Percentages of agreement with each statements on PS, voluntary active euthanasia(VAE), physician assisted suicide(PAS), withholding life-sustaining management and withdrawing life-sustaining management was 50%, 1.2%, 1.2%, 53.6% and 25.6%. Percentage of disagreement on VAE and PAS was 76.2% and 84.5, and it increased into 97.6% and 97.6% after medical ethics education.

Conclusions & Take-home message

Findings from this study demonstrate that post graduate medical ethics education for doctors help to improve their competency in ethical decision-makings including distinguishing PS from VAE and PAS. Postgraduate medical ethics education on the end-of-life decision making process that is culturally, ethically and legally acceptable should be provided for doctors.

5 YEAR EVALUATION OF DELIVERING POSTGRADUATE ACADEMIC PROGRAMMES IN THE GULF

Author/s

Davinder Sandhu, Cameron Mirza

Presenters

Davinder Sandhu, Cameron Mirza

Institution(s), Department(s), Country/Countries

¹ Royal College of Surgeons in Ireland - Bahrain University, ² Higher Education Council, Ministry of Education

Introduction

Bahrain is a small island off the coast of Saudi Arabia with a population of 1.2m people. A key priority for the RCSI Bahrain University in collaboration with the Ministry of Education was to develop the school of postgraduate studies and research (PGS&RS) which has evolved since 2009.

Achievement

- The main pillar of the PGS&RS has been the MSc programme in nursing which commenced in 2009. To date 63 students have graduated.
- In addition RCSI Institute of Leadership hosted Masters Programmes from RCSI Dublin but delivered in Bahrain - 281 graduates since 2007.
- Difficult to establish Master's programme in other disciplines due to small population and its impact on critical mass to make programmes a success.
- However collaboration with the neighbouring Arabian Gulf University (AGU) allowed additional Masters by research programmes to be created.
- Established support from Pharmaceutical Company SBI to develop research.
- RCSI Bahrain has invested in fully funded PhD programmes.
- Joint research funding established with AGU and University of Bahrain.
- 10 Faculty have been supported to pursue PhD programmes
- Student summer research project has been highly successful

Conclusion and Take Home Message

To be successful:

1. Important to understand and engage with local Arabic culture.
2. Work closely with the Ministry of Education and Health and other stakeholders
3. Establish close industry links
4. Respect Ministerial regulations and quality assurance.
5. Establish good relations with neighbouring universities.
6. Hosted programmes can be a vehicle of development of academic programmes.
7. Support local faculty with grants and PhD programmes.

WORK READINESS: SELF-PERCEPTION OF HEALTH SCIENCE GRADUATES FOLLOWING AN INTERNSHIP PROGRAMME

Author(s):

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Presenter:

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Institution(s), Department(s), Country/Countries:

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Introduction

Internship programme provides opportunities for students to apply knowledge and skills learnt in classroom to real work environment besides acquire understanding of organisational functions. It aims to enhance the graduate competencies which are associated with long-term success in workplace. The graduates' self-perception of work readiness following an internship programme is evaluated in this study.

Methods

The final year students in the Bachelor of Science Pharmaceutical Chemistry programme in International Medical University were involved in this study. At the end of the 3-year programme, the students undertake an 8-week internship in organisations related to their field of study. The effectiveness of the internship programme in enhancing the work readiness of the graduates was evaluated using the modified Predicting Learner Advancement through Cooperative Education (P.L.A.C.E.) questionnaire. In this instrument, there are 29 items in the domains of career development, academic achievement and personal growth. The difference in the total and individual score of each item before and after the internship was analysed using paired samples t-test.

Results

The students perceived that the internship contributed significantly ($p < 0.05$) to their overall self-perception of work readiness, specifically understanding of how organisations function, clarity of career goals, professional network of contacts, ability to take initiative and ability to adapt to change.

Conclusions

Internship training contributes to increased self-perception of work readiness among the health science students, particularly in the categories of organisational acumen and personal characteristics.

Take-home message

A structured internship programme can enhance health science graduates' work readiness.

THE 21ST CENTURY PRIMARY CARE PHYSICIAN DEVELOPING NEW ROLES FOR GPs IN THE UNITED KINGDOM. THE DEVELOPMENT AND EVALUATION OF A NEW EDUCATIONAL FELLOWSHIP IN URGENT PRIMARY CARE

Author/s

Hughes E (1) Wilkie V (2) Aeillo M (3) Walter S (3)

Presenter

Wilkie V

Institution(s), Department(s), Country/Countries

1. Health Education England UK
2. University of Worcester UK
3. Health Education West Midlands UK

Introduction

Primary health care in the UK is undergoing huge changes as the demography of the population changes and traditional boundaries of care cease to exist with care increasingly being delivered close to home. Department of Health figures show, overall, that the number of people presenting at A&E departments in England has increased by 32% per cent in the past decade and by one million each year since 2010. The over-65s represent 17% of the population and 68% of NHS emergency bed use.

Frail and elderly patients also represent some of the NHS' most vulnerable patients and those most at risk from failures to provide seamless care. The pressures come not only from the number of patients attending but also from a fear or reluctance to turn people away. A Pilot project in 2013, looked at training GPs, who had experience of working in the community, in an educationally supported way to increase knowledge confidence and skills to work across the acute and urgent care boundaries the aim being to develop a branch of clinicians with suitable skills and experience to make the tough decisions and provide a bridge between primary and secondary care practice' – a clinician who is able to operate in both community and secondary care settings, with sufficient knowledge of both pathways to decide whether a patient should be admitted or not.

Structure of the fellowship

GPs are appointed to a 12month long fellowship. they spend 2 days of every week in a GP practice experienced in training GPs. There they undertake routine and urgent care General Practice and are supervised in project work within the practice to learn about health service improvement around urgent care. The Fellows also spend 2 days in each of 3 , four month placements ; in the emergency department, an acute medical admissions unit and with the ambulance service. In these placements they work as senior members of the team, learning the additional emergency medicine skills and working with the emergency teams to help in terms of community management. One day a week is spent in a facilitated action learning set, developing skills and knowledge in leadership, education, evidence based practice and health service improvement. The fellows also take part in a 3 module post graduate certificate (Masters level) in urgent and acute primary care at the University of Worcester.

Development of a certificate in Urgent primary Care

The certificate was developed by portfolio assessment of the cases seen by the first phase fellows and by examining relevant curriculum statements for hospital specialists in emergency medicine and acute medicine. It was assumed that the fellows (all of who had passed their Membership of the Royal College of General Practitioners in the UK), had an up to date knowledge and experience of being a GP. A curriculum was drawn up and then discussed with medical and clinical mentors in all of the placements, and three modules , urgent care and long term conditions, urgent care and the frail elderly and urgent and acute care in the community were

developed. These were then designed and quality assured by the University of Worcester, and the first phase fellows have recently completed the certificate.

Evaluation of the learning and impact of the urgent care fellows in General practice, the Emergency department, Acute medical Ward and the Ambulance Service. The University of Warwick department of primary care undertook an evaluation of the first 12 months. This evaluation has shown an increase in the knowledge skills and confidence of the fellows in urgent care, a significant impact in their placements, integration of care and confidence in care in the community, with both sides benefitting from the learning of this.

Because of the success the Urgent Care fellowship has now recruited for the third year, is going to be developed in London and the South East and further fellowships in community care of the elderly, community mental health, primary care paediatrics and primary care leadership are being developed and will be plotted, again in the West Midlands UK over the next 18 months.

COMPARISON BETWEEN THE NEW HAND SURGERY RESIDENCY PROGRAM AND THE OLD HAND SURGERY ADVANCED SPECIALTY TRAINING PROGRAM

Author(s)

Shian Chao Tay, Joey Sze Ming Thee

Presenter

Shian Chao Tay

Institution(s), Department(s), Country/Countries

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Abstract

Hand Surgery specialty training in Singapore started in 1990 when the country saw the need for increased medical specialization. As a former British colony, the postgraduate medical education system was based on the UK system. In 2011, this was changed to the American College of Graduate Medical Education - International (ACGME-I) type residency system.

The ACGME-based residency program is more structured with clear focus on competency training. Assessments are more formative whereas the UK advanced specialty training (AST) system is more of an apprenticeship and assessments are summative. Both programs still require membership examinations with the UK colleges for progression (residency) or entry (AST). The residency program is 6 years long of which 4 years are spent in Hand Surgery. In the AST system, trainees start after their membership examinations, before embarking on 3 years of Hand Surgery training. There is an exit examination at the end of both programs.

There is more oversight administration and support in the residency program. There are more assessments performed in the residency program. There is mandatory teaching time allocated in the residency program as well as strict work hour restrictions. In addition, there are 20 compulsory course compared to 6 in the old AST program.

On average, residency program has 12-15% less clinical time due to work hour restrictions and compulsory course attendances. Only time can tell if these trade-offs are worth it.

Session 8U

WHAT DOES WORK READY MEAN: SPEECH PATHOLOGY EMPLOYER PERCEPTIONS

Author/s

Chris Brebner, Sue McAllister, Stacie Attrill Presenter

Presenter

Chris Brebner

Affiliation

Speech Pathology, School of Health Sciences, Flinders University

Introduction/background:

Work ready graduates have skills and attributes to succeed in the workplace. However, there is minimal agreement regarding what constitutes work readiness in allied health. Work readiness requires integration across learner, educational and workplace contexts, and competency is an important component. Australian speech pathology has well defined competency-based occupational standards and a robust standardised assessment to evaluate competency, but links with work readiness are unclear.

Purpose/objectives:

We explored employers' perceptions of the work readiness of graduates from two speech pathology programs to answer the research question "what do employers of Australian speech pathology graduates from our programs consider to be the characteristics of work readiness?". We explored employers' perceptions of the work readiness of graduates from two speech pathology programs to answer the research question "what do employers of Australian speech pathology graduates from our programs consider to be the characteristics of work readiness?".

Using a social-constructivist approach, we conducted 28 semi-structured telephone interviews with employers from 20 organisations. Data were analysed thematically. Using a social-constructivist approach, we conducted 28 semi-structured telephone interviews with employers from 20 organisations. Data were analysed thematically.

Issues/questions for exploration or ideas for discussion:

What does work readiness mean?

What are the potential roles of Universities in preparing graduates for workplaces?

Results:

There were four main themes: 1) independence, 2) attitude, 3) learning and 4) effective communication and teamwork. Infusing all themes was a sense of tension in that graduates need to get the balance 'just right' (e.g. be independent but not too independent). The findings are interpreted from a Systems Theory perspective.

Discussion:

Employers in this study expect to support graduates to apply their knowledge and skills in the workplace, but within a limited field of action with ill-defined boundaries. These boundaries are characterised by expectations that graduates will demonstrate professionalism, lifelong learning, communication and teamwork, and appropriate independence.

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Take-home message:

University programs may need to support students to develop skills to explicitly negotiate these ill-defined boundaries with employers including expanding independence with developing expertise.

CULTURAL COMPETENCY IN DENTAL EDUCATION

Author/s

Ms Sheree Nicholson, Dr Melanie Hayes, Associate Professor Jane Taylor

Presenter

Dr Melanie Hayes

Affiliation

¹ The University of Melbourne, ² The University of Newcastle, ³ The University of Newcastle

Introduction/background:

Culture can have important clinical consequences in the patient-health care practitioner relationship and can profoundly influence clinical care and patient management. In culturally diverse societies, there is a growing concern that dental education has failed to keep pace with the changing composition of the patient population. As these societies become increasingly ethnically and racially diverse, it is essential that dental practitioners are trained to provide culturally competent health care.

Purpose/objectives:

To examine cultural competency education in dental and oral health schools in Australia and New Zealand. Specifically, the content of education being delivered, the organisation of the curriculum and educational methods were explored.

Issues/questions for exploration or ideas for discussion:

Are there pedagogical techniques that are frequently implemented to teach cultural competency in dental education? Does dental education sufficiently address a diverse range of cultural groups?

Results:

Fifteen of twenty-four schools responded yielding a response rate of 62.5%. The majority of respondents across all schools stated cultural competency was not taught as a specific course, but rather integrated into the existing curricula. The most frequently reported teaching method was lecturing; however discussions and self-directed learning also featured prominently in the responses.

Discussion:

Results indicate significant variation in the way cultural competency was included in the current dental and oral health curriculum. Teaching methods used to educate students were inconsistent across all institutions; further research should explore the efficacy of various pedagogical techniques, to inform best practice.

POTENTIAL VALUE OF COMMUNITY HOSPITALS IN ANATOMIC PATHOLOGY RESIDENCE TRAINING

Author/s

Farah Y. Moid,

Presenter

Farah Y. Moid,

Affiliation

¹ St. Joseph Health Center and University of Toronto, ² St. Joseph Health Center and University of Toronto

Introduction/background:

The Royal College of Physicians and Surgeons of Canada does not require anatomic pathology residents to spend a specific amount of time in community hospitals during their residency training.

The residents use their elective time for community hospital rotation and this may vary from one to six months.

The practice of pathology in teaching hospitals is very different from community hospitals in regards to workload, spectrum of cases, technical expertise etc

Purpose/objectives:

To make pathology residents better trained and comfortable for community practise, where majority of residents end up after graduation.

Issues/questions for exploration or ideas for discussion:

Should community hospital rotation for a specific time period made mandatory for pathology residents?

Results:

Approximately 80% of residents who go into community practice favoured mandatory community hospital experience to achieve the level of performance required in a more generalized setting.

The majority of program directors did not agree with the opinions of community pathologists and senior residents.

Discussion:

There is a need for additional studies to bring changes in the current RCPSC requirements. The authors recognize that such a change would involve a major shift in curriculum of training programs, but perhaps this is the time to begin considering such options so that training programs are prepared for continuing explosion in knowledge sets

AN EXAMINATION OF THE RELATIONSHIP BETWEEN EXPERIENCE, KNOWLEDGE AND ATTITUDES TOWARD OLDER ADULTS IN PARAMEDIC STUDENTS

Author/s

Linda Ross, Paul Jennings, Brett Williams

Presenter

Linda Ross

Affiliation

Monash University

Introduction/background:

Improving attitudes is the cornerstone to improving care, as attitudes influence how information is interpreted, how knowledge is acquired, and ultimately leads to changes in behaviour. Given our aging population it is vital that student paramedics are adequately prepared with experiences and knowledge that will lead to the formation of positive attitudes towards these patients.

Purpose/objectives:

The aim of this study was to determine student paramedic experience, knowledge, and attitudes toward older adults and examine the relationship between these factors.

Issues/questions for exploration or ideas for discussion:

As we strive to improve care for older patients we must look at what types of experiences enhance knowledge and attitudes, how we categorise attitudes as being positive or negative, and any links between attitudes, knowledge and behaviour.

Results:

Paramedic students (n=871) completed three instruments examining experience, knowledge and attitudes towards older adults. The median self-rated level of experience with older adults (1=Low, 10=High) was 6 (IQR 5, 8). The mean (SD) score for the Australian Facts on Aging Quiz (Knowledge) was 13.0 (3.0) out of 25. The mean (SD) score for the Aging Semantic Differential was 120.27 (17.77) indicating only slightly positive attitudes. A regression analysis revealed a statistically significant association between experience, knowledge and attitudes.

Discussion:

Paramedic students require broader experience with, and education about older adults based on balanced and factual information to promote the formation of positive attitudes.

DESIGNING A CURRICULA FOR HOSPITAL BASED MEDICAL EDUCATION - A CURRICULUM RENEWAL PROJECT IN PAEDIATRICS

Author/s

Helen Enright, Amy Gray

Presenter

TBA

Affiliation

¹ Department of Paediatrics University of Melbourne, ² Royal Children's Hospital Melbourne

Introduction/background:

Hospital based medical education has traditionally been managed by individual departments. These department education programs have often developed in an 'ad hoc' way and have had little formalised pedagogy underpinning their development. Furthermore, many department education programs operate in silos, leading to little sharing of expertise, resources and limited knowledge of other departments' education activities.

Whilst much excellent education is taking place in our large paediatric training hospital, there is little systematic analysis of medical education programs. To address this, we have undertaken a major education improvement project across our medical departments.

Purpose/objectives:

This paper aims to identify the curriculum process that was undertaken to assist the education program in one specific department. We identify the processes of undertaking a major needs analysis, a curriculum mapping exercise and the development of a curriculum framework. We also outline the development of educational resources to support this.

Issues/questions for exploration or ideas for discussion:

The processes, issues and challenges identified in implementing this educational framework will be discussed.

Results:

These results provide a cohesive framework of department based medical education. Through a curriculum map, formal and informal education activities are identified and systematically evaluated. Gaps in education are prioritised and strategies developed to address these. This model will next be offered across all hospital departments.

Discussion:

Key to this project, has been the development of a 'community of practice' of key educators to form a curriculum team and drive this process.

This complex activity has required expertise in evaluation, curriculum design, teaching and learning theory and paediatric education.

Session 8V

MEDICAL EDUCATORS' VIEWS ON HOW HEALTH IMPACTS OF CLIMATE CHANGE RELATE TO MEDICAL EDUCATION

Author/s

Horton G, Magin P, Blashki G, Pond D.

Presenter

Horton G

Affiliation

¹ The University of Newcastle, ² The University of Melbourne

Introduction/background:

Tackling climate change could be the greatest global health opportunity of the 21st century according to the Lancet. In humanist terms this would require sufficient alignment of values across many communities, understanding of scientific evidence and harnessing human potential for effective action. Peak bodies have called on medical curricula to include the health impacts of climate change but little is known about views of key stakeholders about this.

Purpose/objectives:

14 medical educators from 5 Australian universities and a range of disciplines were interviewed in late 2014/ early 2015 about climate change as it relates to medical education and discussed implications of student views from four universities from an earlier mixed methods study by the authors.

Issues/questions for exploration or ideas for discussion:

Questions included whether climate change should be a core topic for medical curricula or an optional special interest area. The role of doctors as advocates was explored including how these skills might be best learned.

Results

Climate change is a contentious issue which in the group learning environment requires thoughtful facilitation. It presents an opportunity for students to learn about evidence and scientific enquiry. Students are seen as agents for change but the need for positive messages in order to empower and not overwhelm was highlighted.

Discussion

Medical curricula are often overcrowded due to many competing priorities. Integrating climate change related patient presentations at multiple points could help achieve beneficial contextual understanding and thereby enable medical education to better reflect our changing world.

EXPLORING THE EXPERIENCES OF MEDICAL STUDENTS WITH MENTAL HEALTH ISSUES

Author/s:

McElroy R, Mogensen L, Hu W

Presenter:

McElroy R

Affiliation:

Medical Education Unit, School of Medicine, University of Western Sydney

Introduction/background:

Research and media reports have highlighted high rates of depression, anxiety and suicide in medical students. However, due to the sensitive nature of mental health problems, little is known of the experience of medical students with such concerns.

Purpose/objectives:

To better understand the experiences of medical students with mental illness in the contexts of help seeking, social relations, study and expectations. This is to provide evidence for appropriate supports in medical education and training.

Ideas for Discussion:

1. Our data suggest that for medical students mental illness has implications for the development of professional and personal identity. What are the educational implications?
2. What are the considerations for a peer researcher with regards to exploring sensitive experiences?

Results:

Thematic analysis of eleven in-depth interviews with students from all years in a medical program was conducted. Themes include: the pressures of studying medicine and interacting with their experience of mental illness: seeing themselves as different from other medical students, and the attitudes of other students being a barrier to openness and help seeking about mental health concerns.

Conclusion:

A better understanding of the experience of medical students with mental health concerns may assist in developing curricular and support strategies to improve outcomes for students. Our data suggest that addressing medical student attitudes to mental illness may be as important as programs of support.

ENGAGING STUDENTS EXPERIENCING ACADEMIC DIFFICULTY IN THE HEALTH PROFESSION COURSES

Author/s

Teresa O'Connor, Bunmi S. Malau-Aduli, Robin Ray, & Yolanda Kerlen

Presenter/s

Teresa O'Connor, Bunmi S. Malau-Aduli, Robin Ray, & Yolanda Kerlen

Affiliation

College of Medicine and Dentistry, James Cook University, Townsville

Introduction/ Background

Despite increasing institutional support, studies have shown that one-third of all students entering Australian universities fail to graduate, with over half of them withdrawing in their first year of study. Yet, even with the availability of specific support strategies, it can be challenging to engage learners experiencing academic difficulty as many students do not take up the available additional support.

Understanding the reasons behind the limited uptake of support and developing sensitive strategies to assist students in engaging with the support offered may increase the uptake of support and the likelihood of success for these students. This workshop encourages educators to share experiences and opinions about engaging students experiencing academic difficulty.

Purpose/Objectives

- Define issues pertaining to academic difficulty in students studying healthcare courses.
- Identify potential reasons for poor uptake of support offered to this group of students.
- Develop sensitive strategies to engage this group of students with the support offered.
- Discuss our research findings regarding the reasons for limited uptake of specific support strategies offered.

Issues for exploration/ideas for discussion

This workshop session aims to explore and discuss the following issues:

- Reasons for poor uptake of support by these students.
- Sensitive strategies to engage this student group.
- Specific support systems for at-risk students

INCLUDING PEOPLE WITH DISABILITIES IN THE MEDICAL PROFESSION: CONSIDERATIONS FOR SELECTING MEDICAL STUDENTS

Author/s

Lise Mogensen

Presenter

Lise Mogensen

Affiliation

University of Western Sydney

Introduction/background:

More students with disabilities are enrolling in health professional degrees, but to a lesser extent in medical degrees. UK, US and Canadian literature has long debated the inclusion of people with disabilities (PWD) in medical education and training. This paper will contribute Australian perspectives on this debate by presenting findings from a community survey. It is drawn from research on stakeholder views on disability and chronic illness in medical education and practice.

Purpose/objectives:

To understand barriers and enablers to inclusion and support of PWD in Australian medical education and training

Issues/questions for exploration or ideas for discussion:

Considerations for medical schools in the assessment and selection of prospective medical students with disabilities and chronic illnesses

Results:

Of 181 respondents, 144 (79.5%) stated that PWD should be accepted to study medicine. Thematic analysis showed that: Lived experience of disability and illness may contribute different and valuable perspectives into both care and development of the profession; No discrimination should occur as long as individuals have the capacity to practice medicine safely; PWD should monitor their health and be monitored for safe practice; and Expectation that medical school selection processes ensure only people with capacity to become doctors are admitted to study, regardless of health and ability.

Discuss

Findings from this research address a gap in Australian literature; add Australian perspectives to international debates and literature on inclusive medical education and training; and contribute community views on the topic of widening participation in medical education. This aspect is new to existing literature. The implications for medical education should be considered.

STUDENT MOTIVATION TO ATTEND A VOLUNTARY PEER LEARNING PROGRAM: WHY DO THEY KEEP ON COMING BACK?

Author/s

Joanna Tai, Sheila Vance

Presenter/s

Joanna Tai, Sheila Vance

Affiliations

¹ HealthPEER, Faculty of Medicine Nursing and Health Sciences, Monash University, ² Faculty of Medicine Nursing and Health Sciences, Monash University

Introduction/background

Vertically Enhanced Study Program Approach (VESPA) case nights have been held at Monash University since 2008. VESPA case nights allow medical students from all five years to undertake case-based learning together: senior students act as facilitators. Cases are authored by student committee, with oversight from medical practitioners. Student attendance varies across the academic year, however all registrants combined only make up ~30% of enrolled students.

Purpose/objectives:

To investigate students' reasons for attendance or non-attendance at a voluntary peer-learning activity.

Issues/questions for exploration or ideas for discussion:

Do students' past experiences of the case nights impact on their attendance?

Are there other factors, such as study habits, that impact on preference for case based learning?

Results:

In 2014, an electronic survey was distributed to all VESPA registrants to investigate their reasons for attending. 102 (19%) students responded. Reasons for attendance included seeing an advertisement (72, 70%), friends were also attending (41, 40%) and recommendations by senior students (22, 21%). The majority of students (70, 68%) reported their past attendance influenced their decision to attend again. Reasons for non-attendance were other commitments (57, 56%) and not feeling like it after a full day of work/study (20, 20%).

Discussion:

While the 2014 results reassure us that those who continue to attend the sessions view them favourably, we do not know why others do not attend. In 2015, all students (regardless of previous registration) will be invited to complete the survey. Results from the wider cohort will be presented.

UNDERSTANDING THE MEDICAL WORKPLACE LEARNING CULTURE: EXPLORING MULTIPLE STAKEHOLDERS' SAFETY AND DIGNITY DILEMMAS AND RAISING CONCERNS

Author/s

Sarah Sholl¹, Grit Scheffler, Lynn Monrouxe, Charlotte Rees⁴

Presenter

Sarah Sholl¹

Affiliations

University of Dundee, Scotland; ²Royal College of Physicians, London, England (previously University of Dundee); ³Chang Gung Medical Education Research Centre, Chang Gung Memorial Hospital, Linkou, Taiwan; ⁴Monash University, Melbourne, Australia

Introduction/background:

Professionalism and the workplace learning culture are highlighted as key areas for research in postgraduate medical education^{1,2}. While formal curricula teach good professional practice, trainees commonly encounter safety and dignity dilemmas in the broader workplace learning culture^{3,4}. By analysing postgraduate stakeholders' narratives, we can better understand how they make sense of their experiences, actions and identities, uncovering the complexities of the workplace learning culture.

Purpose/objectives:

To explore safety and dignity narratives of multiple stakeholders (trainees and trainers, other healthcare professionals, and patient representatives) to better understand the medical workplace learning culture.

Methods:

A qualitative narrative interview method was used. Following ethics approvals, 38 participants were recruited from two UK health boards (Site 1=23; Site 2=15). Participants first discussing their understandings of safety and dignity, then sharing their own dilemmas in one-to-one or group interviews. Data is being analysed to examine any patterns relating to stakeholder group or data collection site.

Initial results:

Preliminary thematic framework analysis led to the development of a coding framework.⁵ Key features include: (1) understanding and experiences of safety and dignity; (2) targets for resistance/complicity; and (3) facilitating/inhibiting factors.

Discussion:

Discussion of our findings will address the following questions:

- What types of safety and dignity dilemmas have stakeholders experienced?
- What do stakeholders do in the face of their safety and dignity dilemmas and why?

These findings will enable us to contribute to future educational developments in the postgraduate training programmes.

Session 8W

CARING FOR THOSE WHO CARE FOR OTHERS - BALANCING WORK AND LIFE

Author/s

Shakaib Rehman ¹, Elizabete Loureiro ², Monica Broome ³, Elizabeth Kachur⁴

Affiliation

¹ Phoenix VA Healthcare System/University of Arizona College of Medicine, ² University of Porto, ³ University of Miami, ⁴ Medical Education Development

Introduction/ Background:

The current chaos in health care poses particular challenges for healthcare professionals who seek to find meaningful work making a difference in patients' lives, while living authentic and balanced lives themselves. The pressures are for healthcare professionals in academic and community settings to do more with less. The tempo of work, as well as information overload, adds fragmentation and increased demands on our time, attention, and energy. Computers, Internet, and cell phones have changed the way we work and live. Modern workers are virtually "plugged in" to the office around the clock.

This session will provide a forum and a method to "mine for gold" and discover approaches/ new strategies to manage jobs while still enjoying personal and family lives.

Purpose/Objectives:

Identify the barriers to balancing work and family.

Explore strategies on how to prioritize to achieve balance.

Discover skills, unique opportunities and techniques to achieve balance and joy.

Activities:

The discussion will focus on positive and difficult issues and what has worked.

10 min: Large group interactive session: Identify concepts of balance and burnout.

15 min: Small Group: Appreciative inquiry.

10 min: Key concepts/models/techniques.

10 min: Case studies in small groups.

20 min: Large group interactive session: Participants will complete several exercises.

10 min: Large group exercises based on a questionnaire. Application of principles

15 min: Reflection/lesson learned/evaluation.

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SQUARE PEGS IN ROUND HOLES: HOW DO WE DEVELOP POSITIVE LEARNING ENVIRONMENTS WITHIN A CHALLENGING WORKPLACE CULTURE?

Author/s

Trainer G

Presenter/s

Mr Glenn Trainor

Affiliation

Radiation Therapy Services, Peter MacCallum Cancer Centre, Melbourne, Australia

Introduction/ Background

Healthcare educators are aware of the importance of creating suitably structured, well supported and safe learning environments for students participating in clinical placements. Learners situated within a workplace that acknowledges learning as an integral part of healthcare practice are provided the framework to actively develop as practitioners. But is this reality?

Hospitals and other clinical environments are often fast-paced, technical and high-stress settings. Add to this the challenges of staffing levels, funding and varying degrees of staff engagement in educational practice and we uncover an environment and workplace culture far from the educational ideal.

Purpose/Objectives

This PeArLs session provides opportunity to examine and discuss barriers to the creation of an ideal learning environment and to unpack the influence that workplace culture may have on educational practice. The sharing of experiences will support the discussion with a focus on strategies relating to the management and potential outcomes of such situations.

Issues for exploration/ideas for discussion

“It can’t just be happening here” - What local challenges do you have with your learning environment and what similarities do we share?

“Is it even possible?” - How do you create a ‘cultural shift’ to address local issues?

“You have a valid point” - What can you do when the student raises a legitimate complaint about the learning environment?

“That’s just the way it’s always been!” - How can you manage roadblocks from colleagues?

Session 8X

CARING FOR THOSE WHO CARE FOR OTHERS - BALANCING WORK AND LIFE

Author/s

Shakaib Rehman ¹, Elizabete Loureiro ², Monica Broome ³, Elizabeth Kachur⁴

Affiliation

¹ Phoenix VA Healthcare Systmes/University of Arizona College of Medicine, ² University of Porto, ³ University of Miami, ⁴ Medical Education Development

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SQUARE PEGS IN ROUND HOLES: HOW DO WE DEVELOP POSITIVE LEARNING ENVIRONMENTS WITHIN A CHALLENGING WORKPLACE CULTURE?

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“That’s just the way it’s always been!” - How can you manage roadblocks from colleagues?

Session 8Y

ASSESSING COMMUNICATION AND PROFESSIONALISM WITH MCQS

Author(s)

Kathy Holtzman and Krista Allbee

Presenter(s)

Kathy Holtzman and Krista Allbee

Institution(s)

American Board of Medical Specialties, Chicago, IL USA

Background

Although medical educators agree on the importance of assessing physician professionalism, communication and related ethical topics throughout the continuum, they often find it challenging to develop realistic MCQs that assess whether examinees can apply their knowledge in these areas to decisions related to patient care. This highly interactive workshop will allow attendees to consider appropriate content for assessment from a global and cultural perspective and share/generate ideas for development of realistic scenarios/dilemmas that can be used as stimulus in traditional MCQ format or with more innovative formats that include video/multimedia; attendees will have the opportunity to practice writing/reviewing scenarios and option lists.

Intended outcomes

Participants will gain skills and ideas for writing effective MCQs at their home institutions. Attendees will leave the session with a tool kit including practical advice for structuring MCQs, guidelines for video development, and sample scenarios for use locally.

Structure

The workshop will be run in an interactive, seminar-style format as outlined below:

- Brief introduction
- Small group discussion of appropriate content to assess and associated challenges and report outs followed by full group discussion
- Review/discussion of sample scenarios, potential option lists and innovative formats for potential use in assessment of hard-to-measure competencies
- Practice writing/revising scenarios for MCQs or innovative formats in small groups
- Small group report outs /discussion

Who should attend:

Medical educators responsible for teaching/assessing professionalism, communication, and ethics.

Level of workshop: Intermediate

MULTIDISCIPLINARY TEACHING FOR PRECLINICAL MEDICAL STUDENTS USING THE BOND VIRTUAL HOSPITAL APP

Author/s

Dr Tracy Nielson, Dr Neelam Doshi, Ass Prof Patricia Green, Dr Natasha Yates & Dr Victoria Brazil

Presenter/s

Dr Tracy Nielson, Dr Neelam Doshi, Ass Prof Patricia Green, Dr Natasha Yates & Dr Victoria Brazil

Institutions

Bond University, Gold Coast, Australia

Purpose:

Medical students find the transition from preclinical learning to clinical rotations daunting. Recent reforms in medical school curricula necessitate vertical integration of basic sciences to clinical applications and this involves structured collaboration between multi-disciplinary health care professionals.

Our year 3 undergraduate medical curriculum is delivered using simulated Case Based Learning (CBL) in a virtual hospital environment. This has enabled a smooth transition through explicit connections between basic sciences and their clinical applications, supplemented by exposure to a broader health care team including clinicians of multiple disciplines and levels of training, nurses, psychologists, scientists, ethicists and others. These skilled educators encourage year 3 students to apply clinical relevance to basic science concepts enabling better theory retention across major medical streams and curriculum themes.

Workshop outcomes:

Participants will explore approaches to the integration of basic sciences and multi-disciplinary team teaching in a virtual clinical environment.

Proposed Outline:

1. Demonstration of the mobile application used in this learner- centred education tool.
2. Brief video of a Bond Virtual Hospital (BVH) facilitated ward round.
3. Group breakout session to develop triggers demonstrating basic science integration and a multi-disciplinary team teaching approach to a virtual clinical situation.
4. Debrief and discussion. Issues for discussion:
 - How should educators, of different grades and specialties, be selected and prepare for this role?
 - How do educators from different disciplines integrate content effectively in a virtual clinical context?
 - How can the role-modelling of inter-professional communication improve understanding of the health care team in preclinical students?

Session 8Z

TRAINING SURGICAL DECISION MAKING-A SYSTEMATIC REVIEW

Author/s

Chi-Chuan Yeh, Nick Sevdalis, Roger Kneebone

Presenter

Chi-Chuan Yeh

Institution(s), Department(s), Country/Countries

¹ Department of Medical Education, National Taiwan University Hospital, ² Department of Health Service and Population Research, King's College London, ³ Division of Surgery, Department of Surgery and cancer, Imperial College London

Introduction/background:

Intra-operative decision making can have profound impacts on patients' post-operative results and the complication rate. Trainees not only have to receive graded training but also to face the challenges of emergent operations with complexities and varieties when they are on duties. It is important for them to gain the competence of making good decisions intra-operatively as early as possible.

Purpose/objectives:

The purpose of this research was to evaluate how to train surgical decision making and focused on intra-operative decision making by using systematic review approach.

Issues/questions for exploration or ideas for discussion:

Are educational theory and simulation essential for training surgical decision making?

Results:

Two categories related to decision making and surgery were employed in the search strategy for EMBASE, Ovid MEDLINE(R), PsycINFO. The last search was conducted on March 31, 2011.

9151 citations were found according to the search strategy. 39 articles were included for the data extraction and analysis. Only 10 (25.6%) studies focused on the intra-operative decision making (DM). 7 (17.9%) studies used educational theory or framework in their research which should be improved. Based on the types of interventional tools, they were categorised as paper vignette, computer based vignette, simulation, clinical setting, and others (5 studies). Four studies used hands-on simulations to evaluate stress management, surgical DM, crisis management with team-based training, and briefing. Four studies were conducted in the clinical setting and DM was one of the competencies which were evaluating by the researchers. In the categories of simulation and clinical setting, most studies (75%) focused on intra-operative DM.

Discussion:

Only 1/4 studies focused on the intra-operative decision making in which most adopted evaluations by using simulation or in clinical setting. 17.9% studies used educational theory or framework which should be improved.

Combining simulation for providing hands-on experience with educational theory should be emphasized for training of intra-operative decision making and need to be evaluated in the future.

THE INDIGENOUS HEALTH STREAM

Author/s

Professor Amanda Barnard*, Ms Samia Goudie*, Ms Gaye Doolan

Presenter/s

Professor Amanda Barnard*, Ms Samia Goudie*,

Institution(s), Department(s), Country/Countries

Medical School, Australian National University

Introduction/background:

The Indigenous Health Stream (IHS) is a voluntary enriched program of experiential learning, mentoring and leadership training in Indigenous Health, which runs through all four years of the ANU Medical School curriculum. The program was established in partnership with Winnunga Nimmityjah Aboriginal Health Service, as a collaborative effort to produce doctors who are competent, capable and sensitive towards the needs of Aboriginal and Torres Strait Islander people. Five years after its inception program has expanded from two students to one in twelve first year students.

Students are exposed to a wide range of learning opportunities – seminars, immersion experiences, lectures, and meetings with Indigenous leaders and healers. These are in addition to the standard curriculum. Students are encouraged to create a community of practice and connection.

The program is designed for Indigenous and non-Indigenous students, with the only criteria being merit and a positive assessment by Aboriginal health workers at Winnunga

Purpose/objectives:

To describe a successful program, and to outline the effect the program has on student learning, and the flow on effect to other students and the Medical School

Issues/questions for exploration or ideas for discussion:

Increasing popularity of the program raises questions of capacity and sustainability

Results:

Student evaluation of the program will be presented

Discussion:

Is this sort of program reproducible?

How can we best harness the knowledge understanding and commitment of a small group of students to influence others?

BRINGING SPECIMENS TO LIFE - POTS, QR CODES, AND ANNOTATED VIDEO

Author/s

Dr Eileen Cole & Mr Colin Warren*

Presenter

Mr Colin Warren*

Institution(s), Department(s), Country/Countries

School of Medicine, Deakin University

Introduction/background:

The School of Medicine has a large collection of pathology pot specimens used throughout the medical course for learning about disease. The use of technology has added significant value to this resource.

Stage 1 of the project was converting the paper records of the ~900 medical specimens to online digital records, which are accessible by QR codes (mounted on each pot). Mobile devices scan the code and are taken to a responsively designed wiki-webpage which features an image and a description of the specimen, as well as links to inline resources.

Phase 2 of the project is to include an annotated video of the specimen that outlines and discusses the pertinent issue of the specimen.

Purpose/objectives:

The development of comprehensive technologically enhanced resource for pathology education, which is accessible for both classroom and self-directed learning, for students across the School of Medicine including Optometry and Imaging. These resources are also accessible in context via the course materials in the School's integrated learning platform (ILP) Brightspace.

Issues/questions for exploration or ideas for discussion:

Open discussion around methods for tracking and data collection of the use of the resource and methods for succession planning and maintenance of the resource, especially of currency of the included information.

HANDING OVER THE PATIENT. AUDIO ENHANCEMENT TRANSFORMS A PAPER-BASED ROLE-PLAY SCENARIO INTO A 'REAL' PATIENT

Author/s

Marion Shuttleworth*, Kathy Brotchie, Shane Bullock, Caroline Rossetti

Presenter

Marion Shuttleworth*,

Institution(s), Department(s), Country/Countries

¹ Griffith University, ² Monash University, ³ Monash University

Introduction/background:

The use of role-play for teaching communication skills is an established simulation technique used in the pre-clinical setting. Graduate entry students possess variable levels of clinical experience and students with a health background may become bored with simulation-based history taking sessions in a systems based curriculum. Low fidelity simulation activities providing authentic role-play enhancement can assist with extending the clinical reasoning experience for these students. The use of a brief audio-clip of a simulated paramedic handover of the patient was introduced into the clinical skills program in the second half of a 12-month rural program at Monash University in 2013.

Purpose/objectives:

Provision of enhanced learning opportunities in the clinical skills program was identified as likely to improve buy-in of the students to the situational reality of the scenario presented.

Issues/questions for exploration or ideas for discussion:

How much simulation technology is required to provide more authentic experience for medical students in a small group clinical skills teaching session?

Results:

Introduction of a 29-second audio clip of a simulated paramedic handover created a 'real' patient with minimal effort and expense. Transformation of a routinely structured role-play about a febrile chemotherapy patient through the addition of this handover increased the student engagement in the session compared to previous cohorts.

Discussion:

Use of mobile phones to record audio is an option for all clinical educators and provides a rich experiential learning opportunity in the pre-clinical setting.

WHY SHOULD STUDENTS WRITE A GLOBAL HEALTH CASE REPORT?

Authors:

Manasi Jiwrajka, Dr. Seema Biswas

Presenters:

Manasi Jiwrajka, Dr. Seema Biswas

ABSTRACT

We don't often hear about a Global Health (GH) case report. It seems far-fetched that as medical students we could have any effect on how patients live and the determinants of health, especially when we hear that GH concerns only low-income countries. The reasons for this perception are: one, there is no universally accepted definition of GH and two, worldwide, there remain profound differences in GH education. We propose that the 'global' in GH does not refer so much to 'overseas' or 'over there', as it refers to 'over here;' the real definition of 'global' in GH is 'health everywhere'. 'Global' also refers to 'all' aspects of health i.e. a holistic approach, essential to exploring and taking on the real causes of disease, the social determinants of health. This focuses our attention on the patient in front of us and what we need to do to prevent them from becoming ill again. We urge medical students to write these case reports because they (1) help us look at the root causes of the illness that may limit the medical therapy of the patients in front of us; (2) allow us to learn about socioeconomic, political and cultural influences on our patients; (3) can be published and shared to create an evidence base, and subsequently affect legislation. For the audience reading these case reports, it makes GH personal and individual. It is a call to action to work for our patients, and an inspiration to look beyond a pharmacological prescription to the underlying social determinants of health and disease.

HOW TO EFFECTIVELY ENTRUSTS TRAINEES

Author/s

Robin R. Hemphill MD MPH, Sally A. Santen, MD.

Presenters

Robin R. Hemphill MD MPH, Sally A. Santen, MD.

Institution(s), Department(s), Country/Countries

Veterans Health Administration-National Center for Patient Safety
Ann Arbor, MI
University of Michigan, Ann Arbor, MI

Background

The purpose of medical education is to train students and residents to manage patients independently while the role of the attending faculty varies between supervision and allowing autonomy. This concept has been termed entrustment and is a form of assessment (ten Cate, 2006). Entrustment varies attending factors (experience, confidence), trainee factors (level of training, characteristics), patient factors (severity of illness, complexity) and environment (volume, service expectations). In this session, we will explore resident perceptions of autonomy, the learning environment, and strategies for faculty to enhance resident learning within this framework.

Intended Outcomes

Faculty will be able to understand the factors affecting entrustment and utilize strategies to increase autonomy. In addition, faculty will be prepared to navigate the barriers to entrustment and appropriately facilitate resident autonomy and grant trainee suitable entrustment of patient care to enhance resident education while maintaining appropriate supervision.

Structure

The workshop will be highly interactive, requiring participants to understand resident supervision and autonomy, review their own practice, and apply then apply new techniques to their clinical teaching. This session will start with short didactic presentation and large group discussion to understand entrustment and autonomy. We will then incorporate facilitated small group discussions to understand the concepts and develop ways to improve each participants' ability to engage with a trainee at an appropriate level of supervision and autonomy.

Who should attend:

faculty supervising trainees

Level of workshop

Introductory to intermediate

CHRONIC CARE MODELS USED IN HIV/AIDS NURSING: AN APPRAISAL OF CHRONIC CARE NURSING EDUCATION IN ZAMBIA

Authors:

Kabinga-Makukula Marjorie¹, Banda S. Sekelani¹

Presenter:

Kabinga-Makukula Marjorie (chlbmakukula@gmail.com)

Institution(s), Department(s), Country/Countries

¹University of Zambia, School of Medicine, Department of Medical Education Development

Introduction:

Globally, there is an increase in chronic diseases with a resultant demand on nurses to provide quality care. Nurses require skilled training in chronic care to meet this demand. Evidence shows that the healthcare workforce is ill-prepared in chronic care. Moreover, nursing education in Zambia continues to not account for the increased chronic disease burden.

Purpose/Objectives:

To investigate chronic care models evident among Zambian trained registered nurses and nursing students and how they formulate and consolidate chronic care models for practice.

Methods:

Mixed methods design. Qualitative: Glaser's grounded theory where 21 nurses and students participated in in-depth interviews. Quantitative: 45 item multiple choice knowledge test on chronic care administered to 81 nurses and 294 students from 7 hospitals. Document analysis of the nursing curriculum to assess coverage of chronic care nursing.

Results:

A 'needs focusing' model comprising needs identification, needs triaging and needs intervention was evident and this was influenced by patient individuality, nurse characteristics and environment. Participants formulated the model through classroom learning, working with experienced nurses and trial and error, which was consolidated through repeated practice. Test results revealed inadequate knowledge in 33% of respondents. Document analysis revealed inadequate coverage of chronic care.

Discussion/Conclusion:

Chronic care nursing is a huge component of care but neglected in the curriculum. While chronic care models exist, nurse educators need to be aware of un-described models such as the "needs focusing". Teaching of chronic care nursing should be structured using simulation, reflection and experiential learning for maximum benefits.

THE ENHANCING TERTIARY TUTOR'S CULTURAL SAFETY PROJECT: CULTURAL AWARENESS TRAINING FOR PBL (PROBLEM BASED LEARNING) TUTORS

Author/s

Associate Professor Frankie Merritt, Dr Aline Smith, Associate Professor Pippa Craig, Jacqueline Savard.

Presenter/s

Associate Professor Frankie Merritt, Dr Aline Smith, Associate Professor Pippa Craig, Jacqueline Savard.

Institution(s), Department(s), Country/Countries

School of Medicine, Sydney: The University of Notre Dame Australia

Introduction

Students and staff in medicine can be insulated from the need to understand and respect cultural diversity. This can be a barrier to recognising and acknowledging cultural difference. Medical schools can be reluctant to debate contentious and emotive subject matters, such as race and ethnic identity; importantly medical students can feel pressure to conform to an institutions' values in order to succeed. The research team sought funding to provide cultural awareness training to tutors of first year medicine students at the University of Notre Dame's School of Medicine, Sydney (SoMS), with the aim of enhancing tutor's capability around cultural safety.

Purpose/Objectives

An organisation external to SoMS provided a workshop to promote intercultural competence balanced across four components: knowledge, empathy, self-confidence, and cultural identity. The tutors were interviewed in focus groups or individually, at 6 and 12 months post-training to explore if and how they had applied what they learned in the workshop to their practice as tutors and medical practitioners.

This PeArL session will explore the challenge of how to ensure teaching staff are effectively trained in cultural safety and how they can maintain and implement the skills learnt to provide a culturally safe teaching environment, over the long-term.

Issues for exploration/ideas for discussion

Any feedback on what we've done to date? Comments on the findings?

What other approaches to this type of issue/research are people aware of?

Does cultural safety training have ongoing benefits to PBL tutors?

What are the implication of cultural awareness training (and its long-term ability to change cultural safety) for the students?

How can we enact long-term change (in a teaching environment and in clinical practice) to entrenched worldviews that can be culturally unsafe?

Was one half day session enough for long-term change?

What is the next step for this research?

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A HEALTHCARE PROVIDERS PERSPECTIVE OF THE SUCCESSES OF CENTRALLY COORDINATING AND EVALUATING DIFFERENT MODELS OF UNDERGRADUATE CLINICAL PLACEMENT ACROSS DIFFERENT DISCIPLINES FROM MULTIPLE EDUCATION PROVIDERS – WHY IT WORKS!

Author(s)

Tess Vawser, Sanjee deSilva

Presenter

Tess Vawser

Institution(s), Department(s), Country/Countries

Epworth HealthCare Victoria Australia

Introduction

Epworth HealthCare is a Private Not for Profit Health Care Provider in Victoria with over 1,500 beds, 9 sites offering clinical placements to over 2,600 undergraduate students across 13 health disciplines from 14 education providers. In 2012 an Interprofessional Clinical Education Program was developed to centralise and coordinate the various models. Types of clinical placement models consist of a Block, Flexi, Integrated and Preceptor Model. These vary from a 1-15 week placement to 20 placement days over 1 Semester. This presentation will highlight the successes and challenges of the centralised approach and present evaluation outcomes from the managers and facilitators/tutor/preceptor perspective.

Methods

Directors, Managers, and Clinicians who facilitate/tutor/ buddy or preceptor undergraduate students were surveyed to identify what they perceive as the pros and cons of working with students who are undergoing clinical placement across the various models.

Results

By providing a centrally coordinated service for the various types of placement models increases the amount of clinical placement days offered to education providers.

Individual ward units have different preferred models of student's placements. Varied models across the year help with perceived student "overload"

Ward buddies and preceptors prefer students to have longer placements and also be supported by clinical facilitators.

Conclusions and Take-home message

The requests for increased number of undergraduate clinical placement from education providers to a busy health care facility can be achieved by having various placement models available. When this is centrally coordinating resources can be allocated to maintain the ward units and clinicians continuing engagement.

TEACHING AND LEARNING HEALTH ADVOCACY IN AUSTRALIAN MEDICAL SCHOOLS

Author/s

Arabelle Douglas, Prof. Donna Mak, Dr Indira Samarawickrema, Assoc. Prof. Caroline Bulsara

Presenter/s

Arabelle Douglas, Prof. Donna Mak, Dr Indira Samarawickrema, Assoc. Prof. Caroline Bulsara

Institution(s), Department(s), Country/Countries

School of Medicine, University of Notre Dame Fremantle.

