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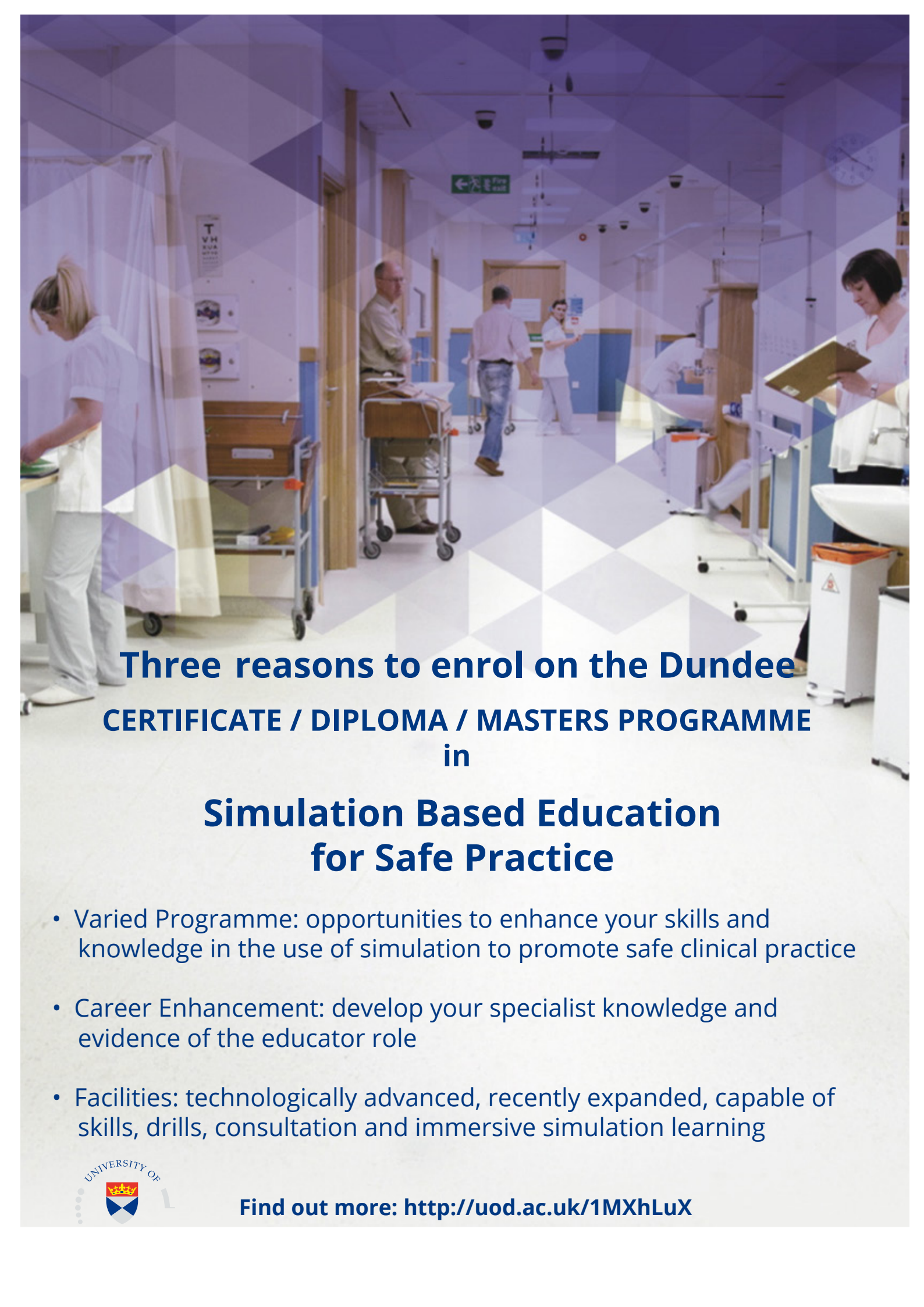and Nursing

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Creativity & Diversity

in Clinical Skills Education

and Research

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Abstracts

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KW: Keynote Workshop
F: Full Oral Paper
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Keynote Addresses

KA05   **Dr. Jeff Bezemer**
        Reframing Clinical Communication: A multimodal perspective

Communication is a critical dimension of clinical work. When communication between and within teams of health care professionals is ineffective, patients are at risk. That is now widely recognized. Communication skills training is now often the focus of (simulation-based) professional development programmes for clinicians; tools have been developed for assessing the effectiveness of communication in teams; and research on communication in specific clinical environments is growing.

As clinical communication is becoming a central focus for policy, research and training, there is a need for critical engagement with the categories, terms and theoretical models used to describe communication. Frequently communication is described in terms of the transmission of messages or bits of information. In this model, successful communication happens when messages are transmitted at the right time to the right people. When messages are not effectively relayed, problems occur. Typically, in this model, speech and writing are seen as the central modes of communication ('x wasn't told fact y about patient z' by colleagues who were aware of y, or, 'fact y about patient z wasn't mentioned in the notes').

In this talk I will present an alternative perspective on communication. Using audio and video recordings of clinical work, I 'dissect' small strips of interaction, rendering visible how communication unfolds at micro-level. The approach highlights characteristics of communication that are currently often overlooked or unnoticed. When looking at communication at a micro-level, it becomes clear that all bodily actions are drawn into communication. Health care professionals working in teams often do not talk for prolonged periods of time, while noticing what their colleagues do: stepping aside, changing gaze direction, lifting tissue up inside a patient's abdomen with a surgical instrument. They attach meaning and respond to such actions, just as they attach meaning and respond to what colleagues say.