Introduction/ Background

Teaching and learning (T/L) health advocacy (HA) in Australian medical schools is currently ambiguously documented within the curricula learning objectives. The Australian Medical Council (AMC) Standards for Assessment and Accreditation of Primary Medical Programs comprises four domains including 'Health and Society: the medical graduate as a health advocate'. North American research on T/L HA in medical schools shows that experiential learning at both patient and community levels, improves students' self-reported knowledge and skills. The University of Notre Dame Fremantle School of Medicine (UNDF SoM) is founded on an ethos of social responsibility encompassed in their mission and within the Core Curriculum subjects of Philosophy, Theology and Medical Ethics; making the concept of HA T/L of key importance and relevance.

Purpose/Objectives

We aim to determine whether UNDF SoM graduates believe they are educated and skilled in HA for the benefit of their future practice with patients and the wider community. The objectives are to develop insight into how HA is taught presently at UNDF. This is from both an objective assessment of the curriculum and qualitative analysis of interviews with academic discipline leaders, UNDF medical alumni and through surveying third and fourth year medical students. The results will lead to a future dialogue with academic governance around ways to improve the T/L HA for the benefit of future UNDF medicals students.

Issues for exploration/ideas for discussion

1. Can medical students learn what it means to be a health advocate and how to be one within the scope of a four-year post-graduate medical curriculum?
2. Can HA be developed/taught in medical students or is it a quality embedded in one's past experiences, personality, attitudes and values?
3. How might medical students best learn to be health advocates?

Session 9A

TRAINING SURGICAL DECISION MAKING-A SYSTEMATIC REVIEW

Author/s

Chi-Chuan Yeh, Nick Sevdalis, Roger Kneebone

Presenter

Chi-Chuan Yeh

Institution(s), Department(s), Country/Countries

¹ Department of Medical Education, National Taiwan University Hospital, ² Department of Health Service and Population Research, King's College London, ³ Division of Surgery, Department of Surgery and cancer, Imperial College London

Introduction/background:

Intra-operative decision making can have profound impacts on patients' post-operative results and the complication rate. Trainees not only have to receive graded training but also to face the challenges of emergent operations with complexities and varieties when they are on duties. It is important for them to gain the competence of making good decisions intra-operatively as early as possible.

Purpose/objectives:

The purpose of this research was to evaluate how to train surgical decision making and focused on intra-operative decision making by using systematic review approach.

Issues/questions for exploration or ideas for discussion:

Are educational theory and simulation essential for training surgical decision making?

Results:

Two categories related to decision making and surgery were employed in the search strategy for EMBASE, Ovid MEDLINE(R), PsycINFO. The last search was conducted on March 31, 2011.

9151 citations were found according to the search strategy. 39 articles were included for the data extraction and analysis. Only 10 (25.6%) studies focused on the intra-operative decision making (DM). 7 (17.9%) studies used educational theory or framework in their research which should be improved. Based on the types of interventional tools, they were categorised as paper vignette, computer based vignette, simulation, clinical setting, and others (5 studies). Four studies used hands-on simulations to evaluate stress management, surgical DM, crisis management with team-based training, and briefing. Four studies were conducted in the clinical setting and DM was one of the competencies which were evaluating by the researchers. In the categories of simulation and clinical setting, most studies (75%) focused on intra-operative DM.

Discussion:

Only 1/4 studies focused on the intra-operative decision making in which most adopted evaluations by using simulation or in clinical setting. 17.9% studies used educational theory or framework which should be improved.

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Combining simulation for providing hands-on experience with educational theory should be emphasized for training of intra-operative decision making and need to be evaluated in the future.

THE INDIGENOUS HEALTH STREAM

Author/s

Professor Amanda Barnard*, Ms Samia Goudie*, Ms Gaye Doolan

Presenter/s

Professor Amanda Barnard*, Ms Samia Goudie*,

Institution(s), Department(s), Country/Countries

Medial School, Australian National University

Introduction/background:

The Indigenous Health Stream (IHS) is a voluntary enriched program of experiential learning, mentoring and leadership training in Indigenous Health, which runs through all four years of the ANU Medical School curriculum. The program was established in partnership with Winnunga Nimmityjah Aboriginal Health Service, as a collaborative effort to produce doctors who are competent, capable and sensitive towards the needs of Aboriginal and Torres Strait Islander people. Five years after its inception program has expanded from two students to one in twelve first year students.

Students are exposed to a wide range of learning opportunities – seminars, immersion experiences, lectures, and meetings with Indigenous leaders and healers. These are in addition to the standard curriculum. Students are encouraged to create a community of practice and connection.

The program is designed for Indigenous and non-Indigenous students, with the only criteria being merit and a positive assessment by Aboriginal health workers at Winnunga

Purpose/objectives:

To describe a successful program, and to outline the effect the program has on student learning, and the flow on effect to other students and the Medical School

Issues/questions for exploration or ideas for discussion:

Increasing popularity of the program raises questions of capacity and sustainability

Results:

Student evaluation of the program will be presented

Discussion:

Is this sort of program reproducible?

How can we best harness the knowledge understanding and commitment of a small group of students to influence others?

BRINGING SPECIMENS TO LIFE - POTS, QR CODES, AND ANNOTATED VIDEO

Author/s

Dr Eileen Cole & Mr Colin Warren*

Presenter

Mr Colin Warren*

Institution(s), Department(s), Country/Countries

School of Medicine, Deakin University

Introduction/background:

The School of Medicine has a large collection of pathology pot specimens used throughout the medical course for learning about disease. The use of technology has added significant value to this resource.

Stage 1 of the project was converting the paper records of the ~900 medical specimens to online digital records, which are accessible by QR codes (mounted on each pot). Mobile devices scan the code and are taken to a responsively designed wiki-webpage which features an image and a description of the specimen, as well as links to inline resources.

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Issues/questions for exploration or ideas for discussion:

Open discussion around methods for tracking and data collection of the use of the resource and methods for succession planning and maintenance of the resource, especially of currency of the included information.

HANDING OVER THE PATIENT. AUDIO ENHANCEMENT TRANSFORMS A PAPER-BASED ROLE-PLAY SCENARIO INTO A 'REAL' PATIENT

Author/s

Marion Shuttleworth*, Kathy Brotchie, Shane Bullock, Caroline Rossetti

Presenter

Marion Shuttleworth*,

Institution(s), Department(s), Country/Countries

¹ Griffith University, ² Monash University, ³ Monash University

Introduction/background:

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How much simulation technology is required to provide more authentic experience for medical students in a small group clinical skills teaching session?

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Discussion:

Use of mobile phones to record audio is an option for all clinical educators and provides a rich experiential learning opportunity in the pre-clinical setting.

WHY SHOULD STUDENTS WRITE A GLOBAL HEALTH CASE REPORT?

Authors:

Manasi Jiwrajka, Dr. Seema Biswas

Presenters:

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ABSTRACT

We don't often hear about a Global Health (GH) case report. It seems far-fetched that as medical students we could have any effect on how patients live and the determinants of health, especially when we hear that GH concerns only low-income countries. The reasons for this perception are: one, there is no universally accepted definition of GH and two, worldwide, there remain profound differences in GH education. We propose that the 'global' in GH does not refer so much to 'overseas' or 'over there', as it refers to 'over here;' the real definition of 'global' in GH is 'health everywhere'. 'Global' also refers to 'all' aspects of health i.e. a holistic approach, essential to exploring and taking on the real causes of disease, the social determinants of health. This focuses our attention on the patient in front of us and what we need to do to prevent them from becoming ill again. We urge medical students to write these case reports because they (1) help us look at the root causes of the illness that may limit the medical therapy of the patients in front of us; (2) allow us to learn about socioeconomic, political and cultural influences on our patients; (3) can be published and shared to create an evidence base, and subsequently affect legislation. For the audience reading these case reports, it makes GH personal and individual. It is a call to action to work for our patients, and an inspiration to look beyond a pharmacological prescription to the underlying social determinants of health and disease.

HOW TO EFFECTIVELY ENTRUSTS TRAINEES

Author/s

Robin R. Hemphill MD MPH, Sally A. Santen, MD.

Presenters

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Institution(s), Department(s), Country/Countries

Veterans Health Administration-National Center for Patient Safety
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Background

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Intended Outcomes

Faculty will be able to understand the factors affecting entrustment and utilize strategies to increase autonomy. In addition, faculty will be prepared to navigate the barriers to entrustment and appropriately facilitate resident autonomy and grant trainee suitable entrustment of patient care to enhance resident education while maintaining appropriate supervision.

Structure

The workshop will be highly interactive, requiring participants to understand resident supervision and autonomy, review their own practice, and apply then apply new techniques to their clinical teaching. This session will start with short didactic presentation and large group discussion to understand entrustment and autonomy. We will then incorporate facilitated small group discussions to understand the concepts and develop ways to improve each participants' ability to engage with a trainee at an appropriate level of supervision and autonomy.

Who should attend:

faculty supervising trainees

Level of workshop

Introductory to intermediate

CHRONIC CARE MODELS USED IN HIV/AIDS NURSING: AN APPRAISAL OF CHRONIC CARE NURSING EDUCATION IN ZAMBIA

Authors:

Kabinga-Makukula Marjorie¹, Banda S. Sekelani¹

Presenter:

Kabinga-Makukula Marjorie (chlbmakukula@gmail.com)

Institution(s), Department(s), Country/Countries

¹University of Zambia, School of Medicine, Department of Medical Education Development

Introduction:

Globally, there is an increase in chronic diseases with a resultant demand on nurses to provide quality care. Nurses require skilled training in chronic care to meet this demand. Evidence shows that the healthcare workforce is ill-prepared in chronic care. Moreover, nursing education in Zambia continues to not account for the increased chronic disease burden.

Purpose/Objectives:

To investigate chronic care models evident among Zambian trained registered nurses and nursing students and how they formulate and consolidate chronic care models for practice.

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Mixed methods design. Qualitative: Glaser's grounded theory where 21 nurses and students participated in in-depth interviews. Quantitative: 45 item multiple choice knowledge test on chronic care administered to 81 nurses and 294 students from 7 hospitals. Document analysis of the nursing curriculum to assess coverage of chronic care nursing.

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Discussion/Conclusion:

Chronic care nursing is a huge component of care but neglected in the curriculum. While chronic care models exist, nurse educators need to be aware of un-described models such as the "needs focusing". Teaching of chronic care nursing should be structured using simulation, reflection and experiential learning for maximum benefits.

THE ENHANCING TERTIARY TUTOR'S CULTURAL SAFETY PROJECT: CULTURAL AWARENESS TRAINING FOR PBL (PROBLEM BASED LEARNING) TUTORS

Author/s

Associate Professor Frankie Merritt, Dr Aline Smith, Associate Professor Pippa Craig, Jacqueline Savard.

Presenter/s

Associate Professor Frankie Merritt, Dr Aline Smith, Associate Professor Pippa Craig, Jacqueline Savard.

Institution(s), Department(s), Country/Countries

School of Medicine, Sydney: The University of Notre Dame Australia

Introduction

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An organisation external to SoMS provided a workshop to promote intercultural competence balanced across four components: knowledge, empathy, self-confidence, and cultural identity. The tutors were interviewed in focus groups or individually, at 6 and 12 months post-training to explore if and how they had applied what they learned in the workshop to their practice as tutors and medical practitioners.

This PeArL session will explore the challenge of how to ensure teaching staff are effectively trained in cultural safety and how they can maintain and implement the skills learnt to provide a culturally safe teaching environment, over the long-term.

Issues for exploration/ideas for discussion

Any feedback on what we've done to date? Comments on the findings?

What other approaches to this type of issue/research are people aware of?

Does cultural safety training have ongoing benefits to PBL tutors?

What are the implication of cultural awareness training (and its long-term ability to change cultural safety) for the students?

How can we enact long-term change (in a teaching environment and in clinical practice) to entrenched worldviews that can be culturally unsafe?

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What is the next step for this research?

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A HEALTHCARE PROVIDERS PERSPECTIVE OF THE SUCCESSES OF CENTRALLY COORDINATING AND EVALUATING DIFFERENT MODELS OF UNDERGRADUATE CLINICAL PLACEMENT ACROSS DIFFERENT DISCIPLINES FROM MULTIPLE EDUCATION PROVIDERS – WHY IT WORKS!

Author(s)

Tess Vawser, Sanjee deSilva

Presenter

Tess Vawser

Institution(s), Department(s), Country/Countries

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By providing a centrally coordinated service for the various types of placement models increases the amount of clinical placement days offered to education providers.

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Ward buddies and preceptors prefer students to have longer placements and also be supported by clinical facilitators.

Conclusions and Take-home message

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Institution(s), Department(s), Country/Countries

School of Medicine, University of Notre Dame Fremantle.

Introduction/ Background

Teaching and learning (T/L) health advocacy (HA) in Australian medical schools is currently ambiguously documented within the curricula learning objectives. The Australian Medical Council (AMC) Standards for Assessment and Accreditation of Primary Medical Programs comprises four domains including 'Health and Society: the medical graduate as a health advocate'. North American research on T/L HA in medical schools shows that experiential learning at both patient and community levels, improves students' self-reported knowledge and skills. The University of Notre Dame Fremantle School of Medicine (UNDF SoM) is founded on an ethos of social responsibility encompassed in their mission and within the Core Curriculum subjects of Philosophy, Theology and Medical Ethics; making the concept of HA T/L of key importance and relevance.

Purpose/Objectives

We aim to determine whether UNDF SoM graduates believe they are educated and skilled in HA for the benefit of their future practice with patients and the wider community. The objectives are to develop insight into how HA is taught presently at UNDF. This is from both an objective assessment of the curriculum and qualitative analysis of interviews with academic discipline leaders, UNDF medical alumni and through surveying third and fourth year medical students. The results will lead to a future dialogue with academic governance around ways to improve the T/L HA for the benefit of future UNDF medicals students.

Issues for exploration/ideas for discussion

1. Can medical students learn what it means to be a health advocate and how to be one within the scope of a four-year post-graduate medical curriculum?
2. Can HA be developed/taught in medical students or is it a quality embedded in one's past experiences, personality, attitudes and values?
3. How might medical students best learn to be health advocates?

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Session 9B

CONSCIENTIOUSNESS: A SCALAR AND OBJECTIVE MEASURE OF A COMPONENT OF PROFESSIONALISM

Author(s)

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Presenter

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Introduction

Professionalism is frequently viewed as complex and subjective to measure. However, the trait of Conscientiousness (one of the 'Big Five', along with Openness to Experience, Extraversion, Agreeableness, and Neuroticism) is both measurable and generally predictive of future performance in the workplace. We therefore postulated that conscientiousness in routine tasks would represent a facet of professionalism in medical practice, and that it is measurable in early settings as a predictor of later professional practice

Methods

Over the last 8 years, working with academics and administrators, we have developed 'Conscientiousness Indices' in a variety of contexts, including undergraduate medical and allied health professional settings. These have been used as the 'predictor variable' and compared to other independent estimates of professionalism such as faculty and peer professionalism ratings as the 'outcome variables'. The predictor variable is based on objective measures, and

Results

Measures of conscientiousness behave as a stable, objective and scalar property with well-defined characteristics. There are statistically significant positive relationships between conscientiousness and independent measures of professionalism, with some exceptions.

Conclusions

Measures of conscientiousness either represent a component of professionalism, or co-distribute with measures of professionalism. Since conscientiousness is relatively easy to measure in a scalar and objective way, it provides a useful metric which may identify individuals who require remediation in professional behaviours, or who should be de-selected from progression. There are some challenges

Take-home message

Measuring conscientiousness early in training very probably provides a predictor of later professionalism, and is therefore a useful developmental or selection tool.

MEETING THE CHALLENGE OF PROFESSIONAL EDUCATION WITHIN MEDICAL UNDERGRADUATE PROGRAMS

Author(s)

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Presenter

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Abstract

Achieving effectiveness and consistency in professionalism education within undergraduate medical programs is fraught. Defining professionalism is elusive, and the '*I know it when I see it*'^[1] approach doesn't guide student development or assist medical educators to develop defensible professionalism curriculum and assessment.

In recent years attention has focused on identifying, remediating or removing professionally 'dysfunctional' students, in the belief that such students become dysfunctional doctors^[2]. However, the low prevalence of serious unprofessionalism and poor predictive modelling increasingly challenge the presumed inevitability of this trajectory^[3].

As the aim is not merely to teach students to '*act like*' a professional, but rather to support them to '*become*' a professional^[4], we argue that the current focus on the aberrant student has undermined curriculum development. As the profession's goals, that students ultimately meet, are clearly articulated in a number of regulatory sources^{[5], [6]}, it is from these sources that defensible undergraduate curriculum and assessment, applied to the developmental stage of training, must be developed. Accreditation bodies like AMC play a key role in ensuring the alignment of industry, regulatory, legislative drivers to lay out a clear pathway for the professional growth from student to registered professional.

'WE CARE'.....BUT DO OUR DOCTORS – ASSESSING APPLICATION IN PRACTICE?

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Introduction

In 2013 our Trust introduced a set of 'We Care' Values to be adopted by all staff in delivering our service to patients. A pilot assessment study was undertaken to gauge the application of these values in medical practice, as Doctors had been implicated in patients' formal complaints.

Methods

In a pilot, medical students were asked to observe staff interactions on wards and discuss their findings at Medical Grand Round. • Embed values and standards using observation and feedback • Audit applications of 'We Care' standards in practice • Analyse doctors' behaviours and its impact • Students to adopt the values introduced • Promote cultural change within the clinical setting • Reduce complaints Students made anonymous ward-based observations of staff communications and analysed findings. They evaluated these communications against the values of the organisation. Findings were presented at the Medical Grand Round including grade/job titles.

Results

Increase in Students' awareness of sub-standard behaviours demonstrated by doctors · 51% of students' increased their awareness of organisational values · 52% reported pilot had positive impact on their behaviours · 50% reported it offered a platform for raising concerns · 80% said the pilot had enhanced team working.

Take-home message

Student involvement in promoting and embedding organisational values is an innovative method of raising awareness among staff. Sharing findings within Grand Rounds encourages culture of transparency and new method of reporting to improve staff and patient experience, and potentially help reduce complaints. Analyses of complaints data will be undertaken to attribute its relation to doctors' behaviours.

IMPROVING PROFESSIONALISM BEHAVIOURS IN OURSELVES AND OUR MENTORS: WHAT DO SURGEONS THINK?

Author(s)

David J Hillis

Presenter

David J Hillis

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Introduction

Professionalism underpins the commitment made between a profession and a society. It is a complex multi-dimensional construct that varies across historical time periods and cultural contexts. Core elements now include behaviours as well as ethics and values. By utilising the P-MEX tool in a reflective questionnaire manner over 1800 surgeons and surgical trainees indicated areas for improvement in their own professional practice and in their mentors.

Methods

Distribution of 3053 surveys with over a 60% response rate

Results

Clear priorities were established in the 24 behaviours of the P-MEX tool. The four factor grouping of reflective skills, time management skills, doctor patient relationship skills and interprofessional relationship skills were confirmed in Australia and New Zealand

Conclusions

There are priorities particularly relating to reflective skills which need greater emphasis in pre-vocational and vocational training. Importantly mentors also need to improve a differing array of professionalism behaviours and this should inform ongoing professional development activities

Take-home message

Professionalism requires active teaching including assessment. Role modelling is also critical and it is most important that behaviours are appropriately modelled.

THE PREVALENCE OF ITEM SHARING IN CLINICAL ANATOMY – APPLICATION OF GATED ITEM RESPONSE THEORY MODEL

Author/s

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Introduction

Item sharing through collaboration between students can expose several items in a short time. The Gated Item Response (GIR) Theory model was proposed by Shu in 2013 to measure the prevalence cheaters by over-exposure of multiple-choice items.

Methods

300 standard multiple-choice items from 3 examinations were classified as exposed or secure according to the number of times that they were reused. The mean number of examiners was 214 students per examination and the Cronbach alpha was higher than 0.85.

The GIR model estimates the true ability and the cheating ability per student and classifies a student as cheater if the cheating ability is higher than the true ability.

Results

The number items that were used more than once ranged from 13 to 26%, respectively for examination 1 and 2. The prevalence estimated by the GIR model ranged from 22 to 28%, assuming high-effective and medium-effective cheaters, respectively. For example, the cheaters obtained an increase of 17% in exposed items score compared with secure items score while the increase was only of 3% in the non-cheaters for examination 3.

Conclusions

One in each 4 students was classified as cheater, showing a high prevalence of academic dis-integrity.

Take-home message

It is important that teachers use models like GIR and students be elucidate about the importance of not sharing test items.

Session 9C

EVALUATION OF EFFECTIVENESS OF TRAINING PROGRAMME ON HEALTH RELATED RESEARCH FOR MEDICAL STUDENTS

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Introduction

Training on health related research, the Health Research Programme (HRP), is compulsory part of the undergraduate MBBS Year 3 curriculum under the School of Public Health (SPH), Li Ka Shing (LKS) Faculty of Medicine. The effectiveness of all undergraduate programmes is evaluated using the University of Hong Kong (HKU) Students' Evaluation of Teaching and Learning (SETL) questionnaire; however such evaluation is not specific enough for public health purposes. The main objective of this report was to evaluate HRP effectiveness using more structured HKU University Grants Committee requirements (UGC) framework.

Methods

Each guiding principle in the UGC framework was assessed using multiple criteria:

1/ Aligning HRP outcomes with HKU Educational Aims and SPH OBASL; 2/ Aligning resources with achievement of educational aims; 3/ Fostering self-reflection and peer review, and providing room for bottom-up initiatives; 4/ Promoting collaboration and exchange of good practice amongst teachers; 5/ Focusing on student learning experience supported by evidence; 6/ Engaging internal and external benchmarking. Both self-reported and objective data from 2012-2013 MBBS year 3 cohort was used for effectiveness evaluation.

Results

The HRP OBASL research competences partially aligned with the HKU, but their acquisition was only evaluated immediately after the HRP completion without monitoring long term impact on future health research. The students' bottom-up initiatives and achievements of research milestones were often delayed. Evidence focusing on student learning experience showed that all group assignments' marking scores were above the passing threshold, but none achieved distinction. Students' self-perceived rating showed a large effect of the HRP on acquisition of research competences; however differences might exist between individual standardized learning and group learning with division of labor. Students perceived that HRP tutors' guidance and availability was less effective in comparison with other programmes.

Conclusions

The HKU UGC framework used in this HRP evaluation provided a structured approach for HRP effectiveness evaluation and enabled identification of weaknesses that would remain unrecognised if only the conventional framework for undergraduate programme evaluation was used.

Recommendations

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Areas for improvement of the health related research training programme exist such as providing much better guidance, monitoring division of labour in each group and adopting measures to encourage each student's contribution to research on a topic of public health importance.

SETTING THE AGENDA FOR DENTAL EDUCATION RESEARCH IN SCOTLAND: A PRIORITY SETTING EXERCISE INCLUDING MULTIPLE STAKEHOLDERS

Author(s)

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Presenter

Rola Ajjawi

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Introduction

The Scottish Oral Health Research Collaboration identified dental education research (DER) as a key strand of their strategy,¹ leading to the formation of the Dental Education Research Group. The starting point for this group was to understand various stakeholders' perceptions of research priorities, yet no existing studies were found. The aim of the current study was to identify DER priorities for Scotland in the next 3-5 years.

Methods

The study utilised a similar methodology to that of Dennis et al,² in medical education. Data were collected sequentially using two online questionnaires with multiple dental stakeholders represented at undergraduate and postgraduate levels across urban and rural Scotland. 85 participants completed questionnaire 1 (qualitative) and 649 participants completed questionnaire 2 (quantitative). Qualitative and quantitative data analysis approaches were used.

Results

Of the 24 priorities identified, the top priorities were: role of assessments in identifying competence; undergraduate curriculum prepares for practice; and promoting teamwork within the dental team. Following factor analysis, the priorities loaded on four factors: teamwork and professionalism, measuring and enhancing performance, personal and professional development challenges, and curriculum integration and innovation. The top barriers were lack of time, funding, staff motivation, valuing of DER, and resources/ infrastructure.

Discussion

There were many similarities between the identified priorities for dental and medical education research², but also some notable differences, which will be discussed. Overwhelmingly, the identified priorities in dentistry related to fitness for practice and robust assessment practices.

Take home message

Priority setting exercises with multiple stakeholders are an important first step in developing a national research strategy.

THE RESEARCH ASSESSMENT CHALLENGE IN MEDICAL EDUCATION

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Presenter:

Kathryn Hird

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Introduction

The role of research training in medical education in Australia is under review. Many programs are making the transition from the MBBS to the MD, providing an additional stimulus for review of research training.

The Australian Quality Framework level 9E criteria require students be trained in a range of research skills, and that this should be demonstrated by completion of a 'scholarly project'. But how can a research training program be assessed? Assessment strategies are important as they structure the learning process, and demarcate appropriate and required skills and knowledge.

The effectiveness of a competency based assessment strategy involving cumulative progress over an academic year as well as student's responses to it are described

Methods

The assessment strategy required students to create a portfolio of completed tasks culminating in a submission ready scientific paper. The tasks included: a grant proposal, an ethics application, an applied ethics essay, a structured conference abstract, and an oral platform presentation at a symposium for medical students.

The assessments rubrics detailing the competencies required for each task were provided to students and supervisors at the beginning of the program. All of the tasks were independently assessed by two examiners. Formative and summative assessment was provided throughout the program.

Conclusions

The assessment strategy revealed systematic learning of discrete research skills across a range of contexts. In addition, it provided a transparent structure for the course requirements.

Take-home message

The contextualised skill acquisition model provided an efficient and appropriate approach for medical research training and assessment.

ENCOURAGING FUTURE MEDICAL SCIENTISTS: 10-YEAR IMPACT EVALUATION OF A SUMMER RESEARCH SCHOLARSHIP PROGRAM

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Introduction

Since 2005 the Sydney Medical School has offered students 8-week summer apprenticeships with career scientists to encourage talented students into postgraduate research degrees and research careers. The rationale for the Summer Research Scholarship (SRS) program was that students would be attracted to research careers by exposure to inspirational research leadership. This evaluation was conducted to assess whether the program met its objectives.

Methods

An online survey was sent to students who completed an SRS in the 10 years since program inception (2005-14), asking about their experience and subsequent research involvement. Supervisors were also surveyed to identify additional benefits of the program.

Results

Of 643 students awarded one or more SRS, 500 (78%) were email contactable and 340 (68%) completed the survey. Respondents reported excellent or very good program experience (80%) and agreed or strongly agreed that the experience made it more likely they would pursue research in their future (76%). Supervisors were rated highly for their contribution to the quality of SRS experiences (85%). Respondents reported current research involvement (58%) including in honours (12%), Masters (11%) and PhD (26%) degrees, as well as in paid research (21%) or academic (5%) positions. Research supervisors reported continued connection with their students in ongoing research.

Conclusions

Students completing an SRS program appear inclined towards higher degrees and research careers and the program provides supervisors with ongoing benefits.

Take-home message

A positive experience with an inspirational leader early in a student's career can lead them to consider a career in biomedical research.

* denotes equal first authors

ASSESSMENT OF RURAL AND REMOTE PERCEPTIONS IN FIRST YEAR MEDICAL STUDENTS

Author/s

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Presenter

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Introduction

James Cook University medical school has a mission to produce medical practitioners able to meet the needs of rural and remote communities. This project evaluated beginning medical students' perceptions about rural medical practice. As part of a literacy assessment, students completed a low stakes essay on the life and work of a rural doctor.

Methods

The 103 student essays were coded into three main themes: rural lifestyle, doctor role and rural practice. Sub-themes were elicited and quantified. Positive themes included rural lifestyle, doctor role, views of doctor, impact on community. Negative themes included, pressure on doctor, greater workload, isolation and limited resources.

Results

Z tests revealed no significant differences on the number of positive and negative responses for rural lifestyle and rural. The rural doctor role had a significantly more positive than negative views. Significant differences were found for positive views of the rural doctor role and negative views of rural practice. Participants from an urban background reported a significantly higher percentage of negative views of rural practice, and had significantly more negative views about the rural doctor role especially related to workload, limited resources and isolation than rural origin students.

Conclusions

These students entering medical school already had both positive and negative views about the life and work of a rural doctor with those students from capital city areas having significantly more negative views.

Take-home message

Evaluation of student perceptions is a useful way of assessing entry level beliefs and identifying positive experiences required in a rural focused curriculum.

Session 9D

IMPACT OF INTRODUCTION OF COMPETENCY-BASED ORTHOPAEDIC TRAINING ON THE LEARNING CLIMATE OVER A SIX-YEAR PERIOD

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Introduction

Postgraduate medical curricula worldwide have become competency-based. The impact of this paradigm shift on the quality of the learning climate is unknown. The aim of our study was to assess changes in the learning climate, as perceived by trainees, from before to after implementation of a competency-based orthopaedic curriculum.

Methods

From 2009 to 2014, we conducted yearly surveys among all Dutch orthopaedic trainees. The quality of the learning climate was assessed using Dutch Residency Educational Climate Test (D-RECT), a validated instrument with 50 items on 11 subscales. Scores range from 1 (poor) to 5 (excellent).

Results

Over the 6-year period 641 responses were obtained (response rate 92%). There was no difference between the mean (SD) D-RECT scores in the pre-modernisation (2009 and 2010: 3.72 (0.45)) and the post-modernisation period (2013 and 2014: 3.79 (0.50)) ($p = 0.19$). Subscale analysis showed increased scores for 'supervision' ($p = 0.002$) and 'coaching and assessment' ($p < 0.001$) post-modernisation. Learning climate in affiliated teaching hospitals (3.83) was rated higher than in academic centres (3.68 $p < 0.0001$).

Conclusions and Take-home message

After the introduction of a competency-based programme trainees' perception of the quality of the learning climate did not change. However, the perceived quality of 'supervision' and 'coaching and assessment' did improve. Although the observational nature of this work precludes causal inference, it highlights some of the impact of recent changes in orthopaedic training.

COMPETENCE BY DESIGN: LIFTUPP, THE FIRST E-PLATFORM TO FULLY TRACK AND DEVELOP CLINICAL COMPETENCE

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Introduction

The goal of any clinical curriculum is 'competence'. However, '*competence is not just about acquisition of knowledge and skills, but about the ability to create new knowledge in response to changing work processes*' (Govaerts et al, 2013). Thus the demonstration of competence requires the longitudinal triangulated measurement of performance against the required outcomes, combined with an understanding of the context of the task and assessor behavior. This necessitates an integrated approach to: accreditation/QA; assessment; feedback; examiner performance; technology use; and learning analytics. Unfortunately, each of these requisites are often considered, developed, and managed in isolation.

Methods

We have developed a technology-supported learning design (LIFTUPP) able to longitudinally triangulate all the learning outcomes assessed and provide detailed feedback over performance. LIFTUPP is capable of displaying individual real-time data over developmental progress, in an unlimited number of outcomes, distributed between any numbers of stakeholders, across any number of sites. A web-based dashboard is used to drive development through learner-centered reflection based around the longitudinal quality and consistency of performance in all domains. We have developed and used this platform since 2010 to monitor and enhance the competence of all our students.

Results

National Student Survey satisfaction scores in "Assessment and Feedback" improved from 40% to over 90%, and qualitative data suggests our graduates have improved.

Conclusions

The symbiosis of technology and pedagogy, has enabled the University of Liverpool Dental School to truly monitor and develop clinical competence.

Take Home Message

We believe this approach is transferable to any clinical area.

UPENDING MILLER'S PYRAMID: THE IMPORTANCE OF CAPABILITY IN PREPARING MEDICAL AND DENTAL STUDENTS FOR THE COMPLEXITIES OF PRACTICE

Author(s)

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Presenter

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Abstract

Health profession education emphasises the development of student competencies. Expected competencies are usually detailed in national guidance and presented as learning outcomes, separated into domains such as biomedical, clinical and professional. Each domain tends to be assessed separately, using predictable and familiar tools and settings.

In this presentation we will introduce a model which upends Miller's Pyramid and, in doing so, question whether competence based education and assessment adequately trains our students to practice in today's complex, ever changing world of healthcare. We will draw on research into students' preparedness for practice to demonstrate how just "ticking the competency box" has often left young doctors and dentists unprepared and unsure how to tackle problems in the real world.

We will argue that we need to educate our students for "capability" as well as competence. Building on the literature we will explore the nature of capability and the range of skills, such as the ability to formulate and solve problems in unfamiliar and changing settings, which underpin it. We will consider how capability is addressed (or not) within the different health professions and will propose ways that dental and medical undergraduate curricula could adapt to support students to develop capabilities. We will also consider how these might be assessed.

Finally, we will consider why the notion of capability, which can be perspective shifting and transformative for some educators, can be troublesome and difficult to grasp for others. Can the notion of "threshold concepts" thrown a useful light onto this?

ASSESSMENT OF LEARNING OUTCOMES IN MASTERS IN HEALTH PROFESSIONS EDUCATION – COMPARISON IN UK AND PAKISTAN

Author(s)

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Presenter

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Introduction

There has been an increased awareness in academicians in health professions for a formal qualification in health professions education. Master's and PhD program in health professions education have been started globally. It is important to know how these programs differ in their learning outcomes, delivery methods and assessment tools

Methodology and Method

It was a qualitative case study designed to provide insight into the type and level of learning outcomes and assessment tools used in MHPE programs. Data was collected using archival research. 08 programs through purposive/convenience sampling were selected each from UK and Pakistan. Data was analysed through content analysis

Results

Learning outcomes of knowledge, attitude and skills were addressed in all programs but their level according to Blooms taxonomy is not uniform. All programs have common themes of Curriculum, Teaching and Learning, Assessment, Leadership and Educational Research. Tutorials, workshops, self-study, small group discussions are the common learning strategies used in the program. Common assessment tools used are assignments and dissertation submission. Programs in Pakistan also have summative examination. All programs in the study assesses student at 'shows how' level except 02 universities in UK who evaluates the student at 'Does level'.

Conclusions

Programs in UK and Pakistan share many common basic features of curricular content, learning outcomes and assessment tools, however major differences in level of learning outcomes and assessment method may affect the eventual outcome and standardization of these programs.

REALIZING COMPETENCY BASED RESIDENCY EDUCATION AT QUEEN'S UNIVERSITY

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Presenter:

Dr. Laura McEwen

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Introduction

The leadership of the School of Medicine at Queen's University in Kingston, Ontario, Canada set the goal to have all residents entering July 2017 following a competency-based curriculum model. Achieving this goal requires twenty-eight residency programs design, develop, and transition to a new curriculum model within a two-year window. In order to support faculty we developed the Queen's curriculum development model.

Methods

This curriculum development model brings together extensive work undertaken by the Royal College of Physicians and Surgeon of Canada with their Competency by Design (CBD) initiative, scholarly work conducted by medical education experts especially in the area of Entrustable Professional Activities (e.g., Ten Cate et al. 2015), and curriculum experts (Biggs & Tangs, 2011) and operationalizes it within the context of an institution-wide transition to competency based residency education.

Results

Our six-stage curriculum development model places great emphasis on assessment and includes: Defining stage specific outcomes (Royal College EPAs), estimating the length of stages, building consensus both departmentally and nationally about the curriculum, mapping EPAs to RCPSC enabling competencies and milestones, building programmatic assessment systems, and defining required 'training experiences'. Within this model, program design is conceptualized as an iterative process whereby previously completed stages are revisited and elaborated upon as program development unfolds.

Conclusions

We share our six-stage curriculum development model, discuss emergent adjustments, and identify important areas for research.

Take-home message

Curriculum development is an iterative process that must remain flexible to accommodate the cultural specificities among specialties and leverage learning gains across programs.

EXAMINING CHANGES IN ASSESSMENT INFORMATION FOLLOWING IMPLEMENTATION OF THE COMPETENCY-BASED ACHIEVEMENT SYSTEM (CBAS)

Author(s):

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Presenter:

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Introduction:

In residency training, primary focus often gets put on assessing medical knowledge and procedural skills given the ease with which they can be evaluated. Competency-based assessment approaches strive to encompass all of the competencies required of an effective physician. In this study, we examined the assessment data collected using the Competency-Based Achievement System (CBAS), a framework that emphasizes formative feedback to residents in the workplace to encourage guided self-assessment. Our hypotheses were that assessment information post-CBAS would be 1) more detailed and informative, 2) would address multiple competencies beyond medical knowledge and procedural skills, and 3) would show evidence that residents had an opportunity to self-assess.

Methods:

Secondary data analysis: source = De-identified resident assessment data for 4 years pre-CBAS and 5 years post-CBAS, random sample of 25% of files for each cohort (total N=164). In Training Evaluation Reports (ITERs) and summative progress reports (PRs) were examined for content, length, and quality of comments, as well as for opportunities for residents to self-assess.

Results:

For PRs, results confirmed our hypothesis: Post-CBAS, comments were detailed and specific, resident self-assessment was more evident, and learning plans were found more consistently. For ITERs, comment length did not change post-CBAS, but accuracy in identifying concerns about resident progress increased. Additionally, post-CBAS ITERs showed more alignment between comments and the score given to the resident.

Conclusions:

Adopting a system (CBAS) that emphasizes workplace assessment and formative feedback resulted in better assessment information.

Take-home message:

CBAS results in more detailed information about resident competence.

Session 9E

PLANNING FOR ASSESSMENT: CLINICAL TEACHING ASSOCIATES EVALUATING STUDENTS' SENSITIVE EXAMINATION SKILLS – WHAT DO WE NEED TO KNOW?

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Presenter:

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Introduction

As medical education discovers ways to provide simulated learning and assessment experiences to prepare medical students for various aspects of clinical practice, Clinical Teaching Associates (CTAs) – men and women from the community, specifically trained as specialised simulated patients to teach students appropriate sensitive examination - are increasing being adopted with greater responsibilities to contribute to student evaluation. In view of this, we evaluated our program domains pertaining to student evaluation. The findings gave us insight into our expectations and “what we need to know” for planning assessment of students’ sensitive examination skills, and ways to support CTAs to meet expectations from their increasingly demanding role.

Methods and Results

A Program evaluation incorporating a student performance survey was conducted in 2015 within the domains of communication and technical skills, and formative evaluation feedback from the CTAs. Questions were posed on what students considered the most important and most difficult parts of performing a sensitive physical examination, with the majority of students identifying communication as the hardest part of performing the examination.

Conclusions

Assessment and evaluation methods are crucial components of the medical curriculum. As medical education finds ways to provide learning opportunities where CTAs take on greater responsibilities in evaluation, keeping up to date with expectations is central to outcomes. This review has helped to reaffirm “what we need to know” not “what we think we know”.

Take-home message

Define level of expectation to match the curriculum outcomes.

Embed collaborative assessment and planning preparation to match expectations.

CHANGES IN STUDENT EVALUATIONS OF CLINICAL SKILLS WITH INCREASING STUDENT NUMBERS: A 10 YEAR COHORT STUDY

Author/s

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Presenter:

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Introduction

The Mackay site of James Cook University College of Medicine has undergone significant growth in recent years. From a modest beginning of six students in 2004, there has been a rapid expansion to the current cohort of 70 students. Commencing with the 2005 group, students have completed a formal course evaluation survey assessing their experience of their rotations and clinical skills development.

Methods

A course evaluation survey is completed by 5th and 6th year medical students at the Mackay campus of JCU in August/September of each year (N ranging from 6 to 35 by year). The survey was developed in association with clinical educators who identified three core skills for each rotation. Students rate the number of times they practice each of the core skills on a 4 point scale (never to more than 3 times) and their perceived proficiency at performing that skill (5 point scale from very poor to very good).

Results

There was a significant positive association between the number of times a student has the opportunity to practice core skills and their perceived proficiency. Over the ten year timeframe there was no decrease in number of times clinical skills were reported as being performed, or perceived proficiency, with increased student cohort size.

Conclusions

Students benefit from hands-on opportunity to practice core clinical skills. Increased student numbers has not decreased student evaluations of their clinical skills training.

Take home message

Our results indicate that the student experience is not diminished by increasing student numbers

LARGE-SCALE END-OF-YEAR KEY FEATURE EXAM USING AN AUDIENCE RESPONSE SYSTEM (ARS)

Author(s)

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Presenter

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Introduction

The Medical University of Vienna introduced a clinical practical year in winter term of 2014. By means of a logbook/portfolio students are directed to perform specific clinical tasks according to the Austrian Competence Level Catalogue. After 48 weeks of clinical rotations (internal medicine, surgery, one elective) at self-chosen hospitals, students return to the university for an assessment (return-week) of their acquired key-competencies in two consecutive modules.

Methods

A key-feature exam [Fischer, 2005] was implemented for the first module, incorporating 10 self-created key-feature questions from internal medicine and surgery respectively. Each key-feature question is based on a case history consisting of three to four MC sub-questions assessing clinical decision-making skills. An audience response system (ARS) was used to cope with the high number of students and to provide immediate results necessary for the subsequent oral examination module.

Results

389 students took part in the unprecedented return-week in July 2015, answering 69 questions with a personalized voting device within an hour (45 seconds/question on average). Students were well prepared due to the tasks they performed during the practical year in accordance with the requirements in the logbook.

Conclusions

Significant faculty input is required for the creation of key-feature questions. Strict definition of a question template is necessary to automate the process of importing the questions into the ARS. Eventually the ARS allowed us to perform the exam in a minimum of time, providing immediate personalized results.

Take-home message

The key-feature question approach and the ARS proved to be valuable for the large-scale assessment of clinical decision-making skills.

MAINTAINING ACADEMIC HONESTY IN DENTAL PRACTICAL ASSESSMENTS

Author(s) :

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Abstract

There is increasing attention given to academic integrity across university education. The literature that specifically concerns academic integrity in dentistry and oral health programs is small, but powerful, in that it highlights cheating and academic dishonesty as a significant problem for dental schools (Andrews et al, 2007; Ford and Hughes, 2012). The range of assessment types in a dental program is wide, and includes direct observation of patient treatment and practical simulation assessments, as well as written examinations and other individual and group assessments. While there was an increasing concern of academic dishonesty in written exams and assignments, there was a sense of security in the integrity of practical assessments, where the student performed dental procedures on simulated patients.

This paper will present two unusual cases of academic dishonesty in a dental practical assessment. The first case involved a student bringing a previously prepared tooth into the examination room and substituting it for the assessment tooth. The second case involved a student removing key teeth during the exam to enable them to have better access to complete the preparation.

These two cases resulted in a complete review of practical assessment processes and the unique application of technology to maintain academic integrity. Central to the strategy to maintaining honesty and equity during the dental practical assessment is the use of a vending machine and black light marker pens.

MAKING SUMMATIVE ASSESSMENT MANDATORY IN SIMULATION-BASED TECHNICAL SKILLS TRAINING

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Introduction:

Overwhelming evidence shows that simulation-based training is an effective way of acquiring technical skills. However, simulation is still under-utilized and major challenges exist regarding implementation. Our aim is that all trainees have passed an evidence-based test before performing (supervised) procedures on patients.

Methods:

The Simulation Centre at Rigshospitalet, Copenhagen, Denmark, offers flexible technical skills training to postgraduate trainees. All training ends with an individual practical exam with established evidence of validity. In 2014, we hired a consulting group to help us develop an evidence-based business case showing the advantages of simulation-based training, e.g. increased patient safety, shorter procedure times, decreased length of stay, reduced equipment repair costs, and excellent return of investment. The business case should be used to convince local departments, medical societies, and hospital owners to make simulation-based training and certification mandatory.

Results:

A growing number of departments in the 18 hospitals served by the Simulation Centre now demand that their trainees acquire a simulation-based "driver's license". Furthermore, medical societies have started to make simulation a requirement for specialization and in February 2015, the politicians in the Capital Region of Denmark (population of 1.8 mio) decided to make simulation based training mandatory for every clinical procedure.

Conclusions:

Mandatory simulation-based certification ensures basic competency and increases motivation, learning, and retention. Key opinion leaders in our medical community can be convinced to embrace simulation and assessment.

Take-home message:

Key decision makers should be approached with carefully prepared arguments to facilitate implementation of mandatory simulation-based training and certification.

DEVELOPING A KEY FEATURES APPROACH TO STATION SCORING IN A HIGH STAKES CLINICAL EXAMINATION

Author(s)

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Presenter

David Prideaux

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- 3 Chief Executive Officer, Australian Medical Council
- 4 Director of Assessment, Australian Medical Council

Introduction

The Australian Medical Council (AMC) conducts high stakes clinical examinations for International Medical Graduates seeking to practise in Australia. The AMC has revised the station scoring system to improve the psychometric properties of the whole examination, to facilitate a new approach to standard setting and to enable tablet technology to be used for scoring.

Methods

The AMC's expert assessment panel designed the new system. It utilised a Key Features approach in defining scoring checklists. A global rating was included for future use in the borderline regression method for standard setting.

Results

The majority of the AMC's clinical examinations are conducted within the new National Test Centre. The new scoring system was introduced in 2014. It has readily been adapted into the tablet technology used in the centre and has received support from examiners. The use of the Key Features approach has improved the construct validity of station format and scoring. The overall reliability of the examination has improved. Further investigations are being conducted to determine how much this can be attributed to the scoring system or to other reforms to the examination.

Conclusions

The use of a Key Features approach to scoring in high stakes clinical examinations has enabled more attention to be given to construct validity in station design and scoring, contributed to the improved reliability of the examination as a whole and has facilitated the use of tablet technology.

Take-home message

Station scoring is an important component in enhancing the psychometric properties of high stakes clinical examinations.

Session 9F

LISTENING TO THE STUDENTS' VOICE: USING EVALUATIONS OF ASSESSMENT TO IMPROVE STUDENT LEARNING

Author

Anthony Barrett, PhD

Presenter

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Introduction:

The University of Otago Medical School, like many schools, allocates an enormous amount of time, planning, and resources to the high stakes assessment of students' learning at the end of each year. Both student and staff prepare during the entire year for these few days of examinations. In 2010 several students requested a means to submit feedback because they felt strongly about explaining their experience.

Methods:

Consequently a survey was administered in 2010 and again in 2013 and 2014. These three surveys generated over 1000 pages of data. Feedback from students revealed a wide diversity of opinions' about these high stakes assessments. The key research question from the survey was: *Did you think the following assessments corresponded with the content/skills emphasised in the course?* Students were emailed a link to the survey directly after their assessments but prior to knowing their results.

Results:

The quantitative data covered a wide spectrum of results and varied from year to year and exam modality. The free text comments provide a "thicker" description, indicating some vivid themes of student voices along the spectrum. As expected with high stakes exams and a large data set, free text comments were also varied and complex.

Conclusion:

For selected students the high stake assessment was not a positive learning experience because of the alleged incongruence between what the students were taught and what they were assessed on.

Take-home message:

Enhanced constructive alignment between curriculum objectives and exams questions would promote both assessments of and for learning.

IMPROVING HEALTH PROFESSIONAL COMPETENCE & PATIENT HEALTH OUTCOMES: THE CONTINUUM MODEL

Author/s

Dr Anita Peerson PhD, Dr Gabriella Berger PhD

Presenter/s

Gabriella Berger, Anita Peerson

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Introduction

In the 21st century, cultural competence training of the clinical health workforce has become a key approach in English-speaking countries to improve the health outcomes of its culturally and linguistically diverse populations. Researchers from around the world have proposed and implemented training options and models which incorporate perspectives from various professional disciplines such as public health, nursing, allied health, medicine and medical sub-specialities such as psychology and psychiatry.

Method

A new cultural competence model has been developed due to other models: i) using numerous definitions; ii) describing different segments of the cross-cultural interaction between patients and health professionals; iii) lacking description, content and depth; and iv) conflating culture with race and ethnicity. The innovative Continuum Model addresses these shortcomings and advocates a 3-step approach to training clinicians.

Results

The Continuum Model has been developed in mid-2010 and implemented for junior doctor training since January 2011 onwards at our regional health service in Queensland, Australia. So far well over 255 doctors, mainly junior doctors and international medical graduates have participated in training and provided feedback. Written and verbal evaluation data has been collected which illustrates its effectiveness and success.

Conclusions

Precepting with the Continuum Model promotes a supportive learning environment and describes a practical, concrete and integrated approach for at-risk patients and improves key outcomes.

Take-home message

The Continuum Model offers an improved approach to clinical workforce cultural competence training: it is more than a one-off orientation to health care service delivery but embodies a continuous quality improvement process.

“EXPERIENCE WITHOUT THEORY IS BLIND, BUT THEORY WITHOUT EXPERIENCE IS MERE INTELLECTUAL PLAY”; THE INTERPLAY BETWEEN THEORY AND PRACTICE IN THE EVALUATION AND REFORM OF A CONTESTED CURRICULUM

Author(s)

Vicki Langendyk and Glenn Mason

Presenter

Vicki Langendyk

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Introduction

Despite regulatory body support for inclusion of personal and professional development (PPD) in medical school curricula, there remains a fight for legitimacy. Focusing on the subjective and sociocultural dimensions of medicine, PPD does not sit within the dominant objective scientific paradigm which underpins student's conception of the medical profession. PPD is frequently denigrated as “soft” by students. To counter this, a sustained and iterative approach to curriculum reform is proposed.