These observations have significant implications for what does and does not get recognised as communication. Speech turns out to be one among many modes of communication, each with distinct affordances; and interpretation –including the 'reading of bodies'- appears to describe communication more accurately than transmission of messages. I will demonstrate the potential of this alternative perspective on communication, which is sometimes called multimodality, by looking at video recordings of surgical operations. The recordings were made as part of a series of ethnographic studies on communication and learning in the operating theatres of a major teaching hospital in London. Exploring small video clips from a multimodal perspective, I will address three key themes: inter-professional collaboration, decision making, and medical education.

Dr. Filippo Bressan, PhD
WHY did you do it? Decision in times of uncertainty

Doctors spend most of their time making decisions. Decision making can be considered the core of modern medicine: we need to decide among several different diagnoses, we can decide among several different treatments and we can decide also among plenty of symptoms. Although decision making is never an easy task, it is even more difficult during crisis and emergencies, where individuals and teams are under stress, time is a tough constrain and the patient's immediate outcome depends on making the right choices. Theoretically speaking, decision making can be defined as the "art" of identifying and choosing alternatives according to the data available to the decision maker.

The quantity of data is a first limiting factor: few data can be easier to interpret and integrate but at the same time they can be insufficient to allow us to make a diagnosis, missing the very one that can clarify the situation; alternatively, too many data can be confusing enough to make us get lost and unable to grasp the whole picture. This kind of "information overload" is quite common in critical medicine, where the flow of monitored parameters and a fast evolving clinical situation risk to overcome the capability of the physician, or the team, to discern what is really important to move to the next steps. In these situations the quality of decision making can be inversely related to the quantity of data available: the more data we have, the worse decision (probably) we take. Regardless the number of data we have to consider, we can integrate them in several different ways in order to make decisions. Therefore, decision making can be considered a mental problem solving activity that involves data integration, culture, personal beliefs, training and experience mixed with a strong emotional component.

As humans usually don't bother about the decision making process while taking decisions, this activity could be considered completely unconscious but it doesn't mean that we always decide irrationally. In fact, some of our decisions are completely well meditated and thoroughly thought: this kind of "rational" decision shows up when we critically try to interpret our less or more giant flow of clinical data, trying to convince ourselves that we haven't missed any single important clue and that our interpretation is robust enough to resist almost every attempt to criticise. Unfortunately this "critical thinking" is a very poor performer when we deal with clinical uncertainty: it requires a fast speed of thinking and the capability of calculating several different outcomes that are more natural for a personal computer than for a human being. In a classical very simple example people are challenged to choose between a 50% chance to win 20 or a 90% chance to win 10.

Mathematically the decisions is straightforward: $0.50 \times 20 = 10$ while $0.90 \times 10 = 0.9$. Several people when challenged with this problem will tend to choose "illogically" the second option, just because the 90% chance appears intuitively safer than 50%. In other words, deciding rationally means a time consuming activity of balancing mathematically at our best the pro and the contras of our decision target.
This approach was made very popular by philosophers like Plato and scientists like Franklin that built theories on it, but as we have limited calculation and forecasting abilities, we have adapted ourselves to

decide more intuitively than rationally in times of uncertainty: one of the most used strategy is the use of heuristics. Heuristic can be defined as the application of a generic solution for a generic problem. In anaesthesia we can consider a heuristic turning high the oxygen in response of low oxygen saturation. We can be completely unaware of the reason that determined the drop in oxygen saturation but as we have seen several other similar situations and we have solved them increasing the oxygen flow, we will tend to repeat the same action. Of course heuristics are not devoid of risks, but they are very useful at least to put the situation safe enough to allow us to investigate what is exactly going on. There are several other strategies that can be used to make decisions in times of uncertainty and under pressure of time: a basic knowledge of the principles that rule the decision making can be not only useful to do the "right thing" but also to improve the team performance and release the emotional impact of the members.

KA03   **Associate Professor Simon Cooper, PhD**
              Innovative clinical skills teaching: Best practice – Best outcomes?

What motivates us to teach and what motivates us to learn and how do we measure the impact of our teaching? In this talk Simon Cooper will explore educational motivators, best practice and ways of measuring educational outcomes with a focus on clinical impact. A range of didactic and experiential teaching strategies will be illustrated covering gaming, and innovative simulation techniques.

The role of web based learning will also be explored with reference to interactive simulation techniques. Educational choice and variety is paramount but should be developed with a view to clinical impact and organisational achievability.

KA02   **Professor K. Anders Ericsson**
              The Making of Expert Healthcare Providers: What Can We Learn from
              the Training of Chess Masters, Elite Athletes and Musicians?

Researchers in many domains of professional expertise, such as teaching, psychotherapy, nursing, and medicine, have for a long time thought that professional experience provides opportunities for reflective practice with associated increases in performance throughout the careers of the professionals. More recent research have found that improvement in measurable objective performance, such as increased learning by students and improved patient outcomes, do not increase as a function of length of professional performance. In some domains there are increases in objective performance for the first couple of years but no measureable improvement for the remaining decades.

The finding that professional experience is not a valid predictor of superior performance has generated a discussion and led to challenges of the common practice of referring to individuals with 10 or more years of experience as experts. Some researchers have stopped studying people, who are believed to be experts, and instead examined individuals with reproducibly superior performance in their actual practice (Ericsson, 2006a). These individuals have then been brought into the laboratory, where they are presented with representative tasks that capture their superior performance so its mechanisms can be studied by measuring the processes by having them think-aloud, record their eye-fixations, and the accuracy, speed and control of their actions (Ericsson, 2006b). Once the mediating mechanisms have been identified researchers have studied the development of the superior performance and in particular tracing the engagement in various types of activities that might improve performance.

Most of the original research have studied expert performance in domains with competitions, where objective tests of individuals' performance are conducted, such as music, chess, ballet, and sports. In these domains differences in ability to select best actions in representative situations, ability to reproduce accurate movements, and superior memory for relevant information have been consistently been found to relate to superior performance (Ericsson, Charness, Feltovich, & Hoffman, 2006). Analyses of the performers' development shows that the accumulated duration of engagement in domain-relevant activities, such as work, playful interactions, and competitions, have surprisingly limited correlation with attained level of performance, once a merely acceptable level has been attained. For example, some of us know recreational golfers who haven't improved after decades of active playing. In contrast, research on expert performance demonstrates that some types of experience, such as focused appropriate training activities supervised by a coach or teacher--deliberate practice (Ericsson, Krampe, & Tesch-Romer, 1993).

The research has shown that the acquisition of reproducibly superior (expert) performance corresponds to a successive development of increasingly refined mental mechanisms that afford experts increased control over their performance in representative situations. This successive improvements can typically

be linked to a sequence of appropriate deliberate practice activities, which a coach or teachers has selected for a particular learner based on their current level of performance. The learners can engage in the practice task which provides immediate accurate feedback, and opportunities for repetition and gradual modifications after reflection (Ericsson, 2009).

This theoretical analysis of the full range of expert performers' learning, has been extended to professional expertise in treating medical patients by doctors and nurses (Ericsson, 2004). In my presentation I will show how such analyses can provide insight into how to measure performance in the clinics. There are recent proposals for how training environments in medicine have been developed to improve particular aspects of the relevant performance, such as resuscitation, technical aspects of surgery, interpreting X-rays, diagnosing heart sounds, decision making during surgery (Ericsson, 2008, 2011, and 2014). I will discuss some of studies showing how this type of training led to improvements in patient outcomes in the clinic.

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KA04   **Daniel Raemer, Ph.D.**
            Simulation in Medical Education: Dr. Quo or Dr. Wave?

Simulation has grown rapidly as a technique in healthcare education since the late 1990's. Simulation has been used to supplement existing curriculum, introduce new topics, elevate learning to the level of application, and as an evaluation platform. At first, simulation was a modality at the fringes of healthcare education, but now has made inroads into the mainstream. Thus, the question of how much of the healthcare practitioner's clinical learning can be replaced with simulation? What can and cannot simulation provide to the learner? How will it be fit into an educational structure that has remained essentially intact since the early 1900's? As paper money is giving way to electronic transactions, libraries are being replaced by digital repositories, the land line is a thing of the past in my home, I have begun to wonder if the clinical rotation, the residency, the nursing clinical placement will yield to a fully simulated experience? What are the limitations? What part of the clinical experience cannot be replaced? Perhaps, the question is not "if", but "when"? Oh my!

KA04   **Dr. Brian Simmons**
            Experiential Learning: human simulation - an untapped resource.

When you visit a healthcare practitioner, you put your well-being - sometimes your life - in his or her hands. You rely on your designated provider to be both skilled and compassionate. The education process that brings healthcare professionals to the level of ability worthy of this trust requires students to engage in effective practice in order to develop their skills along the educational continuum. A particularly valuable means of providing students with these controllable learning experiences is through interactions with simulated or standardized patients (SPs) - human simulation.

Since the birth of SP methodology in the early 1960s, many healthcare professions around the globe have adopted this modality to instruct learners, assess curricula, and/or certify skills. SPs are considered to be the 'gold standard' for assessment of clinical performance, particularly communication skills, professionalism and behaviours. The skills required of SPs are complex and demanding. Not only does every discipline engaging SPs have its own unique set of requirements but teaching and assessment also summon different approaches. Teaching entails not only the accurate portrayal of a patient presentation

but also the provision of constructive feedback in support of the learning process. The SP's unique position to offer the students feedback from the patient's perspective is invaluable in directing attention to the strengths and weaknesses of their interpersonal skills so they can improve.
On the other hand, SP-based assessment activities require a focus on accuracy and standardization of portrayal over many repetitions and between the other SPs involved. With careful training, SPs can provide students with consistent experiences, thus increasing the validity of an assessment and the depth of a learning experience.

This presentation will use specific examples to introduce some foundational concepts and practices that underpin human simulation as a valuable educational methodology related to: case development for teaching and assessment with students and teams; recruiting and training SPs for demanding roles and offering constructive feedback to learners; assessing curricula, and/or certify skills. The ethical implications of working with SPs will be considered. The role of experiential learning and human simulation beyond the health care setting will also be explored.

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Keynote Workshops

KW04   **Dr. Jeff Bezemer**
              Video-based research of clinical activity

Video is now widely used by social scientists to record and analyse social practice. In this workshop we explore the potentialities and constraints of using video as a tool for researching clinical activity. We discuss how video recordings of clinical settings can be obtained, how such data can be analysed and what the ethical issues are in doing video research.

In the first part of the workshop we review rationales, methods and outcomes of past and current video research in clinical settings. In the second and main part we explore two different methodological approaches to analysing video data (coding and transcription), drawing on video recordings of clinical work in the operating theatre. In the third part we discuss how video research might complement other approaches, such as ethnography; and how video research can be 'translated 'into training activity and public engagement.

KA05   **Dr. Filippo Bressan, PhD**
              Debriefing Challenge Contest

Debriefing is one of the most subtle aspect of simulation: different instructors use different debriefing styles and there is not a validated debriefing technique that has been proved to be better than others. Nevertheless we can learn from different debriefing styles and pick up ideas and suggestions to use simply observing other instructors on the field. In this workshop participants will be alternatively divided in two groups: actors and debriefers.
Starting from a simple case the "actors" will act as the participants to a simulation course while the debriefers should conduct a debrief. At the end actors and debriefers will change their roles with a different case. The group will then discuss the different debriefing styles with live feedback from the faculty and other participants

KW03   **Associate Professor Simon Cooper, PhD**
            Managing patient deterioration: Enhancing healthcare professionals'
            competence through web-based simulation techniques.

Workshop Aims

In relation to patient deterioration management:
To summarise the contemporary literature.
To identify performance issues and available educational programs.
To demonstrate an on line simulation based training program - FIRST2ACTWeb [Version 2].