Methods

Curriculum development is underpinned by ongoing cycles of evaluation, redesign and implementation. A theory led approach to both the design and analytical phases of the reform process was adopted. The complex PPD learning environment was analysed through the sociocultural lens of activity theory (AT) and design-based research (DBR) provided the structure for an iterative approach to curriculum reform. Both Lave and Wenger's and Mezirow's learning theories informed curriculum reform to support student development of a patient-centred and critically reflective professional identity.

Results

AT illuminated sites of tension within the learning environment and interventions were designed and implemented accordingly. Analysis of qualitative data from the first cycle of reform demonstrated enhanced relevance and legitimacy of the curriculum for students.

Conclusions

Theory and practice inform each other in a dialectical relationship which is integral to curriculum reform.

Take-home message

AT is a useful lens to explore contextual factors in a complex learning environment.

DBR illuminates the dialectical relationship between theory and practice.

ASSESSING RESILIENCE AND TOLERANCE OF AMBIGUITY IN MEDICAL STUDENTS: IMPLICATIONS FOR RURAL TRAINING PROGRAMS

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Introduction

A variety of programs at the medical education level are aimed at recruiting students with genuine potential and sustained interest in practicing in a rural location. This study compared personal attributes among rural and non-rural students to assess levels personal characteristics shown to be beneficial to coping in rural medical practice.¹⁻³

Methods

Medical students (N=808; mean age 24.9 years, SD=4.0) completed the Temperament and Character Inventory⁴ and measures of Ambiguity Tolerance⁵ and Resilience⁶. Demographics included rural background and interest in a rural career.

Results

Students with a background and/or interest in rural practice were significantly more likely to fit in a Temperament and Character Profile marked by low Harm Avoidance, high Persistence and high Self-directedness, compared to non-rural students ($\chi^2=12.96$, $df=1$, $p<.005$), and those with no interest in rural practice ($\chi^2=15.16$, $df=1$, $p=.004$). They were also higher in levels of Resilience ($F=4.11$, $df=1,798$, $p=.003$), and Ambiguity Tolerance ($F=2.59$, $df=1,798$, $p=.036$).

Conclusions

A defining feature of the successful rural training programs (e.g. longitudinal rural immersion) are those which devote significant effort in assessing students' personal attributes to ensure they are a good fit to the program. This data is congruent with a growing literature that shows individuals with a rural background, or a strong interest in rural life, have particular personal qualities beneficial to rural medical practice. Educators may find it useful to look at the personalities of students when assessing their suitability for rural immersion programs to increase the likelihood that their recruitment will lead to retention in the rural workforce.

Take-home message

Increasing evidence of a unique rural profile of personality characteristics should be considered when assessing the suitability of students for rural immersion programs to compliment counselling and advice on choosing a rural medical career.

Session 9G

INTRODUCTION OF PROGRESS TESTING TO ENHANCE APPLIED MEDICAL KNOWLEDGE ACQUISITION IN PHYSICIAN ASSOCIATE STUDENTS

Authors

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Presenter

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Introduction

Physician Associates (PA) are a new healthcare profession in the UK with less than 200 practising in the NHS. We are piloting progress testing as a means of assessing and enhancing their medical knowledge over the duration of the Postgraduate Diploma in Physician Associate Studies programme. This approach adopts a frequent-look-rapid-remediation approach, but requires suitable methods of standard setting and test development in order to be effective.

Methods and Conclusions

PA students sit MCQ progress tests throughout the academic year which allow knowledge growth to be tracked longitudinally towards a standard based on the knowledge required of a qualified PA. Accurately determining this end point and the expected level of knowledge at each test occasion presents a range of challenges, but ones we have overcome by combining historical data from medical students, PA knowledge growth, and data from practicing UK PAs.

The standards appear fair to students and provide outcomes in-line with those of similar courses. However, as students progress it will be important to obtain more data from qualified PAs to further refine our standard setting procedure and ensure our students are well equipped for their qualifying examinations. Furthermore, we have developed proposals for more robust methods to adopt as the cohort sizes grow and PA-specific historical data becomes available.

Take-Home Message

Standard setting a progress test for a new course should make use of as much available data as possible. Consideration of how the methods will account for varying cohort size and knowledge growth is also an important in future-proofing the assessment process.

EVALUATION AND THE CONSEQUENCES FOR THE STUDENT SELF-EVALUATION TOOL “HIP (“HOW I PERFORM”)” – DO PROGRESS TESTING RESULTS SUPPORT STUDENTS SELF-EVALUATION?

Authors

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Presenter

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Introduction

Main idea of the new developed tool for self-evaluation is to match transversal exam data with longitudinal progress test results. Thus it is possible to estimate own performance in different medical fields through time e.g. with respect to state exams which request global knowledge in all medical fields. Exams results allow only the view to knowledge in certain medical fields at a certain point in time. The access to all data enhances possibilities of self-evaluation.

Methods

Structured interviews and an online survey (Evasys) were applied for evaluation of the HIP-Tool. It was applied to improve the usability of the tool and to measure the user's needs. The structured interviews were made as a qualitative content analysis according to Mayring.

Results

The structured interviews showed good understanding of the tool among students. Especially the relationship between summative and formative results was mentioned positively. The subsequent survey showed that comprehension of the relation between summative and formative results is not given. The speciality and the purpose of formative progress testing results have to be explained better in the context of an environment of recurrent summative exams.

Conclusions

In an environment of a quantity of summative exams and only a few formative tests, the formative Progress Test in Aachen among students is not taken as significant as it should be. There is lot of explanation necessary to make accessible the benefits of progress testing. One key to acceptance is motivation.

Take-home message

Students inclusion is a good way to get better results in quality improvement

USING PROGRESS TEST FEEDBACK IMPROVES PERFORMANCE

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Abstract

Progress tests offer the potential for rich feedback to students and teachers. A progress test is a cross sectional test on the complete domain that is administered to students of all levels at regular intervals of time, hence offering a longitudinal and detailed view on knowledge development, allowing learners to explore their strengths and weaknesses. In 2009, a web-based dashboard, ProF, was introduced providing flexible and personalized access to this longitudinal feedback. The current study investigates whether using ProF can improve students' performance.

A longitudinal study among 6057 students of 4 medical schools was performed in which usage log data from ProF was collected during 19 months and combined with progress test result data. The average knowledge progression in the period was 9.94 percentage point. Multiple regression analysis showed a strong positive effect: with every session of ProF the performance on the progress test increased with 0.42 percentage point, up to 2.1 percentage point with 5 or more sessions.

The study does not unveil the cause of this effect, but we can rule out that only good students use the system. Follow-up study needs to be conducted to analyse the motivational aspects and to investigate the detailed behaviour within ProF.

Take-home message

- The ability to enter into a dialogue with their feedback data allows students to improve their progress test results.
- The use of feedback tools needs to be embedded in the educational environment.

THE IMPACT OF A REVISED MEDICAL CURRICULUM ON ACADEMIC MOTIVATION, BURNOUT, AND QUALITY OF LIFE AMONG MEDICAL STUDENTS

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Introduction

The purpose of this study was to determine the impact of a revised curriculum on medical student academic motivation, burnout, and quality of life.

Methods

This study involved the comparison of three medical school classes at The University of Auckland; the class of 2012 (n=437), the last class under the previous curriculum, and the class of 2013 and 2014 (n=680), the first and second classes under a revised curriculum, which included the implementation of progress testing. Participants completed the Academic Motivation Scale, subscales of the Motivated Strategies for Learning Questionnaire, the brief version of the WHO Quality of Life questionnaire, and the subscales of the Copenhagen Burnout Inventory.

Results

The response rate was 48%. No statistically significant differences were found between curriculum cohorts for mean scores of academic motivation, personal burnout, and quality of life. In comparison to Year 2 students, the MANCOVA for Year 4 students showed a significant main effect for the revised curriculum with respect to both psychological and environmental quality of life, and extrinsic motivation.

Conclusions

A revised medical curriculum had a differential effect on academic motivation and quality of life, particularly for those students in the latter years of medical school who are based in a clinical learning environment.

Take-home message

Medical schools should consider optimizing curriculum structure and assessment methods to reduce student distress and promote motivation for learning and quality of life.

Session 9H

BEHAVIOURAL ASSESSMENT IN MEDICAL SCHOOL ADMISSIONS: A LARGE-SCALE NATIONAL STUDY TO DETERMINE THE PREDICTIVE VALIDITY OF THE UKCAT FOR THEORY AND SKILLS PERFORMANCE ACROSS YEARS 1-5

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Background

The UK Clinical Aptitude Test (UKCAT) is used within candidate selection in most UK medical schools. We present findings on the predictive validity of UKCAT behavioural subscales for theory and skills performance in the medical school from a national study.

Method

Subscales for the *ITQ100*, *MEARS*, *IVQ33/ITQ50* and *SAI2* tests were considered. Univariate regression analyses were conducted to investigate the predictive validity of the UKCAT behavioural subscales on medical school performance (standardized *theory* and *skills* scores) across all 5 years of medical school.

Results

The most significant analyses from the 20 subscales of the 4 tests will be presented, based on 78740 observations. The subscales of *aloofness* and *narcissism* (*ITQ100*, *IVQ33/ITQ50*) showed significant negative relationships. The *confidence* subscale (*ITQ100*) demonstrated significant relationships but directionality was inconsistent across performance indicators. There were positive associations of MEAR's *self discipline* scores with year 1-3 performance indicators. *IVQ33/ITQ50*'s *empathy* scores positively associated with skills score for year 2-4.

Conclusions

A number of the scales show small but statistically significant associations with performance but these are of limited educational significance. We provide evidence to contribute to the debate surrounding the exclusion of behavioural assessment in medical school admissions. We will discuss the implications of non-cognitive testing and selection on medical school performance using illustrative examples from our large data set.

Take-home message

Relationships between behavioural subscales and performance show high degrees of variability, suggesting limited predictive validity and practical use in selection. In contrast, emerging evidence on the validity of Situational Judgment Tests is more promising.

THE ASSOCIATION OF UKCAT BEHAVIOURAL SCALES WITH UKCAT COGNITIVE TESTS: RESULTS FROM A LARGE-SCALE NATIONAL STUDY

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Background

The UK Clinical Aptitude Test (UKCAT) is used as a component of candidate selection in most UK medical schools and includes four cognitive scales (*abstract reasoning, quantitative reasoning, verbal reasoning, and decision analysis*). Previous research has reported that the UKCAT has predictive validity for performance in the first year of medical school, which may extend into later years. Here we present some preliminary findings on the predictive validity of the behavioural subscales of the UKCAT for performance in the four cognitive scales.

Method

Subscales scores for the *ITQ100*, *MEARS IVQ33/ITQ50* and *SAI2* tests were considered. Univariate regression analyses were conducted to investigate the predictive validity of the UKCAT behavioural subscales for the cognitive scale scores. (n= 540, 115)

Results

Behavioural sub-scales from each of the tests (*ITQ100, IVQ33/ITQ50, MEARS and SAI2*) demonstrated significant negative associations with each of the cognitive domains (*abstract reasoning, quantitative reasoning, verbal reasoning, and decision analysis*). The most significant results from analyses of the 20 subscales of the 4 behavioural tests will be presented.

Conclusions

The majority of the behavioural subscales show small but statistically significant associations with performance on the four cognitive domains of UKCAT. We will discuss the implications of behavioural testing and selection on UKCAT performance using illustrative examples from our large data set.

Take-home message

The significant negative relationships between behavioural subscales and UKCAT performance show high degrees of variability, suggesting divergent validity. We will discuss the practical use of behavioural scales in selection.

PREDICTING USMLE STEP 1, 2, AND 3 EXAM PERFORMANCE FROM PRE-ADMISSION DATA AND MEDICAL SCHOOL ACHIEVEMENT IN PRE-CLINICAL YEARS: A LONGITUDINAL STUDY

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Presenter

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Introduction

This study examines the predictive validity of pre-admission data and early medical school achievement for United States Medical Licensing Exams (USMLE) performance. There is some evidence that Medical College Admission Test (MCAT) scores, undergraduate GPA, and achievement in the first two years of medical school predict USMLE Step exam performance.

Methods

The total sample consisted of 264 medical students (154 men and 110 women) with a mean age of 23.8 years (upon admission) that had graduated with an MD from 2009 - 2012. The mean total MCAT score was 31.01 (SD = 2.87) and undergraduate GPA mean = 3.63 (SD=.274). Three separate backward multiple regression analyses were conducted. The independent variables consisted of MCAT subtest scores, science and non-science pre-medical school GPA, and course achievement in the first two years as well as Step 1 and 2 scores for the Step 3 analyses.

Results

The optimum regression model for Step 1 (Multiple R=0.778; R²=0.650) included MCAT Physical sciences, Biological sciences, and first and second year medical school achievement; Step 2 consisted of Step 1 scores and first and second year medical school achievement (Multiple R=0.768; R²=0.590); Step 3 included Step 1 and 2 scores, MCAT Biological sciences and achievement in the first two years of medical school (Multiple R=0.693; R²=0.465).

Conclusions

An impressive amount of the variance (65%, 59%, 47%) in Step 1, 2 and 3 scores respectively, was accounted for in each model. Step 1 and 2 scores are well predicted by MCAT subtest performance and early course achievement in medical school. Step 3 was best accounted for by the other step scores.

Take-home message

The MCAT and early achievement are worthwhile predictors of USMLE performance even separated by 3 to 6 years.

KNOWLEDGE ASSESSMENT OF BASIC AREAS TO ENTER THE GRADUATE MEDICAL AND PERFORMANCE IN MEDICAL RESIDENCY SELECTION

Author(s)

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Presenter

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Introduction:

In Brazil, the selection for admission of students applying to undergraduate programs is done by a set of tests that assess the general and specific knowledge in basic areas and the ability to communicate written and textual interpretation. Selection for residency (MR) has theoretical and practical tests in basic medical areas. This study analyzed the performance on entry into undergraduate and its relation to performance on admission to MR.

Methods:

A cohort study (2005-2008) of students admitted to medical school of Campinas State University. Multivariate analysis was performed, comparing both the overall performance at each selection, as well as each individual sector.

Results:

417 student data were included. It was observed that mathematics ($p = 0.002$), is positive and weakly related to the performance evaluation tests on multiple choice for the MR; wherein history ($p = 0.007$) and physical ($p = 0.036$) poorly influenced the written part. Physics was related positively and weakly with a practical assessment. Regarding the final score in the selection of MR, mathematics ($p = 0.000$) has a positive and weak influence.

Conclusions

Students perform better on assessments that include history, mathematics and physics seem to do better in selecting doctors to attend the MR.

Take-home message

The good performance on assessments that require logical reasoning seem to be better predictive performance in clinical issues explored in the selection for the MR.

THE EFFECT OF SELECTION BASED ON COGNITIVE ACHIEVEMENT IN CONTEXT OF MEDICAL SCHOOL

Author/s

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Introduction

Prior cognitive achievement is an important predictor of achievement in medical school. Furthermore, context can influence performance. The aim of our study was to determine whether cognition-based selection of applicants in real context 1. explains performance in medical school and 2. is preferable compared to cognition-based selection out of context.

Methods

In the time frame of the study (2010-2012), admission at Radboud University Medical School (Nijmegen, the Netherlands) was possible by selection, lottery or high secondary school GPA. The selection procedure consisted of an online course followed by an on-site exam, both resembling early medical school. We compared medical school performance of selected students to the groups admitted otherwise. Before 2010, selection was not applicable. We therefore considered selected students ('new admission') vs lottery admitted students ('traditional admission') as the most important contrast. We used regression analyses and adjusted for pre-university-GPA (pu-GPA) after initial analyses. 954 students were included.

Results

Selection-admitted students outperformed lottery-admitted students on most outcome measures, unadjusted as well as adjusted for pu-GPA ($p \leq 0.05$). They had higher grades in their first year, exceed the compulsory minimum of 42 and receive the maximum of 60 course credits more often, both unadjusted and adjusted for pu-GPA.

Conclusions

We conclude that our in-context selection procedure explains performance in medical school and adds to prior out-of-context cognitive achievement (pu-GPA).

Take-home message

We recommend this *in context* selection procedure as it explains performance, is efficient for large numbers of candidates, is not labour-intensive and, therefore, saves time and money.

Session 9I

USE OF GENERALIZABILITY THEORY IN DESIGNING AND ANALYZING PERFORMANCE-BASED ASSESSMENTS

Author(s):

David B Swanson, PhD

Presenter(s):

David B Swanson, PhD

Institution(s), Department(s), Country/Countries

American Board of Medical Specialties, Chicago, USA
University of Melbourne Medical School, Melbourne, Australia

Background

Performance-based assessment methods (eg, OSCEs, oral exams, workplace-based assessments) are commonly used in the health professions. Because these methods involve multiple sources of measurement error (eg, examiner stringency, case/task difficulty, content specificity), classical reliability theory does not furnish the conceptual and statistical tools needed to properly investigate their psychometric characteristics. Generalizability theory (g-theory) does provide the necessary tools for estimation of the reproducibility (reliability, precision) of scores and for evaluating alternate approaches to test design and use of scarce testing resources.

Intended outcomes

At the conclusion of this workshop, participants will be able to

1. Describe the advantages of g-theory over classical test theory
2. View assessment situations from a g-theory perspective
3. Interpret indices of reproducibility that g-theory provides
4. Describe statistical procedures/software for conducting generalizability analyses
5. Decide if they want to learn more about g-theory

Structure

The workshop uses an interactive, seminar-style format to provide an introduction to g-theory, review commonly used performance-based assessment situations from a g-theory perspective, describe statistical procedures and software for conducting generalizability analysis, and identify additional readings for learning more about g-theory.

Who should attend

Medical faculty and others involved in designing and implementing assessment procedures in the health professions should attend. The workshop does not assume any familiarity with generalizability theory; however, for maximum benefit, participants should be comfortable with analysis of variance for multifactor designs.

Level of workshop (introductory/intermediate/advanced):

Intermediate

Session 9J

STRATEGIES AND TOOLS TO PREPARE SIMULATED/ STANDARDIZED PATIENTS FOR ROLE PORTRAYAL IN HIGH STAKES ASSESSMENTS

Author(s)

Cathy Smith¹; Debra Nestel¹; Carol O'Byrne¹

Presenter(s)

Cathy Smith¹; Debra Nestel²; Carol O'Byrne¹

Institution(s), Department(s), Country/Countries

¹Pharmacy Examining Board of Canada, Canada; ²Monash University School of Rural Health, HealthPEER, Faculty of Medicine, Nursing and Health Sciences, Australia

Background

Simulated/standardized patients (SPs) are the human exam question in high stakes assessments. SPs need to present the question, or patient portrayal, in a standardized manner to provide the opportunity for reliable assessment inferences, ensuring the defensibility of the assessment. In this workshop, we demonstrate scholarly and practical approaches to preparing SPs for role portrayal in high stakes assessments. We present a systematic approach to ensuring assessment readiness of SPs, based on the concept of deliberate practice. Participants will work with tools that support standardization including a training protocol, a scenario training video, and an assessment readiness evaluation form. We use Objective Structured Clinical Examinations (OSCEs) as the assessment context.

Intended outcomes

By the end of this workshop, participants should be able to:

1. Identify theories and principles relevant to standardized SP role portrayal for high stakes OSCE purposes
2. Apply specific training strategies and tools to enhance standardization of SP role portrayal
3. Reflect on applications in their own practice

Structure

We provide a structured yet interactive flexible format in which to meet specific learning objectives, featuring discussions, a training simulation using a 'fish bowl' approach and stimuli for individual reflection.

Who should attend?

Clinicians and educators who train SPs for high stakes examinations

Level of workshop (introductory/intermediate/advanced)

Introductory

Session 9K

INTERPRETING MILESTONES DATA: ENABLING RESIDENCY PROGRAMS TO IMPLEMENT CHANGE

Author(s):

Eric Holmboe, MD, Stanley J. Hamstra, Ph.D.

Presenter(s):

Eric Holmboe, MD, Stanley J. Hamstra, Ph.D.

Institution(s), Department(s), Country/Countries:

Accreditation Council for Graduate Medical Education, Chicago, Illinois, USA

Background

An important component of competency-based medical education are Milestones, which help to define the developmental trajectories of learners in narrative terms. The ACGME has shifted the emphasis of accreditation from regulation to one of collaboration with training programs, using Milestones data as evidence for achievement. To date, we have collected Milestones data from over 80 specialties and sub-specialties, representing over 117,000 residents from July 2013 to June 2015. Based on our early experience in analysing this large dataset, we have developed guidelines and strategies to assist key stakeholders in using these data to effect meaningful change. Key processes include cross-checks for data validity, strategies for analysis and interpretation, and communication with stakeholders. The ultimate goal is to work with program directors and other key stakeholders as partners in collecting, managing and reporting back data to enhance the quality of their programs.

Intended outcomes

1. Discuss management and analysis strategies for a large national milestones database
2. Initiate approaches to effect change in residency programs based on milestones achievement data
3. Discuss ideas for change management within residency programs.
4. Share early lessons from the milestones initiative

Structure

Slides will be used to present key concepts, supplemented by discussion of case studies. Small group discussions and break-out sessions will be used to further enhance deeper understanding of key concepts and how to apply them.

Who should attend

Educational Program Directors of residency/house officer training programs; Officers/leaders of clinical specialty associations

Level of workshop (introductory/intermediate/advanced)

Target Audience: Intermediate

Session 9L

INTERNATIONAL CONSENSUS WORKSHOP ON THE ASSESSMENT OF INTERPROFESSIONAL LEARNING

Author/s

Rogers G, Thistlethwaite J, Anderson L, Moran M, Abrandt-Dahlgren M, Grymonpre R, Samarasekera D, Patil N

Presenter/s

Gary D. Rogers, Jill Thistlethwaite, Liz Anderson, Monica Moran, Madeleine Abrandt-Dahlgren, Ruby Grymonpre, Dujeepa Samarasekera, Niv Patil,

Institution(s), Department(s), Country/Countries

¹ Griffith University, ⁴ Central Queensland University, ⁵ Linköping University, ⁶ University of Manitoba, ⁷ Centre For Medical Education (CenMED), ⁸ The University Of Hong Kong

Abstract

Article 3 of the *Sydney Interprofessional Declaration* (2010) states that 'health worker education and training prior to practice shall contain significant core elements ... of interprofessional education ... [that] ... will be formally assessed' and there is no doubt that the effective assessment of interprofessional learning is critically important in ensuring that health professional graduates have the capabilities they will need for high quality collaborative practice. However, despite a great deal of activity in six years since the *Declaration* was made, there remains wide diversity of opinion and a dearth of definitive evidence about which interprofessional learning outcomes should be assessed or how that assessment should be undertaken. Conference delegates are invited to join an international panel for discussions that will contribute to the formation of a global consensus statement on this important topic.

Session 9M

“WHEN 1 + 1 = 3” FROM AGGREGATION TO INTEGRATION: COMBINING QUANTITATIVE AND QUALITATIVE ASSESSMENT DATA

Author/s

Wendy Hu¹, Roslyn Cameron²

Presenters

Wendy Hu¹, Roslyn Cameron²

Institution(s), Department(s), Country/Countries

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²Curtin Business School, Curtin University, Australia

Background

Increasingly, there are calls to include qualitative as well as quantitative data in assessment of performance, and build datapoints into a longitudinal profile of progression throughout a program of study. Too often is it assumed that simply adding quantitative data across domains equals competence. What is needed is meaningful integration of qualitative and quantitative measures so that “the sum is greater than its parts”, particularly for high stakes progression decisions, when sound judgements about performance are required.

The programmatic approach to assessment is intuitively attractive, but demands new strategies for data collection, analysis and management. This interactive workshop introduces data integration techniques from mixed methods research (MMR) and examines their potential as a practical and robust approach to assessment.

Intended outcomes

Participants will:

- Explore and apply MMR data integration techniques
- Consider their relevance to (programmatic) assessment

Structure

Brief presentation outlining:

- Rationale for combining qualitative and quantitative assessment data
- MMR methodology, focusing on data integration techniques

Working in small groups, participants will then apply these techniques to samples of actual assessment data. Debrief and discussion of issues raised, practical strategies to address them, and implications of using MMR methodology.

Who should attend

Educators, researchers and managers who develop, conduct and improve assessment programs.

Level of workshop

Introductory/Intermediate

Session 9N

USING A LOGIC MODEL TO EVALUATE EDUCATIONAL INNOVATIONS

Author:

Elaine Van Melle

Presenter:

Elaine Van Melle

Institution(s), Department(s), Country/Countries

Royal College of Physicians and Surgeons of Canada, Office of Specialty Education, Canada.

Background

A logic model illustrates how a program is intended to work in order to solve a particular problem. The core components include: resources, activities, outputs and outcomes. When evaluating educational innovations however, additional features are of interest such as ensuring that the work is scholarly and taking into account variability of implementation across contexts. This purpose of this workshop is to describe a logic model developed specifically for the evaluation of educational innovations and to provide guidance in applying the logic model to conduct a program evaluation.

Intended outcomes

By the end of this workshop participants will be able to:

1. Describe the purpose and basic components of a logic model.
2. Describe a logic model developed specifically for the purpose of evaluating educational innovations.
3. Apply this logic model to the evaluation of an educational innovation of their choice.

Structure

This will be a highly participatory workshop. The workshop will begin with a short introduction to the logic model. Participants will be provided with a blank template and be guided in the completion of the logic model in relation to an educational innovation of their choice. The workshop will conclude with an overview of how the logic model relates to the cycle of educational innovation and can be used to determine questions to guide a program evaluation.

Who should attend

This workshop will be of interest to anyone implementing something new and who is interested in evaluating their initiative.

Level of workshop:

Introductory

Session 90

THE AUSTRALASIAN COLLEGE FOR EMERGENCY MEDICINE'S CENTRAL AND REGIONAL PANELS: CHALLENGES FACED AND LESSONS LEARNT IN THE IMPLEMENTATION OF A BI-NATIONAL WORKPLACE-BASED ASSESSMENT PROGRESSION SYSTEM

Author/s

Ruth Hew^{1,4}, Marian Lee^{2,4}, Victor Lee^{3,4}, Lucy Donaldson⁴, Claire Spooner⁴

Presenter/s

Ruth Hew^{1,4}, Marian Lee^{2,4}, Victor Lee^{3,4}, Lucy Donaldson⁴, Claire Spooner⁴

Institution(s), Department(s), Country/Countries

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Austin Hospital, Emergency Department, Melbourne, Australia³

Australasian College for Emergency Medicine, Australia⁴

Background:

In 2015 the Australasian College for Emergency Medicine (ACEM) implemented a new curriculum for its training programme. This included significant changes to the assessment process, both term assessments and examinations. Term assessments that till 2014 had been solely based on term reports submitted by training site supervisors were expanded to include workplace based assessments (WBAs). In addition, progression judgements were deliberately distanced from site assessors and placed under the purview of regional progression panels. The implementation of a regional progression system based on WBAs proved challenging, prompting innovative and practical solutions.

Intended outcomes:

Participants will be able to identify the important elements of implementing a WBA progression system, understand how these elements may apply in their local contexts and identify ways in which they may be able to overcome the challenges and barriers encountered during implementation.

Structure:

This workshop is intended to be highly interactive. Facilitators will provide a brief overview of some of the issues encountered during implementation including agreement on an assessment standard and rater training, inter-rater and inter-panel variance and management, education and communication with site assessors and appeal handling. Participants will be encouraged after each brief introduction to share experiences and explore solutions that will work when introducing a WBA based progression system in their own contexts.

Who should attend:

Educators, course organisers, faculty, clinicians; anyone with an interest in developing or implementing a progression system - participants should have a basic understanding of WBA tools and concepts.

Level of workshop (introductory/intermediate/advanced):

Intermediate

Session 9P

"OUR MARK SHEET IS BETTER THAN YOURS..." :TO WHAT EXTENT DO DIFFERENT OSCE MARK SHEETS AFFECT THE OUTCOME FOR THE CANDIDATE?

Author(s)

Peta-Ann Teague¹¹, David Garne¹², Richard Turner¹³, Kathy Boursicot¹⁴, Bunmi Malau-Aduli¹, Karen D'Souza¹⁵, Nicky Hudson¹⁶, Clare Heal¹ on behalf of the Australian Collaboration for Assessment in Clinical Medicine (ACCLAiM)

Presenter(s)

Peta-Ann Teague, David Garne, Richard Turner, Kathy Boursicot.

Institution(s), Department(s), Country/Countries:

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Background

The majority of health professional courses use a form of Objective Structured Clinical Exam (OSCE) to assess students' clinical competencies. There is wide variation in the mark sheets used to assess the candidates undertaking OSCEs. The ACCLAiM consortium has brought together 17 medical schools to collaboratively develop and use shared OSCEs in summative exams.

It has been our experience that mark sheets are a lightning rod for difficult conversations between medical schools. Local mark sheets have a narrative that is important to an individual medical school.

Substantial literature exists on the use of checklists and global rating scores in OSCE assessments. Nevertheless, differences in the structure and weighting of mark-sheet elements continue and institutions remain committed to their particular mark-sheets.

This highly interactive workshop poses the following question: Do such differences have a significant impact on scores of candidate performance or pass/fail decisions made by assessors?

Intended outcomes

Participants will:

- Discuss evidence pertaining to differently structured mark-sheets;
- Explore the impact these have on assessment of candidate and assessor performance;

- Reach consensus on 'best practice' OSCE mark-sheet structure.

Structure

Participants are invited to bring examples of OSCE mark-sheets from their institutions to illustrate current practice.

A brief literature summary and discussion will be followed by viewing, marking and discussing 2 different videoed OSCE stations using 3 different mark sheets. Consensus will then be sought on 'best practice' mark-sheets.

Who should attend

This workshop is suitable for health professional colleagues involved in designing and implementing OSCE assessments.

Level of workshop

All

Session 9Q

QUALITY ASSURED e-OSCEs USING AN ONLINE MARKING TOOL, INSTANT PSYCHOMETRIC ANALYSIS AND BORDERLINE REGRESSION ANALYSIS

Author(s)

Thomas Kropmans; Winny Setyonugroho

Presenter(s)

Thomas Kropmans

Institution(s), Department(s), Country/Countries

College of Medicine, Nursing & Health Sciences; School of Medicine. National University of Ireland Galway; Ireland

Background:

Quality Assurance (QA) analysis of traditional paper based OSCE is challenging if not very labour intense. The Online Marking Tool (OMIS) developed at our home base provides instant insight in classical psychometric analysis of student and examiners performance. Apart from raw results, it provides Cronbach's Alpha and Borderline Regression Analysis (BRA) for QA and retrospective standard setting respectively.

Intended outcomes:

You will be able to mark online pre-recorded OSCE stations using this Online Marking Tool (OMIS). Furthermore, we will discuss the psychometric details (Cronbach's Alpha, Item variability, inter-examiners variability) of various stations that are being assessed during this workshop. After this workshop you will have gained experience in using an Online Marking Tool and see the benefits over traditional paper based marking. All participants will be able to access our system and practice e-marking, QA and BRA for 6 months in their own institution after the workshop.

Structure:

During the first 10 minutes, you will be introduced to your fellow workshop participants and we share experiences with e-assessment. Different scenarios (pre-recorded OSCE stations) will be marked electronically (**bring your tablet PC (Android), iPad or laptop**). You will be able to discuss the quality of items of OSCE forms being used during this workshop and how you could improve your own OSCE setup by introducing e-marking and QA analysis.

Who should attend:

educationalists, clinical skills coordinators i.e. examiners, decision makers

Level of workshop

introductory

Session 9R

“A STRUCTURED GUIDE TO CURRICULAR ACHIEVEMENT”. A LEVEL BASED LEARNING MODEL FOR RESIDENTS TO FACILITATE INDIVIDUAL ASSESSMENT, PROGRESSION AND DIRECTLY LINKED TO CURRICULAR OBJECTIVES

Author/s

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Anna Freyschuss, MD, PhD, Ass prof, Department of Cardiology, Inst for medicine Huddinge, Karolinska Institutet

Presenter

Anna Freyschuss

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Department of Cardiology, Inst for medicine Huddinge, Karolinska Institutet

Aims

Development of a new structured level based learning and assessment model for medical residents, an e-learning tool to facilitate individual progression and attainment of curricular objectives

Introduction

Training for each medical discipline is outcome based, however residents for varying specialties temporarily train in parallel in departments, posing a problem to assure achievement of the specific objectives for each speciality. With this model trainees are forced to be up to date with the learning objectives of their speciality

Methods

Main clinical areas in cardiology were identified and cases constructed starting from three basic levels; level 1 (interns, residents); level 2 (residents in specialties other than cardiology) and level 3 (residents in cardiology).

An e-learning platform links a clinical scenario from each of the identified areas to questions constructed with typical clinical problems. The level of difficulty and demand on clinical reasoning skills may be increased infinitely. At the end of each webquiz the answers are indicative to where knowledge may be sought, give immediate feed back, link to the respective curricular objective and provides reflective self assessment.

9 students from the interventional group and 9 from a control group (3 from each level) are assessed for clinical reasoning by peers from more competent level in a group seminar at the end of each period using the local scoring system.

Results

Students using the structured level based learning and assessment model for medical speciality training achieve better in the peer assessment seminars and report higher scores on self assessed parameters.

Conclusions

This model provides a link between clinical problems to evidence based resources, contributing to meaningful learning and achievement of objectives directly related to the curriculum.

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TAKE HOME MESSAGE

"The Structured Guide to Curricular Achievement" is an approach that requires students to take control over their unique learning during clinical placements which may improve learning outcomes as well as linking to evidence based knowledge.

The self-assessment of how well residents met their learning objectives may be used in reflective sessions with peers and supervisors.

EFFECTIVENESS OF INTERNAL MEDICINE RESIDENTS' IN TRAINING ASSESSMENT (IM- RITA) IN A SINGAPORE INSTITUTION

Author(s)

Santhosh Kumar Seetharaman ^{1,2}, Satya Pavan Kumar Gollamudi^{1,2}

Presenter

Santhosh Kumar Seetharaman

Institution(s), Department(s), Country/Countries

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Yong Loo Lin School of Medicine , National University Singapore, Singapore

Introduction

Assessment of clinical progression of second year Internal Medicine Residents has been in place since 2011 at National University Hospital, Singapore . Every year nearly 30 second year residents participate in this exercise , where they rotate through various stations with clinical scenarios and journal article critique. The examiners are given structured evaluation sheet with focus on immediate verbal feedback. We decided to get their feedback during this year's exercise in May 2015 .

Methods

Residents and Examiners completed anonymous feedback forms about their perceptions of the effectiveness of this exercise and returned them to the co-ordinators .

Results

We received feedback from a total of 28 residents and 17 examiners. 88 % of residents and 100 % of examiners felt that this exercise will help in realisation of gaps in knowledge . 82 % of residents and examiners think that it provided further learning opportunity . 88 % of examiners and residents believe that the feedback was helpful. 70% of examiners and 82 % of residents felt it should be continued. 71% of residents didn't feel it stressful. Both examiners and residents felt targetted case scenarios i.e. Simulations on cardiac arrest/ crisis management and breaking bad news will be very helpful.

Conclusions

INTERNAL MEDICINE RESIDENTS' IN TRAINING ASSESSMENT (IM- RITA) helps in identifying knowledge gaps and creating learning opportunity under less stressful circumstances through appropriate immediate feedback

Take-home message

Residents' in training assessment provides the stimulus to identify learning needs and career progression.

QUALITY ASSURANCE OF HOSPITAL SPECIALTY TRAINING FOR GENERAL PRACTICE VTS TRAINEES

Author(s)

Dr Will Bowditch, Dr Andrew Longley, Dr Alistair Watkins

Presenter :

Dr Will Bowditch

Institution(s), Department(s), Country/Countries

Dorset GPVTS, School of Health and Social Care, Bournemouth University, Bournemouth, UK.

Introduction:

We developed a systematic approach for the feedback from trainees and clinical supervisors in the hospital setting with identification of improvement and sharing of best practice between departments to improve and assure the quality of GPVTS training.

Methods:

We used an on line questionnaire for the hospital teachers and a focus group for the GP trainees to inform a structured interview with each department's teaching lead. The conclusions, interventions and best practice were shared with the education team across the hospital.

Results:

We demonstrated a variety of quality in the organisation and provision of GP VTS teaching in the hospital setting in 3 District General Hospitals in Dorset. The feedback meetings, conclusions and agreed interventions provided for better communication and learning for the hospital teachers. We identified the recurring themes of conflict between education and service commitment, required improvement in protected time for organised teaching and a need to improve the understanding of the teachers of the GP Curriculum and competencies with improving their assessment skills.

Conclusions :

A structured approach to feedback of the quality of teaching in the hospital setting can improve quality and assure best practice for GP training.

Take-home message:

Using a structured feedback approach we demonstrated the enthusiasm of hospital teachers to understand the learning needs, competencies and assessments required for GP trainees. This work has improved communication between GP education team and hospital consultants and led to sharing of best practice between departments which will improve the quality of training.

CREW RESOURCE MANAGEMENT: FROM THEORY TO PRACTICE IN A PATIENT SAFETY CURRICULUM FOR RESIDENTS

Author(s)

Douglas E. Paull MD MS, Linda Williams BN, MSI, Robin R. Hemphill MD MPH

Presenter

Robin R. Hemphill MD MPH,

Institution(s), Department(s), Country/Countries

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Introduction

Crew Resource Management (CRM) teamwork and communication tools and training are associated with improvements in patient outcomes, staff morale, and the culture of patient safety. Learning outcomes in graduate medical education curricula based on CRM tools are less well studied. This study assessed whether the resident learners knowledge, skills, and attitudes towards teamwork, communication, and patient safety behaviors improved utilizing a CRM-based, simulation-utilized, curriculum.

Methods

Study took place in a large US University affiliated healthcare organization with residents from various specialties. CRM curriculum was conducted followed by immersion in two simulation scenarios and assessment of performance was done using both surveys and observation tools.

Results

Post training, participants felt that they were likely to use CRM tools in patient care and were confident in their ability to perform a time out as well as speaking up when needed. Using an observational checklist to assess success in each scenario, individuals correctly identified an incorrect medical image in 96% of cases, were able to deal with distraction in 76% of observations, and discussed all elements of a proper time-out in 84% of cases.

Conclusions

Crew Resource Management (CRM) tools and techniques can be incorporated into graduate medical education curricula. A simulation-based curricula founded on CRM behaviors was associated with high-levels of learner confidence and performance using specific tools for assertiveness and situational awareness

Take-home message

Success of team training can be assessed using both surveys and observational checklists

ARE FACULTY GOOD ROLE MODELS? RESIDENT EVALUATION OF THE LEARNING ENVIRONMENT AND PROFESSIONALISM BEHAVIORS

Author(s):

Anna Byszewski (1,2) , Heather Lochnan(1,2), Timothy Wood (1, 3), Donna Johnston(1,4)

Presenter;

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3. Department of Innovation in Medical Education, University of Ottawa, Canada
4. Department of Pediatrics, Children's Hospital of Eastern Ontario, Ottawa, Ontario, Canada

Introduction

Given the importance of role modelling in the clinical milieu environment, the learning environment (LE) is vital in developing learner professional identity. In order to ensure best practices, training programs can benefit from periodic monitoring of the LE with an instrument that is brief and can be applied iteratively. This project demonstrates the feasibility and applicability of the Learning Environment for Professionalism Survey (LEP) scale in the postgraduate clinical learning environment. The challenges of implementing the pilot project across postgraduate programs will be discussed as well as the preliminary results.

Methods

The LEP has been validated in the undergraduate setting (C. Thrush, Medical Teacher 2011). LEP is a brief survey that is balanced to assess both professional and unprofessional behaviours on clinical rotations. The 11 items are rated on a 4 point scale.

Results

Overall resident response rate was 87%, with over 600 surveys completed. All items rated positively, but *displays of altruism* tended to have less favorable ratings as did ratings for witnessing *derogatory comments*.

Conclusions

The LEP is a brief, anonymous and balanced LE tool that can be implemented in the postgraduate setting, if possible with institutional approval, and results shared to address shortcomings or celebrate successes occurring in LE.

Take-home message

Learning environment assessment is important and feasible. Based on the information from using the LEP, programs can develop strategies to maximize the learning potential of the clinical milieu (eg. via faculty development, learning modules) as well as addressing systems issues.

A LONGITUDINAL COMMUNITY PLACEMENT IN UNDER-SERVED, DEPRIVED UK AREAS

Author(s):

Paul Crampton, John McLachlan, Jan Illing

Presenter:

Paul Crampton

Institution(s), Department(s), Country/Countries:

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Introduction

Medical students have limited exposure to settings that provide care for deprived communities and the ageing population with increasing numbers of co-morbidities. This research investigates how students learn during the Difficult and Deprived Areas Programme (DDAP), a novel pilot programme which places fourth year students in general practice and community settings in under-served, post-industrial, deprived UK areas for 14 weeks.

Methods

A triangulated qualitative approach using semi-structured interviews was conducted with: DDAP students before (n=9), during and end of placement (n=14) over three cohorts; GP supervisors (n=13), and patients (n=12). Comparison interviews with peers taking alternative placements to the DDAP (n=16), and students taking an established Australian rural programme (n=6) were also completed.

Results

The DDAP enhanced student knowledge about psychosocial determinants of health, developed compassion, and reinforced clinical skills. Learning was facilitated through independent time with patients, which promoted deeper learning about the role of the doctor. The integrated and immersive DDAP structure gave students an understanding of complex deprivation issues. Comparative placement experiences highlighted the importance of having a nurturing supportive supervisor and having an active role delivering healthcare within a community team.

Conclusions

There is increasing evidence for clinical placements in rural and remote communities but little in relation to other under-served, deprived areas such as post-industrial UK areas. This research explored medical student learning during an innovative placement in such settings.

Take-home message

This research provides critical insights into medical student learning during longitudinal community placements, and explores why such placements may help to create better doctors for the future.

TOWARD AN UNDERSTANDING OF THE ROLE OF EMOTION IN THE DIAGNOSTIC DECISION-MAKING OF ANAESTHETISTS

Author(s):

Monique Crane, Suyin Tan, Kirsty Forrest, Sue Brouwers, Mark Wiggins, Thomas Loveday, and Chris Munday.

Presenter:

Monique Crane

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- (2) The faculty of Medicine and Health Sciences - Macquarie University (Sydney, Australia)
- (3) Department of Anaesthesia and Pain Management - Nepean Hospital (Sydney, Australia)

Introduction:

Positive affect has been found to promote flexibility in thinking, which in turn has been shown to facilitate problem-solving and innovation, efficiency and thoroughness in decision-making, and to enable improved thinking, especially where tasks are complex.

Methods:

Two studies examined the impact of emotional states on diagnostic accuracy among practicing anaesthetists. In Study 1, participants were asked to do a number of on-line tasks that simulate the diagnostic cues used by anaesthetists to monitor a patient in surgery. Participant mood was simultaneously assessed using validated measures of emotion. Study 2 used a fully equipped simulated surgical environment to examine decision making in a high-fidelity context where the experience of different mood states was manipulated prior to participating in the simulation.

Results:

Data from these studies are currently being collected. There are some anticipated results based on pilot data. First, we anticipate that positive emotion will be broadly associated with several performance indicators (e.g., faster recognition of diagnostic cues, diagnostic accuracy and faster diagnosis, and appropriate intervention implementation) in a simulated environment. Second, we predict that there will be a curvilinear relationship between negative arousal emotions and the same performance indicators where moderate levels of anxiety will allow the best performance.

Conclusions:

Emotional states have important flow-on effects to diagnostic decision-making.

Take-home message:

Emotional processes have an effect on diagnostic decision-making. Those involved in medical education may need to consider the role of emotional resilience in future practitioners. The training and assessment of emotional management may be a necessary component of medical education.

SIMULATION-BASED ASSESSMENT WITHIN THE SCOPE OF A HIGHER SPECIALIST REGISTRAR TRAINING PROGRAMME

Author(s):

Alice Yi-Chien Tsai, Stella Mavroveli

Presenter:

Alice Yi-Chien Tsai

Institution(s), Department(s), Country/Countries:

Imperial College London, Department of Surgery and Cancer, United Kingdom

Introduction

With the European Working Time Directive and reduction of training hours, simulation-based training has shown to be beneficial for technical skills acquisition and development of surgical competency. Evidence on the validity of simulation-based assessment is scarce despite the increasing popularity of simulation. Within the scope of an integrated, structured simulation programme for higher specialist registrars, we examined the reliability and validity of multiple competency measures on a small bowel anastomosis (SBA) task.

Methods

Participants comprised 50 specialist registrars, specialist trainee level 3 and 4 (ST3 and ST4). Porcine tissue (from animals killed for human consumption) was used for the SBA task. Trainee performance was assessed via 1) direct consultant observation using structured criteria, 2) indirect consultant video observation, and 3) objective suture spacing score using a deviation score.

Results

Results are currently being processed.

Conclusions

Surgical competency assessment for simulation-based performance using a single competency proxy can be inconsistent and inconclusive. A more robust, multi-method assessment methodology should be considered in order to reduce bias.

PREDICTORS OF SUCCESSFUL EMPLOYMENT OF INTERNATIONAL MEDICAL STUDENTS: LESSONS FROM THE FIRST FOUR YEARS OF GRADUATES OF A NEW IRISH MEDICAL SCHOOL

Author/s

Shannon W, Searson E, Lynch J, Nolan S, Finucane P, Dunne C, McGrath D, Larvin M

Presenter:

Larvin M

Institution(s), Department(s), Country/Countries:

Graduate Entry Medical School, University of Limerick, Ireland

Introduction:

The University of Limerick (UL) successfully bid to build Ireland's first new medical school in over 100 years, opening its Graduate Entry Medical School in 2007. Shortfalls in government assistance left 45 places for international students within an annual intake of 140, recruited from North America (NA) through the 'Atlantic Bridge' program. International medical graduates (IMGs) face employment difficulty with concerns about the quality of courses not accredited in NA. We aimed to ensure first-time matching greater than the 50% average.

Methods:

Weekly USMLE preparation evening classes were supported by 'Kaplan' materials. A Director of International Liaison visited NA institutions, gaining agreements for elective clerkships and residency applications and subsequently reviewing graduate performance. US ERAS, Canadian CaRMS and Irish HSE-NRS applications were supported by accurate, tailored references with guidance on program choice, and latterly, advice from successful alumni.

Results:

NA graduates comprised: 2012=11; 2013=33; 2014=31; 2015=28 with successful NA matching: 91%; 82%; 81%; 82%. Many NA unmatched graduates gained Irish internships with total initial employment: 91%; 94%; 87%; 89%. Significant predictors included: NA electives; USMLE scores; academic rankings; acceptance of advice on specialty/location. Changes were made to curriculum coverage and structure from evaluation by NA students, graduates and program directors.

Conclusions:

IMGs of NA origin face increasing competition for home country employment, but specific measures can secure greater than average success and course quality improvements.

Take-home message:

Medical schools accepting non-national students have a responsibility to identify means of maximising initial employment success, ideally in their country of origin.

DO ASSESSMENTS DURING AUSTRALIAN GENERAL PRACTICE TRAINING HELP IDENTIFY GP REGISTRARS WHO WILL REQUIRE FUTURE EDUCATIONAL ASSISTANCE- THE HALLMARKS OF EDUCATION AND LEARNING PROGRESS (HELP) PROJECT

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Presenter

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Introduction

Establishing the effectiveness and efficiency of individual education assessments as predictors of training progress will inform targeted early educational intervention when assessing GP Registrars' progress through Australian General Practice Training.

Methods

This project used mixed methodology, establishing quantitative and qualitative associations of GP Registrars' demographic factors, and individual performance in education assessments during GP Registrar training, with subsequent assistance and intervention processes.

Mixed methods included:

- i) a retrospective cohort study employing multivariable regression analysis with outcome factor 'required assistance or intervention',
- ii) de-identified case studies of GP Registrars identified as requiring training assistance and who were subsequently withdrawn, or withdrew, from training,
- iii) semi-structured interviews with GP Registrars who have been provided with additional training assistance, and
- iv) an online survey of GP Registrars, GP Supervisors, Practice Managers and Medical Education staff.

Results

Preliminary results indicate that performance on External Clinical Teaching (ECT) Visits, Multi-source feedback, and pre-commencement consultation skills, as well as taking leave in the first 6 months of training, may predict the need for additional training assistance.

Conclusions

External Clinical Teaching Visits have actual and perceived value as predictors of future training assistance requirements and are well accepted. There may be opportunity to consider a more selective approach to assessment in the Australian General Practice Training program in order to identify registrars with future training assistance needs.

Take-home message

Strategic emphasis on certain assessment tools that predict GP registrars likely to require additional training needs may conserve training resources and provide timely career guidance.

Session 9S

IMPACT OF HOSPITAL ACCREDITATION ON ORGANIZATIONAL CULTURE AND IN-PATIENT SATISFACTION

Authors:

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Presenter:

Wei Song

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Introduction

The Australian Council on Healthcare Standards (ACHS) is commissioned by the Hospital Authority (HA) of the Hong Kong Special Administrative Region (HKSAR) to pilot test hospital accreditation at selected public hospitals in Hong Kong. This study sets out to explore ways in which hospital accreditation influenced quality of care by looking at organizational culture profiles and in-patient satisfaction.

Methods

Full-time clinical staffs of Queen Mary Hospital (QMH) were surveyed nine months before the implementation of accreditation, and followed up twice at one-year interval, to profile organizational culture using the Quality Improvement Implementation Survey II (QIIS II). Four culture dimensions (group, developmental, rational and hierarchical) were computed into culture strength indicators and tested for changes over time. Adult in-patients (age 18-80) hospitalized at QMH were invited to participate in a post discharge survey on patient satisfaction using the Picker Patient Experience (PPE15) survey. Simple additive scoring was used to compute the PPE-15 domain and summary scores. Linear models were used to assess influence of culture change on satisfaction scores.

Results

Culture strength scores improved across the three time-points despite hierarchical culture remained persistent and higher than that reported by similar studies overseas. With no significant differences in patient demographic characteristics amongst three cross-sections, PPE-15 scores continued to go down, suggesting better patient experience in most domains with the exception of 'continuity' ('not told about medication side effects'). Scores by last measurements were lower than 2005 Thematic Household Survey for all HA clusters.

Conclusions

Organizational culture and patient satisfaction improved after implementation of accreditation.

CAN AN EDUCATION QUALITY DASHBOARD DRIVE QUALITY? EXPERIENCE FROM A UK TEACHING HOSPITAL

Author(s)

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Presenter

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Introduction

Increasingly organizations need to demonstrate compliance with education quality standards. Quality dashboards are established tools for monitoring clinical quality but extrapolation in to education and training has been limited. We describe development, implementation and experience of an Educational Quality dashboard to monitor quality and drive performance in a UK teaching hospital.

Methods

UHL is a large UK teaching hospital, responsible for the delivery of education and training to 700 trainees and 200 medical students. Following a literature search and discussion with stakeholders we selected metrics for inclusion in the EQD. The metrics were completed by Medical Education Quality Leads (EQL), data triangulated with centrally collated data and trainee feedback.

Results

Completion of initial 28 metrics was challenging and was reduced to 17 metrics. Completion improved from 7%-57% to 87% after 6 months. Poorly completed indicators included- trainees' mandatory training compliance (21%) and identification of education funding streams (0%). The breadth of data required to complete the dashboard led to collaboration between EQLs, educators and managers. The dashboard highlighted education issues to the Executive Team and externally informed the quality visiting processes. Education and training issues became integrated into departmental governance processes.

Conclusions

EQD was a useful approach to gather data, highlight variations in practice and raise awareness of education issues in the hospital. Identifying an EQL in each service area was crucial to success

Take-home message

The EQD is a mechanism to collate education quality data, raise awareness, drive compliance and some improvement in educational governance. The challenge is now embedding it in the organisation.

PEER ASSISTED LEARNING INCORPORATING PEER DESIGNED ASSESSMENTS.

Author(s)

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Presenter

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Introduction

In this study students design assessment activities to determine the effectiveness of a teaching activity they performed .

Methods

In 2015, 240 students will perform a student led presentation on core UWA MD learning areas. As an optional additional activity , which will contribute to students learning portfolio ,students will design and implement a brief pre and post activity assessment to determine if learning outcomes have been met and whether the teaching activity was effective in knowledge and skill transfer.

Results

This teaching activity is running at the time of this abstract submission ,so results are not available. Preliminary data suggests that students can design high quality teaching activities, their pre and post-test assessments show that peer participants improve their knowledge and skills as a result of this teaching activity.

Conclusions

Engaging students in teaching activities can improve their skills as future 'doctors as educators'.

Preliminary results suggest that students can be competent in designing assessment activities. The assessments conducted by the students suggest that their teaching activities are effective in the knowledge and skill development of their peers.

PEER LEARNING IN MEDICAL MUSEUM SESSION AT INTERNATIONAL MEDICAL UNIVERSITY MALAYSIA

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Introduction

Peer learning (PL) is expected to provide an effective learning environment and also contributes to improve study skills. We adopted PL in medical museum sessions (MMS) of surface anatomy. This study was aimed to assess the students' knowledge before and after peer learning as well as their perceptions.

Methods

Ninety medical semester one students were participated. They were divided into three equal groups. Each group was subdivided into 6 small groups of each having five. Students underwent an Objective Structured Practical Examination (OSPE) before and after PL. A semi-structured self-administrated questionnaire was distributed to understand their perceptions on PL. Statistical comparisons were done by using Wilcoxon Signed-Rank test.

Results

Before introducing PL, the pre-test median scores of OSPE for group I, II and III were 0.00 (IQR 0-0), 0.00 (IQR 0-2) and 0.00 (IQR 0-0.25) respectively. However, the post-test median scores were found to be high as 7 (IQR 6-8), 7 (IQR 6-8) and 7 (IQR 5.5-8) respectively. A significant improvement was observed after PL for all groups. 75% of respondents were satisfied with PL, 82% agreed that OSPE before and after PL helped them to assess their acquired knowledge and 89% agreed that MMS was effective in learning surface anatomy. In terms of frequency to apply PL in MMS, 40% of respondents wanted it to be conducted once a week.

Conclusions

The undergraduate medical students showed positive attitudes towards PL and acquired adequate knowledge of surface anatomy through PL.

Take-home message

Learning surface anatomy through shared learning experience.

EVALUATION OF STUDENT UNDERSTANDING OF ROLE OF HEALTHCARE PROFESSIONALS AT ENTRY LEVEL

Author/s

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Introduction

An interprofessional learning (IPL) framework was introduced to undergraduate students to promote team work, understanding of the role of healthcare professionals and mutual respect. The framework is divided into three levels with progressive complexity of tasks. Level-1 is an introduction where students are informed of the objectives of the tasks. This usually takes place in the early semesters. Level-2 focuses on co-operative learning that will likely foster transfer of learning in the middle of the course. Level-3 is experiential learning where students are in a work setting similar to the one in real practice. This study aims to assess the effectiveness of level-1 tasks in recognising the roles of healthcare professionals.

Methods and results

Level-1 tasks involved 610 Year 1 students from ten undergraduate programmes: pharmacy (188), medicine (154), dietetics and nutrition (78), biomedical science (47), pharmaceutical chemistry (40), chiropractic (39), chinese medicine (25), psychology (18), medical biotechnology (15), and nursing (6). The tasks include student posters presentation on the roles of healthcare professionals. Post-activities, the students were subjected to two online questionnaires; (1) a scenario-based quiz which evaluates students' knowledge (2) an evaluation of the usefulness of the activities. The findings revealed that students have good understanding of roles of other professions with mean score by programmes ranging from 79% (nursing) to 92 % (Chinese medicine). Among 34% who responded to the online evaluation, majority agreed that the poster exhibition and the quiz had helped them to understand the role of healthcare professionals.

Conclusions and Take-home message

The posters and the quiz have helped the Year 1 students to achieve the appropriate level of understanding of the roles played by different healthcare professionals. It is believed that these would raise the awareness and acceptance of students towards IPL .

STUDENTS SELF-ASSESSMENT OF THEIR LEARNING DURING RESEARCH PROJECT COURSE

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Introduction:

Until recently, the outcome of medical students' research projects has mainly been assessed in terms of scientific publications, while other results important for students' learning and development have been less studied. The aim of the study was to investigate medical students' experiences of learning as an outcome of the individual advanced-level research projects (20 weeks; 30 ECTS credits; term 7), based on students' written reflections after the course.

Methods:

Written reflections of 50 students were analyzed by manifest inductive content analysis.

Results:

Students became more aware about the nature of knowledge and how to generate new knowledge, and developed skills in scientific thinking and critical appraisal. However, the most salient learning outcomes and benefits were related to personal development. Students reported increased self-confidence, self-discipline, independence, and time management skills.

Conclusions:

Individual research projects enhance research-specific skills and competencies needed in evidence-based clinical work and are beneficial for personal and professional development.

Take-home message:

Mandatory research training in medical education is sometimes criticized for usurping time and effort in an already overloaded curriculum. Our findings indicate long-term personal and professional benefits of a research project course and support placing it earlier in the education; this enables students to implement their experiences during the final clinical education.

STUDENT ENGAGEMENT IN CURRICULUM PLANNING: THE MIXED METHODS EVALUATION

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Introduction

Students in many medical schools around the world actively participate in curriculum evaluation. However, only a few are involved in curriculum planning.

Methods

The president of the student union of Chulalongkorn medical school, as a member of curriculum planning committee, led a student working group to conduct the mixed method study to obtain student's feedback on the new curriculum draft. There were 4 rounds of data gathering: student-initiated public hearing, web-based survey, teacher-initiated public hearing, and classroom-based survey. Each of the four questionnaires used in classroom-based survey was designed specifically for each group of target population (Year 2-5 students), covering 27-54 items in 11 domains.

Results

The response rate was 95% (1174/1242). 53% of the respondents felt satisfied with the new curriculum draft while 14% were not. Of the 7 features of the new curriculum, the most welcomed was the opportunity to study in dual MD/MSc program (66%); and the least welcomed was the limitation of student-selected components within packages (8%). Approximately one-third of the participants thought that the new curriculum structure would decrease student participation in Year 1 extracurricular activities, but increase participation in Year 3. This would impact students who were highly-involved, moderately-involved and occasionally-involved in extracurricular activities statistically significantly differently ($p = .001$).

Conclusions

Students are the key stakeholder in curriculum development. Early involvement of students in curriculum planning will increase their sense of belonging. Possible obstacles and resistance can be identified early which will lead to further communication and reconsideration.

Take-home message

Student involvement in curriculum planning is essential for successful curriculum implementation.

GUIDED SELF-DETERMINATION : A SELF-MANAGEMENT INTERVENTION FOR YOUNG ADULTS WITH TYPE I DIABETES

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Introduction

There is little support for young adults diagnosed with Type 1 diabetes. This phenomenon is more apparent in rural areas where access to health care may be challenging.

In Denmark a set of “conversations” termed guided self-determination (GSD) was developed to support the health management efforts of young people with diabetes. An online version of GSD was created in Australia.

This pilot study aimed to assess the efficacy of this online system in linking individuals living with diabetes to diabetic educators to collaborate to develop action plans to manage their condition.

Methods

Real-time communication media were used to create the online tool. Diabetic educators were instructed in the use of the resource, and provided with individualised follow-up teaching. The educators then instructed their clients. The application facilitated educators and clients to interact within the GSD framework to develop lifestyle action plan using the guiding framework of a suite of conversations.

Results

The methodology is acceptable to young adults adjusting to their diagnosis. The process of creating and “publicly” committing to an action plan with support from experienced health professionals has the potential to enhance adherence to regimens developed. For educators’ insight into the issues affecting adjustment to diagnosis are invaluable.

Supported internet access is a challenge in rural areas, and educators and clients have moved to personal devices and private internet service providers rather than relying on public institutions.

FROM MORAL-ENHANCEMENT ACTIVITIES TO PROFESSIONAL ATTITUDE DEVELOPMENT FOR PRECLINICAL MEDICAL STUDENTS; FOUR YEARS EXPERIENCE FROM THAMMASAT UNIVERSITY

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Introduction

This study aims to investigate which of the set of moral-enhancement activities developed for four year at TU Faculty of Medicine are preferable and/or can encourage preclinical medical students' professional attitude to be the humanistic doctor.

Methods

Moral-enhancement activity was started since at the freshman level with Didactic activities. After that, the series of sixteenth activities of (1) Ethical Encouragement, (2) Public consciousness, (3) Self-realization, (4) Self-development, and (5) Communication skill development have been set up from the first year till the third year medical students. After finishing each approaches, all of the medical students in each year were assigned to complete eight items questionnaire with a five rating scale. Four was the satisfaction, the rest conferring the morals and ethics expectation to be changed. Data was analyzed using mean \pm SD and ANOVA.

Results

From the response data (170 students, 90% response rate), mean scores (M) of both satisfaction and moral expectation to be developed were above 4.0. Interestingly, the more clearly preferable approach and morals expectation to be changed was mindfulness camp, film and Enneagram self-developing Camp (p -value <0.05). In addition, PDCA loop was used to manage and re-arranged the activities year by year.

Conclusions

This study demonstrated the potential of the approaches that can enhance Preclinical medical students' own moral compasses.

Take-home message

"Thammasat Style", the three-minute meditation before class, are now challenged to second year medical students and monitored of their self-awareness. Moreover, it has to ensure that the positive behavior fitted for professional still being persisted till clinical level.

Conclusions

Tangible anytime anywhere support facilitates the client educator consultation.

Take-home message

Internet-based resources can empower individuals dealing with chronic disease and render consultations more efficient.

ASSESSING EMPATHY AMONG YEAR 4 MEDICAL STUDENTS

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Introduction

Empathy is an important essence in moulding future doctors as patients seek empathy in their doctors. The best time to nurture this value is during medical school. This study is to assess the understanding of empathy among Year 4 elective students of National University of Singapore using an adapted empathy questionnaire.

Methods

32 students undergoing Advanced Medicine elective clinical postings responded to the questions in a written survey

Results

The students consist of 85% Chinese and 53% male.

Over 82% of the students believe empathy and emotions is an important factor for therapy and affects treatment outcome. 87% and 84% of students believe attentiveness is important for treatment and history taking. 85% believe in importance of body language when communicating with patients. 81% feels strongly that they should think like their patients for better care. Only 26% strongly believe physician humour improves outcome and it is probably due to cultural differences. There are mixed responses on whether physicians should allow themselves to be influenced by strong personal bond with patients and their families. 16% think it is difficult to see things from patient's perspective. 85% think communications is essential to convey empathy to patients.

Conclusions

Above 80% of the Students understand the importance of empathy in the management of patients.

Take-home message

Good understanding of empathy and Communication skills enables better relationships with patients and should be ingrained into the curriculum of undergraduate studies.

THE RELATIONSHIPS BETWEEN EMPATHY, STRESS, AND SOCIAL SUPPORT AMONG MEDICAL STUDENTS

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Introduction

Low empathy is influenced by demographic factors, environment of medical education, or emotional factors. Among them, stress and social support are also thought to be contributing factors towards empathy among medical students. We evaluated the relationship between stress and empathy, and social support and empathy among medical students.

Methods

We evaluated the relationships between stress and empathy, and social support and empathy among medical students. The respondents completed a questionnaire including items on demographic characteristics, the Jefferson Scale of Empathy (JSE), the Perceived Stress Scale (PSS), and the Multidimensional Scale of Perceived Social Support (MSPSS). Correlation and linear regression analyses were conducted, along with sub-analyses according to gender, admission system, and study year.

Results

In total, 2,692 questionnaires were analysed. Empathy and social support positively correlated, and empathy and stress negatively correlated. Similar correlation patterns were detected in the sub-analyses, but the correlation between empathy and stress among female students was negligible. In the regression model, stress and social support predicted empathy among all students. In the sub-analysis, stress was not a significant predictor among female and first-year students.

Conclusions

Medical educators should provide means to foster resilience against stress or stress alleviation, and to ameliorate social support, resulting in increased empathy or maintenance thereof. These would lead to the maintenance of or an increase in empathy in the long term. Furthermore, stress management should be emphasised particularly among female and first-year students.

Take-home message

Stress and social support predicted empathy among all the medical students, except for female and first-year students.

Session 9T

CLINICAL PRESENTATIONS NOT DISEASES AND SPECIALTIES: DEVELOPING AN INTEGRATED PATIENT CENTRED CURRICULUM

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Presenter/s

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Introduction

In traditional medical curricula, preclinical years are divided into scientific disciplines and in clinical years by medical specialties. Learning in this disparate manner can lead to artificial partitioning of knowledge and experiences during training, which can lead to difficulties with recall and application in future practice. In particular the undifferentiated nature of primary care and emergency medicine can be particularly challenging for students that have been trained to think in specialties.

Methods and Results:

In the development of the MBBS program we identified a core series of clinical presentations which were fundamental to clinical practice and have developed and refined these to our current 93 Core Clinical Presentations (CCPs). These form the basis for mapping the curricula and while always available to students, until recently their importance has not been emphasised. During 2015 we have been developing and defining the academic curriculum for our students in the clinical years of their MBBS. This included extensive curriculum mapping of the spiral integrated curriculum but also a shift away from single disease entities and specialties in their final clinical phases.

The curriculum in the senior clinical years is now focused explicitly on the CCPs, reflecting the undifferentiated nature of clinical practice and focusing on the patient's presentation and their experience, not simply the underlying pathology or disease state it represents. This, in conjunction with multimedia online case development and improved scaffolding, has been positively received by students and staff.

Discussion:

When we explore multifocal problems like "difficulty walking" or "tiredness" or "aggression, violence and abuse" by starting with their presentation, not their pathology, we focus on the patient, not the disease process. We also avoid creating blinkered thinking by artificial specialty divisions and better equip our students' clinical reasoning for the future.

EVALUATING THE IMPACT OF A SHORT-TERM PUBLIC HEALTH RESEARCH INTERNSHIP ON STUDENT SELF-EFFICACY

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Diug B, Ilic D

Presenter/s

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Introduction:

Short-term research internships (STRI) provide an opportunity for students to be exposed to public health research. These practical programs aim to encourage students to engage with research teams, provide network opportunities and develop professional skills. Although popular, little evidence exists as to the effectiveness of these programs.

Objective:

We aim to evaluate the impact a STRI program had on student self-efficacy in terms of research skills and professional development.

Questions for discussion:

What makes STRI successful and what are the lessons learnt for the program directly and for other degrees.

Results:

Twenty-three students from four degrees (medicine, health science, biomedical science and science) were accepted into the program. Research self-efficacy increased significantly across all categories including research methodology and communication ($p < 0.001$), understanding of regulatory and organisation-level aspects ($p < 0.001$) and interpersonal aspects ($p < 0.001$). Qualitative feedback identified that students valued the experience as it allowed them develop research specific skills including articulation of findings or critically evaluating the literature. Similarly, self-efficacy in relation to an understanding of ethical requirements and professional conduct increased across the cohort.

Discussion:

The STRI program combined hands-on research, mentorship by a senior researcher, didactic classes and experiential learning in an interdisciplinary environment. Interdisciplinary programs provide challenges as students have differing levels of knowledge and expectations whilst supervisors differ in mentoring style and tasks set. However, our results show that STRI can improve self efficacy in respect to research skills.

INTERPROFESSIONAL LEARNING (IPL) ENHANCES CLINICAL LEARNING VIA PROBLEM-BASED LEARNING (PBL) AND OUTCOME-BASED LEARNING (OBL)

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ANZAPHE Abstract template for Oral Presentations

Introduction/background:

OBL is a learning principle by which students' performance (outcomes) after learning is dictated by the intended learning objectives. PBL, as a professionally relevant platform pertaining to real-life context, can achieve high level outcomes. IPL represents a newly emerged contemporary clinical education, which aims to transfer learning from school to workplace where multiple professionals prevail.

Purpose/objectives:

We explored the feasibility of IPL in enhancing learning in senior students of two closely related health professions, medicine and nursing. Medical students (M) and nursing students (N) with prior PBL experience were placed in 3 groups (M, N, M+N) to conduct PBL tutorials using a specifically designed PBL case which contained two major domains of learning objectives: biomedical ethics (including communication) and life science knowledge.

Issues/questions for exploration or ideas for discussion:

We hypothesize that M and N of two closely allied clinical professionals in IPL setting can learn in a synergistic way using PBL philosophies and OBL principles

Results:

Learning outcomes on two major objective domains in PBL tutorials were assessed via direct observations and interviews. M showed more confidence in life science knowledge whereas N showed greater sensitivity than M in ethical issues. M+N (IPL groups) appeared to show enhanced learning in both domains probably by virtue of collaborative learning between M and N..

Discussion:

Our findings support our hypothesis that IPL effectively extend the learning in PBL to help achieve higher learning outcomes expected of health professionals in workplaces. Such a 3-in-1 (OBL-PBL-IPL) learning strategy in the training of health professional allies (as in PGY) prior to clinical practice is recommended and requires more research.

PREPARING OT AND SP STUDENTS TO WORK TOGETHER IN PAEDIATRIC DISABILITY

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Abigail Lewis

Presenter/s

Abigail Lewis

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Introduction/background:

Clinicians working in the paediatric disability field are expected to work in interdisciplinary teams but students may not have opportunities to develop the required skills. This project evaluated simulation resources developed specifically to engage OT and SP students in working with a family with a child with autism using video vignettes, written assessment material and facilitated mixed group discussion.

Purpose/objectives:

The resource aimed to develop interprofessional communication, negotiation and teamwork skills as well as explore role boundaries and responsibilities in a mixed tutorial structure. Students evaluated the effectiveness of the resource by rating 13 statements using a 5 point Likert scale giving average results and giving free text answers that were analysed thematically.

Issues/questions for exploration or ideas for discussion:

Do students engage in negotiation and discussion around a video vignette?

Can simulation be used to prepare students for the paediatric disability field?

Results:

Over 140 students have participated in this opportunity over the past four years. Students are positive about the learning experience, the reality of the materials and their development of interprofessional skills. Free text themes were the scenario; tutorial structure; working with other disciplines; and knowledge of autism.

Discussion:

The initial development of the resource is time intensive and costly but subsequently the resource is easy to use. Students engaged with the realism of the scenario and the structure of working in group discussion. Students agreed they achieved the learning outcomes. The resource is effective for engaging students in interprofessional experiences in undergraduate education.

PROMOTING INTERPROFESSIONAL PRACTICE FOR HEALTH PROFESSIONALS INVOLVED IN DISASTER RESPONSE AND MANAGEMENT

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Presenter/s

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Affiliation

TBA

Introduction/background:

The National Healthcare Disaster certification is an inter-professional credential to assure employers and the public that healthcare professionals have mastered a body of knowledge and skills related to all phases of the disaster cycle. The goal of this certification is to promote successful outcomes for the public, disaster responders, and healthcare professionals.

The professions involved include:

- Emergency Management
- Emergency Medical Services
- Medicine & Nursing (MD, DO, RN, APRN, PA)
- Behavioral Health (Psychiatry, Psychology, Social Work, etc.)
- Public Health
- Pharmacy
- Respiratory Therapy

Purpose/objectives:

The intent of this initiative is to deliver a certification program that focuses on the core competencies across professional groups resulting in a credential for the healthcare disaster community, versus the creation of separate exams or credentials.

Issues/questions for exploration or ideas for discussion:

Can a universal credential promote measurement of defined population outcomes?

How do interprofessional competencies promote communication in the disaster community?

Results:

The results of the 2015 Role Delineation Study will be shared with participants to understand the constructs of the assessed foundational competency.

Discussion:

The purpose of this role delineation study is to identify the activities most critical to this inter-professional disaster specialty area, as well as the knowledge and skills required to successfully perform these activities.

Session 9U

EVALUATION OF CALAMITIES AND MAJOR COMPLICATIONS IN A TEACHING HOSPITAL ACROSS THE CONTINUUM OF HEALTH PROFESSIONAL EDUCATION: ADVANTAGES AND CHALLENGES.

Author/s

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Presenter

TBA

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Introduction

In every hospital calamities and major complications (CC) will continue to exist. How can doctors, nurses and all other healthcare professionals - in training or not - learn from these cases. Since 2011 we organize a monthly discussion session open to all hospital employees in which CC are discussed in a transparent, blamefree way. A chair prepares these meetings, healthcare providers (HCP) tell their real story, purely with the intention to let others learn. This results in lessons for interprofessional practice. What are the themes that are discussed, which departments and HCP are involved and what are future challenges?

Methods

We evaluated 55 discussion meetings from 2011 till August 2015. Therefore we a) analyzed the discussed CC, b) which HCP presented the cases, c) which departments were most involved, d) analysis of the audience.

Results

16 calamities (2 plus theme), 8 themes + linked casuistries, 16 casuistries and 15 themes on their own, were discussed. Presentations were given by nurses (n=20), residents (n=33), consultants (n=71). Departments frequently involved are Intensive Care (n=16), Surgery (n=9) and Emergency Medicine (n=5). Average number of audience n=81, resp. nurses 22%, clerks 11%, residents 32%, consultants 27%, management 5% and others 3%.

At all levels three main topics needed attention: recognizing and anticipating on shock, patient transfer and hand-off between professionals, and compliance of protocols.

Conclusions

In a blamefree culture a hospital-wide discussion of CC leads to awareness of left slumped knowledge and induces improvement programs.

Take home message

Transparency and blamefree communication on CC motivate HCP in continuous self education.

THERE IS NO MAGIC PILL - IT JUST TAKES HARD WORK K

Author/s

A/Prof Kylie Mansfield, Dr Greg Peoples, A/Prof Lyndal Parker-Newlyn

Presenter/s

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Introduction:

There are many factors that contribute to success in medicine including learning style, learning disposition and study strategy. As part of this study we hoped to identify “the magic pill”, that is a study method that was a distinguishing factor for the successful students.

Methods:

We undertook a survey of four cohorts of first year medical students (n=282) to determine if there was a difference in the study methods used by successful and unsuccessful students in their year 1 examinations. Students rated the importance of a variety of study methods to their exam preparation using a Likert scale. Top 10 students were considered successful while those in the bottom 10 were considered unsuccessful.

Results:

The results of this study indicate that there is no magic pill for success in medicine. Both successful and unsuccessful students reported undertaking the same study methods (Table 1, median).

Table 1. Study methods of successful and unsuccessful medical students.

Study method	Successful students	Unsuccessful students
Summarising lecture content	5	5
Reading recommended texts	2	2
Summarising on-line content	5	4
Summarising learning objectives	5	5
Making mind maps to compile information	3	3
Sharing notes with group members	2	3

Discussion:

We were unable to identify a study method that distinguished the successful students. However, a survey conducted by the students identified that total study time was greater in successful students and increased in the final lead up to the examinations suggesting that there is no magic pill that can lead to success in Medicine, it just takes hard work.

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THE POSITIVE IMPACT OF COMMUNICATION SKILLS PEER ASSISTED LEARNING (PAL) ON MEDICAL STUDENT OSCE PERFORMANCE - A COLLABORATIVE EDUCATIONAL INITIATIVE BETWEEN STUDENTS AND STAFF.

Author/s

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Presenter

Mr James Nightingale

Affiliation

¹ Third Year Medical Student, Griffith University Medical School, ² Senior Lecturer, Griffith University Medical School, ³ Second Year Medical Student, Griffith University Medical School

Introduction/background:

Griffith University Medical School conducts communication workshops as a part of the curriculum. This is assessed in the OSCE. Critically, students practice their communication skills with their classmates, yet formative assessment shows improvement to be unremarkable over time.

Something was missing, and in response students and the teaching team initiated Peer Assisted Learning (PAL). PAL workshops consist of a trained student facilitator and 5 student participants. 10-15 sessions are conducted per week with different PAL groups over a 10-12 week period. This is coordinated by a PAL student coordinator and academic staff.

Purpose/objectives:

- To evaluate the effectiveness of PAL – measured by OSCE performance
- Analyse the difference in benefit between PAL participants and PAL facilitators
- To identify aspects of PAL that might require further improvement

Issues/questions for exploration or ideas for discussion:

- Are our students practicing communication skills with the right people?
- Does PAL involve the right people?
- What are the limitations of PAL?
- What is the student and academic staff feedback on PAL?
- How to introduce PAL as a learning model within medical schools?

Results:

- 113/157 (71.9%) Year 1 Students 2013
 - 96% students: PAL useful/very useful OSCE preparation
 - 78% students: PAL enjoyable/very enjoyable learning model
- 105/150 (71.0%) Year 1 Students 2014
 - Mean OSCE performance 15.73 ± 6.814 marks higher PAL students
 - PAL participants 11.33 ± 7.118 higher marks

- PAL facilitators 31.43 ± 10.25 higher marks
- Correlation observed between number of PAL sessions attended and level of improvement

Discussion:

Students enjoyed PAL as it is: informal, provided the opportunity to engage with curriculum, involved teamwork and provided a comfortable environment. Students found PAL useful as it: facilitated constant practice, provided constructive feedback and encouraged early revision. Overall, PAL has been a model that students enjoy, find useful and has been shown to improve OSCE performance.

CONCEPTUALISING PATIENT-CENTRED CARE TO INFORM PATIENT-CENTRED MEDICAL EDUCATION

Author/s

Jenny Barr, Kathryn Ogden, Kim Rooney, Michelle Horder

Presenter

Jenny Barr

Affiliation

University of Tasmania

Introduction/background:

Contemporary healthcare demands greater partnership between doctors and patients to foster better health outcomes. Preparing a workforce equipped with the learned capabilities for patient-centredness, within the complexity of healthcare practice, should be a collective responsibility. In order to progress the agenda of patient-centred education what is needed is a shared understanding of exactly what patient centred care is and how it can be integrated into education across the continuum.

Purpose/objectives:

We used a participatory concept mapping methodology (as described by Trochim and Kane) to develop a conceptual map of patient-centred care. We invited participants from stakeholder groups (patients, doctors, health care administrators, educators, students) to 1) identify what patient centred involves, 2) group aspects of patient-centred care into overarching domains, and 3) rank aspects of patient-centred care with respect to: their importance for patient outcomes; their suitability for educational interventions; and the need for cross-sectoral approach towards achieving them. We then invited participants, including educators to review the conceptual map and discuss how it can be used to inform medical education.

Issues/questions for exploration or ideas for discussion:

Can concept-mapping provide a useful methodology for tackling complex issues in medical education.

Results:

The conceptual map of patient-centred care will be presented. Pedagogies and methodologies for implementing patient-centred education, to lead to patient centred capability, will be discussed.

Discussion:

Progressing education of complex notions such as patient-centred care can benefit from a participatory approach which cultivates a shared understanding of the problem and the solutions.

SCREENING AS A TEACHING TOOL

Author/s

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Presenter

Erik Martin

Affiliation

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Introduction/background:

Chronic disease dominates morbidity and mortality in Australia and screening high-risk individuals is an important skill for medical students to master. The Public Health Medicine Team at Deakin School of Medicine created an innovative learning opportunity where 2nd year students experience the roles of both screener and patient using rapid diagnostics of chronic disease risk.

Students elected to participate in the two-stage screening program which included (1) an online survey of chronic disease risk factors (standardised questions on diet, physical activity, alcohol/tobacco use and mental health) and (2) measured BMI, blood pressure, blood cholesterol and fasting blood sugar taken at an extra-curricular morning session. Ethics approval was obtained from DUHREC (#2015-017).

Purpose/objectives:

To evaluate the effectiveness of a voluntary screening activity for 127 2nd year medical students in: (A) identifying factors that contribute to the health, illness and disease of populations, and; (B) using recognised, rapid diagnostic tools and techniques for monitoring the health status of populations.

Issues/questions for exploration or ideas for discussion:

- Does hands-on experience enhance learning?
- Ethical and logistical challenges of blending teaching and research.

Results:

Only 39% of students participated in at least 1 stage of the program. Of the online survey participants (n=35), 63% and 47% agreed that it helped them meet objectives A and B. Of those who completed the physical measurements and answered evaluation questions (n=27), 93% and 100% agreed that it helped them meet objectives A and B.

Discussion:

The screening activity was well received by those that participated and appeared to enhance their learning. However, strategies are needed for boosting participation.

Session 9V

TOWARDS COMMON AGREED STANDARDS FOR ABORIGINAL AND TORRES STRAIT ISLANDER HEALTH CURRICULUM ACROSS THE ALLIED HEALTH PROFESSIONS AT MONASH UNIVERSITY

Author/s

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Presenter

Francis-Cracknell

Institution(s), Department(s), Country/Countries:

Monash University, Faculty of Medicine, Nursing and Health Sciences

Introduction/background:

In 2014 a group of academics reviewed existing Indigenous health curriculum guidelines and sought to achieve a set of multidisciplinary endorsed learning objectives. Programs in the Faculty of Medicine Nursing and Health Sciences and Faculty of Pharmacy/Pharmaceutical Sciences nominated representatives to collaborate on gaining consensus on learning and teaching objectives.

Purpose/objectives:

- Establish an interdisciplinary working group
- Achieve consensus on teaching and learning about Aboriginal and Torres Strait Islander health and wellbeing across health professional programs at Monash University.
- Review Committee of Deans of Australian Medical Schools (CDAMS) Indigenous health curriculum framework to determine applicability to other health professions

Issues/questions for exploration or ideas for discussion:

Can the existing work done in CDAMS be applied across other health professions?

Can we achieve interdisciplinary consensus regarding learning objectives across multiple health disciplines?

Results:

Using a qualitative action research approach, group members were consulted using a modified Delphi methodology to refine learning outcomes and identify when to introduce them into the curriculum.

Key outcomes :

- development of new partnerships between University programs in teaching Indigenous health
- 44 learning outcomes endorsed by 12 health disciplines
- 'Novice', 'Intermediate' and 'Advanced' level learning identified
- Establishment of ongoing structure for interdisciplinary collaboration and leadership in Indigenous health.

Discussion:

Gaining interdisciplinary consensus has enabled the University to commence widely embraced implementation processes across all of the included courses.

This work undertaken has led to establishment of a multidisciplinary Indigenous health curriculum committee and a second phase of work in 2015 involving academic strengthening, resource development and curriculum implementation.

PROMOTING AUTONOMOUS LEARNING THROUGH AN INDEPENDENT STUDY MODULE IN AN UNDERGRADUATE PODIATRY COURSE

Author(s):

Maria Young

Presenter:

Maria Young

Institution(s), Department(s), Country/Countries:

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Introduction:

Autonomous learning is a desired attribute for students on any healthcare programme to help produce a highly reflective life-long learner capable of enhancing their profession.

A final year module was designed to offer the opportunity for the enhancement of professional practice through either an increase in depth or breadth of knowledge in a podiatry-related subject. A student negotiated learning contract is used to agree the subject, write the learning outcomes, plan the learning and design the appropriate assessment. Facilitation by academics only takes place at the start and middle of the module.

Methods:

This was a two-stage qualitative study. A questionnaire was used to evaluate the impact of the educational experience on the student, and a focus group to evaluate the professional development experienced by five cohorts of graduated students.

Results:

Main themes from the questionnaire included the high levels of motivation exhibited by the students, the value placed on the opportunity for innovation and creativity, and the development of enhanced transferrable skills. The graduates expressed confidence in their increased skills of professional practice, the benefits to their career progression and the positive learning experience as a whole.

Conclusions:

The results suggest the makings of practitioners who are self-directed, who can plan their own development and understand better the process of learning.

Take-home message: Students can feel empowered by the chance to make choices about what they learn. Take every opportunity to help them develop their independence.

IMPLEMENTATION AND EVALUATION OF A 'CUSTOMISABLE' AND ENGAGING MULTIMEDIA MODULE FOR BIOCHEMISTRY TEACHING IN GRADUATE MEDICINE AND UNDERGRADUATE BIOLOGICAL SCIENCES

Author/s

Teresa Treweek, Michelle Moscova, Karen Fildes, Tracey Kuit, Kate Schreiber

Presenter

Teresa Treweek

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Introduction/background:

To facilitate active learning and avoid cognitive overload in our students, we developed an engaging and interactive online module that could be widely utilised. Based on a clinical case (child with sickle-cell disease), the module allows delivery of 'customisable' content to prepare students for a range of lectures from basic protein biochemistry and genetics to the pathophysiology of haemoglobinopathies.

Purpose/objectives:

To design, implement and evaluate an interactive multimedia module that is engaging, time-efficient and delivers core biochemistry content, better preparing students for lectures. The desired outcome was deeper understanding of the content as a result of more time being made available for active learning.

Issues/questions for exploration or ideas for discussion:

Even in our case-based and integrated medical program, the delivery of much medical science content is didactic in nature and content-rich. The same can be said of our first year biological sciences subjects, which present the additional challenge of servicing up to 600 students/cohort. Traditionally, medical students will spend an hour summarising and consolidating each lecture in their own time. This model allows for consolidation to occur in class, with only 15-20 min of pre-lecture preparation.

Results:

Students; 2nd year MBBS (52) and 1st year Science (291) were surveyed to evaluate their perception of the module. The first year science students also undertook a knowledge-based quiz a week after the lecture – those who completed the module and attended the lecture did significantly better on the knowledge quiz compared to those who only completed either activity. The majority of students (75-100%) indicated that the module was easy to understand and 60-89% found it engaging and wanted similar modules available for other content. Medical students who completed the module before the lecture reported feeling better prepared for class discussion and 75% indicated a desire for more modules of this type.

Discussion:

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The objective of this project was to free up face-to-face lecture time for students to discuss and clarify sophisticated concepts with their lecturers and peers, ultimately fostering deeper understanding of medical science.

LOVE IS IN THE AIR - REMOTE BALINT GROUPS

Author/s

Dr Jennifer Presser, Associate Professor Margaret Hay, Amanda Lo, Dr Allison Turnock, Dr Columbine Mullins, Dr

Presenter

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¹ University of Tasmania, ² Monash University, ³ Tropical Medical Training

Introduction/background:

Balint groups are a particular technique of confidential peer discussion groups, first developed by Michael Balint, which focus on the doctor-patient relationship. For health practitioners and trainees Balint groups have been shown to improve critical thinking and self-reflection and to provide peer support and improve job satisfaction.

Purpose/objectives:

This study examines the experience of group members and group leaders in remote Balint groups of medical practitioners in Australia using thematic analysis of in-depth interviews. In remote Balint groups the meetings are conducted via telephone or online videoconferencing rather than the traditional face to face format.

Issues/questions for exploration or ideas for discussion:

The context of rural/remote practice with professional and social isolation, individual burden of care for complex patients and limited access to resources means that remote Balint groups may be an effective way to increase support and provide professional development. This is likely to benefit the professional practice of rural health care providers and extend to better patient care.

Results:

Remotely conducted Balint groups were found to be effective and participants reported improved clinical thinking, improved self-understanding, peer support and improved resilience in a similar manner to face to face groups. Recommendations are made regarding the setting up and running of remote Balint groups.

Discussion:

Remote Balint groups can improve access to Balint groups for rural/remote and isolated practitioners and can provide professional development and burn-out prevention.

VIDEO SELFIES OF CLINICAL INTERACTIONS: FEEDBACK, REFLECTION & SELF-EVALUATION

Author/s

Thomas Sellitto, Anna Ryan & Terry Judd

Presenter

Thomas Sellitto

Institution(s), Department(s), Country/Countries:

Department of Medical Education, University of Melbourne

Introduction/background:

Clinical interactions between students and patients often occur without direct supervision from clinicians. Opportunities for feedback on these interactions are often limited and students typically take time to develop effective reflective skills.

Purpose/objectives:

The purpose of this study was to assess the feasibility, acceptance and impact of introducing video self monitoring and review within an established clinical learning and teaching activity. Students used small mobile devices to film themselves during patient interactions and presented edited 'highlights' video during tutorials.

Issues/questions for exploration or ideas for discussion:

Filming in clinical settings is ethically challenging. We dealt with these challenges by developing strict protocols around the capture, use and retention of self videos. However, these may not be practical in typical clinical learning and teaching environments, particularly where students use their own mobile devices (i.e. smartphones).

Results:

Participating students and tutors were overwhelmingly positive about the use of self videos within a clinical learning context. They reported few practical issues with capturing and editing videos. A comparative analysis of tutorials with and without the presentation and review of self videos suggests that the use of self videos actively stimulates peer discussion and self reflection.

Discussion:

A process of video self monitoring and review was successfully implemented within an established clinical teaching activity and appeared to stimulate positive learning behaviours. There were few practical or technical issues related to the implementation although the data security and use requires careful consideration.

USING THE MYSTUDYMATE APP TO UNDERSTAND HOW CONTEMPORARY MEDICAL STUDENTS LEARN

Author/s

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Presenter

Karen M Scott

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Introduction

Contemporary medical students have an abundance of information sources for learning. Although valuable, they may reduce students' time with medical teachers and patients.

Purpose

We developed the *myStudyMate* app with an activity and wellbeing log to understand learning habits during Sydney Medical Program's Child and Adolescent Health specialty block (CAH Block).

Issue

Are assessment-driven study tactics impacting clinical learning?

Method

The study was conducted in two eight week CAH Blocks in June and August 2015: during week 3 and 4 clinical placements and week 5 lectures. Students were invited to use *myStudyMate* for one week and attend focus groups in week 6 to discuss experiences. *myStudyMate* data were analysed using descriptive statistics; focus group data were analysed through thematic analysis.

Results

Students spent much time on online resources, textbooks, lectures and tutorials, and less time with clinical teams and in direct patient contact. However, students' ratings of learning showed knowledge acquisition and motivation-boosting events occurred through personal interaction with an engaged registrar/consultant who provided clinical insight and context. Student well-being, measured by sleep, exercise, socialisation and diet, was generally good.

Discussion

Students' focus on study over patient interaction reflects assessment-driven study tactics and assessment driving learning; curriculum adjustment may be needed. The CAH Block has written and clinical assessments, but clinical engagement and relevant deep content knowledge are difficult to assess in standardized assessment formats. Students value interactions with medical teachers but may get less of this in future if traditional training methods are undervalued and student numbers increase.

Session 9W

ACTIVITY METRICS - WHAT ACTIVITIES SHOULD WE TRACK IN OUR LEARNERS?

Author/s

David Topps, Rachel Ellaway

Presenter/s:

David Topps, Rachel Ellaway

Institution/s

University of Calgary, Canada

Introduction/ Background

We are now capturing vast amount of data about our learners in terms of the data they generate through their use of the many online systems and tools they interact with. We also have the opportunity to capture even more data from other tools and devices we can set up within our learning environments. The critical questions we are wrestling with are; what data should we capture, what data should we not capture (or not use), and what are the implications of different uses and applications of this data?

Purpose/Objectives

We will use the PeArLS format to put our questions in front of a diverse expert audience and to generate lively debate and reflective learning around the emerging issues raised by the potential for using this kind of data for assessment purposes

Issues for exploration/ideas for discussion

1. What are the ethical challenges of tracking learner activities and ambient performance log data?
2. What are the methodologic and construct validity challenges raised by such tracking?
3. What are the practical and logistic issues involved in such large and complex data flows?

MARRYING PROCESS AND CONTENT: PUTTING THE ADVICE INTO PRACTICE

Author/s

Dr Conor Gilligan, Associate Professor Sue Outram, Dr Andra Dabson

Presenter/s

Dr Conor Gilligan, Associate Professor Sue Outram, Dr Andra Dabson

Institution/s

The University of Newcastle, Australia

Introduction/ Background

Communication skills training (clinical method) has long been a key feature of the Medical curriculum at the University of Newcastle and is increasingly featuring heavily in Medical schools across Australia and Internationally. Despite widespread adoption of this training, and recognition of its importance in medical curricula, there is a tendency for students and clinical educators to view these curricula components as 'soft' and as separate from the core business of learning about science and clinical problems.

The Calgary-Cambridge model of medical interviewing highlights the need to marry communication processes (microskills relating to rapport, non-verbal behaviour, active listening etc) with the content of the medical interview (information to be gathered and delivered). While this model is taught in communication-focussed learning sessions, its application to learning clinical skills across different disciplines, years and sites is problematic.

Purpose/Objectives

To develop an approach to more effectively marry process and content in our clinical method teaching across the curriculum. A major curriculum renewal process represents an opportunity to implement innovative curricula in this area.

Issues for exploration/ideas for discussion

- How to achieve true integration of communication skills and clinical practice skills such that they are together, perceived as the clinical method?
- How best to engage medical educators in clinical settings in appropriate teaching methods?
- Could PBL tutors engage in clinical skills sessions to facilitate integration?
- Who should teach clinical method?

Session 9X

STOP 'PASS THE PARCEL' WITH PRACTICE-BASED STUDENT LEARNING: ESTABLISHING EDUCATION GOVERNANCE FRAMEWORKS BETWEEN STUDENTS, ACADEMIC STAFF AND INDUSTRY PARTNERS.

Author/s

Amanda Henderson

Presenter/s

Amanda Henderson

Institution/s

Griffith University, Princess Alexandra Hospital

Introduction/ Background

The capability and employability of our graduates is optimised through constructive educational partnerships between academia and industry. The quality of student experience and outcomes are enhanced when cross-sector partnerships are founded on effective communication between key stakeholders, clear and agreed learning outcomes, robust assessment processes and mutual understanding and respect for the active contributions of students as partners in the learning process.

Purpose/Objectives

The purpose of this PeArL is to explore guidelines and questions that the key stakeholders (namely, students, universities, industry) should be asking of each other to advance student learning in practice settings within the operation of the (implicit/explicit) education governance framework.

Issues for exploration/ideas for discussion

To assist with clarity regarding everyone's baseline understanding the discussion will commence with a question:

What is the content of communication (and therefore understanding of student performance) between academia and industry regarding student placement?

The continuing discussion will explore:

How clear are these communications for students and industry partners? And how are these communications interpreted?

How much scope is there for students to initiate and extend their capabilities (in line with the learning outcomes) during the placement experience?

The questions will be discussed in relation to implicit and explicit governance frameworks.

CLINICAL SUPERVISOR REPORTS: WHAT IS THEIR UTILITY?

Author/s

Dr S. Esteves, Assoc. Professor W. Bagg, B. O'Connor, H. Wilks, Assoc. Professor J. Weller

Presenter/s

Dr S. Esteves, Assoc. Professor W. Bagg, B. O'Connor, H. Wilks, Assoc. Professor J. Weller

Affiliation

Faculty of Medical and Health Sciences, University of Auckland.

Introduction/ Background

The University of Auckland's medical programme uses programmatic assessment where results from multiple assessments are considered together to make decisions on each student. Clinical Supervisor Reports (CSRs) are completed at the end of most clinical attachments in Years 4-6 of the programme and contribute to the attachment grade, as well as to the decision-making by the Boards of Examiners. CSRs are also used formatively, to provide feedback to students.

Within our institution, which covers a geographically diverse area, the CSR forms have recently been standardised across all clinical attachments and years, to facilitate consistent assessment of longitudinal domains of study within the medical programme. A recent review of CSRs highlighted a number of issues, including: variable processes of completion and grade conversion within departments, differing standards of formative feedback, variable levels of understanding of the functionality of domain assessments and inconsistent engagement from assessors.

Purpose/Objectives

To explore:

- The role of CSRs in programmatic assessment
- The role of CSRs in formative feedback
- Developing and maintaining good quality CSR completion

Issues for exploration/ideas for discussion

What is the purpose of the CSR?

What does a good quality CSR look like?

What factors impact on CSR completion with regards to consistency and quality?

How can busy clinicians best be supported to provide good quality useful reports?

Should all departments give equal weightings to each component of the CSR?

Session 9Y

USING ITEM ANALYSIS TO IMPROVE THE QUALITY OF MULTIPLE CHOICE QUESTIONS

Author/s

Neville Chiavaroli

Presenter/s

Neville Chiavaroli,

Institutions

Melbourne Medical School
University of Melbourne

Purpose:

The purpose of the workshop is to introduce the concept of, and provide practice with, evaluating the quality of multiple-choice questions (MCQs) through the use of classical item analysis. This workshop is aimed at the novice level.

Workshop outcomes:

As a result of the workshop participants will be aware of the potential value of item analysis, understand how to apply it to evaluation of the quality of their MCQs, and be able to interpret different formats of item analysis.

Proposed Outline:

MCQs provide teachers with an efficient and, if constructed appropriately, potentially valid way of assessing their students knowledge and understanding. Nevertheless, there are several threats to the validity of test results with this format, including the possibility of presenting ambiguous or contentious questions to students, and/or supplying the wrong key for a question during automated scoring. Item analysis software, commonly available with scanning hardware, offers crucial data to assist teachers in quality assurance of their questions. However, training in interpretation of the data is not always available and therefore key information may go unutilised, compromising the validity of test results.

This workshop will offer the participants an overview of the main statistical indices used in evaluating the quality of MCQs, as well as the opportunity to practice interpreting item analyses in the context of health professional examination questions.

Participants are invited to supply beforehand, or bring to the workshop, analysis outputs from their own institution in order to discuss with the facilitator and fellow participants with a view to appropriate interpretation of the data.