The 'failure to rescue' literature highlights concerns over healthcare professionals' ability to manage deteriorating patients.   In this workshop we will discuss these issues and our related work which has identified significant performance decrements in simulated settings. We will particularly focus on simulation approaches which have had a demonstrated impact on clinical practice.

Participants will learn about the development of a web based patient deterioration e-simulation program (FIRST2ACTWeb) which has been developed to create a feasible, accessible and innovative reinforcement to face to face learning. Learning materials include 5 interactive scenarios (using patient actors), which cover AMI, Shock, COPD, post-partum haemorrhage and hypoglycaemia. Assessment tools and evaluation components will be demonstrated.

Participants in the workshop will also learn about the programs development and future directions.
In this interactive session participants will be encouraged to trial the program with a view to future testing in their clinical and educational settings.

RT   **Professor K. Anders Ericsson**
                    How to design deliberate practice activities for particular individuals and members of their teams in healthcare

Keynote ROUND TABLE DISCUSSION

How to design deliberate practice activities for particular individuals and their teams in healthcare

In this roundtable participants are invited and encouraged to report on their own experiences and attempts to design deliberate practice activities and integrate them with the work activities. Participants are also invited to report on unsuccessful attempts and ask for suggestions for how to overcome problems and issues in designing deliberate practice activities. Given the fundamental role of feedback in deliberate practice the workshop will discuss how organizations as well as individuals can collect objective measures of the professional performance of themselves or their unit. I will also illustrate how various methods, such as videotaping, elicitation of think aloud protocols, and retrospective reports on clinical activities can allow superior assessment and lead to accurate identification of areas suitable for targeted deliberate practice and how such practice can might be designed and how its effectiveness for improving clinical outcomes can be evaluated.

KW01   **Daniel Raemer, Ph.D.**
                Providing Effective Feedback - Workshop

Providing effective feedback to learners is a fundamental part of teaching. In this workshop we will analyze different styles of delivering educational feedback, especially in those difficult situation where the learner has performed poorly. We will try to find the elements of those styles that seem most helpful and those aspects that seem ineffective or detrimental. Borrowing from the field of organizational behavior, we will learn and practice a method we have come to refer to as "feedback with good judgment". Attendees will have a chance to practice this technique with their own prior situations they have found difficult.

KA02   **Dr. Brian Simmons**
            Assessment in IPE is it useful?

Background: Interprofessional education (IPE) is a high priority for government and medical education providers. Such education and learning should promote collaborative practices, prepare learners for effective team working and improve patient centered care. Nonetheless, work remains necessary to define appropriate assessment and evaluation methods and standards in IPE.

Intended outcomes: Research suggests that improved patient outcomes in IPE can be achieved by engaging in interprofessional learning and education. The use of appropriate assessment and evaluation methods will be critical to determine if learning has occurred. In this workshop, participants will develop an understanding of useful assessment and evaluation in IPE, focusing on different methodologies and the development of an IPE assessment and evaluation blueprint framework. Van der Vleuten's utility framework, which incorporates reliability, validity, feasibility and educational impact, will be used as the basis for the format of this workshop to determine how useful assessment and evaluation of IPE can be in determining what standards should be set.

Structure: A combination of interactive didactic presentations and small group discussion with practical examples will be used to address:

The importance of assessment and evaluation in IPE
When assessment and evaluation in IPE should be undertaken
What assessment and evaluation methods may be useful in IPE
How to determine the usefulness or utility of assessment and evaluation tools by understanding reliability, validity, educational impact and feasibility
Progression of IPE from novice to expert in determining standards in IPE

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F01

CAVE 2 Hybrid Reality Environment: Teaching clinical skills using simulation and visualization technologies

Patrea Andersen, Selvan Pather
The University of the Sunshine Coast, Queensland, Australia

Abstract

The term CAVE is an acronym for CAVE Automatic Virtual Environment. Originally developed by the Electronic Visualisation Laboratory (EVL) at the University of Illinois in Chicago, CAVE 2 creates a 320 degree 3D wraparound virtual environment that provides an immersive learning experience that enhances perception and results in deeper and faster understanding. Learning is enhanced by images that match the clarity and resolution of the human eye. The sense of being able to "touch" what is not there coupled with tracking systems within the structure that allow students to move about and view images from different perspectives, creates a learning environment that is very different to traditional approaches. How this leading-edge technology is being used at the University of XXX to teach anatomy and physiology, clinical skills in Nursing and complex system design in Engineering will be presented. This will include pedagogical approaches utilised to support learning, highlight the challenges of using this new technology, lessons learnt and recommendations for future development. The presentation will be of interest to academics seeking to incorporate simulation and visualisation teaching methods in curricula. The content of this presentation is transferable to other disciplines.

F02

Utilising eye tracking technology to evaluate perception vs actual defibrillation safety

Linda Ross, *Malcolm Boyle, Brett Williams, Mark Browning*
Monash University, Melbourne, Victoria, Australia

Abstract

Introduction

The importance of access to early defibrillation for patients in cardiac arrest has been emphasised as a critical link in the chain of survival by resuscitation bodies internationally. Defibrillation is not without risk however, as electrical current can inadvertently pass to rescuers and bystanders during the "shock" process, potentially causing them harm. Eye tracking glasses have recently been introduced into healthcare education research as a means to measure situational awareness (SA). Eye-tracking glasses can accurately measure movement of a subject's eyes and provide accurate SA data about safety checks during defibrillation. The objective of this study was to examine visual and verbal safety checks prior to defibrillation utilising eye-tracking technology.

Methods

This was an observational study of student safety during a resuscitation attempt, including cardio-pulmonary resuscitation (CPR) between defibrillation attempts. Participants rated the defibrillation safety using a Defibrillation Safety Self-Assessment form (DSSA) immediately after completing a defibrillation scenario, and again after viewing the eye-tracking footage of their scenarios four weeks later.

Results

Twenty-four paramedic students from Monash University, Melbourne, Australia participated in the study. When the students viewed the video of their performance and then scored their performance, there was a lack of agreement for the main safety components, during the "charging process" and just prior to, and during the defibrillation process. There were differences between their perception of what they did and what they observed during the review of the video. However, there was significant agreement for "eye contact whilst charging the defibrillator" for both scenario one and two, with the agreement ranging between 48% (p=0.009) and 53% (p=0.01).

Conclusion

The results of this study provide educators and students with evidence of their perceived and actual defibrillation safety performance, curriculum quality assurance and evidence of the technology's effectiveness.

F03

A Framework to enhance student engagement with simulation (derived from a longitudinal study of undergraduate nursing students)

Maureen Crowley1
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²Edinburgh Napier University, Edinburgh, UK*

Abstract

Despite the move to graduate education numerous factors have resulted in less opportunity for nursing students to practice clinical skills in practicum (Scholes et al., 2004). Simulation was introduced to address this (NMC 2007) and helped skills acquisition over the short term (Alinier et al., 2006; Ironside et al., 2009). However, little was known about the holistic nature of the student experience of simulation over an extended period of time.

This longitudinal qualitative study explored the progressive nature of the student nurses' experiences of learning within a simulated clinical environment (SCE) and the impact it had on their learning and transfer of skills to practicum.

A purposive sample of twelve students was followed over a two year period, from entry into the branch programme to registration.

 Findings revealed that those able to fully engage with the simulation events appeared to get the most out of it and identified factors, which facilitated or inhibited student engagement. The categories that emerged were: learning in the SCE; authenticity of the SCE; concrete experiences in the SCE; visual mental model; and practicum experiences. An important recurring factor was the impact students' preferred learning style could have on their skill development and subsequent transfer to practicum.
A framework to enhance student engagement with simulation was developed and will be presented and discussed.

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F04

Tag team simulation: An innovative approach for promoting active engagement of participants and observers during group simulations

Tracy Levett-Jones[1], Patrea Anderson[2], Kerry Reid-Searl[3], Stephen Guinea[4], Margaret McAllister[3],
Samuel Lapkin[3], Lorinda Palmer[1]
¹The University of Newcastle, Callaghan, NSW, Australia, ²University of the Sunshine Coast, QLD, Australia, ³CQUniversity, QLD, Australia, ⁴Australian Catholic University, VIC, Australia

Abstract

Background

Active participation in immersive simulation experiences can result in technical and non-technical skill enhancement. However, when simulations are conducted in large groups, maintaining the interest of observers so that they do not disengage from the learning experience is challenging.

Aim

We implemented Tag Team Simulation with the aim of ensuring that both participants and observers had equally active and integral roles in the simulation. This approach is informed by the tenets of forum theatre and applied drama. In this presentation we outline the key pedagogical features of this innovative simulation approach and provide an example of its application to a pain management simulation.

Methods

The Tag Team pain simulation was implemented with second year nursing students. Evaluation was conducted using the Satisfaction with Simulation Experience Scale (SSES) [1].

Results

A total of 444 students participated in the evaluation from a population of 536 giving a response rate of 83%. Cronbach's alpha for the SSES, and the debriefing and reflection, clinical reasoning, and clinical learning subscales were 0.94, 0.94, 0.89 and, 0.88 respectively, indicating high internal consistency and reliability. The mean satisfaction score for those who participated in the simulation ('actors') was 4.63 and for the observers ('audience members') 4.56. The results of an independent sample t test revealed no significant difference between these scores (t (300) = -1.414, p = 0.16).

Conclusion

Tag team simulation is an effective approach for ensuring active engagement of all learners

during group-based simulations and one that is highly regarded by students. It has the potential for broad applicability across a range of leaning domains both within and beyond nursing.

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F05

Validity of a simulated Anaphylaxis station in a final year OSCE as preparedness for practice.

Craig Brown, Jerry Morse
University of Aberdeen, Aberdeen, UK

Abstract

Background: Medical graduates feel unprepared to deal with unwell patients. In 2011-2012 we increased OSCE station lengths, allowing for more in-depth assessment of behaviours and skills. Over the past decade or so the use of simulation as a teaching tool has been increasing. Little has been published on the use of simulation as an assessment tool in the undergraduate OSCE.

An 8 minute high-acuity simulation OSCE station, anaphylaxis followed by cardiac arrest, was administered in the 2014 OSCE. Our aim was to assess station "face validity" and acceptability of simulation in assessment.

Methods: 203 final year medical students who sat the OSCE were sent an email questionnaire. Responses were paired with the student's criterion-based-score for the station as well as "global score" (overall examiner awarded performance score). Data was collated in SPSS v22. Marks were compared with answers using Mann-Whitney tests, Global scores using chi-squared test. College Ethics Review Board approval was granted.

Results: 72 students responded. Median criterion scores and global scores for Yes/No responses to four validity questions were compared. There was no difference in median mark between those who thought the station was good (yes answers) or poor in relation to; demonstrating management of an unwell patient (p=0.069); whether the station helped the examiner understand their decision making (p=0.057); whether mannequin use increased fidelity (p=0.763). Better performers were more likely to answer that the station helped them demonstrate assessment of a critical patient (p=0.008).

There was no difference between good-scorers and poor-scorers global scores in 3 of the 4 questions. Higher global scorers were more likely to state that the station helped the examiner understand their decision making steps (p=0.017).

Conclusion: Final year students considered an anaphylaxis and cardiac arrest simulated OSCE station acceptable. Medical schools should develop further simulated stations for assessment purposes to prepare students for practice.