EASY TO IMPLEMENT TECHNOLOGY ENHANCED LEARNING COMBINING DIGITAL REPOSITORIES WITH BLOGS

Author(s)

Poh-Sun Goh, Moira Maley

Presenter(s)

Poh-Sun Goh, Moira Maley

Institution(s), Department(s), Country/Countries

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Background

Web and mobile technology can greatly enhance learning and educational impact by widening access, scaling up our educational reach, so that we better engage our students. Unfamiliarity with simple and easy to implement technology enhanced learning tools unfortunately can hold educators back.

Intended outcomes

To offer individual teachers an easy to implement process and platform to deliver technology enhanced learning. Participants will understand basic principles of instructional design and educational pedagogy that underpins technology enhanced learning using blogs. Participants will develop their own personal prototype teaching blog.

Structure

The workshop will use a “flipped classroom” model, with pre-reading, pre-workshop assignment, and workshop content and discussions delivered and captured entirely from a workshop blog. The workshop process will model an easy to implement technology enhanced learning “recipe” that participants will be introduced to and encouraged to use in their own teaching.

Who should attend

Health profession educators who are interested in starting to use technology to enhance their learning

Level of workshop (introductory/intermediate/advanced)

Introductory

Session 9Z

A REALIST SYNTHESIS OF THE EVIDENCE LINKING EDUCATION AND TRAINING TO PATIENT BENEFIT

Author/s

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Presenter

TBA

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Introduction

Healthcare interventions are conducted in complex environments in which it is challenging to isolate the effects of variables and illustrate causal relationships. As such the evidence to date is limited on the association between education inputs and outcomes for patients.

Aim

To synthesis the evidence on the link between educational interventions and patient benefit

Methods

A realist synthesis of the evidence. The strength of this approach is explaining why interventions work and how context can inform the outcome. A realist review uses a theory driven approach, synthesising both quantitative and qualitative research. The Kirwin model of learning transfer was used to evaluate the transfer of education to practice.

Results

After refining our search terms, we searched five databases: Embase, Social Services Abstracts, PsycINFO, CINAHL, and Social Care Online. These databases were selected to offer broad coverage of educational interventions with health and social care personnel. We have considered over 24,000 papers, which following title and abstract review we have refined to over 1150 papers. The full papers have been viewed to identify and link educational interventions to excellent patient experience, effectiveness, and safety.

Conclusions

We are able to observe that patient outcomes are rarely incorporated into the evaluation of educational outcomes: lower levels of Kirkpatrick's hierarchy are usually considered instead. We will therefore be able to make some key recommendations for the design and funding of educational interventions in the future.

Take-home message

More research should consider adding evidence of patient outcomes.

FACTORS THAT AFFECT THE CONFIDENCE LEVEL OF NURSES IN AN INTER-PROFESSIONAL TEAM-BASED SIMULATION CRISIS TRAINING IN A SINGAPORE ACUTE HOSPITAL

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Tan Tock Seng Hospital, Nursing Service (Tan Yew Hiang) / HOMER (Ong Yu Han), Singapore

Introduction

Self-confidence has been reported in multiple studies as one of the key factors for effectual task accomplishment among nurses in inter-professional teams. However, factors that affect confidence level among nurses in managing crisis situations were not well-explored. . This study aims to identify key factors that have an effect on the level of confidence of the nurses during the inter-professional team- based simulation crisis training.

Methods

Ninety nurses and a group of doctors participated in two simulated training sessions. A self-administered 35-item questionnaire on a 5-point Likert scale was administered after the training. The questionnaire was developed by an experienced Nurse Educator to examine the factors altering the confidence level of the nurses during the simulated crisis training. Data was statistically analyzed.

Results

A response rate of 54.4% (N=49) was achieved. Generally, 93.9% (N=46) nurses felt confident in managing crisis situations after the training. The lead factors that affect the confidence level identified by 75.5% (N=37) nurses were "Lack of knowledge and skill" and "Unfamiliar environment" and 67.3% (N=33) nurses perceived "Afraid in making wrong judgement or decision" and "Absence of experienced staff" as the other two subsequent key factors.

Conclusion

The ineffectual knowledge and skill could be the contributing factors for nurses to feel fearful in making erroneous decisions and judgement. Instructional simulation could be used as a teaching tool for future crisis training to enhance the knowledge and skill of the nurses.

Take Home Message

The study revealed an urgent need to address the factors that affect the confidence level of the nurses in managing crisis situations.

MAKING IT REAL: LEARNING MEDICAL ENGLISH IN SIMULATION CENTRES

Author/s

Megan Phelps, Heikki Nikkanen, Philippe Persiaux, Martine Chauffeté-Manillier, Claire Le Jeune and Antoine Tesnière

Presenter

Megan Phelps

Institution(s), Department(s), Country/Countries:

¹ Sydney Medical School, ² Mount Auburn Hospital, ³ Paris Descartes University

Background:

During medical training in countries where English is not the primary language, it can be difficult to create authentic experiences for learning medical English. We describe a pilot program of workshops in medical English held in a simulation centre, utilising both simple and complex equipment to create authentic settings for learning and improving medical English.

Methods:

We trialled two workshops using a simulation centre (iLumens at Université Paris Descartes) as the site for a series of case-based, small group sessions conducted in English. Professional native English speaking actors were 'patients' and 'parents'. Anglophone clinicians and medical English teachers acted as facilitators. Anecdotal feedback from the first workshop was used to modify the second. Evaluation used pre- and post-workshop participant questionnaires.

Results:

The questionnaires revealed great student interest and satisfaction with the sessions, although confidence in conducting interviews in medical English was not necessarily improved following the workshop. The contribution of professional actors was valued. Small group learning and timely feedback were noted as positive features. Students suggested improvements through familiarisation with the simulation centre and small group learning before the workshops.

Discussion:

Further workshops are planned, incorporating changes suggested by students. Evaluation by longitudinal participant satisfaction studies and assessment result comparisons is being considered. Similar workshops could be used in other non-English language schools for learning medical English.

BLEEPSIM: ON-CALL SIMULATION TO IMPROVE CONFIDENCE IN NEWLY QUALIFIED JUNIOR DOCTORS

Authors

Dr Reetu Sinha¹, Mr Timothy Chatten¹, Dr Owain Carrick¹

Presenter

Dr Reetu Sinha

Institution(s), Department(s), Country/Countries:

Brighton and Sussex University Hospital Trust

Introduction:

Medical students in the United Kingdom undertake shadowing to prepare for working as a junior doctor. However, they are unable to gain first-hand experience of being on-call. This can cause much anxiety and a lack of confidence could affect patient safety. On-call simulation would introduce students to the challenges of an on-call and could improve confidence.

Methods:

Final year medical students (n=6) held a simulated bleep for three hours whilst shadowing on their ward. Students were bleeped with queries to which responded by telephone as the junior doctor on-call. Students were evaluated on SBAR technique, safe management and assessment of patients and medical record documentation. Each student completed a survey before and after the session. Data was analysed using Windows Excel, 2011.

Results:

No students had received any previous on-call simulation teaching. Overall confidence with being on-call improved from mean score of 2.3 to 4.5 on a 5-point likert scale. Overall confidence with being a junior doctor after the session was 4.16 on the 5 point likert scale. All students felt this session would be beneficial for all students prior to starting as a junior doctor.

Conclusions:

On-call simulation improved confidence in final year medical students with being on-call and a junior doctor. This can aid a positive transition to life as a on-call doctor.

SIMULATION OF CURRENT SENSITIVE HEALTH ISSUES VIA COMMUNITY PARTNERSHIP

Author/s

Dr. Rosemary Brander ¹, Professor Anne O'Riordan¹

Presenter

Dr. Rosemary Brander

Institution(s), Department(s), Country/Countries:

¹Office of Interprofessional Education and Practice, Queen's University
2. School of Rehabilitation Therapy, Queen's University

Presentation Title

Simulation of current sensitive health issues via community partnership using The Health Care Team Challenge™

Introduction/background:

Health challenges experienced by military personnel are explored through collaboration and competition with health sciences students. The Health Care Team Challenge™ (HCTC™) is a well-recognized, interprofessional (IP) educational activity. Students voluntarily participate in friendly competition to develop IP care plans for individuals with complex health problems. Judges select the winning team based on the most realistic, patient-centred plan, with attention to innovative, collaborative approaches.

Purpose/methods:

Clinical teams from the Canadian Forces Base Kingston developed a case based on their specific patient population, which highlighted mental health and sensitive health issues. Students from five healthcare programs formed three IP teams to research and plan presentation strategies for the competition. Judges provide constructive feedback to all teams and the winning team represents the university at the national competition.

Issues/questions for exploration or ideas for discussion:

What experiences have others had in simulation of challenging and sensitive health issues?

Results:

Student participants reported acute awareness of the responsibilities and challenges inherent in providing collaborative care for a real patient within an authentic context. Increased motivation and understanding for the need to meet complex situations with realistic evidence-based IP care plans was noted.

Discussion:

The depth of understanding of challenging clinical issues, and relationships between the university and clinical community were enhanced. Case development and judging by CFB Kingston enhanced knowledge for those educated outside the military context. A university based IPE activity was improved through community partnership with the local military base resulting in win-win outcomes for all stakeholders.

CARDIAC SURGICAL TRAINING THROUGH LOW-FIDELITY SIMULATION

Author/s

Daniel Holloway, Bill Kidd, Mackenzie Quantz, Andrew Maitland

Presenter

Daniel Holloway

Institution(s), Department(s), Country/Countries:

University of Calgary, Cardiac Surgery, Canada

Introduction:

In order to become proficient in technically demanding procedures, cardiac surgery residents are more frequently using simulation.

Methods:

A novel suture simulation device was designed, 3D printed, and distributed to 8 cardiac surgery residents. Specific suture throws were randomly selected at specific regions to create surgical tasks. The time to complete each task was recorded and all residents were filmed completing a task on the first and last day of a 30 day trial. Each resident's opinion of the simulator was assessed through a survey.

Results:

Use of the simulator ranged from 2 to 26 tasks; with a median of 7.5 tasks. The average time required to complete a task was significantly shorter after the 30 day period ($p = 0.005$). Increased use of the simulator was associated with a decreased time required to complete a task ($p < 0.001$). More experienced residents performed tasks significantly faster than junior residents ($p < 0.001$). All the residents stated the simulator was beneficial, would recommend it for other residents, and felt the skills learned would translate to the operating room.

Conclusions:

A low fidelity simulator was created to help residents practice suturing. Suturing proficiency improved through use of the simulator. Residents who used the simulator more frequently showed a greater improvement. The residents believed it was helpful in improving their technical skills and would translate to improved skill in the operating room.

Take-home message:

The use of this simulator may be a helpful adjunct in the training of surgical residents.

Session 10A

10A Symposium Tuesday 1630-1800

Patient and Public Involvement in Assessing Competence Across The Medical Continuum

Julian Archer, The Collaboration for the Advancement of Medical Education Research & Assessment. Plymouth University Peninsula Schools of Medicine and Dentistry, UK

Marie Bismark, Melbourne School of Population and Global Health, University of Melbourne, Australia

Jen Morris, Patient Advocate, AHPRA's consumer committee

Janet Watson, Professional Actor

Suzanne Nunn, The Collaboration for the Advancement of Medical Education Research & Assessment. Plymouth University Peninsula Schools of Medicine and Dentistry, UK

Sam Regan de Bere, The Collaboration for the Advancement of Medical Education Research & Assessment. Plymouth University Peninsula Schools of Medicine and Dentistry, UK

Presenters: Julian Archer, Jen Morris, Janet Watson and Marie Bismark

Patient and public involvement (PPI) is well established in clinical research. Initiatives, such as INVOLVE in the United Kingdom¹, support the public's active engagement in clinical research throughout the development as well as the recruitment and implementation stages.

However while patients have been actively involved in the teaching and training of medical students and doctors since the creation of the profession, this has been ad hoc and often subservient; patients 'used' by doctors for their learning. There has been overtime a 'professionalization' of patient groups such as ASPE: the International Organization for Professionals in the Field of Simulated and Standardized Patient (SP) Methodology providing a voice for patients/lay people in medical training and assessment.²

Increasingly patients and the public are being asked to assess and feedback to doctors at all stages of medical careers including most recently as part of relicensing / revalidation. Yet these developments often involve the public more broadly using patient feedback questionnaires; who are neither trained nor supported and mainly appear unwittingly involved in the assessment of their doctors.³

With these latest developments in mind, including the plans for medical revalidation in Australia, we will provide a series of short presentations exploring a typology for PPI in medical education across the continuum, an exploration of the advantages and challenges of PPI and how it can be done in partnership in medical education.

Primarily this symposium will provide a forum for debate and discussion around the central role of PPI in medical education across the continuum.

¹<http://www.invo.org.uk/>

²<http://www.aspeducators.org/>

³https://www.plymouth.ac.uk/uploads/production/document/path/1/1909/PPI_Report_FINAL_20.2.14.pdf

Session 10B

EMPATHY AND DENTAL STUDENTS: A STUDY OF SELF AND PATIENT ASSESSMENTS

Author(s)

Associate Professor Kellie Bennett¹, Assistant Professor Julie Shepherd¹, Associate Professor Jennifer Bazen²

Presenter

Associate Professor Kellie Bennett

Institution(s), Department(s), Country/Countries

1 School of Psychiatry and Clinical Neurosciences, University of Western Australia, Australia

2 School of Dentistry, University of Western Australia, Australia

Introduction

A study of self and patients assessments of dental students empathy was conducted to explore perceived empathy levels in Western Australian dental students. It is of concern that international research shows empathy levels have decreased amongst dental students in recent times, especially since the use of an empathic style results in greater patient satisfaction and improved outcomes.

Methods

Self-assessments of dental students levels of empathy towards patients are reviewed on an annual basis throughout the UWA dental degree, using the 20-item Jefferson Scale of Physician Empathy for Health Professionals-Student Version. In addition, selected students (N=26) were provided with patients assessments (N=296) of their empathy. During a focus group, students were provided with a summary of patients assessments for reflection on challenges to empathy.

Results

This ongoing study shows that students perceive their own empathy towards patients to be high (Range 78-140, *Mean*=110.69, *SD*=13.38) and this correlates with patients assessments of students empathy (Range 15-35, *Mean* =30.26, *SD*=4.12).

Conclusions

Findings from this study suggest that self and patients assessments of empathy are high for dental students throughout their training. However, challenges to maintaining empathy during clinical consultations, such as time and training, have been identified by a student focus group and supported by patients feedback.

Take-home message

Self and patients assessments of dental student empathy allow students to reflect on this area from varied perspectives. Ongoing assessment in this area is necessary to ensure students maintain high levels of empathy towards patient care.

DO GENDER AND ETHNICITY INFLUENCE STANDARDIZED PATIENTS' ASSESSMENT OF STUDENTS' EMPATHY?

Author/s

Blatt B¹, Lopreiato J², Berg K³

Presenter

TBA

Institution(s), Department(s), Country/Countries

¹ George Washington University, ² Uniformed Services University, ³ Jefferson University

Purpose

To examine, primarily, the effects of ethnicity and gender, which could introduce bias into scoring, on standardized patient (SP) assessments of medical students and, secondarily, to examine medical students' self-reported empathy for ethnicity and gender effects so as to compare self-perception with the perceptions of SPs.

Method

Participants were 577 students from four medical schools in 2012: 373 (65%) were white, 79 (14%) black/African American, and 125 (22%) Asian/Pacific Islander. These students were assessed by 84 SPs: 62 (74%) were white and 22 (26%) were black/African American. SPs completed the Jefferson Scale of Patient Perceptions of Physician Empathy (JSPPE) and the Global Ratings of Empathy tool. Students completed the Jefferson Scale of Empathy and two Interpersonal Reactivity Index subscales. The investigators used 2,882 student-SP encounters in their analyses.

Results

Analyses of SPs' assessments of students' empathy indicated significant interaction effects of gender and ethnicity. Female students, regardless of ethnicity, obtained significantly higher mean JSPPE scores than men. Female black/African American, female white, and female Asian/Pacific Islander students scored significantly higher on the JSPPE than their respective male counterparts. Male black/African American students obtained the lowest SP assessment scores of empathy regardless of SP ethnicity. Black/African American students obtained the highest mean scores on self-reported empathy.

Conclusions

The significant interaction effects of ethnicity and gender in clinical encounters, plus the inconsistencies observed between SPs' assessments of students' empathy and students' self-reported empathy, raise questions about possible ethnicity and gender biases in the SPs' assessments of medical students' clinical skills.

EVALUATION OF THE PSYCHOMETRIC PROPERTIES OF THE CONSULTATION AND RELATIONAL EMPATHY (CARE) MEASURE IN FINAL YEAR FAMILY MEDICINE STUDENTS

Author(s)

Julie Y Chen^{1,2}, Weng Y Chin^{1,2}, Colman SC Fung¹, Carlos KH Wong¹, Joyce PY Tsang¹

Presenter:

Weng Yee Chin

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² Institute of Medical and Health Sciences Education, The University of Hong Kong, Hong Kong SAR

Introduction

Good interpersonal skills are essential for an effective family medicine (FM) consultation. The Consultation and Relational Empathy Measure (CARE) has been used by patients to assess doctors' empathy. This study aimed to establish whether the CARE is valid for assessing medical student empathy.

Methods

158 medical students performed a consultation on a simulated patient (SP) for their final year FM exam. SPs completed the CARE, a global rating score (GRS), the Jefferson Scale of Patient's Perception of Physician Empathy (JSPPPE), and a history-taking checklist. Observing examiners also completed the CARE. Structural construct was assessed using exploratory (EFA) and confirmatory factor analysis (CFA). Reliability was assessed using intraclass and Spearman's correlation.

Results

EFA identified one factor onto which all 10 CARE items loaded significantly, which was supported by CFA. The CARE strongly correlated with both convergent measures: GRS ($\rho = 0.794, p < 0.001$) and the JSPPPE ($\rho = 0.771, p < 0.001$), and weakly correlated with the divergent measure: history taking score ($\rho = 0.277, p < 0.001$). SP CARE ratings weakly correlated with academic results ($\rho = 0.274, p = 0.001$). Female SPs were more likely to give higher CARE ratings (adjusted OR=5.38, $p < 0.001$). The inter-rater reliability between SPs and examiners was low (ICC=0.228, $p = 0.002$).

Conclusion & Take-home message

The CARE measure appears to be valid for use in undergraduate Family medicine clinical examinations. The weak inter-rater reliability between SP and examiner CARE ratings suggests that assessments should only be conducted by the surrogate patient and not by the clinician observer.

WHAT DIFFERENCE DOES GENERAL PRACTICE EXPOSURE MAKE TO EMPATHY AND COPING SKILLS IN FINAL YEAR MEDICAL STUDENTS? AN EVALUATION OF PROGRAM

Author(s)

Natasha Yates, Jane Smith, Elizabeth Edwards, Sally Sargeant.

Presenters

Natasha Yates, Jane Smith and Sally Sargeant

Institution(s), Department(s), Country/Countries

Bond University, Faculty of Health Science and Medicine, Department of General Practice, Australia.

Introduction

It is suggested that empathy declines during workplace-based clinical training. Students on GP rotations are exposed to multiple aligned clinical and teaching activities that encourage a patient-centred approach to clinical practice. Essential ingredients to this include empathy and the ability to cope with patients' situations, which may be confronting and very different to the students' life experiences.

We evaluated changes in empathy and coping skills of final year medical students before and after their General Practice placements

Methods

Final year Medical Students (n=93) completed validated surveys measuring coping style (Brief COPE), and empathy (Interpersonal Reactivity Index) before and after their 7 week general practice rotations. Coping Styles were analysed separately (Active, Cognitive, and Dysfunctional Coping). Students on emergency medicine rotations were used as control groups.

Results

Analysis to date revealed students with higher active functional coping skills showed no decline in empathy ($F < 1$). However concerns remain relating to those with lower active functional coping skills, who showed statistically significant declines in empathy ($P = .017$).

Conclusions

Despite empathy typically declining throughout clinical placements, our results suggest that active functional coping mechanisms may help to prevent this. However students with lower active functional coping skills continue to show declining empathy

This has implications for curriculum development and future directions for teaching empathy and coping.

Take-home message

Intentional exposure of medical students with higher active functional coping skills, to patient centred activities during clinical placements, may help preserve empathy levels. We need to research ways and means to maintain empathy for students with lower active functional coping skills.

Session 10C

TRANSFORMING ASSESSMENT IN INTERPROFESSIONAL EDUCATION: CREATING MILESTONES AND ENTRUSTABLE PROFESSIONAL ACTIVITIES

Author(s)

Wagner, S.J.¹ & Reeves, S.²

Presenter

Wagner, S.J.

Institution(s), Department(s), Country/Countries

¹University of Toronto, Department of Speech-Language Pathology, Faculty of Medicine, Canada

²Kingston University/St George's, University of London, Faculty of Health, Social Care & Education, United Kingdom

Introduction

Competency-based education and practice have become foundational for developing interprofessional education (IPE) and interprofessional collaboration. There has been a plethora of competencies developed in these areas recently, both at institutions and nationally, however, their effective integration and thus potential has not been fully realized. Milestones and entrustable professional activities (EPAs) are new concepts and assessment approaches that provide a way to functionally use and maximize competencies to ensure that competency is attained.

Methods

The study uses a sequential mixed methods approach. The first phase employs a modified Delphi technique to identify possible EPAs based on existing IPE competencies and milestones from a large university. The second phase will begin to create specific EPAs for the IPE curriculum to provide a robust approach to assessment using focus groups of international experts.

Results

It is expected that this study will generate a series of EPAs appropriate for the effective assessment of IPE learning activities. Future work will involve applying the EPAs where they are typically used in student-based simulated and clinical education settings.

Conclusions

Realizing how EPAs can be applied in IPE across the continuum may well be transformative to optimize collaborative practice for the ultimate benefit of clients/patients. In this way, attainment of competencies will be ensured and accountability for interprofessional standards of practice thus accomplished.

Take-home message

Milestones and EPAs provide a way to functionally use and maximize competencies to ensure that competency is attained. They can be applied to IPE to enable alignment of actual learning with assessment.

MILESTONES TO INFORM PROFESSIONAL DEVELOPMENT IN GRADUATE MEDICAL EDUCATION

Author(s):

Eric Holmboe, MD, Kenji Yamazaki, PhD, Nicholas Yaghmour, MPP, Stanley J. Hamstra, PhD

Presenter:

Eric Holmboe, MD

Institution(s), Department(s), Country/Countries:

Accreditation Council for Graduate Medical Education, Chicago, IL, USA

Introduction

In July, 2013, Milestones were incorporated as part of the Next Accreditation System (NAS) in the United States. Between 2010 and 2012, each specialty discipline created specific developmental performance descriptions (i.e. Milestones) for subcompetencies specific for the discipline and aligned with the ACGME six core competencies framework. The range of subcompetencies per specialty is 10 (allergy/ immunology) to 41 (orthopaedics) with a mean number of 24 subcompetencies per specialty. Milestones are organized as five levels of development within each subcompetency. Residency programs report resident performance by subcompetency using Milestone levels. Theoretically, residents should advance in the Milestone levels as they progress in training.

Methods

We examined differences in Milestone judgments between PGYears (range of program length 3-7 years) across 29 specialties for 97,536 residents using the 2015 year-end Milestones data. Milestone judgments were converted to a 0-9-interval scale to account for transitional states between each Milestone levels. The outcome measure was the difference in mean yearly Milestone level by subcompetency per PGYear.

Results

The mean difference per subcompetency was +1.4 units per PGYear (SD=0.58) on 2,699 subcompetency comparisons across all specialties, with the entire range of possible Milestone levels utilized. Only 20 comparisons (0.7%) showed a negative difference in Milestone judgments between PGYear and involved only 41 residents (0.04%).

Conclusions

The Milestone judgments demonstrated meaningful, developmental differences between PGYears across all 29 specialties.

Take-home message

All Milestone levels are being utilized for assessment judgments and the framework appears to be capturing meaningful developmental differences by PGYear.

THE MINI MILESTONES ASSESSMENT (MINI MAS) ,A DIRECT OBSERVATIONAL TOOL TO ASSESS CLINICAL MILESTONES IN THE ERA OF COMPETENCY BASED EDUCATION

Author

Moyez B Ladhani

Presenter

Moyez B Ladhani

Institution(s), Department(s), Country/Countries:

McMaster University, Department of Pediatrics

Introduction

Competency Based education will move training programs away from time based standard to a model of competence and milestones. Assessment, observation and feedback are key ingredients to successful implementation of competency based medical education. Work based assessment tools will be an important part of a multimodal programmatic assessment for learners. The purpose of the study was:

- 1 to develop a tool, the Mini Milestones Assessment (Mini-MAS) to assess six medical competencies and progression through milestones using the Dreyfus Developmental Model and
- 2 to test the reliability, validity, acceptability and feasibility of the Mini-MAS tool.

Methods

Twelve PGY 1 residents at McMaster Children's Hospital were required to complete 40 observations (10 history taking, 10 physical exam, 5 clinical reasoning, 5 communication with families, 5 communication with staff and 5 collaboration) during their general pediatric component of the 2013-2014 academic year. These same competencies were also observed for 9 PGY 4 residents over the same competencies over the same time period . Following the study period, a survey was administered to the residents and faculty to assess acceptability and feasibility of the Mini-MAS tool. Kane's validity framework was used to evaluate the Mini-MAS tool.

Results

PGY 1 and PGY 4 residents had an average of 36 and 16 observations completed, respectively, across a wide variety of settings and clinical problems with multiple assessors. The tool was able to differentiate between the PGY 1 and PGY 4 learners and showed progress of the PGY 1 learners through the academic year. The G coefficient overall for the Mini-MAS tool was 0.8 for the PGY1 residents and 0.5 for the PGY 4 residents. Correlation between the six competencies assessed was low, achieved by only one competency being observed and having grounded anchors. Learners and faculty were satisfied with the tool. The tool allowed learners to be observed more frequently and receive timely valuable feedback.

Conclusions

The Mini-MAS tool added, as a formative assessment mode to a multi-modal assessment program will benefit the trainee, by increasing their observations and providing residents with valuable feedback. The assessment will inform residents where they stand with respect to their level of training, what competencies they can improve on and how they can make such improvements.

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ANALYSIS OF INITIAL MILESTONES DATA FROM THE ACGME NEXT ACCREDITATION SYSTEM: WHEN DO RESIDENTS ACHIEVE ENTRUSTMENT TARGETS?

Author(s):

Stanley J. Hamstra, PhD, Kenji Yamazaki, PhD, Nicholas Yaghmour, MPP, Eric Holmboe, MD

Presenter:

Stanley J. Hamstra, PhD

Institution(s), Department(s), Country/Countries:

Accreditation Council for Graduate Medical Education (ACGME), Chicago, IL, USA

Introduction

The ACGME recently introduced a competency-based framework to accreditation (the Next Accreditation System) that shifts focus from top-down regulation to continuous quality improvement. Each clinical specialty was charged with drafting sub-competency milestones and specific graduation entrustment targets between 2010-12, with reporting of milestones achievement data to be phased in beginning in 2013. The goal of every residency program is the attainment of entrustment milestones for all residents by graduation.

Methods

For the first time, our milestones dataset enables us to examine patterns of achievement within and across training programs. For this study, we analysed 2014-2015 academic year-end milestones achievement data for Internal Medicine, Orthopaedic Surgery, Neurosurgery, Diagnostic Radiology, and Urology (total n=43,979 residents). Our main outcome variable was the percentage of residents who attained the recommended entrustment milestones at graduation per competency.

Results

The percent of senior-most residents who attained the entrustment target varied by specialty and by competency within specialty. For individual Patient Care sub-competencies, percent attainment varied from 72% to 97% across specialties; Medical Knowledge (75-93%), Communication (89-94%), Professionalism (88-97%), Practice-Based Learning (80-95%), and Systems-Based Practice (85-94%).

Conclusions

The data obtained to date indicate that not all residents are achieving recommended milestone targets in all programs. Ongoing dialogue with specialty communities regarding the reasons for specific discrepancies allows for improvement of both assessment processes and quality of training nationally.

Take-home message

Failure to achieve *a priori* prescribed milestones may serve as a useful indicator for areas of improvement in a competency-based accreditation model.

OPERATIONALIZING IMPROVEMENT: A COMPETENCY-DRIVEN PROMOTIONS PROCESS

Author/s

Lomis K

Presenter

Lomis K

Institution(s), Department(s), Country/Countries:

Vanderbilt University School of Medicine

Introduction

Despite a desire to base learner advancement on multiple attributes, educators have struggled to assemble meaningful evidence and enforce standards in domains other than medical knowledge. Reconfiguring processes for learner promotion around domain performance could enable a culture of improvement.

Methods

Students' portfolios are continually populated with evidence across all competency domains using standardized milestone language. Each student reviews performance evidence with a coach, and they jointly assign performance status for each domain. All students set learning goals informed by evidence. A student with any "sub-threshold" or "threshold" rating is reviewed by the promotion committee.

Results

Learning goals of first year students now span all six ACGME competency domains. In a recent promotion cycle, 8 students were reviewed for concerns in a diversity of domains: Medical Knowledge (3); Interpersonal and Communication Skills (1); Professionalism (4); Systems-based Practice (2). Students were required develop a learning plan to address domain concerns, even in the context of passing course grades.

Conclusions

Focusing the promotions process around domain-specific learning plans creates the potential to address a diversity of performance issues earlier, and assist learners in attaining higher levels of competence. Competency-gated learning experiences at later stages gives this process meaning.

Take-home message

The sorting of performance evidence by domain allows for unveiling of potential trends that otherwise may have been considered minor issues within the context of a single course. Students are directed to domain-specific resources for improvement and must set goals that can be reassessed in the following review cycle.

INTEGRATING CLINICAL FACULTY EVALUATIONS ACROSS THE MEDICAL EDUCATION CONTINUUM

Author(s):

Sharon Peters, Gerona McGrath, Steve Shorlin, Asoka Samarasena,

Presenter:

Sharon Peters

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Background

The **Integrated Clinical Faculty Evaluation** process at Memorial University was designed to support the concept of medical education as a continuum from entry into medical school to retirement. We previously reported on the development process that included creating and piloting of a 5-point Likert form for postgraduate trainees (PG). The form was based on 13 specific teaching behaviours corresponding to the six non-Medical Expert CanMEDS roles. Mandatory comments were required for scores of "1", our "red-flags".

Method

A parallel form with different descriptors was developed for undergraduate students. Results are aggregated – vertically (UG and PG) and horizontally (across clinical disciplines) into one report. To protect confidentiality of the learners, reports are not generated unless at least three separate evaluations have been received. Education leaders are notified of three or more red-flags for one individual.

Results

For 2014-2015, 103 individual red-flags were received with four individuals receiving more than three. For the multiple red-flags, the most commonly cited issues have been in the Professional and Communicator roles. Analysis of outcomes of these is ongoing. Satisfaction of key stakeholders with the new process is being planned.

Take-home message

Evaluating clinical faculty using horizontal and vertical approaches provides more robust information on faculty performance.

Session 10D

PERCEPTIONS VERSUS PRACTICES: EXPLORING THE NATURE OF FEEDBACK IN CLINICAL SETTINGS

Author

Ulemu Luhanga

Presenter:

Ulemu Luhanga

Institution(s), Department(s), Country/Countries:

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Introduction:

Although feedback is central to learning experiences, differing perceptions and dissatisfaction with practices remain prevalent among learners and supervisors (Carless et al., 2011; Eva et al., 2012; Watling & Lingard, 2012). A methodological weakness within existing feedback literature is the lack of studies that use both interviews and direct observations to better understand the link between feedback perceptions and practices in clinical settings.

Methods:

To explore the link between learners' and supervisors' feedback perceptions and practices, an embedded, single-case study design was adopted. Data sources included 24 direct observations and 12 semi-structured interviews. Twelve Pediatric physicians participated in the study; including four residents and eight attendings.

Results:

Two themes emerged from the data: purposes of feedback and embedded nature of feedback practices. Three categories were related to purposes of feedback: "giving information", "guiding", and "reassurance"; and four categories were related to the embedded nature of feedback practices: "a form of teaching", "probing a resident", "what's not said", and "role modelling".

Conclusions:

Although learners and supervisor spoke of "giving information" more often than "guiding", observed practices indicated that feedback for the purpose of guiding occurred often in various clinical settings. Residents, however, had trouble recognizing the embedded nature of these "guiding" practices.

Take home message:

Make the implicit, explicit. There is greater need to educate learners and supervisors on the various interrelated purposes of feedback and how feedback is embedded in everyday clinical practices.

WRITTEN PATIENT FEEDBACK FOR MEDICAL STUDENTS: IDENTIFICATION OF KEY FEATURES AND SYSTEMATIC REVIEW OF CURRENT INSTRUMENTS

Authors

J. Martin, N. Roberts, E. Schmidt, C. Pezaro, N. Hogan, H. Li, T. Noor Mollah, C. Koh

Presenter

J. Martin

Institution(s), Department(s), Country/Countries:

Eastern Health Clinical School, Monash University and Deakin University, Australia

Introduction

Patient interactions are central to developing patient-centredness in medical students. Our Patient Teaching Associates (PTA) program uses volunteer patients with chronic illnesses who participate in teaching, to develop patient centred consultation skills (PCCS). The literature, however, lacks evidence for a validated method for patients to provide written feedback to medical students. The aims of this study were to define the necessary characteristics of an instrument for written patient feedback about PCCS, and evaluate existing instruments for patient feedback.

Methods

Systematic literature reviews were conducted to (i) identify key features for patient feedback to students about PCCS, and (ii) identify existing instruments for patient assessment of consultation skills. Each identified instrument was evaluated for evidence of reliability, validity and utility for assessment of PCCS.

Results

Key features for patient feedback to students included: principles of patient-centredness, specific characteristics for patient feedback to learners, and design elements promoting effective feedback. Eight instruments were evaluated, however none were identified as reliable and valid assessment of PCCS. The Doctors Interpersonal Skills Questionnaire was the closest fit to the defined criteria, however has not been described for use in medical students.

Conclusions

Systematic literature review has not identified a suitable instrument for patient feedback to medical students about PCCS.

Take-home message

Development of PCCS in medical students requires robust assessment and feedback by patients. Development of a suitable instrument for this is required.

THE INFLUENCE OF FEEDBACK CHARACTERISTICS ON ITS PERCEIVED LEARNING VALUE DURING CLERKSHIPS: AN INDONESIAN VALIDATION STUDY

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Background:

Various feedback characteristics have been suggested as having a positive influence on student learning. However, there is little evidence for the effect of these characteristics and validation studies are needed. Furthermore, it is unknown how the learning value of feedback is perceived in cultures with low individualism and large power distance, such as in an Indonesian context.

Methods:

We asked 301 students in Neurology (n=169) and Internal Medicine (n=132) to assess the learning value of mini-CEX feedback using a 5-point Likert scale, and to record for each mini-CEX whether the examiner informed the student what went well, mentioned which aspects of performance needed improvement, compared the student's performance to a standard, explained correct performance, and prepared an action plan with the student. Data were analysed using multilevel regression.

Results:

Students perceived that feedback was more valuable for their learning when the feedback provider mentioned their weakness ($\beta_{\text{mention the weakness}} = 0.153, p < 0.01$) and compared their performance to a standard ($\beta_{\text{compare to standard}} = 0.159, p < 0.01$). Also, the explanation of how the correct performance should be ($\beta_{\text{correct performance}} = 0.324, p < 0.001$) and a mutual action plan to improve their performance ($\beta_{\text{plan of action}} = 0.496, p < 0.001$) influenced the perceived learning value positively. The appraisal of good performance did not influence perceived learning value of feedback ($\beta_{\text{mention the strength}} = -0.025, p > 0.05$).

Conclusions:

In a country with low individualism and large power distance (Indonesia) we could validate the effect of four of the five characteristics for effective feedback as described in the literature.

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Take-home message:

We argue that what constitutes effective and valuable feedback should be validated across cultures.

DEVELOPMENT OF AN INSTRUMENT FOR WRITTEN PATIENT FEEDBACK FOR MEDICAL STUDENTS: CONTENT VALIDATION OF THE MSISQ

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Presenter

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Introduction

Patient centred consultation skills (PCCS) underpin good patient care, and development of PCCS in medical students is facilitated by robust feedback assessment from patients. Our Patient Teaching Associates (PTA) program uses volunteer patients with chronic illnesses (PTAs) who participate in teaching. The aim of this study was to develop and validate an instrument designed for feedback assessment from patients.

Methods

A stepwise process was undertaken:

- (1) Identification of key features for assessment of PCCS via systematic literature review.
- (2) Evaluation of prospective feedback instruments via stakeholder consultations (PTAs, clinician tutors, and medical students), using focus groups, one-to-one interviews and survey questionnaires.
- (3) Creation of a purpose-designed, PTA-completed, feedback instrument that incorporates key features of assessment of PCCS: The 'Medical Students' Interpersonal Skills Questionnaire' (MSISQ).
- (4) Dynamic pilot of MSISQ with iterative refinement: trialled over 6 months in 156 encounters involving 36 PTAs, 19 clinician tutors and 64 medical students in their first clinical year.

Results

MSISQ demonstrated face validity as a tool to assess PCCS in medical students, with increased PTAs acceptance through refinements over 6 months.

Participant feedback on MSISQ showed content validity, in particular: ease of use, inclusion of key features of PCCS, and incorporation of design elements that promote effective feedback.

Conclusions

MSISQ has demonstrated face and content validity for written patient feedback assessment of PCCS in medical students, and is readily accepted in the PTA teaching contexts.

Take-home message

MSISQ has utility for written patient feedback assessment of PCCS in medical students.

THE ROLE OF CLINICAL PROCESS, COMMUNICATION AND LANGUAGE IN THE LONG CASE EXAM - AN INTEGRATED FEEDBACK TOOL FOR PRACTICE FROM PAEDIATRICS

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Presenter

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Introduction

Synthesis, prioritization and communication are key skills in medicine. In paediatric training, these are assessed through short case and long case examinations in the FRACP clinical exam. Examination candidates commonly practice long cases with consultants leading up to their clinical exam. Yet consultants have little specific training to do this. Long case presentations involve sophisticated, multi-layered skills and critiquing the presentation is a complex and difficult task. Identifying where the problems lie in a complex long case performance can be difficult to articulate. The guidance provided by FRACP is focussed on clinical tasks. However, the problems examinees face in doing long case exams are often a subtle combination of language, communication, structural and clinical process problems.

Methods

To assist examining doctors, we have designed a feedback tool which builds on the current reference table rubric and includes elements of structure, language and communication. It is used in a small group feedback session where a participant's filmed simulation long case is reviewed and peer review and facilitator feedback is provided.

Results

This feedback tool targets specific aspects of the long case presentation to improve examinee doctor insight and exam preparation performance. It is an aid to examining consultants to give a more comprehensive assessment of a doctor's performance in this complex exam and may contribute to standards of good training practice.

Conclusions

A specifically designed feedback tool provides more comprehensive and holistic feedback to doctors practising long case exams.

Take-home message

Language and communication are essential components of a long case exam and need to be prioritised.

HOW PATIENTS PERCEIVE THEIR CONTRIBUTION TO MEDICAL STUDENTS' LEARNING IN PRIMARY HEALTHCARE

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Introduction

Medical students have an increasing part of their education in Primary Healthcare (PHC). To involve patients more in students' learning may increase the value of the clinical placements. The aim of this qualitative study was to explore how patients in PHC could contribute to medical students' learning.

Methods

Qualitative individual interviews with 12 patients at two Primary Healthcare Centers (PHCC) in Stockholm, Sweden. All patients had recently had a student involved in their visit to the PHCC. A semi-structured interview guide was used. The data was analysed by using inductive qualitative content analysis.

Results

The results showed five main categories. The patients perceived medical students to be a natural element in PHC and the students were accepted to take part in consultations. The patients perceived that they could contribute to the students' learning through the encounters with real patients. They could give their perspective on their medical condition, give feedback on how they felt during the encounter and let their bodies to be examined. They sometimes felt ambiguous about if they could trust the competency of the student, despite the supervisor's back-up. They perceived that they got more attention and could learn from the student if they asked questions about their health.

Conclusions

Patients in PHC perceived that they could contribute to the medical students' learning by giving them feedback and insights about their perspective on their medical condition, communication and emotional responses.

Take-home message

Patients have a potential to give more formative feedback to medical students in PHC.

Session 10E

IMPROVEMENTS IN DIAGNOSTIC PERFORMANCE ASSOCIATED WITH THE USE OF A DUAL PROCESSING THEORY BASED APPROACH TO DIAGNOSTIC TRAINING AND ASSESSMENT

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Introduction:

Mounting evidence suggests that diagnostic error may be the third leading cause of death in America. While many factors contribute to error, the ill-defined nature of most diseases (i.e., lacking necessary and sufficient diagnostic criteria) is likely a primary cause. This investigation utilized a Dual Processing-based theoretical framework (DPT) to explore the use of multiple case vignettes in training to and assessing diagnostic competencies against ill-defined diseases.

Methods:

With IRB approval, 117 year one medical students participated in a 1.5 hour computer-based diagnostic training activity involving the problem of Acute Chest Pain and nine commonly associated ill-defined disease differentials. Instruction focused on the formation of two core DPT/System I diagnostic constructs (disease prototypes and disease exemplars) by providing students with a prototypical description of each differential, and practice opportunities against four randomly presented case exemplars for each differential. Assessment involved a pre and post training instrument containing the same 27 test case vignettes with each of the nine diseases represented by three distinct case vignettes.

Results:

A DPT-based approach to diagnostic training produced a significant improvement in diagnostic performance (41.70% at pre-training, 60.26% post training); $t=14.04$, $p<0.001$; effect size, Cohen's $d = 1.32$, while providing a modest level of test reliability = 0 .67.

Conclusion:

DPT is a useful framework for designing new approaches to diagnostic training and assessment.

Take-home message:

The diagnostic capabilities of medical students improve when a DPT framework is used to prepare them for the challenges associated with patients presenting with ill-defined diseases.

THE USE OF SAGAT AS AN EDUCATIONAL TOOL IN MULTIDISCIPLINARY TEAM TRAINING: TEACHING SITUATIONAL AWARENESS IN CLINICAL SIMULATION

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Introduction:

Situation awareness (SA) is a human factor of critical importance to patient safety. Human patient simulation (HPS) allows for a safe environment where health care professionals can develop these skills; however, SA cannot be directly observed. The Situation Global Assessment Technique (SAGAT) measures SA in real-time. Our objective was to validate the feasibility of this tool in measuring SA during multidisciplinary simulation team training.

Methods :

Twenty-four paediatric teams, consisting of two nurses, one resident and one consultant, participated in three acute care scenarios, using HPS. Individual SAGATs contained shared and complimentary knowledge questions on different levels of SA. Within each scenario, two "freezes" occurred so as to assess SA of each team members' clinical assessment and decision making. Individual SAGAT scores were made available to the instructor for use in debrief. Afterwards participants were asked about their satisfaction with teamwork and use of SAGAT as an educational tool.

Results:

Freezes during simulation were not regarded as disruptive by participants and enhanced both individual as team SA. Complimentary knowledge that was not shared within the team lead to misconceptions among team members. Teamwork satisfaction was more influenced by knowledge about the importance of the assigned task than outcome of the scenario.

Take home message:

The use of SAGAT is feasible in clinical simulation. By using handheld technology, SA data are made available to the instructor for use in debrief. This facilitates discussion and provides constructive feedback to the team, expanding the utility of SAGAT to the field of medical education.

THE SUBJECTIVE PRECISION INTERVAL (SPI) – IT'S USE IN CLINICAL PERFORMANCE ASSESSMENT OF MEDICAL STUDENTS

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Introduction

Focussing on the psychometric properties of assessment tools overlooks a major factor: subjective examiner factors. All scientific measurement instruments come with a declared level of precision, and yet examiners' measurements of students' clinical performances do not. The SPI is the examiner's declaration of their level of precision in the mark they award.

Methods

Third year medical students undertake a mandatory clinical performance assessment, known as a Mini Case Review (MCR). A clinician examiner marks the MCR out of a possible of 20. Clinicians were asked to place a confidence interval (i.e. an SPI) across the mark they awarded.

Results

Fifty students completed an MCR; 39 had collected the new MCR/SPI form. There were fifteen unique examiners. Four forms were incorrectly completed, thus 35 cases were available for analysis. The average mark was 16.6/20. In 23/35 cases examiners declared an SPI: five cases had an SPI of 1, fifteen had an SPI of 2, three had an SPI of 3. The average difference between the awarded mark and the upper SPI limit was 0.78, and to the lower SPI mark was -1.13.

Conclusions

The SPI is a real entity as demonstrated by the majority of examiners declaring it, and it can account for a significant proportion of the marking range

Examiners may give students 'the benefit of the doubt' by rewarding them a final mark at the higher end of the SPI.

Take-home message

The SPI is an area for potential focus to improve the assessment process.

AUSTRALIAN MIDWIFERY STANDARDS ASSESSMENT TOOL: DEVELOPING AND VALIDATING A MIDWIFERY CLINICAL PRACTICE ASSESSMENT TOOL.

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Introduction:

Currently in Australia, midwifery education programs each have their own clinical assessment tools to evaluate students' clinical performance. Assessment processes are required to ascertain that graduates meet the requisite professional competency standards as well as the Threshold Learning Outcomes (Health). This project aimed to enhance assessment through developing and validating a standard tool to assess midwifery student performance in workplace-based settings

Methods:

An iterative process was used to develop and refine the tool and behavioural cues. Four workshops were held with refinements from each iteration verified through email. This ensured the language in the tool was relevant and meaningful to clinicians and academics working with students. A total of 24 midwives across four university programs in three Australian States, and in diverse settings (metropolitan and regional sites) contributed to this process.

Student performance is scored with the newly developed AMSAT tool (alongside existing tools). A short survey provides feedback as to whether assessors find the AMSAT tool user-friendly. A minimum of 220 assessments are currently being undertaken across the four universities.

Results:

Upon completion of data collection in October 2015 the assessments will be analysed using SPSS. Factor analysis will be conducted to determine groupings of items. Data will be analysed to ascertain any differences to inform the validity of the tool across sites.

Conclusions:

The tool, behavioural cues and training manual are now available through a public website for national use.

Take-home message:

A common validated assessment tool can contribute to national consistency in midwifery graduate standards.

SELF-PERCEPTION AND MANIFEST - COMPETENCE OF FINAL YEAR MEDICAL STUDENTS OF THE UNIVERSITY OF ZAMBIA

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Presenter:

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Introduction:

Self-perception of clinical competence is the reported ability to perform clinical practical skills, while manifest competence is the observed behavior or practice. Regarding clinical competence, the undergraduate medical education curriculum aspires to initiate the process of transforming novices to experts although the transformation happens after qualification. To initiate this transformation, essential skills in which every medical student must demonstrate competency by the time of graduation have been identified by medical schools, councils, associations and certifying bodies.

Methods:

To investigate the Self-perception of competence of Final Year Medical Students of the University of Zambia, 56 students from a class of 60 completed a self-administered questionnaire that required them to rate their perception of competence on a 5-point Likert scale on 14 clinical practical procedures. The 14 were: IV cannula insertion, nasogastric tube insertion, gastric lavage, urethral catheterization, Cardiopulmonary Resuscitation, endotracheal intubation, wound suturing, vaginal examination, examination of the placenta and lumbar puncture. Manifest competence was measured in the final examination Objective Structured Clinical Examination (OSCE) held at the end of the 2012/2013 academic year.

Results:

Two thirds 36 (66.7%) of the participants perceived themselves as moderately competent in performing the 14 selected clinical practical procedures, 15 (27.8%) rated themselves as highly competent while 3 (5.6%) had low self-perception. Clinical practical procedures that were structured in the curriculum systematically taught, and assessed had higher self-perception and manifest competence concordance. With manifest competence, all students passed the OSCE using the school pass mark of 50%. In terms of levels however, majority of students 52 (92.8%) were barely competent while 4 (7.2%) were absolutely competent. When overall self-perception was compared to manifest competence, there was a discordance which was demonstrated by a negative correlation Spearman rho -0.123 .

Conclusion:

The negative correlation between self-perceived and manifest competence confirms the fundamental cognitive limitation in the ability of humans to know themselves as others may see them consequently limiting the usefulness of self assessment results and supporting the use of objectively measured competency.

Take-home message:

For medical students to learn and develop competence in clinical practical skills, the skills must be systematically outlined in the curriculum, taught, and assessed.

Session 10F

PREFERRED PRACTICE LOCATION AT MEDICAL SCHOOL COMMENCEMENT STRONGLY DETERMINES GRADUATES' RURAL PREFERENCES AND WORK LOCATIONS

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Introduction

We aimed to identify factors influencing whether Australian medical graduates prefer to or actually work rurally.