F06

Changing attitudes using an online patient safety resource for all entry-level health professionals

Stuart Marshall[1,2], Monica Peddle[3], Agnetha Clarke[2], Susan Walker[2], Richard Huysmans[0]
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Abstract

Background

Attitudes of workers have been shown to correlate with safety behaviours in hospitals (1). Many safety attitudes questionnaires are available but few target the unique position of health professional students (2). Undergraduate safety education is now recognised as an important component of curricula (3). Measurement of the effects on attitudes of the education is required.

Following an extensive curriculum mapping exercise, we constructed a series of five online modules using animation, online tasks, short questions about their experience and video case studies to induce reflective learning around patient safety. Each module required a minimum of 4 hours to complete with the exception of the first module that required 6 hours of study (4).

Aims

To determine how professional entry students' attitudes to patient safety change with a detailed online program.

To validate an attitudes survey for multiprofessional groups.

Methods

A modified version of the Attitudes to Patient Safety Questionnaire (APSQ) (2)was completed by students before and after the first module and after completion of the final module. The APSQ was modified only such that it referred to all health professionals rather than medical staff.

Data were analysed using repeated measures ANOVA for each student.

Results

Preliminary results suggest improvement in attitudes in all questions of 5 of the 8 constructs in the survey following completion of the first module (n=147, p<0.001). Only 16 students had completed all 5 modules at the time of writing but improvements were seen in 6 of the 8 constructs, with large changes in 'Team functioning' (11.73 vs. 12.56, p<0.001) and 'Error reporting confidence' scores (17.56 vs. 19.08, p<0.001). Internal consistency of the survey items were high but insufficient responses were achieved for a full confirmatory factor analysis.

Conclusion

Attitudes to safety improve following the education. Further validation of the modified APSQ is required.

F07

Building a physician workforce to care for underserved patients

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Abstract

The US is suffering a severe shortage of physicians to care for underserved populations. Doctors are more likely to choose to work in underserved communities if they had positive clinical exposures in resource-poor settings during their medical training. Educators at one medical school have used five years of federal grant funding to develop programs that ensure that their graduates receive thorough didactic and clinical training in the care of underserved patients and populations, regardless of specialty choice. Specifically, the project team has implemented new curricula into a required third-year Family Medicine Clerkship, enhanced an existing curriculum in the social and community context of care, and developed new and existing clinical training sites at community health centers. Two modules, including a three-hour workshop on chronic disease management and a series of simulated-family cases, teach students clinical and advocacy skills. The latter, taught in six two-hour small group sessions using paper cases, covers a range of topics relevant to vulnerable and underserved patients and families including trust in the health care system, language and cultural barriers, teen pregnancy, and domestic violence. An introductory session on advocacy skills, an enhanced curriculum in the social and community context of care, and recruitment of additional training sites are other key components of this comprehensive curriculum.

Evaluation includes quantification of students' clinical placements in underserved settings, student performance on three novel objective structured clinical examination (OSCE) stations featuring vulnerable standardized patients, student specialty choices, and longitudinal assessment of students' annual responses to a validated measure of attitudes towards the underserved. Here we will present the results of the systematic development, coordinated implementation, and ongoing evaluation of this robust clinical curriculum including its impact on students' clinical training, their skills, and their attitudes towards caring for the underserved.

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F08

Student reflections on learning in a novel simulation of General Practice

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Abstract

We report results of a thematic analysis of 77 reflective essays completed by 4th year medical students after participating in a novel simulation of General Practice where actors role play real life clinical scenarios adopted from local primary care settings.

The Dunedin SECO (Safe and Effective Clinical Outcomes) clinic1 is unique in using outcomes specific to each simulated patient as measures of student performance. Safe outcomes are those which result in no increased risk of harm to either the patient or the doctor. Effective outcomes (the best possible for the patient in that particular scenario) are designed to be evidence based, patient centred, context sensitive, and resource efficient. Decisions regarding achievement of outcomes are based on written feedback in response to specific case-related questions from the actors in role, and the students' written clinical notes. Each scenario requires the student to draw on their knowledge base and repertoire of clinical skills as seems appropriate for that particular patient. There are no time restrictions on a consultation and students must decide when they have achieved safety and effectiveness. They are unobserved and have access to resources and telephone advice from a senior colleague. The simulation is designed to align learning with professional practice.

The safety of the setting, allows students to take on what otherwise could be overwhelming learning challenges. Students report powerful learning, particularly in safe practice and clinical reasoning, and insights into the development of professional identity.

A realistic simulation of professional practice combined with a safe learning environment can provide rich learning experiences in applying key clinical skills of safe and effective patient care.

• 1. Williamson, M., T. Walker, et al. (2013). "The Safe and Effective Clinical Outcomes (SECO) Clinic: Learning Responsibility for Patient Care Through Simulation." Teaching and Learning in Medicine **25**(2): 155-158.

F09

Intimate examinations: UK medical students don't do them any more

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Abstract

Context: a survey of final year medical students in the UK

Background: Intimate examinations (IEs: male rectal, female rectal, male genitalia, female pelvic and female breast) are a core part of a doctor's skill set, and patients legitimately expect such examinations to be done swiftly, competently and without embarrassment.

Method: We surveyed final year medical students to determine how many IEs they had performed as students, since competence can only be acquired with practice. We used survey monkey to ask how many of each of the IEs they had performed on real patients, and how competent they felt.

Results: Sample: 982 replies from 21 medical schools. 58% of responders were females. Self-reported ethnicity: 72% white, 8% Indian, 3% Pakistani, 4% other Asian, 4% Chinese.

Male rectals: 90% had done < 10, 13% had done none

Female rectals: 97% <10, 40% none

Male genitalia: 93% <10, 16% none

Female pelvic: 77% <10, 5% none

Female breast: 87% <10, 6% none

No statistically significant differences between medical schools. Males achieved higher average IE numbers on 'male' examinations and vice versa for females. No statistically significant difference by ethnicity.