Methods

We analysed longitudinal data from Australian or New Zealand citizens and Australian permanent residents enrolled in 20 Australian medical schools and who completed Medical Schools Outcomes Database (MSOD) surveys between 2006 and 2013. Outcomes of interest were preferred and actual work locations one (PGY1) and three (PGY3) years post-graduation.

Results

There were 20,784 participants, 4028 of whom completed a PGY1 and/or PGY3 questionnaire. Self-reported preference for rural practice location at medical school commencement was the most consistent independent predictor of whether a graduate would have a rural location preference at PGY1 (odds ratio [OR] 6.07, 95% CI 4.91-7.51) and PGY3 (OR 7.95, 95% CI 4.93-12.84), and work rurally during PGY1 (OR 1.38, 95% CI 1.01-1.88) and PGY3 (OR 1.86, 95% CI 1.30-2.64). The effect of preferred practice location at medical school commencement is independent of, and enhances the effect of, rural background. Graduates of graduate-entry programs or with dependent children were less likely to have worked rurally during PGY1 and PGY3, respectively.

Conclusions

Self-reported preferred location of practice at medical school commencement is the most consistent factor associated with rural preferences and work location at PGYs 1 and 3; this association is independent of, and enhances the effect of, rural background.

Take-home message

Better understanding of what determines rural preference at medical school commencement and its influence on rural workplace outcomes beyond PGY3 is required to inform medical school selection policies and curricula.

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BETTER PERFORMANCE FOR THOSE WHO START CLINICAL YEARS IN INTERNAL MEDICINE? ANOTHER LOOK AT CLERKSHIP TIMING IN CLINICAL YEARS

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Presenter

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Introduction

Multiple studies on timing and/or sequencing of clerkships for undergraduate medical school students have generated mixed results. Some found having certain clerkships early was associated with better performance while others did not find the impact of clerkship timing and sequencing on performance. This study is to examine whether students who had Internal Medicine first had better performance in surgery shelf exam and step 2 than those who had Family Medicine first.

Methods

Among data for 3 recent classes of 360 students, 57 students had surgery as their final rotation. 29 started in Family Medicine and 28 in Internal Medicine. For the 29 students who started in Family Medicine, they had Internal Medicine during the second quarter of the year. Multivariate analysis of variance (MANOVA) was conducted to see whether there are significant differences between the two groups when surgery shelf scores and step 2 scores are simultaneously considered.

Results

The correlation between surgery shelf scores and step 2 CK is at 0.59 and MANOVA results show there are not significant group differences when step 2 and surgery shelf results are considered at the same time. Univariate tests indicate that there is no group difference in either surgery shelf scores or step 2 scores.

Conclusions

The results indicate that there is no difference in surgery shelf exam and step 2 results between the students who took Internal Medicine or Family Medicine as their first clerkship.

Take-home message

Our result suggests that those who started in Internal Medicine did not perform significantly better in clinical knowledge.

THE JOURNEY TO FLIPPING A LARGE (N=500) CLASS

Author/s

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Presenter/s

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Abstract

The flipped classroom model is becoming increasingly popular. It has been shown to be particularly effective when class sizes are small and students are highly motivated. However, flipping a large class presents a new set of challenges, particularly in relation to logistics and student commitment. This paper describes the development, over a four-year period, of a flipped classroom for a large (N=500) class, specifically, a research methods course in psychology. In particular we discuss the challenges we faced in implementing the course, and the changes we introduced to improve the delivery and student uptake.

Student evaluations of the course (quantitative ratings) will be compared between the first (Year 1) and latest (Year 4) delivery of the course. Final mark distributions and retention rates will also be compared between years 1 and 4. We expect to be able to show that changes implemented in response to ongoing student feedback and reflection will be associated with improvements in student engagement, performance, and involvement.

Our data collection for Year 4 only commences in August 2015, hence we cannot provide details of findings in this Abstract.

Take-home message

Large-scale courses can be successfully flipped but they don't happen overnight!

Institution(s), Department(s), Country/Countries

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Introduction

The transition from medical student to medical internship can be both exciting and stressful and recent studies highlight mental well-being as a significant issue¹. The Medical Education Unit introduced a peer-to-peer mentoring program to support the inaugural intern intake in a newly commissioned hospital. An evaluation was undertaken to clarify the experiences and needs of this group.

Methods

Junior doctors, who self-identified with an interest in mentoring, participated in the pilot mentoring program for interns. All mentors underwent multi-modality training that included a small group workshop or e-learning module with a face-to-face component.

Mentors supported a maximum of three mentees over the period of their internship.

Mentees and mentors were approached to provide feedback at intervals during the year.

Results

The response rate to an online survey from intern mentees was 22% (27 of 121). Perceived benefits, enablers and barriers in implementation of the program for junior doctors at multiple sites with various clinical interests were identified. The decisions of mentees becoming future mentors (59%) correlate with suitable partnership ($r=0.44$, $P=0.02$) and having helpful mentoring meetings (0.46 , $P=0.02$), but not perceived engagement of their mentor and the number of mentoring meetings.

Conclusions

These results highlight the need for enhancing the mentee-mentor matching process. Key directions for future training will also focus on building a mentoring partnership and improving the quality of mentor-mentee meetings.

Take-home message

Peer-to-peer mentoring in isolation may not be adequate to meet the needs of interns.

THE PROFESSIONAL FOR TOMORROW'S HEALTHCARE (PTH) - A NEW MODEL FOR ALIGNING HEALTH PROFESSIONS EDUCATION, TRAINING AND EVALUATION

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Introduction

Challenges posed by increasing healthcare demands, require radical redesign of healthcare delivery, together with reform of healthcare professions education and workplace training. This study presents a model for capabilities needed in the **Professional for Tomorrow's Healthcare (PTH)**, as a basis for aligning education, training and assessments in National Healthcare Group (NHG).

Methods

Discussions with educators and practitioners in NHG pertaining to capabilities required in the ideal healthcare worker of the future yielded the PTH model.

NHG, following validation of the PTH model, has started to incorporate it comprehensively as a framework in assessing education curricula, staff training programmes, and faculty development competencies across various professional groups.

Results

The PTH model is summarized below:

PTH = E [K1 + K2 + F + L]	
E	Ethical conduct and healthcare ethos
K1	Core and professional knowledge
K2	Cross-cutting knowledge; collaborative skills
F	Future-oriented thinking – adaptive expertise, ability to cope with change
L	Distributed leadership

Currently, competencies of faculty and allied health professionals (pharmacists) are mapped to the PTH model. The model is also used to define competencies in developing leadership programmes.

Stock taking of all training programmes according to the model has led to the design of inter-professional training programmes to cater to "F" and "L" domains.

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Conclusions

The PTH model forms a common basis for designing educational programmes, restructuring organizational processes to enact and assess the development of PTH attributes in healthcare workers.

Take-home message

A common model, when implemented across education, training and assessment schemes in an organization, is useful for enacting a shared vision.

Session 10G

DEVELOPING A VALIDATED MARKING TOOL FROM EXPERT CLINICIAN CONSENSUS

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Introduction

Many of the clinical skills we use as health professionals can be performed in a variety of ways. Students can benefit from learning different skill techniques, but for the more novice student, the perceived inconsistency can lead to both confusion and anxiety around assessments. We sought to develop a marking checklist for Laryngeal Mask Airway (LMA) insertion and Manual Intraosseous (IO) insertion to identify what priorities expert clinicians hold when they apply these skills.

Methods

We conducted a two-stage modified Delphi study to identify what pre-hospital clinicians uphold as important aspects of LMA and IO insertion. Clinicians were invited to rank each suggested criteria on a provided likert scale, and suggest additional items for inclusion. The study design is based on existing published work [1-5].

Results

A skill guide which has been validated to reflect expert consensus practice was developed for both LMA and IO insertion. Items which are anticipated to effect patient mortality and/or morbidity if performed incorrectly have also been identified.

Conclusions

Two marking tools have been developed for Laryngeal Mask Airway insertion and Manual Intraosseous Insertion to guide consistent clinical education and assessment in these skills.

Take-home message

When consistent teaching is delivered to students, educators provide a solid foundation on which the developing clinician can build variations of practice.

ASSESSMENT AS EVALUATION

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Abstract

Medical schools devote much effort to ensuring that assessment of students is valid, fair and equitable and that graduates are prepared for medical practice. However, when the examination period is over we tend to put the results to one side and return to the task of teaching. In this presentation we argue that assessment outcomes are a valuable evaluation tool that can provide a range of data to inform our curriculum design and teaching.

Some examples of the usefulness of assessment data are longitudinal and cross-sectional analyses of student performance. This can tell us both about performance of individuals and sub-groups over time, and the relative performance of sub-groups such as clinical school attachment in a given period. It can also inform our understanding of what is being taught and identify gaps in knowledge and skills. More detailed analysis of assessment data can inform program revision, such as the contribution of student attributes (e.g. prior degree) to performance in the course.

In order to fully capitalise on assessment data to inform evaluation some challenges must be met. One of the barriers to using performance data is the way files are preserved and stored. We need to ensure that data files are kept in a form amenable to future analysis. This requires the training of support staff in file management and oversight by evaluators with expertise in data analysis and reporting.

We will illustrate our case with examples of how creative use of assessment data can enhance understanding of both student performance and curricula.

A STRUCTURED METHODOLOGY FOR INNOVATIVE ITEM DESIGN IN COMPLEX DISCIPLINES

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Abstract

What does a test developer need to know about the test taker? Defining the test construct is a fundamental step in designing any type of assessment. The test blueprint is the operational definition of the construct and guides test development efforts. And yet, particularly for complex fields such as medicine, it can be very difficult to specify explicitly the knowledge, skills and abilities needed for competent performance. Furthermore, there may be certain aspects of the test blueprint that are difficult to assess through traditional assessment methods. To tackle this second point, the technology of computer-based testing (CBT) opens up a myriad of possibilities regarding the design of assessments and items within assessments. However, technology is not the sole answer to better measurement. All items, regardless of how innovative and sophisticated they are, must meet the construct intent to be successful assessment tools.

This presentation discusses a novel approach to construct definition and innovative item design that is based upon the user-story technique used in Agile product development methodology to create functional specifications for software. To facilitate more principled and intentional thinking about test constructs, Subject Matter Experts are guided through an analysis of the construct needs for innovative item design using the creation of user stories which translate test blueprints into measurable tasks. Follow-up steps include item storyboarding and development of prototypes from the storyboards. Lastly, Subject Matter Experts evaluate the prototypes against criteria that consider all aspects of a CBT test item: For example, how will performance on the task be evaluated and scored? How will the test taker navigate to and through the item? Are stimuli required to complete the task and, if so, what and how should be stimuli best be presented?

This approach to innovative item design is built on two philosophical cornerstones: (1) the test construct and what is being measured are at the heart of well-designed test items, and (2) items should be considered as the sum of component parts – these components include navigation and delivery, evaluation, selection and ordering, and configuration as well as presentation. Through this approach, an evidentiary pathway from the test construct to the operational definition of that construct is created to support content-oriented validity of the resulting assessment

EVALUATION OF SURGICAL SKILLS IN PLASTIC SURGERY: VALIDITY AND RELIABILITY OF ASSESSMENT USING THE O-SCORE

Author(s)

Curtis R. Budden, Mark Gierl, Jay Zhu, Jonathan White

Presenter

Curtis R Budden

Institution(s), Department(s), Country/Countries

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Introduction

There is a paucity of global assessment tools to aid in assessment decisions for plastic surgery trainees. With a shift in medical training from preceptorship model to competency based-training, methods to yield valid and reliable assessments are imperative. The Ottawa surgical competency operating room scale has been evaluated for use in general and orthopaedic surgery. The objective of this research is to determine the reliability and validity of decisions made using the O-SCORE when implemented at a large Canadian plastic surgery residency program.

Methods

Plastic Surgery residents at the University of Alberta, a large Canadian University hospital, were evaluated using the O-SCORE over a three month period. Trainees were evaluated using the O-SCORE on two occasions on three surgery types. A generalizability study was performed to assess variance components of a three facet, fully crossed, balanced design model. A D-study using these values was conducted to determine optimal conditions for assessments allowing maximum reliability scores. To assess validity, t-test of scores between junior and senior residents was performed.

Conclusions

This is the first study to examine validity and reliability global surgical skill evaluation in plastic surgery postgraduate training. Assessment tools for global surgical skills are needed for plastic surgery training. The O-SCORE, or a modification of it, may serve as a suitable form of assessment which can lead to valid and reliable decisions in plastic surgery.

BEST-WORST SCALING AS AN ALTERNATIVE METHOD TO EXAMINE CONTENT VALIDITY

Author(s):

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Presenter:

Mr Yonghao Lim

Institution(s), Department(s), Country/Countries

National Healthcare Group, Health Outcomes & Medical Education Research (HOMER), Singapore

Introduction:

Best-Worst Scaling (BWS) is a method to elicit stated preferences, especially in situations where tradeoffs need to be considered. In a typical BWS experiment, participants have to choose the 'best' and the 'worst' options from lists of 4-7 options. It is an alternative method to examine content validity, specifically, domain representation and domain relevance. As compared to traditional methods involving subject matter experts achieving consensus through rating, ranking or sorting (e.g. Delphi method), BWS has the advantages of less response bias, better discrimination of relevant dimensions and avoiding differing interpretations of rating scales.

Summary of Work:

In this presentation, we will illustrate the utility of BWS experiments using a case study of an actual BWS experiment conducted to investigate the characteristics of good clinical teachers. This experiment was conducted with a large group of medical residents and faculty members (approximately 1000) that looks at characteristics of clinical teachers presented both positively and negatively and aims to compare the preferences of different clinical disciplines, institutions and status (e.g. trainee vs faculty). Considerations in the design and analysis of BWS experiment, such as sample size determination, number of options and lists, structuring of data and different statistical methods, will be discussed and potential limitations will be highlighted to guide the implementation of BWS experiments.

Take-home Message:

BWS experiments are a viable method to examine content validity that can overcome some of the limitations in traditional methods. The potential of BWS experiments to contribute to content validity and other aspects of assessment should be further explore.

Session 10H

COMPARISON BETWEEN THE WORLD FEDERATION FOR MEDICAL EDUCATION (WFME) AND THE EUROPEAN QUALITY ASSURANCE REGISTER FOR HIGHER EDUCATION (EQAR) STANDARDS FOR EVALUATING AGENCIES THAT ACCREDIT MEDICAL SCHOOLS

Author/s

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Presenter/s

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Institution(s), Department(s), Country/Countries

Foundation for Advancement of International Medical Education and Research (FAIMER), United States

Introduction

A system of accreditation can help ensure quality and encourage improvements in medical education. As of 2023, graduates of international medical schools seeking training positions in the United States will be required to have graduated from an appropriately accredited medical school. To enhance the validity of decisions made by accrediting agencies worldwide, some agencies undergo voluntary external evaluations of their standards and processes.

Methods

The World Federation for Medical Education (WFME), with assistance from the Foundation for Advancement of International Medical Education and Research (FAIMER), has implemented a Recognition Program which fulfills the 2023 requirement. This Program evaluates the quality of agencies accrediting medical schools around the world. In Europe, the European Quality Assurance Register for Higher Education (EQAR) system assesses agencies accrediting higher education programs in general, sometimes including medical education. The benchmarks used by WFME and EQAR to assess accrediting agencies, [WFME Recognition Criteria and EQAR Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)], were compared to determine similarities and differences in scope and content.

Results

While the WFME Recognition Criteria and the EQAR ESG contain overlapping content, several key differences were noted. For example, the WFME Recognition Criteria include a requirement for accrediting agencies to use standards specific to medicine or possessing similar characteristics, while the ESG do not specify type of standards used.

Conclusions

External evaluations such as by WFME or EQAR can help ensure the validity of accrediting agencies' decisions, and alignment of standards across these systems could further enhance the quality of accreditation reviews.

A ROD FOR OUR OWN BACK? IMPACT OF NEW ACCREDITATION FRAMEWORKS ON ASSESSMENT OF HEALTH EDUCATION PROVIDERS IN AUSTRALIA

Author(s):

Jolly, BC¹, Baird M².

Presenter:

Brian Jolly and Marilyn Baird

Institution(s), Department(s), Country/Countries

- 1) Joint Medical Program, Universities of Newcastle and New England, NSW, Australia
- 2) Department of Medical Imaging and Radiation Sciences, School of Biomedical Sciences, Faculty of Medicine, Nursing and Health Sciences. Monash University, VIC, Australia

Introduction

A national health professional registration scheme has been operating in Australia since July 1 2010, or 2012 for 3 professions including Radiation Sciences. Integral to this has been the formation of national boards for health disciplines and respective accreditation committees for education providers. The extent to which these changes have challenged the traditional approach to Australian health accreditation is the topic of this paper.

Methods

The authors analysed the publications of two accreditation committees: one pre existing national body (the Australian Medical Council) and one newly formed national committee that took over from several State-based committees (Medical Radiation Practice Accreditation Committee). A content-based conceptual approach was taken, similar to that used by Eraut et al¹ for analysing curricula

Results

Results suggested that there had been a move from the supportive constructive framework in the early 2000's to a critical evidence-based framework post 2012. There were also many more elements to latter accreditation activities and a greater number of criteria to fulfil by institutions. In addition newer accreditations are not time-based, but perpetual monitoring is required. The previous underlying assumption was that criteria were achieved unless evidence gathered in the process showed otherwise. The modern assumption is that a criterion is not met until evidence is sighted that it has been. The implications of these shifts for the assessment of health professional education course will be discussed.

Conclusions

The results challenge the notion of lighter touch accreditation in keeping with the philosophy of TEQSA. Have we made a rod for our own back?

Take-home message

A national forum is required to discuss Australian approaches to healthcare accreditation.

DOING MANY THINGS BUT DID NOT INFLUENCING: A CASE STUDY OF EVALUATING MEDICAL SCHOOL SOCIAL ACCOUNTABILITY FOR PUBLIC HEALTH CARE

Author(s) :

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Presenter :

Rachmad Sarwo Bekti

Institution(s), Department(s), Country/Countries

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Background: The involvement of social accountability issue in LCME, WFME revised standard and national medical education accreditation standard has raised concern among Indonesian medical education leaders. Our newly appointed medical school principals established a team to conduct analysis which has never done before to measure the extent of institute social accountability quality innovative methods as the baseline data for formulating more effective strategy to respond the call of new accreditation standard challenge.

Summary of work: The team had created & distributed self-assessment questionnaire of faculty involvement in social accountability effort as well as reviewed the published health care indicator and MDG's district achievement report in past 4 years from relevant regulating body.

Summary of results: Our analysis has informed that for last 4 years, there were no significant contribution of our grade A accredited medical school to the improvement of district public health care and MDGs indicator. Faculties have reported that they spent more than 30% of annual FTE for what so called social accountability activity both in research and teaching. Most of them perceived that doing medical service has already fulfill social responsibility obligation.

Conclusions: This is a case study revealing that faculty member in developing countries such as Indonesia, still did not know that what they did in medical school contributed less in improving public health care indicator & MDGs Achievement, even in the district where they live.

Take home message: The gap in faculty assessment report and district public health indicator indicating the provision of more overarching framework for internalization of social accountability in medical school.

EXPLORING THE TIES THAT BIND: MAPPING THE MISSIONS OF U.S. LCME ACCREDITED MEDICAL SCHOOLS: AN EXERCISE IN ORGANIZATIONAL ASSESSMENT

Author(s)

Frederic W. Hafferty, PhD, Douglas Grbic Ph.D., Philip K. Hafferty,

Presenter

Frederic W

Institution(s), Department(s), Country/Countries

Mayo Clinic, General Internal Medicine, (USA)

Association of American Medical Colleges, Research and Data Programs (USA)

University of Washington, Art History (USA)

Introduction

Mission statements (MSs) are an expression of an organization's 'vision' and a reflection of a broader social environment in which it is embedded. Using schools as our unit of analysis, we analyzed all (N=141) U.S. LCME accredited medical school mission statements to explore how researchers might move beyond simple frequency counts of MS attributes to better understand the system-level and relational nature of medical school missions.

Methods

This study employed: a) content analysis to identify themes within MSs; b) social network analysis (SNA) techniques to compute the linkages among schools based on those themes; and c) hierarchical cluster analysis to identify subsets of schools.

Results

Content analysis revealed 20 themes, with MSs having an average of 5.7 unique codes. A cluster analysis of the linkages among MSs revealed a 10 cluster solution to be a strong, optimal fit for the data. An analysis of each of these clusters showed that schools centered on relatively unique combinations of themes embedded in their MSs. A SNA approach allowed one to "see" not only core schools within clusters, but schools that bridge clusters, along with true outliers.

Conclusions

Through a novel combination of analytical strategies and data visualization techniques, findings showed distinct subsets of schools with MSs orientated around specific combinations of themes. Findings illustrate the diversity of missions among medical schools.

Take-home message

Counting attribute frequencies, while seductive in their simplicity, fail to capture the necessary system-level understanding of how functionally related organizations go about their work.

A NEW ASSESSMENT TOOL FOR INNOVATION POTENTIAL

Author(s):

Fiona Patterson^{1,2}, Vicki Ashworth¹, Charlotte Flaxman¹, Máire Kerrin¹.

Presenter:

Vicki Ashworth

Institution(s), Department(s), Country/Countries:

¹ Work Psychology Group, UK; ² University of Cambridge, UK.

Introduction

Health services globally will need to do more with less over the coming years; innovation is believed to be an emerging key attribute for healthcare workers. Research indicates that organisations need to be able to identify innovative characteristics and behaviours within their employees to promote innovation across their organisation (Patterson & Kerrin, 2013). Therefore, enabling identification of these characteristics is likely to be of particular interest and benefit to both employers and employees.

Methods

A tool for assessing innovation potential has been developed; the Innovation Potential Indicator (IPI). The IPI is a self-report measure that captures the important behaviours associated with the idea generation and implementation phases of the innovation process. Examples of the domains measured include subsets of 'motivation to change' (e.g. intrinsic motivation, and personal initiative) which have been found to be some of the best predictors of innovation outcomes (Burch et al., 2008).

Results

The tool has been used and evaluated in a variety of contexts. Research shows good evidence of internal reliability (α ranging from .69 to .73) and construct validity (correlations between personality traits ranging from $r = -.39$ to .66, $p < .05$, (12 studies, $N = 1100$)), which were as expected.

Conclusions

Findings suggest the IPI is an effective tool for evaluating employees' innovation potential; the outputs can contribute to wider innovation agendas and offered valuable developmental feedback.

Take-home message

With health services under increasing pressure to do more with less, the IPI provides a unique opportunity to assess and develop innovation potential within healthcare employees.

EVALUATING A RURAL MEDICAL EDUCATORS' ACCREDITATION PROGRAM

Author/s

Peardon M, Caygill R, Wright J

Presenter/s

TBA

Institution(s), Department(s), Country/Countries

The University of Melbourne Department of Rural Health

Introduction

A Teaching Development and Recognition Program (TeDARP) has been developed in response to a lack of professional development opportunities for rural medical educators. We aim to develop a culture of professional development in teaching, of collaboration and sharing of teaching experiences, resources and knowledge.

Education specific training benefits educators and their students. This includes having a rudimentary understanding of education theory and practices.

The aim of TeDARP is to provide opportunities for rural medical educators. As part of this program the Rural Clinical School will also be conducting a number of education sessions which will provide points towards accreditation.

The program is voluntary with clinicians opting in to a range of professional development activities which will provide credit towards a relevant level of accreditation.

While not a formal qualification, the accreditation process provides recognition of a level of medical education attainment and a demonstration of commitment to continuing medical education (CME).

The result we aim for is a student body that have access to teachers who are well equipped to deliver high quality educational content and learning experiences. Our goal is to have 50% of teaching delivered by accredited teachers by the end of 2016.

Methods

Participants have been invited into the pilot program. The participants apply for accreditation through our model- a number of relevant professional development activities provides points towards an appropriate level of accreditation. Accreditation is available at different levels to allow participation from educators with different teaching frequencies (Tef levels)

Results

Our pilot program is currently underway. Results of the evaluation program will be ready to present at the conference in March 2016.

Conclusions

Our goal is to provide opportunities for our rural medical educators. This unique model of accreditation will ensure that rural practitioners have access to a variety of activities for which they can receive recognition and accreditation. Differing levels of teaching frequency can ensure that all rural medical educators can become

accredited. Our University run professional development sessions will also provide an opportunity for relevant PD in the area of medical education that does not require them to travel long distances. We aim to bring to our rural educators equivalent opportunities for learning and development as their metropolitan colleagues.

Take-home message

TeDARP is our newly developed program of accreditation to be offered to the rural medical educators at The University of Melbourne Rural Clinical School. This unique program offers accreditation and professional development opportunities.

Teaching frequency (Tef)Level	Points Required
Tef Level One Teacher (teaches five or more hours per week, hold senior position)	50
Tef Level Two Teacher (teaches two-five five hours or equivalent every week)	30
Tef Level Three Teacher (teaches at least one hour or equivalent every week)	20
Tef Level Four Teacher (teaches between 10 and 50 hours or equivalent a year)	10
Tef Level Five Teacher (teaches less than 10 hours or equivalent per year)	5

Session 10I

HOW TO USE BEHAVIOUR CHANGE THEORIES AND METHODS TO ASSESS TRAINING COURSES

Author(s)

Jo Hart¹ Ged Byrne² Marie Johnston³ Chris Armitage⁴ Lucie Byrne-Davis¹

Presenter(s)

Lucie Byrne-Davis, Ged Byrne, Jo Hart

Institution(s), Department(s), Country/Countries

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Background

Educators and behavioural scientists share a common goal, namely, to change healthcare professionals' clinical practice. Despite this common goal, educators and behavioural scientists rarely collaborate. This means that much education occurs without explicit knowledge or use of behavioural science despite the fact that behavioural scientists know much about how capability, opportunity and motivation influence the likelihood that healthcare professionals will practice in a desired manner (Michie et al., 2011). There are clear, mutual benefits to working together: educators making explicit their implicit aim of professional practice change with the support of behavioural scientists.

We have developed a bank of assessment items based on behaviour change theory that can be tailored to specific behavioural outcomes (practice change) in healthcare professionals. These include items assessing current behaviour, behavioural intention and other important determinants of behaviour.

In this workshop, we will explore why assessing the pathway from 'shows how' to 'does' in practice could have a transformative effect on education.

Intended outcomes

- Understand that training can be conceptualised in terms of behaviour change techniques
- Knowledge of the ways to assess proxies of behaviour
- Knowledge of theory-based determinants of practice change and how they can be used to assess outcomes of training.

Structure

Part 1: Brief overview of behaviour change theory applied to health professional education (10mins talk, 10mins worked examples)

Part 2: Discuss assessing behaviour: involving attendees in worked examples. (10mins talk, 20mins worked examples)

Part 3: Introduce psychological factors influencing whether 'shows how' becomes 'does'. (10mins talk, 20mins worked examples)

OTTAWA2016
ANZAHPE2016



OTTAWA2016
ANZAHPE2016



Who should attend

CPD/CME providers; health education policy makers, educators

Level of workshop

Introductory

Session 10J

SETTING STANDARDS FOR PROGRESS TESTS

Author(s)

Boaz Shulruf, Adrian Freeman, Phillippa Poole, Warwick Bagg, Lee Coombes Steven Lillis

Presenter(s)

Boaz Shulruf, Adrian Freeman, Phillippa Poole, Warwick Bagg, Lee Coombes Steven Lillis

Institution(s), Department(s), Country/Countries

University of New South Wales, Medical Education, Sydney , Australia
University of Exeter Medical School, UK
University of Auckland, School of Medicine, New Zealand
Cardiff University, School of Medicine, UK

Background

Progress Tests (PTs) are written assessments in which the difficulty and content of the items are pitched at the knowledge required of a newly graduated doctor. PTs take place at regular time points, often using the 'single best answer' format. PTs draw their strength and validity from their ability to compare medical knowledge of each student in a programme, regardless of year cohort, to that of a graduate. Furthermore, they assess student progression longitudinally. These two attributes may help with early identification of students at risk of failing. Finally, PTs allow comparisons among cohorts and may inform staff on the quality and scope of the curriculum. To date, setting standards for PTs has proved challenging. This workshop will focus on the utility of standard setting methods for PTs throughout the medical programme using both norm-based and reference-based methods. The methods discussed and practiced in the workshop will apply to different types of PTs (e.g. when correction for guessing is applied or not).

Intended outcomes

Participants will be able to apply two methods of standard setting for progress tests used in their own educational context and critically appraise the advantages and challenges of such methods.

Structure

1. A brief Introduction to Progress Tests.
2. A brief introduction to standard setting methods, particularly when Progress tests are implemented.
3. Norm-based standard setting for Progress tests, using examples from currently used PT's.
4. Reference-based standard setting for Progress tests, using examples from currently used PT's.
5. A discussion on different methods of standard setting across different types of PTs, comparing practicality and implications across methods.

Who should attend

Medical educators who have strong interest in assessment and standard setting and/or Progress Tests.

Level of workshop

Intermediate & advanced

Session 10L

TITLE: HOW IS MY TEAM DOING – HOW DO YOU ASSESS TEAM PERFORMANCY

Author(s)

Robin R. Hemphill MD MPH, Sally A. Santen, MD. PhD, Andrew M. J. Linn MBBS

Presenter(s)

Robin R. Hemphill MD MPH, Sally A. Santen, MD. PhD, Andrew M. J. Linn MBBS

Institution(s), Department(s), Country/Countries

Veterans Health Administration-National Center for Patient Safety

Ann Arbor, MI

University of Michigan, Ann Arbor, MI

School of Medicine, University of Adelaide, South Australia

Background

One effective method of teamwork is Crew Resource Management (CRM). CRM-based communication tools and training are associated with improvements in patient outcomes, staff morale, and the culture of safety. Learning outcomes in graduate medical education curricula based on CRM tools are less well studied. This workshop will discuss a CRM-based, simulation-utilized, curriculum and methods to assess whether training has been effective. The goal is to develop students and residents well versed in team behaviors to improve communication, and patient safety behaviors and assess their performance.

Intended outcomes

Each participant will be able to measure how well prepared their medical students are after graduation as regards to team behaviours. Will they speak up when appropriate? Do they know how to be assertive? Can they perform as effective leaders and team members? Additionally, participants will have an idea of what is possible as a goal for their own patient safety training in the area of teamwork.

Structure

A blended instructional method beginning with short didactic introductions to CRM will be used. Methods to assess team-based performance will then be disseminated and reviewed. Brief simulation scenarios will be run within each small group giving participants opportunity to use the assessment tool after which the entire group will discuss potential opportunities and barriers for conducting this type of training and assessment at their own institutions.

Who should attend

Faculty, medical school program directors, and curriculum developers whose goal is to ensure achievement of team based competencies.

Level of workshop

Introductory to intermediate

Session 10M

ROLE OF ASSESSING PROFESSIONAL DEVELOPMENT CONDUCT AND BEHAVIOUR IN ASCERTAINING FITNESS TO PRACTICE

Author/s

Braidman I, Humphreys J, Regan M

Presenter/s

Humphreys J, Regan M

Institution(s), Department(s), Country/Countries

University of Manchester Medical School

Background

There is now increasing evidence that clinicians whose Professionalism is found unacceptable by regulatory bodies, had poor Professional Development (PD), Conduct and Behaviour as undergraduates. Developing means of identifying such students early on is therefore becoming more important. Much depends on how professional aspects of the undergraduate programme are assessed and is a common issue across healthcare education. Several different approaches are used; poor professionalism is recorded across the programme, and, initially, a warning is triggered but with increasing evidence, consequences are more serious e.g. Fitness to Practice. Alternatively, students' reflective pieces are analysed or outcomes of PD Portfolio assessments, are presented to "Fitness to Practice" Committees. It is essential that evidence used is appropriate to the stage of the programme. Whether such approaches are sufficiently robust or are able to identify students whose professional standards might be poor after graduation, is currently unclear

Intended outcomes

Participants will:

- Enhance understanding of assessing Professionalism for undergraduate medical or other healthcare students, at different stages of the programme
- Obtain insights into how to apply this to identify students whose Professionalism is unacceptable
- Explore how this relates to Fitness to Practice

Structure

We will begin with a short introductory 20 minute presentation. Participants, working in small groups, will then construct a student journey through an undergraduate programme and at each stage identify appropriate evidence for PD, and means of assessment. We will use activities (e.g World Café) that enhance participation and sharing of ideas. Participants will then use these insights into assessing PD to discuss and resolve scenarios illustrating different Fitness to Practice situations

Who should attend

Anyone interested in undergraduate Professionalism and its assessment across all healthcare professions

Level of workshop

introductory/intermediate

Session 10N

NON-COGNITIVE QUALITIES ASSESSMENT FOR SELECTING STUDENTS FOR HEALTH CARE PROFESSIONS

Author(s)

David Powis, Brian Kelly, Diann Eley, Jennifer Cleland, Don Munro

Presenter(s)

David Powis^{1,2}, Brian Kelly², Diann Eley³, Jennifer Cleland⁴, Don Munro¹

Institution(s), Department(s), Country/Countries

¹Schools of Psychology and ²Medicine & Public Health, University of Newcastle, Callaghan, NSW, Australia. ³School of Medicine, The University of Queensland, Herston, QLD, Australia. ⁴School of Medicine and Dentistry, University of Aberdeen, Scotland.

Background

As early as 1944, in the UK, government and opinion leaders remarked that both ability and character should be assessed in potential medical students. Seventy years on, medical schools all over the world continue to struggle with how best to assess 'character' (or personal attributes relevant to the interpersonal and professional aspects of medicine) in an objective manner, even though, since then there has been a frequently recurring commentary in the academic literature acknowledging that selection procedures could and should be improved.

The purpose of this workshop is to determine what qualities constitute 'character' and further, what tools and procedures are available for their objective assessment. There will be a particular focus on practicality of implementation, and reliability, construct validity and, particularly importantly, the predictive validity of current or potential tools to assess the personality, attitudes and values of applicants.

Intended outcomes

Identification and definition of what personal qualities constitute 'character' and further, determination of what tools and procedures are appropriate for their objective assessment.

Structure

Following an introduction, workshop participants will be asked to generate a list of qualities that could be considered to constitute 'character', and prioritise these in the context of selecting tomorrow's healthcare practitioners. Small group work will focus on considering how best to measure these qualities robustly. A final plenary discussion will collate the suggestions and produce a list of recommendations.

Who should attend

Medical educators and education researchers involved with selection of students for health professional programs.

Level of workshop

Intermediate/advanced

Session 10P

SEQUENTIAL TESTING METHODOLOGIES – A PRACTICAL GUIDE TO IMPLEMENTATION AND MEASURING BENEFITS

Author(s)

Richard Fuller & Matthew Homer

Presenter(s)

Richard Fuller & Matthew Homer

Institution(s), Department(s), Country/Countries

Leeds Institute of Medical Education, University of Leeds, UK

Background

Sequential testing methodologies are relatively new assessment formats that help us deal with the challenges of feasibility, quality and cost whilst undertaking and delivering high stakes assessment. This typically takes the form of a two stage assessment process where all candidates are subject to a main 'screening' test, with lower performing candidates subject to an additional (sequential) test of similar magnitude. These candidates therefore undergo a longer test involving a broader spread of items, delivering a highly reliable assessment than would be provided in a traditional single test format, whilst providing an assessment that is 'fair' for candidates

Intended outcomes

Participants will gain theoretical and practical experience in the implementation of sequential testing, and explore the measurement of a range of markers of impact (e.g. quality metrics, student progression and cost-benefit analyses)

Structure

This highly interactive workshop will be delivered by facilitators with extensive assessment and sequential testing experience. Using models and materials from the University of Leeds' development and implementation of sequential testing, a mixture of round table discussion and practical exercises will allow participants to apply lessons to their own assessment process. Models for sequentially testing OSCE and knowledge test formats will be used to illustrate techniques for implementation and measurement of impact.

Who should attend

This workshop has particular significance for those responsible for the design, delivery and analysis of performance based assessment

Level of workshop

Intermediate

Session 10R

STRESS IN MEDICAL STUDENTS IN RECENTLY ESTABLISHED RURAL MEDICAL EDUCATION CENTER IN THAILAND.

Author/s

Pisrapa Noiming

Presenter

Pisrapa Noiming

Institution(s), Department(s), Country/Countries

Si Sa Ket Hospital Medical Education Center, Pediatric Department, Si Sa Ket, Thailand.

Introduction:

Stress can deteriorate learning process, health, mind and soul, persistently to the future.

Methods:

A cross-sectional descriptive study was done in all 4th -5th year medical students in Si Sa Ket Hospital, a rural medical education center founded 2 years ago in the northeast of Thailand. Data were collected by using 3 questionnaires consisted of 1) general information questionnaire 2) stress evaluation questionnaire and 3) causes and stress management questionnaire. Descriptive statistics were used to analyzed the data.

Results :

All 39 medical students completed the questionnaires. About one-fourth of them (25.6%) experienced mild level of stress while 4 of them (10.3%) had high level of stress. As the pioneer of this rural medical education center, 79.5% of them experienced stress due to medical education. Their anxiety might involved national license and comprehensive examination, their clinical skills, limitation of skillful medical staffs, and acceptance from other institutes. Regarding stress management, exercise, sleep, music and television, hobbies and family support were used to reduce stress.

Conclusion :

About one-third of medical students experienced above-average level of stress. Medical education was the principle cause of stress. Most of them could manage their stress by themselves and their families. However, closed supervision for these medical students should be supportive.

Take home message :

Stress in medical students should be relieve by improving educational system and closed supervision.

LEARNING STYLE PREFERENCES AMONG MEDICAL UNDERGRADUATES AND POSTGRADUATES IN CHACHOENGSAO, THAILAND

Author/s

Siriluk Pongchitsiri,

Presenter/s

Siriluk Pongchitsiri

Institution(s), Department(s), Country/Countries

Buddhasothorn Medical Education Center, Family Medicine Department, Chachoengsao, Thailand

Background :

Learning style of individual medical undergraduates and postgraduates vary considerably and that learning become more effective when medical instruction was correlated with students's learning style. This study was to determined the learning style preferences among medical students.

Method :

A cross-sectional study, self administered VARK questionnaire was used to categorized learning style preferences among clinical undergraduates(year 4th -6th) and postgraduates medical students of Buddhasothorn Medical Education Center during the year 2014.

Results :

A total 93 students(77 were undergraduates), most responders were female(62.4%), mean age was 23.19 and mean GPA was 3.2. The majority had multimodal learning style (52.7%) while the remaining students had unimodal. 50.7% of undergraduates medical students had unimodal, whereas 69.7% of postgraduates had multimodal which bimodal was predominant. We found no difference in gender, education level and GPA in all type of learning style. The students preferred lecture(38.5%), self- directed learning(SDL)(21%), small group discussion(19.9%) and problem-based learning(PBL)(19.9%), respectively.

Discussion and conclusion :

Although the medical students had mainly multimodal learning style but lecture was the favorite studying. The result provide us with useful information to re-assess appropriate learning approach to the students.

Take-home messages :

The teaching and learning strategies should be suitable for all type of students.

SELF-EVALUATION OF STUDENT PREPAREDNESS FOR THE CLINICAL PHASE OF MEDICAL EDUCATION: EFFECT OF INTRODUCING PRE-CLINICAL PHASE HOSPITAL ROTATION POSTINGS

Authors:

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Presenter:

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Introduction:

Hospital rotations are a major component of "Clinical integration block" in pre-clinical phase introduced in the revised medical curriculum at International Medical University (IMU). These postings were introduced to improve clinical skills and communication skills, integrate basic sciences together with clinical reasoning etc; following feedback from partner medical schools (PMS), clinical schools and several stakeholders. The aim of this study was to determine the impact and effectiveness of the hospital postings experience on student preparedness for transfer to PMS and clinical school in Malaysia.

Methods:

A detailed and structured questionnaire involving components of student attributes was sent to all students in IMU clinical school (n=510) and to all senior clinical transfer students at 4 PMS at Australia and UK (n= 144). Self-evaluation by the students were on six attributes of history taking, physical examination, communication skills, English proficiency, medical knowledge and professionalism. Comparison of self-perception of preparedness between students from old and revised curriculum and between students at PMS and IMU clinical school was done. The mean rating of each attribute and the rating distribution was analysed. Data were tabulated and analysed using SPSS. Inferential statistics was represented by independent t-test, paired t-test and Pearson's Correlation co-efficient.

Results:

A significant improvement in the students' perception of clinical preparedness was observed in the history taking and communication skills component. There was major improvement in medical knowledge and physical examination for the clinical school, and minor improvements in these areas for the partner medical schools. There are no significant improvement in English proficiency and conduct and professionalism components.

Conclusion:

The student's perception and self-evaluation showed that introduction of hospital postings during the pre-clinical phase has provided better opportunities for them to be better prepared for the clinical phase.

GROUP BASED TRAJECTORY MODELLING ON STUDENT ACHIEVEMENTS

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Introduction

Recent evidence supports using a range of admission criteria for dental student selection. However, admission factors do not consistently predict academic progress. This study aimed to investigate associations between factors in our admissions processes and progression.

Methods

The sample included Australian school leavers who commenced their dental programme between 2007-2012 inclusive. Students' academic yearly progress was the main output variable. Covariates included sex, previous academic achievement (ATAR), UMAT and admission interview performance. Group-based trajectory analysis was used to characterise trajectories of time-varying dependent variables of academic progress. A logistic model of unconditional and conditional distribution of dichotomous longitudinal data of progression was developed. The likelihood of each case belonging to each trajectory or latent group was used to classify individual group membership. Time stable covariates were incorporated into the model by assuming they influence the probability of belonging to a group.

Results

With the unconditional model, a 3-group academic progress trajectory was selected as *success* (n=177; 80.45%), *troubled* (n=31; 14.09%) and *failed* (n=12; 5.45%). These groups matched with *uninterrupted*, *interrupted* and *withdraw* categories of academic progress. Conditional models with single covariates showed swapping of small numbers between groups. Further, students with high ATAR scores were less likely to be in the troubled group, while students with high scores for UMAT Book1 or with poor overall interview scores were more likely to be in the failed or troubled groups, respectively.

Conclusions and take home message

Group-based trajectory models can be useful for modelling longitudinal academic progress and to explore the relationship between progress and other student or admission factors.

THE INFLUENCE OF ECONOMIC ENVIRONMENTS AND RESIDENTIAL AREAS OF HIGH SCHOOL STUDENTS ON THEIR CHOICE OF GOING ON TO MEDICAL SCHOOLS: RECOGNITION OF THE GUIDANCE COUNSELORS

Author(s)

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Introduction

Entrance examinations of Japanese medical schools strongly focus on the result of paper tests. For this reason, most of the enrolled students are the graduates of distinguished high schools or preparatory schools in big cities. On the other hand, it might be more difficult for those who are economically disadvantaged and/or living in the area with few distinguished high schools to enter medical schools. However, the actual conditions have not been revealed.

Methods

We conducted a nation-wide survey by sending a questionnaire to 1,746 high schools in Japan and asked the guidance counsellors to answer it. The questions were developed from the discussions in an international symposium, our research group, and previous studies. We collected the answer data and analysed them by descriptive statistics.

Results

Responses were obtained from 638 guidance counsellors (response rate: 36.5%). While 417 (65.4 % of respondent) answered it is relatively difficult for economically disadvantaged students to go on to medical schools, 396 (62.1 %) answered it is relatively easy for those who live in urban areas to do so. 268 (42.0 %) answered there were students who gave up medical school enrolment for economic reasons.

Conclusions

From this study, the influence of economic environments and residential areas of high school students on their choice of going on to medical schools was suggested.

Take-home message

Many of guidance counsellors recognize that students of wealthy families of urban areas have advantage of going on to medical schools.

ETHICALLY RELATED DECISIONS IN DIFFERENT SITUATIONS BY MEDICAL SCHOOL APPLICANTS FOR GRADUATE-ENTRY PROGRAM

Author(s)

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Presenter

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Introduction

In medical school admissions processes, applicants' ethical traits are frequently assessed using scenario-based structured interview. However, the details of scenarios used are not negligible because of varying interactions between an applicant and a scenario. This study examined how the applicants' ethical decisions differ depending

on the types of ethical dilemmas, and what sorts of characteristics can affect them towards making unethical decisions.

Methods

A questionnaire comprised of 13 hypothetical scenarios of three domains – unethical business decision, sexual quid pro quos, and unethical decision in academic setting – was developed. In 2014, all 82 applicants invited to the interview for graduate-entry program admissions were asked to rate the possibility of making unethical decisions using a 1-to-4 scale.

Results

On average, tendencies for unethical decisions were lowest for sexual favors, and highest for gaining academic advantages. While the answers were normally distributed in both academic and business settings, the answers for sexual favors followed a power law distribution. Also, unethical decisions for academic advantages and sexual benefits were, respectively, significantly correlated with the female gender and those graduating overseas.

Conclusions

This study highlights that medical school applicants have different levels and distributions in ethical decision making depending on the situations provided. Because admissions for a medical school is a high-stake procedure, developing items as well as drawing a cut-off line must be based on close inspection of applicants, scenarios, and their interactions.

Take-home message

Understanding the ethical attributes of medical school applicants under various contexts can be used in developing effective and fair assessment tools.

INNOVATION IN MEDICAL EDUCATION: APPLYING SELF-MONITORING MEASURE IN HIGH STAKES TESTING AND MEDICAL TALENT SELECTION

Author/s

BRAD WU, KATHLEEN A. GIALLUCA

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Abstract

Self-monitoring ability is an area of evaluation that is receiving increasing attention in both medical employment testing and the academic admissions process. Self-monitoring is a form of metacognition that lies in relatively uncharted territory between the domains of personality and ability, and current thinking suggests it is of great practical relevance, because it is likely to determine how a person perceives and manages risk. A person who

jumps to conclusions on the basis of too little information (without recognizing they have too little information) could blindly make decisions without realizing what is unclear or missing. A person's perception of their own accuracy in decision making may also influence the degree to which they check their work for errors, and seek help and clarification in areas where they lack expertise. Self-monitoring ability can be measured through embedding survey questions in the form of confidence ratings into cognitive ability tests. This requires test takers to indicate their level of confidence in their response to each item and allows objective comparison of an individual's ability and their insight into the accuracy of their decisions. The presenters will share their experiences in developing measures of self-monitoring ability in academic and organizational settings. Specifically, the authors will share their recent experience of adding confidence ratings to a large-scale medical school admission test. Evidence in reliability, scalability, and construct validity of the self-monitoring measure will be presented. In addition, plans and practical issues with predictive validity of the self-monitoring measure will also be discussed.

SOCIAL WORK OF INTERPROFESSIONAL DEVOTION (SOLID) 2015 : THE ROLE OF HEALTH STUDENTS IN IMPLEMENTING INTERPROFESSIONAL EDUCATION AND COLLABORATION APPROACH FOR SOCIETY

Author/s

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Presenter

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Introduction/Background

Indonesia health students are now more proactive in strengthening awareness and understanding of interprofessional education (IPE) and collaboration among health fields (starting with medical, dental, nursing, midwifery, pharmacy, nutrition, and public health). Particularly for health students in Bali and Nusa Tenggara region, they conduct innovative program, namely Social Work of Interprofessional Devotion (SOLID) 2015. It is collaborative program of health students from Udayana University, Warmadewa University and Mahasaraswati University. The program is very well supported by universities as pilot project for IPE development.

Purposes/Objectives

SOLID 2015 aims to implement interprofessional education and collaboration approach to solve health problems in Bali region, and to strengthen understanding about roles and responsibilities of each health worker to solve health problems in the society.

Method or Issues for Exploration/Ideas for Discussion

SOLID 2015 was held in three months starting from March until June 2015, attended by 45 selected participants from seven health study programs. SOLID 2015 is divided into five phases. On the first meeting, the participants was given basic knowledge about IPE and how to apply it in the real practice. In the next two weeks, the participants spread out into five subvillages in North Denpasar and did some observations to identify the main health problems. In this process, the committee did good coordination with the local government and the health center. The methods of the observation are analyzing the data of the health center and interviewing the local governments and the villagers. From the observations, the participants found some health problems, namely hipertension, diabetes mellitus, and dental problems. After two weeks observation, the participants presented their findings in front of the local government and the chief of the health center. They also had to conduct social project related to main health problem in society.

Results

According to the evaluation result, most of participants perceived some advantages, such as preparing health students for IPE curriculum and having good relationship and advocation strategies to the stakeholders to support continuation of IPE development. On the other hand, the villagers and the local governments perceived advantage from social project, namely to have health education for main health problems in Bali.

Conclusion

SOLID 2015 is pilot project for IPE development in Udayana, Warmadewa and Mahasaraswati University. The sustainability of program should be maintained by all stakeholders, particularly health students, universities, and local government.