Conclusion: although there is no consensus nor research on how many IEs are necessarybefore achieving competence, it is clearly not zero and many would say, because of the issues of embarrassment interfering with learning, 10 would be an absolute minimum (anecdotally 50 for male rectal and 100 for female breast have been suggested). It is not clear why the numbers of IEs being performed appears to have fallen drastically, nor how recently. However, if these are core skills, we need to debate ways of achieving these skills, since we are currently qualifying large numbers of incompetent doctors in the UK.

F10

Student versus faculty ratings of debriefing quality for interprofessional simulation in undergraduates

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Interprofessional simulation (IPS) promotes teamwork and attitudes towards other professionals' roles but debriefing is complex since faculty and participants from multiple programmes are involved. Good quality debriefing is important to promote reflection on learning and enhance awareness of other professionals' roles, however there is sparse evidence in the literature on how to structure IPS debriefs and measure their quality. This study aimed to compare self-assessed faculty ratings with student perceptions of debriefing.

Final year students (50 medical, 83 nursing), in groups of 7 to 12, completed two IPS scenarios. Participants rated quality of the debrief using the Debriefing Experience Scale (DES) [1] whilst faculty self-assessed the debrief using the DASH rating tool [2]. Reliability of both instruments was assessed by Cronbach's Alpha and correlations between the different rating instruments made. Faculty were then trained in using the TeamGAINS 6-steps model [3] and subsequent simulation scenarios scored using DES and DASH scales during the second phase of the study. Attitudes towards IPS were recorded using the ATTITUDES scale.[4]

Results

Both the DES and Faculty DASH tools (Cronbach's alpha 0.88-0.98) showed good reliability for measuring quality of debriefing. Student DES scores were uncorrelated with faculty self-assessed DASH scores in both phases of the study. Faculty self-assessed DASH scores were significantly higher ($p<0.001$) in Phase 2 than Phase 1 of the study. The ATTITUDES scale showed good reliability (Cronbach's = 0.92) and scores showed a significant pre-post increase ($p=0.020$).

Conclusions and recommendations

DES and DASH scales are consistent measures for rating quality of IPS debrief but are measuring different facets of the debrief. The Team GAINS 6-steps model is successful in improving the quality of IPS debriefs in terms of faculty self-assessments. IPS improved attitudes to interprofessional learning in final year nursing and medical students.

Workshop Submissions

References

• 1. Debriefing Experience Scale: Development of a Tool to Evaluate the Student Learning Experience in Debriefing. Reed SJ. Clin Sim Nurs. 2012;8: e211-7

• 2. Debriefing Assessment for Simulation in Healthcare. Brett Fleegler M et al. Sim Healthcare. 2012; 7: 288-94

• 3. TeamGAINS: a tool for structured debriefings for simulation-based team trainings. Kolbe M et al. BMJ Qual Saf 2013;22: 541-553

• 4. Undergraduate Students' Perceptions of and Attitudes Toward a Simulation-Based Interprofessional Curriculum. Sigalet E. Sim Healthcare 2012; 7: 353-358

F11

The UQ Physiotherapy Standardised Patients Program: "Ready to hit the ground running"

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Abstract

Background: The UQ Physiotherapy Standardised Patients Program is designed to help students consolidate knowledge and skills from three earlier years of study and from three different core areas of physiotherapy: cardiorespiratory, musculoskeletal, neurological. This develops students' readiness to "hit the ground running" in final year clinical placements in a profession where they are expected to be autonomous, first-contact practitioners upon graduation. Trained actors portray patients and classrooms are converted into clinical settings so that students can practice skills in a safe environment before they start working with 'real' patients. This is a large-scale, action-packed program delivered on campus, which mimics a traditional placement: students become the physiotherapist and are engaged in all aspects of the clinical experience, helping them feel more confident about their transition to clinic. The timing of the program as an introductory unit acts as a 'wake-up call' for students to dust off cobwebs and launch into polishing performance for clinical year.

Evaluation: Self-efficacy surveys mapped to national professional practice standards were administered pre- and post-stream and pre- and post-program, for approximately 150 students each year since 2006. A final examination (OSCE) provides evidence for attainment of skills.

Findings: There was significant improvement in students' confidence in their abilities mapped to professional standards (all $p<0.05$), for example, to: establish rapport; plan and perform a patient interview, and physical examination; and modify their interaction to suit the patient presentation. Mean anxiety level associated with entering clinical practice significantly declined from 6.49/10 (pre-program) to 3.1/10 (post-program).

Conclusion: This Standardised Patients program facilitates improvement in students' confidence across a range of professional practice facets. There is reduction in student anxiety associated with the otherwise potentially daunting transition from campus to clinic. The 'UQ model' is one of three models now adopted by Australian universities as part of a large government-funded project.

F13

Supporting Development of Clinical Judgment: Use of Concept-Based Learning Activities

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Abstract

Background: The current health care environment worldwide demands that clinicians be skilled in clinical judgment. Development of clinical judgment is supported when students study key concepts within the discipline, connect theory with practice and are exposed to multiple exemplars of how the concept presents in practice (Tanner, 2006; Heims & Boyd, 1991; Nielsen, 2013). Concept-based learning has been used to connect theory with practice in science and engineering education as well as in nursing ((Nielsen, 2013).

Methods: Use of concept based learning activities (CBLAs) in clinical situations involves study of how key physiologic concepts present in patients. Students prepare by reading current evidence about the concept as it relates to the patient population that is the focus of study. In the clinical setting, the student gathers data about the patient situation, does a focused hands-on patient assessment using a study guide designed by faculty, considers how the concept is presenting in this particular patient, and proposes interventions. Students within a clinical group compare and contrast how a given concept presents in a variety of patient situations through collaborative learning (patient rounds or post-conference).