Session 10W

DESIGNING “REASONABLE ADJUSTMENTS” IN THE CURRICULUM AND ASSESSMENTS TO CREATE EQUITY FOR STUDENTS WITH TEMPORARY OR PERMANENT DISABILITIES.

Presenters:

Liz Fitzmaurice, Harry Mc Connell, Dinesh Palipana

Institution:

Griffith University, Gold Coast Queensland Australia

Introduction:

In 2015 Griffith University School of Medicine re-admitted a student with a significant physical disability to our MD programme. The School has found the general university guidelines, for students with disabilities, does not readily translate to the complexity of the Medical School's curriculum and assessment process. In particular, the guidelines do not recognise the requirement for “reasonable adjustments” to clinical skills' teaching and assessments in a simulated environment and in the workplace. The academic literature is also relatively devoid of examples of Medical School's curriculum and assessment redesigns for students with significant physical disabilities. Therefore Griffith University School of Medicine has been innovative in designing reasonable adjustments to the curriculum and assessments for this student to maximise his learning opportunities and opportunity for success in assessment tasks.

Purpose/Objectives:

- To describe the redesigns of the curriculum and assessments Griffith University School of Medicine made in the simulated and workplace environment to accommodate the reasonable adjustments required for our student with a significant physical disability.
- To discover how other Medical Schools have dealt with the challenges of designing equitable learning opportunities and assessments for students with temporary or permanent disabilities.

Issues for exploration/ideas for discussion:

- The various experiences of redesigning curriculum and assessment tasks to allow students with significant physical disabilities to have equitable access to curriculum learning opportunities and to be successful in assessments.
- Where to from here: International collaboration as a cornerstone to graduating "intern ready" students with significant physical disabilities.

HOW TO MAXIMISE YOUR ONLINE PRESENCE THROUGH SOCIAL MEDIA

Presenter/s

May Wong, Benjamin Veness

Institutions

Sydney Local Health District, Sydney, Australia

Purpose:

Social media is not for posting what one ate for lunch or one's latest holiday destination. Social media is for connecting, uniting and advocating. The Internet transcends geographical boundaries and allows doctors to network with other health professionals. It also gives doctors a platform to express views about the health system, which helps generate and inform health policy and public debate. Beyond this, social media can also engage the general public as well as provide accessibility to people in rural and remote communities. Learn how to claim the @DrJohnSmith twitter handle before somebody else does. Social media is not about narcissism, but rather a rational career move, as the real estate space in social media gets clogged.

Workshop outcomes:

- Learn how to use social media as part of your career tool-kit
- Create and leverage your online profile and personal 'branding' with authenticity and consistency, and within the professional guidelines of our profession
- Learn how to create content stakeholders want to 'Follow' or 'Like'
- Explore the professional code of conduct and institutional policies on social media
- Determine means to ensure patient safety, privacy, and confidentiality when using social media in practice

Proposed Outline:

- 30 minutes, small group session- use an audit tool to evaluate their professional "digital footprint".
- 15 minutes, hear practical tips from thought leaders and doctors who are using social media successfully in their careers.
- 30 minutes, Interactive presentation using social media tools for teaching and learning including how to be a curator and how to use social media to promote learner engagement, collaboration, and feedback.
- 15 minutes, tutorial on how to evaluate your online reach and influence.

Session 10X

THRESHOLD CONCEPTS AND REFLECTIVE PRACTICE AS A FRAMEWORK TO INVIGORATE LEARNING AND TEACHING IN THE HEALTH PROFESSIONS

Presenter/s

Dr Sarah Hyde, Associate Professor Andrew Flatau, Professor David Wilson

Institution/s

School of Dentistry and Health Science, Charles Sturt University, Orange NSW

Introduction

Issues regarding the identification and assessment of threshold concepts and threshold learning outcomes (TLOs) in most healthcare curricula have not been addressed.

Professional standards are being equated with TLOs by regulatory bodies in Australia and New Zealand, but we suggest that there is a significant theory/practice gap for many key stakeholders.

The presenters have reviewed the theory behind threshold concepts with the intention of using a reflective practice framework to design a pedagogically cohesive dental curriculum which bridges the theory/practice gap created by TLOs. This framework will assist students to achieve endpoint TLOs but before this can occur we need to first identify the threshold concepts in curricula.

Purpose/Objectives

The theory around TLOs is complex and confusing. The goal of this session is to untangle the web of threshold concepts, TLOs, graduate attributes and competencies and to work towards an exploration of the potential impact a deeper understanding of threshold concepts can have for stakeholders in the health professions. Attendees at this PeArL will work towards identifying at least one threshold concept in their own discipline and will discuss the benefits and challenges of designing curricula using this approach.

Issues for exploration/ideas for discussion

- Are threshold concepts/outcomes/standards just new jargon or does it offer a conceptually useful way to design and implement curricula?
- Where do TLOs and threshold concepts fit in with graduate attributes and how can they be assessed?
- TLOs have been identified in health but not the concepts underpinning them – and without the concepts, how can we assess them throughout curricula?

WEAVING ASSESSMENT INTO THE FABRIC OF PROJECT-BASED LEARNING IN A MEDICAL EDUCATION COURSE: WHY AND HOW

Author(s)

Professor Donna Mak , Professor Jane Courtney, Professor Greg Sweetman, Elina Tor

Affiliation(s)

School of Medicine Fremantle, The University of Notre Dame Australia

Introduction

When carefully integrated into curriculum design, assessment is a powerful driver of learning. Additionally, assessment data is invaluable for informing future curriculum planning, monitoring student progress, and for informing and guiding future learning actions. However, assessment practices, if not underpinned by best practice principles, can undermine learning. One example of this is the dichotomization of the role of formative and summative assessment and, consequently, the fragmentation of learning and assessment.

A programmatic perspective is a paradigm shift in the assessment of competence in medical and health professional education. This perspective suggests that a program's curriculum and assessment frameworks are aligned and interconnected. Assessment tasks are embedded in the 'rhythm' of instruction, occurring at places where it makes educational sense to include them. Research has shown that instruction alone is not enough to produce rich changes in student performance, but it is through assessment tasks interwoven into the curriculum and instruction that educationally significant growth happens in students.

Purpose/Objectives

This session aims to firstly share our experience in designing and implementing a clinical audit - a capstone project-based assessment which is authentic, student-centred, and embedded in the curriculum and pedagogy for final year medical students. Most importantly we hope to initiate and facilitate small group discussions with the participants on the following issues:

Issues for exploration/ideas for discussion

1. How can we leverage the power of assessment to drive learning by integrating the formative and summative role of assessment modalities?
2. How can validity be 'built-in' for project-based assessment so that the results can serve as valid data points to inform student progression decision making?
3. How do we ensure buy-in from all stakeholders for a paradigm shift in regards to the integration of assessment and learning?

Session 10Y

INTERPROFESSIONAL EDUCATION IN A PRIMARY CARE SETTING - DOING IT BETTER

Presenter/s

Dr Lou Sanderson, Ms Eliza Barry, Dr Zoe Huang,

Institution/s

Kardinia Health
GP Super Clinic, Geelong, Victoria, Australia

Introduction/ Background

Kardinia Health opened in August 2010, having received capital funding from the Australian Federal Government under the GP Super Clinics program. The objectives of this program include providing well integrated, multidisciplinary, patient centred, high quality, best practice care and to support the future primary care workforce by providing high quality education and training opportunities. The founding partners are Barwon Health, the Barwon Medicare Local (PHN) and Deakin University.

In its 5 years of operation, Kardinia Health has established a vibrant and successful multidisciplinary team with a high level of interprofessional respect and collegiality. We have hosted large numbers of students from multiple disciplines on clinical placement and we have a number of GP Registrars and Pre Vocational General Practice Placement Program trainees.

Our challenge has been how to provide interprofessional education to our students and trainees to convey to them the importance of the multidisciplinary team within the constraints of their placements, time and the private health professional setting.

Purpose/Objectives

We would like to evaluate what we have been doing, explore what is being done elsewhere, and develop some new ideas for discussion at the PEARLS session.

Issues for exploration/ideas for discussion

How do we optimise interprofessional health education in the clinical placement setting?

How effective are case studies, observing sessions, case conferences in enhancing the awareness of the trainee of the role and expertise of the health care team?

SUPPORTING CAPABILITY FOR INTERPROFESSIONAL PRACTICE THROUGH ACCREDITATION

Presenter/s

Theanne Walters, Kylie Woolcock, Bronwyn Clark, Clinical Professor Fiona Stoker, Professor Mike Morgan

Institution/s

Australian Medical Council
Council on Chiropractic Education Australasia
Australian Pharmacy Council
Australian Nursing and Midwifery Council
Melbourne Dental School The University of Melbourne

Introduction/ Background

In Australia, 14 health professions participate in the National Registration and Accreditation Scheme. Programs of study in each regulated profession are assessed against accreditation standards by an accreditation authority appointed by a national registration board.

The Scheme has a focus on developing a responsive, flexible and sustainable health workforce, and enabling innovation in education. All entities operating in the Scheme contribute to these objectives. Accreditation authorities must also encourage educational innovation, including interprofessional learning, in programs of study.

In June 2015, accreditation councils ran a multi-stakeholder workshop on *Interprofessional Education for Interprofessional Practice* and considered adopting a common set of interprofessional learning competencies and principles.

Purpose/Objectives

Accreditation authorities are collaborating on actions to ensure accreditation of health profession programs is an enabler of interprofessional education and are seeking stakeholder feedback to review and refine those actions.

Issues for exploration/ideas for discussion

1. What barriers to interprofessional education can accreditation authorities help reduce?
2. Having adopted a common set of learning outcomes how should accreditation authorities embed interprofessional education in their requirements?
3. What elements should accreditation authorities expect and assess within interprofessional education?
4. How can accreditation authorities support cross-profession accreditation and/or mutual recognition of each other's quality assurance processes?

Session 10Z

MEDICATION CHART TRAINING FOR THE PRESCRIBERS: HOW IT HELPED

Author/s

Teoh S, Mukadam N

Presenter/s

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Institution(s), Department(s), Country/Countries

King Edward Memorial Hospital

Introduction

This paper aimed to describe the use of multifaceted educational interventions to promote safe prescribing practices, in a tertiary hospital.

Method

The study hospital has included the National Prescribing Service (NPS) National Inpatient Medication Chart (NIMC) course as a mandatory training for the doctors in the hospital since 2014. The pharmacists participated in the half-yearly hospital orientation sessions for the junior doctors emphasizing safe prescribing and highlighting common prescribing errors seen in the study hospital. Hospital guidelines for commonly used antibiotics were printed onto a card to attach to doctors' lanyards. Computer screen savers on medication safety were set as default screen savers on all computers in the hospital.

Results

By October 2014, 37% of the consultants, 40% of the fellows, 50% senior registrars, 40% registrars and 44% resident medical officers had completed the NPS NIMC online learning. The primary outcome measured was the hospital's performance in the national NIMC audit in 2014. In 2014, the percentage of patients with complete identification on all pages of medication charts has increased from 6.67% in 2012 to 80.00% in 2014. Other improvements included the % of patients with complete ADR documentation on all charts (from 80.00% to 83.33%), % of patients with a medication history documented on medication chart (from 13.33% to 43.33%), and % of patients with VTE Risk Assessment documented on any medication chart (from 10.00% to 20.00%).

Conclusion

The multifaceted interventions including NPS NIMC online learning were associated with a modest improvement in the use of NIMC.

CAN WE MEASURE THE SKILLS OF CLINICAL REASONING BASED ON THE FINDINGS FROM THE PHYSICAL EXAMINATION IN OSCE?

Author/s

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Presenter/s

TBA

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Introduction

OSCE has contributed to the development of skills of performing physical examination, but whether it developed the skills of detecting abnormal physical findings remains unknown, because some abnormal findings, such as lymphadenopathy, are difficult to be acted out by SPs, and simulators have limitations in expressing abnormal findings.

Methods

In Tohoku University, since 2009, sixth-year students have been required to take postclerkship OSCE, in which students perform medical interview (Q1), physical examination (Q2), and clinical reasoning (Q3) within 14 minutes. To determine whether OSCE can measure the skills of clinical reasoning based on the findings from the physical examination, we examined the correlations between the scores of Q2 and Q3. The 30 scenarios we created from 2009 to 2014 were classified into 5 categories according to the types of Q2: G1 (SPs acting out abnormal findings; n=12), G2 (SPs not acting out abnormal findings; n=4), G3 (simulators; n=10), G4 (laboratory examinations; n=3), and G5 (oral examination followed by the 2nd oral examination in Q3; n=1).

Results

The mean and standard deviation of the correlations between the scores of Q2 and Q3 was 0.15 ± 0.19 (n=30). The correlation was statistically significant in only one scenario of G5 ($r=0.60$, $P=0.001$). According to categories, the means and standard deviations of the correlations between the scores of Q2 and Q3 were 0.10 ± 0.21 (G1), 0.30 ± 0.09 (G2), 0.09 ± 0.15 (G3), and 0.17 ± 0.04 (G4). When analyzed together, the correlation between the scores of Q2 and Q3 was 0.238 ($P < 0.0005$, $n=839$).

Conclusions

OSCE, when SPs or simulators are used, did not seem to measure the skills of clinical reasoning based on the findings from the physical examination, indicating the needs of other methods, such as using real patients.

FAMILY MEDICINE CLERKSHIP EVALUATIONS: OSCE OR A MINI-CEX? STUDENT AND FACULTY PERCEPTIONS

Authors

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Introduction

Identifying feasible tools that promote direct observation of medical students' clinical and communication skills, provide point of care feedback, and can be used for assessment is critical. We explored views of medical students and faculty educators on the use of a mini-CEX tool modified for Family Medicine (FM) clerkship, the FM Clinical Evaluation Exercise (FM-CEX), compared with a FM Objective Structured Clinical Examination (FM-OSCE).

Methods

Qualitative approach with focus groups. Transcripts coded for anticipated and emergent themes. Analysis by method of constant comparison. Student focus group (n=5) and faculty focus group (n=6) compared feasibility, acceptability, perceived usefulness and satisfaction with FM-CEX compared to FM-OSCE.

Results

Students described feedback received from FM-CEXs as often inactionable or too general to be helpful and described FM-OSCE as a better learning experience. Faculty described strengths of FM-CEXs as the ability to identify students in need of additional help earlier, the value of observed encounters, opportunities to model good practice and deal with complexity of real patients. Students and faculty had concerns about the FM-CEX including: lack of marking consistency, high degree of variability in execution, pre-existing relationships as a barrier to objective evaluation, and challenges in patient selection and scheduling.

Conclusions

Students and faculty considered FM-OSCE to provide more controlled, objective and rigorous evaluation compared to FM-CEX. The value of observed encounters via FM-CEX was considered high by faculty as these often revealed aspects of student performance that might not otherwise emerge. Students expressed that FM-CEX added little value to their experience.

MULTISOURCE FEEDBACK FOR REVIEW OF LECTURES IN MEDICAL EDUCATION: A PILOT STUDY

Author(s)

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Introduction

The scholarship of teaching and learning, including delivery of face-to-face lectures, requires scrutiny from multiple sources, including students and faculty.

Methods

This pilot study involved multisource qualitative and quantitative feedback on lectures delivered to third-year medical students in an eight-week general practice rotation. Nineteen eligible lecturers were invited to participate in a pre- and post- lecture review process utilising multisource feedback. Lecture evaluation forms were developed and data were gathered from peers (both content-experts and non-content experts) and from the student cohort. Feedback was provided to lecturers in verbal and/or written formats. Lecturers had the opportunity to reflect upon the feedback and incorporate changes to their subsequent lecture content and delivery. They then participated in follow-up multisource feedback on their lectures and an evaluation of their participation.

Results

Eleven (58%) lecturers participated in the project. Significant improvements were shown for various aspects of lectures. The global evaluation of lectures was scored most critically by students and most generously by medical educators. Although qualitative feedback tended to focus on the main domains of the quantitative survey, each reviewer group gave comments which were unique and very informative. Lecturers valued the feedback process.

Conclusions

Lectures remain a significant mode of learning in medical education, and multisource feedback has the potential to provide valuable teaching feedback to lecturers – both consolidating and complementary.

Take-home message

Future feedback endeavours should ideally encourage and support the inclusion of all lecturers in a multisource feedback process.

THE RELATIONSHIP BETWEEN CASE COMPLEXITY AND SHARED DECISION-MAKING: USE OF THE CLINICAL SHARED LEADERSHIP FRAMEWORK

Author/s

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Introduction

Interprofessional team meetings (IPTMs) provide a platform to establish treatment priorities, co-ordinate care and effect discharge planning. However, there is limited understanding of how case complexity affects shared decision-making in interprofessional teams. We aim to understand shared decision-making for straightforward and complicated cases during IPTMs in two subacute geriatrics wards.

Methods

We studied 115 members (32.2% doctors, 41.7% nurses, 26.1% allied health professionals). We surveyed demographic variables and involvement in decision-making process for straightforward and complicated cases. We conducted a directed qualitative content analysis of written text to evaluate themes based upon our previously validated clinical shared leadership framework (i.e. social cohesion, joint involvement, and decentralized interprofessional interaction).

Results

The majority (n=99, 86.1%) endorsed alignment of the shared leadership framework with decision making for both straightforward and complicated cases. Interestingly, 'bringing residing expertise to bear' emerged as a theme along with the framework. However, nine members (7.8%) perceived that they were not involved in decision making for straightforward cases and six (5.2%) for complicated cases. The former group, comprising mainly nurses, perceived the lack of joint involvement and decentralized interprofessional interaction in straightforward cases. Conversely, the latter group, comprising mainly allied health professionals, noted decreased decentralized interprofessional interaction in complicated cases.

Conclusion

The complex relationship between case complexity and shared decision-making needs to be explored further especially with professional groups who have contrasting views for straightforward and complicated cases.

Take-home message

Interprofessional members perceived different levels of involvement in decision-making during IPTMs, depending on case complexity.

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INTERPROFESSIONAL EDUCATION: A REFLEXIVE STUDY

Author(s)

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Presenter

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Introduction:

Every year students enter the national HealthFusion Health Care Team Challenge (HFTC) and experience taking charge of a patient's care in a multidisciplinary team. While students find this experience positive, there is little data about their attitudes and beliefs prior to the HFTC concerning their professional roles and how these change when students interact with other disciplines. Knowing how students perceive their professional role in a team prior to contact will inform educators about future curriculum development.

Methods:

Students enrolled in their final year of a health professional or behavioural sciences degree program at The University of Queensland were invited to apply to be part of a six-discipline team for the HFTC event. X number of applications were received and six students from different disciplines were selected. Prior to commencing training for the event, they responded to a question about their understanding of their health professional role in managing patient care. They also completed a survey about their attitudes towards their and other health professions and also their expectations about the HFTC. Students completed a reflexive diary during training. Following the HFTC, the students completed the same surveys.

Results:

The surveys and diaries were analysed using descriptive and qualitative analysis. Changes in attitudes and beliefs were noted and the diary discourse was analysed.

Conclusions and take home messages:

Changes in attitudes by the six students after sharing knowledge with other professions provides evidence that these activities should be embedded into the standard curricula of health and behavioural science programs.

Session 11A

11A Symposium Wednesday 0800-0930

EPA/WBAs : How to make them work

Lisa Lampe, University of Sydney/RANZCP, Australia
Niv Patil, University of Hong Kong
Elizabeth Molloy, Monash University, Australia
Katharine Boursicot, Singapore
John Norcini, FAIMER, USA (Discussant)
Sean Hood, University of Western Australia (Chair)

Workplace Based Assessments (WBAs) and Entrustable Professional Activities (EPAs) have become embedded in modern clinical evaluation of students and trainees. How well does this actually work in practice? Are the results measurable, reproducible and defensible? This Symposium charts the journey of WBAs from theory to implementation, evaluation and on to consider future directions with the help of a broad international expert group of health science educationalists.

Experiences of the implementation of WBAs in a range of settings will be discussed. Members of the Education Committee of the RANZCP will present on their experience following the formal introduction of WBAs and EPAs into postgraduate training in 2012, including discussion of problems and pitfalls with strategies to overcome the weaknesses of WBAs in practice. Niv Patil will complement this with insights into the implementation of WBAs from a surgical training perspective in Hong Kong. Liz Molloy will draw on research from the higher education and health professions education domains to highlight the role of formative assessment in building learners' capacity to self evaluate. The design of WBAs within a program (macro), along with the design of individual feedback conversations (micro) will be discussed.

Following these brief presentations there will be an extended expert panel discussion with the audience, facilitated by Symposium Chair John Norcini.

0800: Welcome and Introduction to the Symposium [Sean Hood]
0805: The RANZCP WBA/EPA Experience (Aus/NZ) [Lisa Lampe]
0815: Work Based Assessment: Strengths and Weaknesses (Hong Kong) [Niv Patil]
0825: Formative Assessment & feedback in the clinical workplace (Aus) [Elizabeth Molloy]
0840: Synopsis and Introduction to Panel [John Norcini]
0845: Panel Discussion with John Norcini as Chair / Discussant]
0930: End

Session 11B

ENCOURAGING AND ASSESSING STUDENTS' REFLECTIVE THINKING: ARE ONLINE DISCUSSIONS EFFECTIVE?

Author(s):

Mary Furnari, Dr Clinton Golding, Dr Vivienne Anderson

Presenter:

Mary Furnari

Institution(s), Department(s), Country/Countries

University of Otago, Higher Education Development Centre, New Zealand

Introduction:

Opportunities to practise reflective thinking are crucial for medical students' professional development. The challenge is how to engage students in reflection and formatively assess their ability to reflect. This paper examines the usefulness of online discussion as a way of encouraging and assessing students' reflective thinking.

Methods

Participants were 124 second-year undergraduate medical students who completed two online discussions about readings and a documentary film. Participants were given a reflective rubric. The unit of analysis was a post or reply to an online discussion. Posts/replies were assessed for levels of reflection using a four-category scheme: non-reflection, understanding, practical reflection and critical reflection. Students provided feedback on their online experiences.

Results

Over half the participants demonstrated practical reflection and just under half achieved understanding level. Only one student demonstrated critical reflection. Students' perceptions of the usefulness of online discussion for fostering reflection were mixed. The four-category scheme was effective for formatively assessing levels of reflection; however, some nuances within each level of reflection were not captured by the scheme.

Conclusions

The four-category scheme was useful for assessing students' levels of reflection; however, additional analysis was needed to understand the quality of students' reflection. The asynchronous, written, shared nature of the online task encouraged reflection in some students and hindered it in others.

Take-home message

Online discussions can be useful for formatively assessing medical students' reflective thinking; however, a more fine-grained analysis may be necessary to ascertain the quality of reflection. Not all students felt that online discussion fostered reflection.

REFLECTIVE ESSAY WRITING IN PSYCHIATRY: DO THE STUDENTS REFLECT?

Author/s

Guerandel A, Donohoe A, Malone K, O'Neill G

Presenter/s

TBA

Institution(s), Department(s), Country/Countries

University College Dublin

INTRODUCTION:

While reflective capacity is widely recognized as an essential characteristic of clinical competence there is a considerable lack of empirical evidence to guide the teaching and learning of reflection in medical education. While the integration of reflection into the relevant curricula is commendable, it is important to note that these educational developments are occurring within an empirical vacuum with a paucity of research pertaining to the teaching of reflective practice in Psychiatry is evident. In University College Dublin we have integrated a reflective essay as a component of the assessment in the Psychiatry module the students take in their final year of the medical course. In our study we identify the types of reflective writing generated by the students. This information will help us explore educational strategies to further foster reflective practice particularly in Psychiatry.

METHOD:

A specific coding instrument and coding protocol is used to analyse the reflective essays. This is based on Hatton and Smith's work on the description of reflective writing. There is a three stage coding protocol using two coders. Where there is disagreement in the coding between the two coders a third expert coder provides the final adjudication. This way each essay is assigned to a specific type of reflective writing. The results are interpreted in the context of the study.

CONCLUSION

The students are reflecting but few reach the level of critical reflection. This study enables us to review how we teach reflection, how we train the examiners to mark the essays and how we can potentially provide a template for other educators for understanding and categorizing types of reflective writing.

STANDARDISED CASE BASED DISCUSSIONS: A METHOD FOR EXPLORING STUDENT CLINICAL REASONING

Author(s):

David Smallwood, Neville Chiavaroli, Lucrezia Marino, Ruth Sutherland

Presenter:

David Smallwood

Institution(s), Department(s), Country/Countries

Melbourne Medical School, University of Melbourne, Australia

Introduction:

Case-based discussions format have been utilised as a form of clinical assessment in workplace contexts for many years. While useful for assessing clinical reasoning, issues remain about variability in case difficulty and examiner judgement.

Methods:

We adapted the case-based discussion format for summative use with 3rd year medical students (in a 4-year graduate entry course) by developing a video of a short doctor-patient diagnostic interview. Students watch the video and then participate in a 15-minute discussion with a single examiner, during which students request further information relating to the clinical encounter, outline their differential diagnoses and explain their reasoning about the case.

Results:

The format proved feasible and students were very receptive to the concept during piloting. Feedback from students indicated they particularly appreciated the opportunity to discuss a standardised case in depth. Examiners also found the assessment engaging and satisfying.

Conclusions:

While the format has obvious sampling limitations, when used as part of a programme of multiple summative clinical assessments, we believe it provides a unique opportunity to probe students' clinical reasoning in an acceptably standardised and valid way. In particular it assesses students' capacity to solicit and interpret relevant clinical information. A key challenge for examiners is to balance the amount and timing of prompting to explore students' reasoning and to apply the marking criteria in an acceptably consistent way.

Take-home message:

The case-based discussion format can be feasibly adapted for summative use to complement other commonly used clinical assessments.

NEURAL AREAS OF ACTIVATION DURING CLINICAL REASONING AND DECISION MAKING

Author(s):

Pam Hruska, Olav Krigolson, Sylvain Coderre, Kevin McLaughlin, Filomeno Cortese, Christopher Doig, Tanya Beran, Bruce Wright, Kent Hecker

Presenter:

Pam Hruska

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Introduction

Medical education research has continually sought to understand the neurocognitive processes underlying clinical reasoning and decision-making. To date, indirect methods have predominantly been used to study how physicians become expert diagnosticians over the course of medical training. The purpose of this project was to identify the neural basis of these cognitive processes and assess the effect of case difficulty and expertise on neural activity.

Methods

Functional magnetic resonance imaging (fMRI) was used to determine neural areas of activation in clinical reasoning and clinical decision making, and to identify if clinician level of expertise or manipulations of task difficulty elicit differential neural activity during these cognitive processes.

Results

There were shared neural areas of activation identified in clinical reasoning and decision making tasks in both novice and expert levels of clinicians studied. Given overall activity observed within the prefrontal cortex (PFC), findings from this research highlight dependence on working memory (WM) in these cognitive processes. There were also significant hemispheric activation differences between novice and expert clinicians on hard clinical cases, suggesting clinicians of different levels of expertise employ different decision-making processes when diagnosing hard clinical cases.

Conclusions

Our results demonstrate examples of both common and divergent neural areas of activation during clinical reasoning and decision-making tasks. This work provides awareness of neural areas supporting these cognitive processes and as well, exposes factors (level of expertise and task difficulty) associated with differential neural activity.

Take-home message

This work demonstrates clinical reasoning and decision-making processes are dynamic, and neural activations may change or reorganize as experience develops or as situations demand.

METACOGNITIVE AWARENESS AS A PREDICTOR FOR CLINICAL REASONING SKILLS IN MEDICAL UNDERGRADUATES

Author/s

Paul Welch, Louise Young & Peter Johnson

Presenter/s

TBA

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Introduction

Clinical reasoning is the ability to sort through a variety of features presented by a patient and accurately assign a diagnostic label, with the goal of developing an appropriate treatment strategy. These skills are core to medical practice and a central aim of medical education^{1,2}. Metacognition refers to the processes used to plan, monitor and assess one's understanding and performance. Few studies have investigated the relationship between metacognition and clinical reasoning skills in medical undergraduates, as measured by assessment, and little is known about the developmental characteristics and features of clinical reasoning.

Methods

A validated questionnaire (Metacognitive Awareness Inventory, MAI³), was used to test for correlations with performance on global and selected assessment tasks across the JCU MBBS program. Assessment scores for participants in the following MBBS assessment items was collated: Years 1-3: end of year MSAT exam (multi-station assessment task); overall year mark; Years 4-6: end of year OSCE exam (objective structured clinical exam); mini-CEX tasks (mini clinical evaluation exercise); overall year mark.

Results

An analysis of the qualitative and quantitative results of the study, and comparisons across cohorts, will be presented and discussed.

Conclusion / Take home message

Investigating aspects of metacognition allows educators to gain insight into the development of components related to clinical reasoning. In doing so, we may be able to identify those components which are amenable to remediation so that interventions may be developed to assist poorly performing students develop clinical reasoning.

BIAS AND DECISION-MAKING IN MEDICINE: ASSESSING BIAS AND ITS EFFECT ON CLINICAL DECISION MAKING

Author(s)

Ricci Harris, Donna Cormack, Elana Curtis, Rhys Jones, James Stanley, Cameron Lacey

Presenter

Elana Curtis, Cameron Lacey,

Institution(s), Department(s), Country/Countries

University of Otago, Māori/Indigenous Health Institute, Aotearoa New Zealand
University of Auckland, Te Kupenga Hauora Māori, Aotearoa New Zealand

Introduction

Health professional training has a role to play in understanding and addressing inequities in health between indigenous and non-indigenous populations. Examining the role of racial/ethnic bias among health professionals, within a broader context of racism as an underpinning determinant of health and driver of ethnic inequalities is required (Williams & Mohammed 2013).

Methods

The development of tools to assess implicit and explicit bias and its association with clinical vignette responses within the *Bias in Clinical Decision Making in Medicine (BDMM)* study among medical students is presented. A staged development process included conceptual framework development, literature review, item identification and expert review, followed by pretesting (sorting and rating tasks and cognitive interviews) and piloting. .

Results

Insights into the meaning, coherence and acceptability of measures that informed the final wording and ordering of questions were identified. Tools included 1) two chronic disease clinical vignettes with patient ethnicity randomised; 2) an ethnicity preference Implicit Association Test (IAT) and an ethnicity and compliant patient IAT; 3) explicit ethnic bias questions. Piloting results confirmed the functionality of the web-based questionnaire.

Conclusions

Robust processes are required in the development of studies to assess ethnic bias in order to improve data quality. Creating a strong evidence base is needed to understand the role that ethnic bias may play in health and to inform education strategies.

Take-home message

Assessing the effect of ethnic bias on clinical decision-making within medical students may inform education strategies for the training of health professionals.

Session 11C

PEER ASSESSMENT IN A LARGE SCALE INTERPROFESSIONAL LEARNING ACTIVITY

Author(s):

Gillian Nisbet¹, Christine Jorm², Christopher Roberts³, Christopher Gordon⁴, Timothy Chen⁵, Stacey Gentilcore⁴.

Presenter:

G.Nisbet

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Introduction

Large scale interprofessional learning (IPL) where participation is mandatory, outcomes assessed and grades awarded, are rare. The University introduced a largely student directed IPL video task where teams of healthcare students from 13 disciplines creatively depict an interprofessional management plan for a complex patient case. Available tools for assessing student video products or integrated interprofessional work are limited. We describe the validation of an IPL video peer assessment tool using student performance data.

Methods

Validity of the tool was assured by developing a prototype from the literature on IPL competencies. Groups of staff and students (n=5) worked iteratively on the tool using a selection of 5min videos from the previous year. Data was collected from three days of the IPL task, in which student teams worked on the case and developed the IPL video assessment task.

Results

Findings from the workshops demonstrated content validity of the anchoring statements and criteria for the tool. Data will be presented from 1300 students, and 260 team videos, each assessed by at least five students. Validity will be demonstrated by internal consistency, generalisability, and acceptability.

Conclusions

We developed and validated an IPL video peer assessment tool that can be confidently used in large scale student IPL activities. The assessment encourages creativity, critical thinking and innovation within a framework of an interprofessional approach to patient care.

Take-home message

Large-scale interprofessional learning which uses video and a case based -approach to collaborative management of complex cases requires innovative and validated assessment tools.

UTILIZATION OF PEER REVIEW IN PORTFOLIO ASSESSMENT COMPETENCY

Author(s)

Christine Leyden, RN, MSN & Lee Skinner, MA

Presenter

Christine Leyden, RN, MSN

Institution(s), Department(s), Country/Countries

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Abstract

The traditional approach to competency assessment has centred on test examinations of defined standards of practice through the process of specialty certification. The rapidly changing health care landscape has created opportunities for sub-specialty areas of nursing practice evolving from the pathway of medical surgical nursing to the area of genetics, rheumatology, forensics and hemostasis subspecialties. The portfolio framework applies peer review to assess a framework of four defined domains; quality and safety, professional and ethical nursing practice, teamwork and collaboration and professional development. The demonstrated inter-rater reliability of the portfolio peer review process is a robust method of competency assessment.

Introduction

Certification through portfolio is designed to objectively assess specialized knowledge, understanding, and application of professional nursing practice and theory through the review of a collective body of work present in a nurse's portfolio by clinical peers in the specialty area.

Methods

Content expert panels developed scoring elements that are used to standardize appraisers (peer reviewers) to ensure consistency in the results rendered. The component of the portfolio includes; professional development record, performance evaluation, and the narrative clinical exemplar. The four defined domains of quality and safety, professional and ethical nursing practice, teamwork and collaboration and professional development is assessed via peer review process.

Results

Peer review inter-rater reliability was found by using Intra-class Correlation Coefficient to determine a mean overall inter-rater reliability of .54.

Conclusions

Peer review inter-rater reliability can be assessed in a statistically valid manner. Competency assessment via portfolio is a cost effective method for clinical certification of emerging subspecialty practice areas.

Take-home message

Increasing specialization in health care provides an opportunity for nursing peer review
Peer Review is an essential component of quality assessment of competency

UNDERSTANDING PEER NOMINATIONS AMONG MEDICAL STUDENTS USING A SOCIAL NETWORK APPROACH

Author/s

Barret Michalec, PhD, Douglas Grbic, PhD, J. Jon Veloski, MS, Monica M. Cuddy, MA, Frederic W. Hafferty, PhD.,

Presenter

Barret Michalec,

Institution(s), Department(s), Country/Countries

¹ University of Delaware, Thomas Jefferson University, ² Association of American Medical Colleges (AAMC), ³ Thomas Jefferson University, ⁴ National Board of Medical Examiners (NBME), ⁵ Mayo Clinic

Introduction:

Although there is little debate regarding the utility of peer nomination to assess various aspects of medical students' abilities, attributes, and competencies, minimal attention has been paid to what factors may predict peer nomination or how peer nominations might exhibit a clustering effect. Focusing on the homophily principle and utilizing social network analysis, this paper explores how certain student- and school-based factors predict the likelihood of peer nomination, and the clusters, if any, that occur among those nominations.

Methods:

Survey data from the 2013 Jefferson Longitudinal Study of Medical Education related to peer nominations (for which classmates had significant positive influences on students' professional and personal development) were analyzed using a relational contingency table and an ANOVA density model. A total of 211 (81%) of 260 medical students from Jefferson Medical School responded to the relevant survey questions.

Results:

Within-group nominations were significantly higher for those in the accelerated program as well as for particular specialty choices (emergency medicine, family medicine, obstetrics/gynecology, ophthalmology, and surgery). Although within-group nominations by gender were not significant, the authors stress the value of examining the cultivation and attributes of social networks among female medical students and other traditionally marginalized groups of students.

Conclusions:

Implications regarding harnessing social cohesion within clinical clerkships as well as the possible development of siloed departmental identity and in-group favoritism are discussed.

Take-Home Message:

Our findings shed light on the peer nomination processes, identify possible mechanism/factors behind why some students may nominate peers, including how particular social structural or pedagogical arenas within medical education (framed as "opportunity structures") underscore the fundamental nature of medical education as a social process.

THE ROLE OF PEER LEARNING IN THE DEVELOPMENT OF MEDICAL STUDENTS' EVALUATIVE JUDGEMENT

Author(s)

Joanna Tai, Elizabeth Molloy, Ben Canny, Terry Haines

Presenter: Joanna Tai

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Introduction

Evaluative judgement, or the capacity to understand notions of quality and apply them to a performance, is key for lifelong learning. Closely tied to self-assessment, it also applies to the evaluation of others. Students have been previously found to have poor self-assessment capacity. Peer learning has been hypothesised to improve evaluative judgement, through closer engagement with performance standards, and practising making judgements on fellow students' performances.

Methods

This ethnographic study investigated peer learning on undergraduate medical clinical placements through observations and interviews with students in their first clinical year and their educators. Data were thematically analysed to understand the contribution of peer learning to the development of evaluative judgement.

Results

Peer learning contributed to both understanding notions of quality, and exercising their judgement by evaluating others. This occurred through observation of peer performance, receiving feedback from peers on performance, discussing performance with peers. Opportunities to observe modelled clinical performance by experts, and undertake self-evaluation, were identified as largely absent from the clinical setting. The reliance on authority figures for performance information also stifled fruitful peer interactions.

Conclusions

This study supports the increased use of peer learning within clinical environments to improve students' evaluative judgement capacity.

Take-home message

Students should be afforded opportunities to improve their evaluative judgement through engagement in formative evaluations of peer performance, with appropriate guidance from educators. Learning tools such as 'observation worksheets' or structured feedback forms may facilitate students' critical observation skills. Self-evaluation and opportunities to observe modelled expert performance may also improve students' capacity to make accurate judgements.

CAN FEEDBACK ENHANCE THE RELIABILITY OF STUDENTS' ASSESSMENT OF THE PROFESSIONAL BEHAVIOURS OF THEIR PEERS IN PBL?

Author(s)

Christine Jorm, Chris Roberts, Jim Crossley, Stacey Gentilcore

Presenter:

Christine Jorm

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¹ Sydney Medical School, University of Sydney, ² University of Sheffield

Background

It is a common conception that student assessment of their peers within small group learning activities such as problem based learning (PBL) tutorials can provide a reliable measure of a student's professional behaviour. We wished to determine whether a validated multisource feedback tool measuring professional learning behaviours was sufficiently reliable for decision-making about student professionalism.

Methods

Data was available for two cohorts of students (n= 560) who were learning in PBL groups. Each student was rated by their peers on a professional learning behaviour scale consisting of 9 checklist and one global rating. Following provision of feedback to the students, their behaviours were further rated. A generalisability study was undertaken to calculate the students' capability, and sources of error that impacted the reliability of the assessment, and changes in rating behaviour after feedback.

Results

Student ratings of their peers within PBL groups was reliable for 'within group' comparison, but very poor for 'across group' comparison. This was because the stringency of fellow students as judges is so variable and they are nested within groups. After feedback student raters are less variable in their stringency but their subjectivity over individual assessees had grown.

Conclusion

Whilst the process of giving multi-source feedback may provide formative feedback for the behaviours of a student within their group, it is unsafe to draw conclusions about the student's behaviour compared with the rest of the cohort. Feedback appears to exaggerate their subjectivity. Health professional educators need to rethink the value of assessing professional behaviours in groups.

Session 11D

GAINING A NEW PERSPECTIVE: USING POINT OF VIEW GLASSES TO PROVIDE FEEDBACK TO PARAMEDIC STUDENTS UNDERTAKING CLINICAL SIMULATION

Author(s):

Linda Ross¹, Jaime Wallis¹ & Malcolm Boyle¹

Presenter:

Linda Ross

Institution(s), Department(s), Country/Countries:

1. Monash University, Department of Community Emergency Health & Paramedic Practice, Australia.

Introduction

Research has highlighted the importance of effective feedback to enhance learners' ability to reflect and improve. The objective of this study was to identify student perceptions of the effectiveness of point of view video glasses in providing feedback following clinical simulation.

Methods

A cross-sectional methodology was used incorporating a paper-based survey. Paramedic students wore point of view video glasses during clinical simulations. Following the simulations students were asked to view the video and provide a self-critique of their performance to supplement facilitator feedback. Students were later asked to complete a questionnaire on their perceptions of using video glasses for feedback and reflection. The survey consisted of demographic and Likert scale questions.

Results

Data analysis of (n=69) participant responses found that they either agreed or strongly agreed that the video footage of their simulation helped them identify; issues/events that they were otherwise unaware of (68.1%), weaknesses (66.7%), and strengths in their performance (66.7%). Students also agreed or strongly agreed that the footage helped them reflect on communication skills (73.5%) and their overall performance (77.9%).

Conclusions

The results of this study suggests that students positively perceive the use of point of view video glasses for post clinical simulation feedback and reflection.

Take-home message

While students seem to value this method of feedback delivery it is yet to be determined if it has a positive influence on learning and future performances. Further research is also required to determine if this is a good adjunct or stand-alone method for reflection and feedback delivery.

PROVIDING DETAILED FEEDBACK TO CANDIDATES FOLLOWING HIGH-STAKES POSTGRADUATE OSCE EXAMINATIONS: VIRTUOUS AND PRINCIPLED OR MISLEADING AND FOOLHARDY?

Author/s

Wakeford R¹, Denney M²

Presenter

TBA

Institution(s), Department(s), Country/Countries:

¹ University of Cambridge, ² Royal College of General Practitioners

Introduction

Examining bodies wish to provide failing candidates with helpful feedback following high-stakes examinations, towards directing learning.

Methods

UK postgraduate examinations' approaches to providing candidate feedback were investigated, also relevant technical guidelines (APA/AERA/NCME) and research.

Results

Typically, candidates receive their total mark, 3-7 'domain-marks' or 'skills-marks' and results on individual OSCE stations (labelled eg 'respiratory', 'psychotherapy').

Guidelines state that test scores should only be reported for individuals if validity, comparability, and reliability are established; if tests provide more than one score, the distinctiveness of the separate scores should be demonstrated.

Research shows that these criteria are rarely met, sub-scores almost invariably being found to add no marginal value over the total score. Generally, sub-scores have lower reliability (often far lower) than the overall score.

Conclusions

Much feedback is defensible neither psychometrically nor logically. Failing candidates' patterns of sub-scores imply the need for improvement on certain domains: these patterns may apply to successful candidates, too, and are misleading. Poor performance on one OSCE station labelled "endocrinology" may lead the candidate to concentrate on that specialty, yet the performance may be due to a specific *lacuna*, unlikely generalisable to performance in endocrinology overall.

Examining bodies are between Scylla and Charybdis: failing candidates demand feedback, yet much is either psychometrically unjustified and/or possibly misleading if not presented in a broader context—potentially resulting in complaints of inappropriate advice.

Take-home message

Feedback beyond a total score should be limited to what an examination's psychometrics can defend; it should be contextualised and explained to make candidates aware of its limitations.

USING ANNOTATION TOOLS TO ENSURE CONSISTENT FEEDBACK AND SUPPORT TEACHING

Author(s)

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Presenter

Nalini Pather

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²School of Medicine, University of Queensland

Introduction

Providing timely and effective formative feedback is an important part of designing student activities. This can be challenging, especially in programs that have large student numbers, and consequently utilise a number of tutors. The BEST (Biomedical Education Skills and Training) Network's Slice image repository provides an annotation capability that can be used to provide real-time feedback, and ensure consistency across multiple tutor groups.

Methods

Slice was used in face-to-face and online activities in gross anatomy, histology and histopathology. Students marked relevant regions and shared these annotations with their peers and teachers for discussion and feedback. Teachers provided feedback to students by sharing their annotation layers. In addition, senior instructors created annotation layers as resources for tutors.

Results

Instructors from multiple disciplines found the tool useful in diverse teaching paradigms, including face-to-face sessions, 'flipped' teaching, online formative feedback, and interactive practical classes. Teachers found it easy to review students' annotations in real-time and to provide helpful feedback regarding misconceptions. Students reported receiving better feedback and perceived an improvement in their conceptual understanding. By disseminating annotated notes on images directly to tutors, senior instructors ensured that all students received consistent information.

Conclusions

As a result of being well accepted by students and teachers in this trial, annotation layers for pre- and post-class learning are now being systematically implemented.

Take-home message

Slice's annotation feature enables effective feedback in multiple settings and can be used to support consistent teaching across large class cohorts that are taught by multiple tutors.

STUDENTS EXPERIENCES OF MASTERS DISSERTATION SUPERVISION & FORMATIVE ASSESSMENT

Author/s

John Anderson, Jim Price

Presenter/s

John Anderson, Jim Price

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Background

Previous research on postgraduate students' experiences of research supervision & formative assessment during dissertations has highlighted the common occurrence of complaints and lack of satisfaction with the supervision they have received. However, most studies have focussed on non-medical students. Although there has been general guidance published in this area in the medical education literature, there remains a gap in the research literature regarding students, especially part-time clinicians, engaged in taught postgraduate Masters level courses in medical schools. In particular there is a dearth of literature that relates psychological theory concerning '*the relationship*' to that of the supervisor/supervisee. This study aims to address this deficit.

Aims

- To identify and report on students' experiences of dissertation supervision / formative assessment in taught Masters courses in postgraduate medicine.
- To identify factors which contribute to the success, or otherwise, of the experiences of supervision and formative assessment. This includes:
 1. A review of the literature.
 2. In-depth interviews with students who have completed their dissertations in postgraduate clinically-related subjects within the Division of Medical Education (DME), Brighton & Sussex Medical School (BSMS).
 3. In-depth interviews with supervisors of students who have completed their dissertations.
 4. A questionnaire survey of students and supervisors to establish how the themes and issues identified in the interviews are experienced more widely.

Methodology

In-depth interviews, using an interpretive phenomenological approach, with a random sample of 12 students who have completed their dissertations within DME, BSMS. The interviews were analysed using the '*Framework Approach*' by the researchers: each blindly coded the transcripts and verified each other's coding. Agreement was reached through an iterative process. These data informed the development of a standard evaluation questionnaire for supervisors and students regarding formative assessment and supervisory processes during the dissertation.

Results

We present a summary of the literature, relevant psychological theories, findings from the interviews and preliminary results from the questionnaire.

Discussion and Conclusions

Some findings confirm previous research, but others highlight interesting new concepts relating to established psychological theories concerning personal relationships. Implications of these new findings and their theoretical implications for supervision and formative assessment are discussed.

SEVEN YEARS OF EXPERIENCE WITH SUMMATIVE WORKPLACE BASED ASSESSMENT: METHODS, RESULTS AND THE IMPORTANCE OF CONTINUOUS FEEDBACK

Author/s

Farmer E

Presenter

Farmer E

Institution(s), Department(s), Country/Countries

Australian Medical Council

Introduction

Workbased assessment (WBA) has been offered to international medical graduates since 2008 leading to general medical registration in Australia. It is aimed at working candidates in accredited sites. The presentation discusses current assessment methodologies, learning from seven years of the process and emphasises the role of longitudinal feedback.

Methods

The AMC accredits 7 providers across Australia to deliver a longitudinal programmatic assessment over a minimum of six months. The compulsory methods include Mini-CEX, CBD, and Multi-source feedback (MSF) from colleagues and co-workers. All assessment methods emphasize detailed and immediate feedback after every assessment, intended to promote self-directed learning.

Results

337 candidates have been through this process. Details of the current pass rates and areas that candidates have the most difficulty with will be discussed. Survey results from the candidates' perspective will be provided. Candidates appreciated the process and valued the acculturation and preparation and the contemporaneous feedback.

Conclusions

WBA provides a robust form of summative assessment using a longitudinal programmatic assessment model. It provides a valid pathway to general registration for international medical graduates and is highly considered by participants and providers as a quality assessment process. Continuous feedback and self directed learning appear powerful drivers of success.

Take home message

Feedback after every component of a longitudinal summative workbased assessment programme appears a powerful mode for learning development.

Session 11E

IS IT TIME TO REINTERPRET OUR DREEMS?

Authors

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Presenter

N. Roberts

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Introduction

Eastern Health Clinical School (EHCS) undertook DREEM (Dundee Ready Education Environment Measure) surveys in 2013 and 2014. DREEM is a valued tool in managing medical student programs and has provided an internationally recognised benchmark. Our DREEM results led us to question the relevance of some DREEM items in evaluating contemporary medical programs.

Methods

Recent EHCS DREEM results suggest that 'there is more positive than negative' in our program. However the results for three survey statements suggested aspects that could be improved:

- "I am clear about the learning objectives of the course"
- "I am able to memorize all I need"
- "The program is well timetabled".

We presented these results for small group discussion at ANZAPHE 2015. A number of the insights arising have been further explored in the context of our program and the literature.

Results

Insights from the 2015 ANZAHPE discussion included:

- Student expectations from university may be inappropriate in clinical settings
- The context of learning and teaching and assessment in the clinical environment must be more clearly defined for staff and students
- Learning objectives must be readily translatable by students into learning activities
- The student role in the clinical environment must be clearly defined for staff and students

Conclusion

DREEM results provide a useful indicator of student concerns about the clinical learning environment, but responses should address underlying issues rather than the literal survey statements. Changing concepts of student-centeredness point to a need to revise the instrument for use in contemporary medical student programs.

ASSESSING WORKPLACE READINESS USING A MULTI-COMPONENT ASSESSMENT MODEL IN A CANADIAN BRIDGING PROGRAM FOR INTERNATIONALLY EDUCATED PHYSIOTHERAPISTS

Author/s

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Presenter/s

TBA

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Introduction:

Many internationally educated physiotherapists (IEPTs) have difficulty entering the Canadian health workforce. To evaluate the likelihood of successful integration, a comprehensive assessment model was implemented within the Alberta Internationally Educated Physiotherapy Bridging Program (AIEPBP). To meet known gaps as well as to introduce IPETs to new practice approaches such as patient-centered care and interprofessional teamwork, an instructional model including frequent and varied formative and summative assessments was designed.

Methods:

Assessments to measure the IEPTs' knowledge, skills, clinical reasoning, self-reflection abilities, professionalism and clinical competence were built into the AIEPBP continuum (pre-admission assessment, blended academic courses and clinical placement). Assessment formats included written exams, MMI, individual performance reviews, OSCEs, oral exams, self-reflections, and professional behavior evaluation plus rankings provided by AIEPBP instructors, clinical mentors/supervisors. Pass rates for the national licensing exams and employment success were monitored as final outcomes of practice readiness.

Results:

Early results with 32 IEPTs who have completed the AIEPBP suggest that the strongest predictors of practice readiness are the pre-admission OSCE, the professionalism evaluations and the feedback and ranking of AIEPBP instructors and clinical mentor/supervisors. Knowledge based assessments alone, such as written MCQs, were not strongly associated with overall competence.

Conclusions:

Multiple modes of assessment, including both objective measurements and subjective feedback from instructors and clinical mentors are essential to predict overall practice readiness.

Take-home messages:

Transition to the Canadian health workplace is challenging. Bridging programs can offer comprehensive preparation and assessment of readiness.

ONLINE ASSESSMENT OF PROBLEM-BASED LEARNING

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Introduction:

Problem-based learning (PBL) is widely employed as an instructional strategy in medical education to promote clinical reasoning via collaborative and self-directed learning. Assessment of problem-based learning is complex, with multiple cognitive, affective and social learning criteria used to determine student success. With escalating use of technology in all facets of medical education, we explored the viability of assessing PBL via online assessment tools embedded in our learning management system.

Methods:

PBL is implemented weekly over two preclinical years in our curriculum, with one case spread over two, 110-minute sessions each week. We converted one video-based PBL case to an online version which could be completed by 190 medical students using self-directed learning, with responses graded online by 22 tutors. A video case history is presented, with students prompted to write open-ended prompts for differential hypotheses and supporting evidence. The case unfurls over successive text and multimedia components, with similar inputs. The assessment tool prevents access to previous responses. PBL group tutors mark each question numerically according to assigned points, and can provide written feedback. No social interactions, synchronous or asynchronous are required of students.

Results:

The online PBL assessment was completed successfully by all students. Variability in tutor written feedback was evident, but at an acceptable level, with scores ranging from 44%-100%. At present only cognitive aspects of PBL are assessed.

Conclusions:

Online technologies permit assessment of well-defined, but complex learning outcomes with rich feedback.

Take-home message:

Online assessment of diagnostic reasoning for PBL is beneficial when face-to-face meetings are not feasible.

EVALUATION OF ONLINE PATHOLOGY PRACTICAL TEAM BASED SELF DIRECTED LEARNING IN PROBLEM BASED LEARNING CURRICULUM

Authors:

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Presenter:

M Fayez Al Homsi

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Abstract

Pre-clerkship medical learning strategies at University of Sharjah are blended problem based learning (PBL), team based learning (TBL), task based learning or learning basic medical sciences in the clinical environment (LBMSCE), and self-directed learning (SDL). This continues to the clerkship phase in "spiral approach".

Online pathology SDL in TBL is actively utilized in PBL curriculum at University of Sharjah in pathology practical sessions. Pathology objectives list is posted online immediately after the first PBL session, and the pre-lab session is conducted a day before practical session.

All 119 medical students answered a questionnaire that included evaluation of different aspects of SDL, PBL and TBL strategies of learning as well as in combination. Motivation to self-directed learning and improvement of presentation skills were the main advantages of pathology SDL, PBL and TBL as expressed by 95 students (80%). Ninety nine students (83%) like the TBL most because it provides teamwork atmosphere, and 95 think that the sessions effectively stimulate group discussion. Motivation of self-directed learning was again emphasized as one of the major advantages of TBL as expressed by 92 students (77%). Ninety nine students (83%) think that pre-lab resource sessions help them markedly in understanding the subject. The students responded positively to the outcome of combined PBL, SDL and TBL, with 95 students (80%) think that this combination improved their understanding of different pathological aspects, and improved their academic performance.

From students' perspectives, PBL, SDL and TBL help better understanding of pathology studying material and possibly improve the academic performance.

Session 11F

A COMPARISON OF ANGOFF AND COHEN STANDARD SETTING ACROSS AUSTRALIAN MEDICAL SCHOOLS

Author(s)

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Presenter

A/Prof Kylie Mansfield on behalf of the AMSAC collaboration

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Medicine Learning and Teaching Unit, University of Adelaide, Australia

Introduction

Since 2009 the Australian Medical Schools Assessment Collaboration (AMSAC) has been benchmarking assessment in the pre-clinical years. Standard setting in high stakes assessments is an important but difficult task. This paper will present the standard setting methods used by AMSAC medical schools and compare the difference between the cut-scores derived from different standard setting methods.

Methods

The standard setting processes used by AMSAC medical schools was identified by an on-line survey, collating the standard setting method, calibration and modifications employed. In 2015 AMSAC used an agreed Angoff standard setting methodology for 50 shared MCQs and also calculated a cut-score for these items using the Cohen method. Individual Angoff ratings were recorded before and after discussion.

Results

Of the 13 schools who responded to the survey 12 used criterion referenced standard setting methods with 7 using an Angoff approach, although with some variation between schools. A comparison of the difference between the cut-scores derived from the Angoff and Cohen methods and their impact on overall student pass/fail results will be presented as well as a comparison of the changes to the Angoff ratings before and after group discussion.

Conclusions

The Cohen method is a purely statistical method for standard setting while Angoff is judgemental requiring at least 6 experts to be involved in each session, the administrative impact of the two methods is very different. While the results cannot be pre-empted, two schools have already moved to replace their Angoff standard setting with Cohen.

Take-home message

Is Cohen a more sensible alternative to Angoff?

STANDARD SETTING AS A CATALYST FOR QUALITY IN HEALTH PROFESSIONS' EDUCATION: A CONCEPTUAL APPROACH

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Introduction

Historical pass/fail cut-off marks can be difficult to defend, psychometrically and credibly yet the stubbornly persist despite disapproval in the literature. Nonetheless, resolute demands for accountability through defensible, valid, and reliable practices, including pass/fail decisions are insistent. This conceptual review considered how standard setting can be placed strategically within the quality dialogue space to address concerns about credibility and defensibility in the literature.

Methods

Inductive thinking and deductive thinking were applied to selected literature, obtained from PubMed, Google Scholar and African Journals on Line databases, to formulate a conceptual approach. Searched key words included standard setting, pass/fail marks, cut-off marks, health professions education, and educational assessment standards. No time limit was specified in searching. Relevance, detailed description, scholarlyness, and educational context were the inclusion criteria for in-depth study of the full articles.

Results

The resulting scrutiny showed that educational tensions arise in the expectations of quality performance standards and the impact of the assessment outcomes. The tension arises because assessment remains the representative measure of achievement of the prescribed performance standard but indicts the quality of the HPE too. The authors suggest that standard setting can be a pivotal focus to attend to both technical and psychometric sufficiency of assessments, on one hand, and accountability responsibilities of HPE institutions to stakeholders, on the other.

Conclusions

Standard setting should not be seen as methodological process of setting pass-fail cut-offs only but as a powerful catalyst for quality improvements in HPE by promoting excellence in assessments.

Take-home message

Standard setting can be a powerful catalyst for quality improvements in HPE by promoting excellence in assessments.

CREATING A ROBUST CRITERION REFERENCED ASSESSMENT FRAMEWORK FOR DISCURSIVE WRITING

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Introduction

This paper discusses an assessment system based on similar criteria that were robust enough to process discursive work from different spheres of interest characterised by widely varying topics. 28

Methods

A criterion referenced format and standard setting anchored our assessment of discursive writing. Jolly (2014) described a 'process framework' based on five core criteria for use in self-selected student essays where model answers cannot be supplied. We developed discursive criteria and post-test standards adapting BookMark (Zieky & Perie 2006) for use with verbal descriptors. Faculty re-engineered learning outcomes and blueprints to identify verbal descriptions of **just pass and clear fail** standards. Post-test faculty panels sampled this work using verbal descriptors and identified the **cut score point** in the mark sheet – set the cut score. During 2014-15 three thousand assignments were processed using this approach. 102

Results

Pictorial data and graphs will illustrate:

- Criterion referenced framework (rubrics) and verbal descriptors
- How sampling was organised and lessons learned
- Feedback from reviewers and students
- Percentage of scripts moderated in all cohorts 32

Conclusions

There were huge variations in topics/ projects assessed using the same criteria and standards. Use of criteria and post-test standards allowed a consensus and illustrated where discursive work reached a **good enough /or not good enough** standard to pass. Faculty reviewers used criteria as *described* to match content and descriptors. 50

Take-home message

Criterion referenced assessment and standard setting allows submission of a wide variation of topics in *one assessment* and *similar judgements* were reached about standards. 24

ARE STUDENTS ABLE TO SET STANDARDS FOR YEAR ONE ASSESSMENTS?

Author/s

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Presenter

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Introduction:

For standard setting, important factors for panel members include expertise in subject content, understanding the exam method and familiarity with the group being assessed. Recent students are possibly the “real” experts, especially in the early stages of a course which they have just completed. The aim of this preliminary study was to determine the reliability and credibility of student panels.

Methods:

Using a year one MCQ exam, three panels were compared: PBL tutors (n=10), year two students (n=8) and year five (final year) students (n=10). Each panel calculated the passing score using a modified Angoff procedure. Generalisability theory was used to assess reliability. The root mean squared error (RMSE) of the passing score, as a function of the number of items and the number of judges, was calculated. The passing scores were compared to relative (mean \pm two standard deviations) and fixed (mean passing score for previous 10 years) standards.

Results:

	Modified Angoff Standards			Other standards	
	PBL tutors	Year 2	Year 5	Fixed	Relative
Standard (%)	56.2	55.8	54.5	57.0	53.6
SD across items and judges	6.9	2.1	3.3		
RMSE	2.19	0.75	1.05		
Number of judges for 60 items (RMSE 0.5)	41	12	20		
Number of items for 10 judges (RMSE 0.5)	1100	80	250		
Failure rate (%)	26.1	26.1	20.9	30.4	20.9

Conclusions:

These data support the concept that students could participate in standard setting. What needs to be determined is whether these data are reproducible and this approach is feasible and acceptable to regulatory authorities.

Take-Home Message:

Student standard setting panels are worth considering.

SENSITIVITY AND SPECIFICITY OF VARIOUS STANDARD SETTING METHODS IN PREDICTING STEP 1 NATIONAL LICENSING EXAMINATION RESULTS

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Presenter

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Introduction

The rationales many teachers used to decide what standard setting methods to be employed are usually the underlying educational principles of each method and the failure rate resulted from each method. This study aimed to propose the use of sensitivity and specificity data as a predictive validity evidence for selecting appropriate standard setting methods.

Methods

The MCQs scores from 31 assessments of 309 students obtained during the three-year pre-clerkship study at Chulalongkorn medical school were used. Eighteen cut points modified from 3 standard setting methods (fixed pass marks, Cohen's, and norm-referenced using mean and standard deviation (SD)) were established to determine their relationships with the Step 1 national licensing examination results.

Results

The three cutting points yielding both high sensitivity and high specificity were: Cohen's method (sensitivity/specificity = 95%/82%); fixed 50% pass mark (sensitivity/specificity = 95%/79%); and mean - 2.25 SD (sensitivity/specificity = 89%/85%). The cutting points resulting in the sensitivity of 100% were 65% of the 95th percentile; fixed 55% pass mark; and fixed 60% pass mark. However, they led to the lower specificity of 85%, 78% and 66%, respectively.

Conclusions

The predictive validity evidence should be considered together with the other two rationales to determine a standard setting method. If we consider end-of-course assessments as screening tests for at-risk students, higher sensitivity is preferred. Therefore, Cohen's method seems to be the most appropriate method since it is easy-to-implement and, based on the result from this study, provides very promising predictive validity evidence.

Session 11H

OVERCOMING BARRIERS TO MEN'S HEALTH EXAMINATIONS

Author/s

Fairbank C

Presenter

Fairbank C

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Background

Diseases of men's reproductive organs cause considerable morbidity and mortality. Yet there is evidence that our students graduate with little experience of men's health examinations including rectal examination. Even those that have had experience have low levels of confidence in their findings. If we are to achieve long term improvement in men's health this barrier needs to be addressed.

Method

We have recruited volunteers from the community (urological teaching associates, UTAs). These men were taught the technique of hernia, genital and rectal examination as well as communication and feedback skills. They then teach the students whilst being examined themselves.

Each tutorial involves 2 students and 2 UTAs. It starts with an introduction and then the examination is demonstrated by the UTAs. This is followed by a role play in which each student examines a UTA and is given individual feedback on their performance.

Findings

Pre and post tutorial evaluations have shown dramatic shifts in the students' confidence levels in their ability to perform these examinations. Almost all students are not confident in the beginning but all have some degree of confidence afterwards. This is a marked change for a 3 hour intervention.

Conclusions

This program could revolutionise the teaching of the men's health examinations area and help to overcome the barriers that exist at present.

THE IMPACT OF HEALTH PROMOTION PROJECTS FOR SENIOR MEDICAL STUDENTS AND THEIR GP PRACTICES: A QUALITATIVE STUDY OF THREE YEARS OF CORE CURRICULUM ACTIVITY

Author/s

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Introduction

The GMC requires UK medical curricula to include addressing risk factors for non-communicable disease, the management of patients with long-term conditions including multiple morbidity, and health promotion. A programme has been developed at one large medical school with the intention of supporting students in developing the associated skills, and at the same time disseminating this knowledge to their clinical teachers. Action research methodologies have been applied to review and modify three key educational foci: social determinants of health; community health promotion interventions; and behavioural change (smoking cessation, exercise and weight loss).

Methods

The programme has been evaluated within a pragmatist-interpretivist paradigm using predominately qualitative methods. Data sources included student and GP focus groups; generic student and GP feedback; and document analysis of student assignments including reflective case studies. Themes relating to feasibility, acceptability, utility and sustainability have been extracted.

Results

Students and GP teachers reported confidence and role legitimacy in behaviour change, when supported by evidence-based training and opportunities to apply learning. Students and teachers gained a wider appreciation of the social determinants of health, as well as local resources to address needs. There was high-level engagement with formative assignments with students describing satisfaction through contributing to health outcomes. Student experience was dependent on GP teacher engagement with a minority of students wanting more time and/or preparation.

Conclusions

The approach is sustainable and acceptable, nurturing patient-centered and biopsychosocial approaches and providing students with incentives for learning beyond traditional assessment drivers. It is an effective method of disseminating evidence-based approaches to teaching practices.

WHAT ARE WE TEACHING OUR WOMEN? A STATE-WIDE SURVEY OF ANTENATAL EDUCATION IN WESTERN AUSTRALIA

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Introduction

The effects of general antenatal education remain unknown (Cochrane 2014). A state-wide survey was undertaken of all WA maternity care providers to examine the current status of antenatal education. As part of the study we asked respondents:

1. what topics were covered for antenatal education
2. if a lack of standardised program/educational resources were formal barriers to improving their antenatal education

Methods

Ethical approval was obtained as a quality improvement study. Survey designed and piloted by the authors. On line survey (SurveyMonkey™) sent to all WA maternity care providers (as recorded by WA Health dept and State-wide obstetric support unit). Follow up reminders sent to non-responders.

Results

We received 35 responses from maternity care providers. Six of these were from private obstetric units (100% response), 4 were from combined public and private maternity care providers (100%) and 25 were from public only funded maternity care providers (+90% response).

Based on review of the literature and Australian public health information sites (www.jeanhales.org.au and www.pregnancybirthbaby.org.au) an agreed list of 21 possible antenatal education topics were provided in the questionnaire. Of those topics, 8 (38%) were covered by all providers, another 10 topics (48%) were covered by >90% of providers and the remaining 3 topics were covered by <75% of providers.

Only 17% of maternity care providers stated that a lack of standardised program and education resources was a barrier to improving their antenatal education; although 43% perceived that the content is reliant of the individuals who deliver the program.

Conclusions

Although the topics covered in antenatal education could be expected to be universally relevant, only 38% of the topics were covered by all education providers. Our survey demonstrated variation in content and this appeared to be related to the individuals delivering the programs. There was little recognition by education providers that a lack of standardised program is a potential barrier to improving education for women. There is minimal evidence

on the benefits of antenatal education and this study demonstrates that information provided to women may vary significantly in content and delivery in WA.

Session 11T

WAX ON WAX OFF: NOVICE INDIGENOUS HEALTH CURRICULUM FOR MEDICAL STUDENTS

Author/s

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Presenter

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Introduction

In 2014 disciplines in the Faculty of Medicine Nursing and Health Science at Monash University developed learning objectives in Indigenous health for novice, intermediate and advanced learners. In 2014-2015 the Indigenous Engagement Unit in the faculty developed curriculum for novice learners.

Purpose/objectives:

- Develop novice Indigenous health medical curriculum
- Provide academic strengthening to deliver Indigenous health curriculum
- Describe student and academic experiences of curriculum

Issues/questions for exploration or ideas for discussion:

How can we inspire and strengthen confidence for

- academics to teach Indigenous health
- student to work effectively with Indigenous peoples

Results:

Using a mixed methods approach artifacts of curriculum and academic strengthening sessions are described. In addition survey results from students and academics are presented. Students found differing activities more useful than others, rated Indigenous health as highly important and self identified particular areas of interest in Indigenous health, such as, cultural wellbeing practices, Indigenous issues in the media, meeting Indigenous people and generally desiring to learn more. Academics found strengthening sessions useful and had varying levels of confidence teaching aspects of Indigenous health.

Discussion:

An accreditation requirement for Schools of Medicine is inclusion of Indigenous content and this is also an imperative to improve healthcare equity and access for Indigenous people. Understanding more about needs of academics and students at differing learning stages is important to quality improve teaching and learning in Indigenous health.

OTTAWA2016
ANZAHPE2016



ARE OUR MEDICAL STUDENTS ACHIEVING CULTURAL COMPETENCY IN BOTH COMMUNICATION AND PRACTICE? IF THEY CAN TALK THE TALK CAN THEY WALK THE WALK?

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Presenter

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Introduction:

The University of Wollongong, Graduate School of Medicine, was established in 2007 and aims to address the shortage of medical practitioners in regional, rural and remote Australia. New to our four-year graduate entry program (2015-2016) is an innovative approach to teaching Indigenous health which is delivered both didactically and experientially. The latter includes early clinical exposure for students in primary care settings, including Aboriginal Medical Service (AMS) placements within their first three weeks of study. Our programme ensures students have opportunities to engage in Indigenous health in community settings to normalise experiences with Indigenous people and reduce stigmatisation that may be present.

Objectives:

- I. To evaluate whether the new programme is effective in meeting our objective to develop culturally competent students in both their communication and practice.
- II. To assess whether students can demonstrate an ability to apply course content knowledge delivered on Indigenous health including but not limited to racism; kinship; Indigenous health programs, policies and research

Ideas for discussion:

Obstacles to the development of evaluation instruments and assessment tools encountered on our journey will be discussed.

Results:

Results will be presented on the validation of our evaluation instrument as well as the developed student assessment tools measuring Indigenous cultural competency.

Discussion:

It is hoped that our evaluation tool will eventually be utilised across the sector to assess student cultural competency in both practice and communication.

ABORIGINAL AND TORRES STRAIT ISLANDER HEALTH WORKERS: THE SKILLS RECOGNITION AND UPSKILLING PROJECT

Author/s

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Presenter/s

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Introduction:

Throughout 2014 and 2015 a series of three, two-week residential blocks were conducted by Tropical North Queensland TAFE in collaboration with James Cook University to deliver essential content to help with skills recognition and upskilling of Aboriginal and Torres Strait Islander Health Workers in Queensland. The project goal was to assist eligible Aboriginal and Torres Strait Islander Health Workers to qualify for a Certificate IV in Aboriginal and Torres Strait Islander Primary Health Care Practice and be able to apply for registration with the Australian Health Practitioner Regulation Agency (AHPRA).

Purpose:

This presentation will share what was achieved throughout this project and some of the challenges faced by the educational institutions in delivering the program. Furthermore, challenges faced by students will also be explored, along with strategies that were implemented to help overcome them.

Issues for exploration or ideas for discussion:

- i. Criteria used for student selection to program – how successful was it?
- ii. The importance of clearly communicated training goals.
- iii. Working collaboratively to provide successful cross institutional education.

Results:

The first cohort of students were less satisfied with the training experience than the second and third cohorts of students. The results also showed that that the third cohort had the most students to complete all five units of the training package.

Discussion:

Reasons why the first cohort's experience was not as satisfying as the subsequent groups will be explored and discussed. Lesson learned and recommendations will be shared.

**REFLECTIONS ON A MĀORI HEALTH CURRICULUM FOR EARLY LEARNERS IN MEDICINE-PROVIDING
A FOUNDATION FOR LIFE-LONG LEARNING AND FUTURE PRACTICE.**

Author/s

Francis Kewene, Joanne Baxter & Anna Dawson

Presenter

Francis Kewene

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TBC

Introduction/background:

Significant health inequalities exist between the health of Māori (New Zealand's indigenous people) and non-Māori in New Zealand. The New Zealand health workforce must understand the determinants of inequality and New Zealand's medical schools have an important opportunity to train doctors equipped for contributing to positive Māori health gains and outcomes.

The Otago Medical School delivers a 6-year undergraduate medical degree with years 2 and 3 being Early Learning in Medicine (ELM). Māori health (Hauora Māori) is a vertical module spanning years 2 to 6 of the medical course. It is positioned as an educational domain in its own right with distinctive learning objectives and educational approaches. The Otago medical intake is around 290 students and these students are very diverse in their knowledge and experience in relation to Māori health.

Purpose:

This presentation describes the approach taken by Kōhatu, Centre for Māori Health to the development and delivery of the Māori health curricula in the ELM programme, at Otago Medical School. It will focus on a description of the programme and reflect on the challenges, opportunities and student response to this curriculum.

Issues for discussion:

Issues for discussion include how best to meet the challenge of providing a foundation in Māori health that meets the learning needs of a large class and a large diversity of students. Other issues include the value of an 'immersion' in Māori health spanning 4 days with diverse teachers and experiences. Student feedback provides a further area for further discussion and reflection.

Conclusion

It is possible to design and deliver an effective programme for 'foundation level' learning in Māori health. In order to be effective the programme needs to account for student diversity and offer diverse learning experiences including cultural immersion. Student feedback is largely positive.

COMPLETENESS AND INTERCULTURALISM IN THE CONTEXT OF THE HEALTH EDUCATION

Author/s

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Presenter

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Introduction:

In addition to specific skills and competencies for each course of healthcare, today much has sought cultural competence so that future professionals know how to work in contexts of socio-cultural diversity. Roraima, a state in northern Brazil, imposes an additional challenge to teaching in the area of health, where 15% of the local population is indigenous, with several ethnic groups and about 7 different languages.

Purpose/objectives:

Access the knowledge of nursing and medical students about important cultural characteristics of indigenous service, your impressions and learnings after specific stage of indigenous health.

Issues/questions for exploration or ideas for discussion:

it's a cohort study (qualitative and quantitative design), to evaluate by applying an initial stage pre questionnaire and compilation of a reflective portfolio after two months, inherent difficulties of communication issues , understanding and acceptance of adult and pediatric patients Indians .

Results:

students showed difficulties of hospital health teams to welcome and care for indigenous patients beyond limited teaching at the university that prepared them to act together with these patients .

Discussion:

There is a real demand for development of specific training strategies for health professionals network, as well as the necessity of including these issues in the undergraduate health professions in order to contribute to the integrated, interdisciplinary and focused on cultural dialogue work.

FEATHERING MEDICINE: THE PROSPECTS AND PERILS IN THE ENGAGEMENT WITH TRADITIONAL ABORIGINAL MEDICINE

Author(s):

Earle Waugh

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Background:

Around the world, there is an increasing awareness of the need for cultural competency in the area of Indigenous health. As a result, health care institutions and medical schools have been struggling to come to terms with Traditional Aboriginal Practitioners and healing cultures. Quite simply, the tools are not available for this task.

Intended outcomes: By the end of this workshop, participants will be able to: 1) Describe cultural competency and its importance for Indigenous health; 2) Recognize cultural issues in obtaining consent, and; 3) Apply tools for cross-cultural communication.

Structure:

Using discussion, a brief didactic Powerpoint, and videos, this workshop provides an overview of the tensions between Aboriginal cultural system and Allopathic medicine, and suggests measures to be taken to address them. Based on previous research conducted in Wabasca, a Cree community, a model has been developed to teach cultural competency skills to health professionals. The Model has been successfully applied in a Learning Manual, with widespread distribution. Utilizing Aboriginal-inspired videos, this workshop explores a variety of issues in cross-cultural competency. The workshop facilitator utilizes cultural competence tools and modifies them for adaptation to the gap in health care related to Canada's Aboriginal populations. Its goal is to assist health professionals to provide culturally competent care to a patient population with critical health issues within Canada

Who should attend:

Anyone with an interest in Aboriginal medicine.

Level of workshop

Introductory

Session 11U

TEACHING COMPASSIONATE CARE IN PRIMARY CARE USING ENHANCED ONLINE DELIVERY METHODS

Author/s

Dr. Rosemary Brander^{1,2}, Dr. Catherine Donnelly¹, Dr. Shayna Watson¹, Professor Anne O'Riordan¹, Professor Susanne Murphy¹, Ms. Christine Chapman¹

Presenter

Dr. Rosemary Brander

Affiliation

Office of Interprofessional Education & Practice, School of Rehabilitation Therapy, and Centre for Studies in Aging & Health
School of Rehabilitation Therapy
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Office of Interprofessional Education & Practice)

Introduction/background:

This research included the creation, delivery and evaluation of an online compassionate care module for pre-licensure interprofessional (IP) health sciences students during primary care placements. Literature reviewed cited compassion as a core value of family medicine and professional competence, but little about its teaching and evaluation. For these reasons, enhanced learning was aimed at the provision of compassionate primary care.

Purpose/methods:

A developmental evaluation examined the use of a newly created online module (six chapters). Interprofessional teams of health sciences students were placed in online communities and completed one chapter per week. A trained facilitator encouraged learners in online and real-time discussions as they worked through the chapters. Questionnaires gathered learner knowledge and attitudes related to compassionate care. An online survey and interviews collected: 1) learner and mentor module feedback, 2) experiences of how the module supported and facilitated compassion within primary care.

Issues/questions for exploration or ideas for discussion:

How have others taught and evaluate the provision of compassionate care? How could our work be extended and improved?

Results:

Students indicated that the module gave them 1) language to describe compassion, 2) opportunities to reflect on their own compassionate experiences, 3) opportunities to discuss and reflect on experiences with interprofessional students. One unexpected outcome was that the creation of the module nurtured compassionate practices within the research team.

6. Discussion:

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The module was successfully developed and implemented. Further use and evaluation of the module will inform its broader use and applications.

"JUST TELL ME WHAT I NEED TO KNOW TO PASS THE EXAM!" CAN FLIPPED LECTURES OVERCOME PASSIVITY?

Author/s

Wei (Anya) Dai, Diane Kenwright, Emma Osborne, Tehmina Gladman, and Peter Gallagher

Presenter

Wei (Anya) Dai

Affiliation

University of Otago

Introduction/background

Although the flipped classroom approach encourages knowledge-construction and higher level learning, leading students to become effective, self-directed learners; little research has focused on flipping the classroom in a large enrolment medical context. This research gauges senior medical students' perceptions of a partially flipped pathology course using both quantitative and qualitative measures.

Purpose/objectives

To explore students' perceptions of the flipped classroom approach in whole class pathology teaching.

Issues/questions for exploration, or ideas for discussion

Do flipped lectures work in a fact intensive course or is it better to deliver packaged information for students to process later?

Results

Student evaluations showed only 35.9% perceived the usefulness of this approach in a large class setting. They perceived the completion of the flipped activities in advance, (which included reading, video watching, quizzes, slide labelling and written questions) as too time-consuming. Rather than spending time constructing their own knowledge, students preferred the most important information in the course to be clearly identified and delivered to them.

Discussion

Our results indicated that incorporating higher level (Bloom) learning through e-learning and flipped classroom in lecture settings, caused dissonance between expectations and the method. While educators created learning opportunities for students' knowledge construction and clinical integration, students valued transmission of "exam-related facts" only. This is in contrast to our prior experience where a flipped setting comprising pathology e-learning followed by small group tutorials was perceived as highly effective. For students to make effective use of a flipped classroom model with lectures, expectations need to be adjusted and higher value placed on knowledge construction over exam facts.

A MODIFIED TEAM-BASED LEARNING APPROACH FOR TEACHING INFECTIOUS DISEASES TO MEDICAL STUDENTS

Author/s

Bronwen Dalziel, Slade Jensen, Björn Espedido, Iain Gosbell

Presenter

Bronwen Dalziel

Affiliation

University of Western Sydney

Introduction:

Our new approach to teaching infectious disease (ID) content to pre-clinical medical students seeks to capture both the flexibility of online content delivery and the benefits of face-to-face sessions, where lecturers can engage students in more cognitively challenging activities. This presentation will discuss the re-development of a core block of teaching for medical students, providing feedback from both the academic staff and students.

Method:

In 2014 Infectious Disease lectures were placed online and students viewed a number of these lectures in preparation for a "Clinical Classroom" session. In the classroom, students were grouped and given quizzes and case-based discussion questions to check understanding, with a staff in attendance to further challenge students. A new learning design was implemented in 2015, using Learning Activity Management System software to streamline the viewing of lectures, quizzes and management of student teams.

Results:

In 2014, students were overall positive (75%) about having online lectures and students (49%) indicated they would like more clinical classrooms in the futures (30% neither agreed nor disagreed with adopting more). Based on evaluation of the new approach, a change in technology was suggested for 2015 to better facilitate the content delivery, team organisation and data collection of the learning design. The results of these changes will be reported on.

Conclusion:

This method of teaching ID content has resulted in positive feedback but improvements in learning design were necessary. We anticipate this teaching approach will lead to deeper learning as students apply their knowledge from lectures to clinical scenarios.

ONLINE SITUATIONAL JUDGEMENT TESTS: IMPLICATION AND PERSPECTIVES OF GROUP TEST TAKING IN CASPER

Author/s

Dore K, Reiter H, Baskwill A

Presenter

Dore K, Reiter H, Baskwill A

Affiliation

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Introduction

As medical education increasingly involves some degree of online training, including assessment, implications of online testing must be examined. CASPer, an online-situational judgement test (SJT) assesses medical applicants' personal/professional characteristics. Given the unproctored nature of CASPer concerns arise that applicants may collaborate in the development of their responses. This research assessed if CASPer scores were enhanced through collaborative test-taking in the 5-minutes/question time restriction.

Methods

Participants were randomly assigned to complete CASPer independently or as part of a writing pair. Paired participants were either designated to be the "applicant" or their "helper". Outcomes included total CASPer score and results of an exit survey of their experience completed by all participants.

Results

52 total participants, 18 individuals and 17 pairings, completed the test. No significant difference was found in mean scores from those who completed CASPer independently ($x = 5.9$) compared to those who completed CASPer in a pair ($x = 6.2$, $F = 1.31$, p ns). When asked if they completed CASPer again would they complete it independently or with assistance, 71% indicated a preference to complete CASPer independently. Reasoning for this included discord in response perspectives within the pair.

Conclusions

The results of this pilot research support the notion that given the limited response time there is little benefit to having an additional person assisting you in the completion of CASPer.

Take-away Message

Time restriction may allow additional test security of ensuring independent writing of online examinations.

BUILDING BRIDGES WITH ONLINE CLINICAL WORKBOOKS FOR MEDICAL IMAGING STUDENTS

Author/s

Druva R

Presenter

Druva R

Affiliation

Department of Medical Imaging and Radiation Sciences, Monash University, Faculty of Medicine, Nursing & Health Sciences, Monash University

Introduction/background:

In 2014 an Australian University invested in an online hosted web based licensed UK system (Pebble Pad™) for use within clinical placements. This system with existing templates and tools uses two different interlinked workspaces one personal the other institutional. This initiative seemed a natural fit for radiation sciences courses because these disciplines in daily practice interact with high end technology.

Purpose/objectives:

This presentation focuses on the achievements alongside lessons learnt during the transition from printed to electronic clinical workbooks for medical imaging undergraduate students.

Issues/questions for exploration or ideas for discussion:

Due to a very short time frame from conceptualisation to implementation and engagement with students, academics and clinical partners; strategic management to build bridges between all stake holders was required.

Results:

An action research framework was the chosen quality assurance method. This framework supports iteration adjustments as necessary across the delivery of the phased implementation approach. Early indications are that this system (Pebble Pad™) allowed the flexible development of electronic clinical workbooks that appears to bridge some of the existing tension between theoretical learning and learning that happens within clinical practice in an applied practical way.

Discussion:

By monitoring and evaluating the enablers alongside encountered challenges; responding to user feedback in real time is possible. Demonstration of higher order learning occurred through documenting a diversity of elements beyond what is possible in a traditional format. Some of these elements will be showcased.

Session 11V

WHAT ARE THE CHALLENGES OF BEING A MEDICAL EDUCATOR AND CLINICIAN AND WHAT HELPS?

Author(s)

Julie Browne, Alison Bullock, Katie Webb

Presenter(s)

Julie Browne¹, Alison Bullock²

Institution(s), Department(s), Country/Countries

¹Cardiff University, School of Medicine (UK) ²Cardiff University, School of Social Sciences (UK)

Background

Medical education is moving out of lecture theatres into interprofessional workplace settings where clinician-educators play key roles.

Methods

We report data from focus groups conducted during 2015 for the UK Higher Education Academy¹, with additional data from recent two studies for the Academy of Medical Educators. In all three studies medical educators reported challenges and insecurities about their identity.

Results

Maintaining balance as a medical educator is a particular challenge for clinicians, where patient safety is their foremost priority and the educator role creates conflicting demands. One participant observed: "The main day job is looking after patients and education comes second". Those with a research role also feel educational scholarship is insufficiently recognised². Other challenges include keeping pace with changing health service demands, managing student, patient and employer expectations and making effective use of learning resources (including technological). Although the professionalization of the medical educator role can support clinician and researcher engagement, it can also dishearten those already struggling to maintain their identity as teachers in complex working environments³.

We offer tentative solutions to some of these issues, including a brief outline of our current work in developing an innovative national credential in medical education based on evidence of knowledge in action.

Conclusions

Without a clinical role, the identity of the medical educator is already a complicated matrix of teacher, scholar/researcher and manager/leader. A clinical role adds significant complexity. Enhancing recognition of the role can be helpful.

Take home message

Challenges of the clinical educator role demand greater recognition.

UTILISING ENTHUSIASM FOR TEACHING TO PROMOTE RESEARCH AS A TOOL FOR IMPROVING TEACHING PRACTICE: A TARGETED SURVEY

Author/s

Pippa Craig, Shannon Saad, Sally Lord, Fran Everingham

Presenter

Pippa Craig

Institution(s), Department(s), Country/Countries

¹ School of Medicine Sydney, University of Notre Dame Australia, ² QMAD, University of Notre Dame Australia

Introduction/background:

The University of Notre Dame's School of Medicine Sydney (SoMS), a relatively new medical school, aims to develop research capacity among clinical teaching staff. Many teachers have sessional appointments and joined SoMS primarily through their passion for teaching. We hypothesise that developing skills and pathways for medical education research (MEdRes) may be both of high interest and more feasible than clinical research for busy clinician-teachers.

Purpose/objectives:

With a university Research Incentive Grant, we conducted a survey to investigate the prevalence and type of research experience and interest among clinical teachers, including in MEdRes. The survey also explored barriers to and factors facilitating engagement in research.

The grant was used to fund two researchers to meet with each clinical school and the PBL tutors, providing an opportunity to conduct the survey and outline the School's research strategy. The survey was also available online.

Issues/questions for exploration or ideas for discussion:

Face-to-face contact for access and engagement

Harnessing interest in research through MEdRes

Building a MEdRes community through clinicians' role as medical educator

Results:

There were 105 respondents (29%). A quarter of research-active teachers reported doing MEdRes; 40% non-research active stated an interest in MEdRes. MEdRes activity and interest was highest among, but not limited to, PBL tutors.

Discussion:

These findings support our hypothesis for harnessing interest in research through MEdRes. PBL tutors are the least research active; we have now identified a way of potentially engaging them in research. The next stage is to work with those interested in teaching practice to build a research community in medical education.

DEVELOPING ONLINE TRAINING FOR MEDICAL EDUCATORS TO DELIVER CULTURALLY APPROPRIATE TEACHING

Author/s

Nisha Dogra, Jeanine Suurmond, Inessa Markus, Michael Knipper and Catherine Leyland on behalf of the C2ME project

Presenter

Nisha Dogra

Institution(s), Department(s), Country/Countries

¹ University of Leicester, ² University of Amsterdam, ³ Justus Liebig University

ANZAPHE Abstract template for Oral Presentations

Introduction/background:

Medical educators may not recognise that their underlying beliefs about the merits or disadvantages of certain approaches in education and diversity itself influence the choices they make about the way they develop their courses. Even staff with awareness of the issues may be concerned about how to incorporate diversity into their teaching. We aimed to develop innovative modules to provide clear guidance to support staff.

Purpose/objectives:

To develop and evaluate an online resource which has four standalone but linked modules based on the responses of 1100 European medical educators who completed a needs assessment questionnaire:

- a. Reflecting on perspective about diversity and integrating diversity into the curriculum
- b. Social determinants of health
- c. Diversity and communication
- d. Making the most of student diversity

Issues/questions for exploration or ideas for discussion:

The challenges faced in creating the modules and their generalizability beyond European contexts

Results:

To date, two modules have been developed and one has been piloted. The modules will be completed by October 2015 and made available for wider use. The evaluation of the training will be presented at the meeting.

Discussion:

The discussion will include benefits and challenges of developing educational material for an unknown and diverse audience, using technology creatively and engaging educators with potentially difficult issues and ensuring stakeholder engagement in the development of educational materials.

HOW DO PARTICIPANTS OF FORMAL EDUCATIONALLY-FOCUSED PROFESSIONAL DEVELOPMENT PROGRAMS CONCEPTUALISE AND ENACT THEIR LEARNING?

Author/s

Koshila Kumar*, Jennene Greenhill, Adrian Schoo

Presenter

Koshila Kumar

Institution(s), Department(s), Country/Countries

Flinders University Rural Clinical School, Adelaide

Introduction

Helping health professionals improve their education/supervision practices is a pragmatic requirement since most are not formally instructed in how to teach/supervise during their undergraduate or postgraduate years, despite educational responsibilities often constituting part of their professional role. Although the literature conclusively shows that educationally-focused professional development activities are generally associated with positive outcomes (1), what is lacking is a nuanced and theoretically-informed exploration of the nature of learning that occurs within formal educationally-focused professional development programs and how health professionals conceptualise and enact their learning in the clinical workplace.

Methods

This qualitative project utilises an online survey and in-depth interviews with health professionals undertaking a formal educationally-focused professional development program. Transformative learning theory (2) and workplace affordances (3) provide the theoretical lens for this study.

Results

Findings relating to the questions below will be presented at the conference:

- What is the nature of learning that occurs within formal educationally-focused professional development programs?
- How can we better support health professionals to develop their capacity as educational leaders/champions/change agents as opposed to being knowledge experts or information brokers?
- What strategies can be used to empower individuals to recognise and leverage organisational or workplace affordances (or negotiate limitations) related to enacting their educational role in the clinical setting?

Discussion

The implications for curriculum design and delivery to help health professionals develop as educational leaders/champions/change agents and negotiate the workplace affordances and limitations related to enacting their educational role in the clinical setting, will be discussed in more detail in the conference presentation.

COACHING SKILLS FOR HEALTHCARE EDUCATION

Author/s

Sue Sims, Helen O'Grady, Julie Gustavs

Presenter/s:

Sue Sims, Helen O'Grady, Julie Gustavs

Institution(s), Department(s), Country/Countries

Royal Australasian College of Physicians (RACP), Helen O'Grady Consulting, GROW Mind and Body Coaching

Introduction:

Coaching is well established as a successful method of professional development in many industries, including corporate business, and sport; however remains a relatively new phenomenon in healthcare.

Coaching is based on the premise that professional development is most effective when the coach uses skills and techniques to support the coachee to identify their own solutions to key issues and problems. The conversation focuses on open ended non-judgemental questioning rather than telling or advice giving.

Methods:

A pilot coaching program was piloted between May – December 2014. The program included a coaching skills workshop, coaching practice with a peer, sessions with health executive coaches and a wrap-up workshop to conclude the program. The program was evaluated through surveys and focus groups.

Results and conclusions:

Participants developed an understanding of what coaching is, including the evidence supporting the use of coaching in healthcare. Participants explored how coaching skills can be applied across a number of areas including workplace communication with trainees, colleagues and patients.

Take-home message:

This presentation will share findings from an extensive pilot of coaching conducted in 2014 by the Royal Australasian College of Physicians (RACP), which provided some very encouraging preliminary evidence of the value of this technique in medical education.

EXPLORING A SHAREABLE APPROACH TO THE DESIGN AND DELIVERY OF DIGITAL RESOURCES.

Author/s

Dr Frank Bate

Presenter

Dr Frank Bate

Institution(s), Department(s), Country/Countries

University of Notre Dame Australia

Introduction/background:

A research study has been initiated to test the validity of a shareable approach to the design and distribution of digital learning resources at the University of Notre Dame Australia. Fifteen context-free multimedia learning artifacts (MLAs) have been developed and assembled into a unit (RM5010A Research Methods). These MLAs can equally stand-alone to support individualised learning and/or be re-sequenced or re-purposed as required.

Purpose/objectives:

The presentation will offer some initial findings on an exploration into the practicability of a shareable approach in the teaching of Research Methods in other disciplines. It is hypothesised that such an approach will be particularly useful in circumstances where similar or related content is used in multiple contexts.

Issues/questions for exploration or ideas for discussion:

To what extent are MLAs useful for individual masters or doctoral students seeking specific understandings around how to conceptualise, design and conduct research?

How satisfied are research supervisors with the depth, breadth and overall quality of the MLAs?

To what extent are MLAs useful for academic staff seeking to re-purpose, re-sequence or re-energise their teaching of Research Methods?

Results:

Initial findings indicate that there is a strong appetite for the use of Research Methods MLAs amongst the academic community. Specific results in relation to the questions posed under (4) above will be presented.

Discussion:

The presentation will tease out some of the issues and challenges associated with the wider application of the model.

Session 11W

SOCIAL LEARNING AND E-LEARNING: CAN THEY SYNERGISE?

Author/s

Diane Kenwright, Emma Osborne, Wei (Anya) Dai, Tehmina Gladman, Peter Gallagher

Presenters

Diane Kenwright, Emma Osborne, Wei (Anya) Dai, Tehmina Gladman, Peter Gallagher

Institution

University of Otago, Wellington

Introduction

E-learning provides flexible learning opportunities to individual learners and usually focuses on cognitive processes associated with the construction of knowledge at an individual level. In contrast social learning emphasises the generation of knowledge within groups and generates superior learner satisfaction, which is related to peer interaction and student-instructor interaction. How can we enhance e-learning with social learning in a course where students have expectations of passive information transfer?

Incorporating problem-based learning (PBL) into an e-learning environment may be a solution to this question.

By mapping PBL activities into an e-learning platform, students can exchange, organise and process their ideas at a group level through virtual communication. If we can build an online group-based learning environment, in which learners can construct knowledge through small-group collaborative interactions, both learning effectiveness and learner satisfaction might be greatly improved. The social learning may also be enhanced by group-tutor interactions at the mid and end point of the exercise.

Purpose/Objectives

To discuss whether a socially oriented problem-based- e-learning approach will enhance learning, and improve learner satisfaction. Will students value the activities when under time pressure from clinical attachments?

Issues for exploration/ideas for discussion

How can instructors design attentive online activities that synergise knowledge construction and social learning?

What other factors might affect successful engagement besides characteristics of the virtual space and the communication medium? How can these be overcome?

ENHANCING THE STUDENT EXPERIENCE VIA COLLABORATIVE LEARNING

Author/s

Kan B, Dowdell S, de Permentier P, Pather N, Velan G, Kumar RK

Presenters

Kan B, Dowdell S, de Permentier P, Pather N, Velan G, Kumar RK

Institution:

UNSW Australia

Introduction:

The BEST (Biomedical Education Skills and Training) Network is a community of educators who have assembled a repository of shared images across a range of disciplines including gross anatomy, histology, pathology and radiology. Such images, together with associated adaptive tutorials and annotation exercises, are recognised as excellent learning resources. However, facilitating active engagement of students remains challenging. One potentially effective approach is to enable collaborative annotation of images with fellow students in real time.

Purpose/Objectives:

We have implemented collaborative exercises in digital annotation of images of microscopic sections, gross anatomy and clinical imaging, in supervised and supported classroom sessions. These help students to integrate basic principles and knowledge of histology and pathology, as well as to correlate gross anatomy and imaging. The exercises use images from the BEST repository known as Slice, which has a collaborative annotation tool. Initial feedback suggests that such activities enable students to learn from one another as well as from the instructors. While the approach offers a great deal of flexibility, we are still seeking to optimise student interactions and the overall learning experience.

Issues for exploration and discussion:

How do we best improve the learning experience for our students using these collaborative tools? Some potential variables in a classroom setting are group size, the extent to which activities should be framed by pre-set questions and the balance between collaborative activity with peers *versus* instructor-guided activity.

How will we measure improvement in the student learning experience and learning outcomes?

Session 11X

HOW INNOVATIVE TECHNOLOGIES AND SOCIAL MEDIA CAN PROMOTE INTERPROFESSIONAL LEARNING, COLLABORATION AND IMPROVED PRACTICE

Author/s

Lawrence Sherman, FACEHP, CHCP, Kathy Chappell, PhD, RN, FAAN

Presenter/s:

Lawrence Sherman, FACEHP, CHCP, Kathy Chappell, PhD, RN, FAAN

Institutions:

Prova Education, USA
American Nurses Credentialing Center, USA

Purpose:

Globally, healthcare providers (HCP) are increasingly challenged with maintaining clinical competence and delivering safe, high-quality care. A rapid explosion of health care information over the past 50 years has exceeded the ability of HCPs to keep pace with scientific advances using traditional learning methods such as live, face-to-face activities. Today's acute care settings can act as a barrier for HCPs to engage in learning activities with limited work time devoted to professional development opportunities. And, HCPs in areas such as rural settings may have geographic restrictions to travel that limit their ability to participate in education to improve clinical practice.

The use of innovative technology-based learning strategies and social media can address barriers of time and cost while promoting interprofessional learning, collaboration and improvements in practice. Strategies such as flipped classroom models and problem-based learning enable HCPs to actively engage in educational activities that promote higher level cognitive learning and transfer of learning into practice while remaining sensitive to time limitations and tight budgets. Through social media platforms, HCPs can engage with each other globally and share information to improve practice 24 hours a day.

Workshop outcomes:

In this session, participants will have an opportunity to take a real-world tour of technology-based learning strategies and social media platforms that are applicable in all practice settings. Using common devices including personal computers, tablets and mobile phones, participants will make videos, participate in chats, and tweet with colleagues from other countries as they learn together!

Proposed Outline:

1. Assessment of participant learners via audience response system or similar technology (10 minutes)
2. Overview and demonstration of technology-based learning strategies (30 minutes)
 - a. Twitter
 - b. Facebook
 - c. Flipped classroom
 - d. Videos
3. Small group work (40 minutes)
 - a. Create a 2 -3 minute health-related video
 - b. Create a Twitter account
 - c. Create a unique group Twitter hashtag
 - d. Tweet with other learners
4. Participant evaluation and shared learning (10 minutes)