Results: In one small study, a statistically significant increase in clinical judgment was shown with use of concept-based learning activities by one student group, compared with another group not exposed to CBLAs (Lasater & Nielsen, 2009). In another study, students and educators reported "deep student learning" using CBLAs. Teaching approaches that supported deep learning were focus on one concept a day, immediate connection of theory with practice, time with the educator, and collaborative learning (Nielsen, 2013).

Conclusion: Concept-based learning in the clinical environment is one way to deepen student understanding of key aspects of patient care and enhance development of clinical judgment.

F14

From culture shock to cultural empathy and cultural competence: An innovative 3D immersive simulation experience

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Abstract

Background

Australia is one of the most culturally and linguistically diverse nations in the world. Over one quarter (5.3 million) of Australia's population was born overseas. This increasing cultural diversity has placed pressure on the healthcare system to ensure that all people have access to culturally safe healthcare. However, multiple reports describe misunderstandings, miscommunication, and culturally unsafe care by health professionals [1].

Study aim

This project aimed to explore the impact of an immersive 3D cultural simulation on health professional students' cultural empathy and behavioural intentions in relation to cultural competence.

Intervention

The simulation consisted of a 10 minute 3D video of an unfolding scene in a hospital ward of a developing county. The hospital environment, language, and clinical practices exhibit an amalgamation of cultural behaviours, symbols and metaphors unfamiliar to, and incongruent with, Anglo-Celtic Australian culture. Students lie on a bed and view the video through 3D glasses while imagining that they are a patient in the ward.

Methods

Changes in cultural empathy were measured using a pre-test post-test Kiersma-Chen Empathy Scale [2] and the pre-test post-test Cultural Empathetic Concern Scale [3]. Behavioural intentions in relation to cultural competence and the predictor variables of attitudes, perceived behavioural control and social norms were measured using a quasi-experimental design and the Theory of Planned Behaviour: Cultural Competence Questionnaire [4].

Results

459 students participated from a population of 530 (response rate 87%). Data analysis identified statistically significant results for each of the above measures.

Conclusion

This 3D simulation experience replicated an authentic experience and enhanced participants' cultural empathy and cultural competence. Sections of the cultural video will be shown in this presentation and the study results will be outlined in detail.

F15

Values Exchange: Health Professional Students Learning about their Values from and with Each Other.

Georgina Willetts, Jennifer Newton, Cheryle Moss
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Abstract

Background

Prospective healthcare practitioners need to be able to uncover values present in everyday clinical practice, to make sense of these experiences and to project insights towards future practice. Rarely do health professionals (in training or registered) have a chance to consider their own values in relation to other members of their profession, or indeed in relation to other health professional groups. 'Values Exchange', a software program, enables groups of people to respond individually to scenario based situations, and then to study the responses of whole and part groups both quantitatively and qualitatively. Students enrolled across a wide array of health courses and degrees in a large medical faculty (including Nursing, Midwifery, Medicine and Allied Health) have been using Values Exchange software. The undergraduate health professional students (anonymously) reflect on and document their values, reasoning and judgments in relation to a specific clinical scenario. After entering their personal data, the program enables students to see summarised data from all the data sets held in relation to the scenario. Students can explore these datasets in relation to different demographics, professional groups, value positions and outcomes.

Project Aim & Methods

This project sought to develop an analytic framework to be used on data collected from the values exchange program. Seventy undergraduate nursing students consented for their data from one specific case to be analysed. Data reports were manually retrieved on the quantitative and qualitative student responses. An initial framework was developed around 3 foci: basics, reactions and reasons.

Conclusion

With an increasing interest in interprofessional learning in health disciplines Values Exchange provides a platform for health professional groups to engage in uniprofessional and interprofessional examination of underlying values.

F16

Collaborative Learning Through an Inter-disciplinary Ward Simulation

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Abstract

Introduction: To date very little research is available relating to the impact of interdisciplinary ward simulations on interdisciplinary learning. No literature has been found relating to interdisciplinary ward activities involving the allied health professions of Diagnostic Radiography, Occupational Therapy and Physiotherapy. Ker et al (2003) undertook an inter-professional ward simulation involving only nursing and medical students but focused on whether specific skills were completed rather than team working aspects. McKimm et al (2010) involved a wider range of professionals (qualified nurses, doctors, speech and language therapists, pharmacists and dieticians). Facilitators felt that there could have been greater collaborative working, an essential area considering that all health professionals must be able to work in partnership

Objective: To investigate the impact of an interdisciplinary ward simulation on the learning achieved by students from a wide range of health care professions.

Design: A qualitative study using focus groups and individual semi-structured interviews

Participants: Diagnostic Radiography, Dietetics, Nursing, Occupational Therapy, Pharmacy and Physiotherapy students from the Robert Gordon University, Aberdeen, UK

Intervention: An inter-disciplinary ward simulation was undertaken by students in the above professions. Students subsequently participated in multiprofessional focus groups one to two weeks later. Physiotherapy and Nursing students then participated in one to one interviews post practice placement.

Results: Students reported extensive learning about interdisciplinary working, the importance of communication being key. Learning about each other's roles was also achieved as specific activities, which students may not encounter during placement, can be incorporated. Post placement Physiotherapy students reported greater carryover of learning about the interdisciplinary team from the ward simulation than nursing students.

Recommendations: The interdisciplinary ward simulation can be effectively used as a catalyst to promote interdisciplinary groups to learn about each other's roles and to develop the skills required for safe and effective interdisciplinary working in practice.

F17

Student-led interprofessional clinics may improve health management in patients with chronic diseases.

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Abstract

Context

Interprofessional education in student-led clinics enables collaborative care and extends educational capacity beyond traditional single-discipline placements. While students' experiences of interprofessional learning have been examined, little is known about how interprofessional student-led consultation affects health management of people with chronic diseases.

Aim

To examine outcomes of interprofessional student-led clinics in primary and residential care on chronic disease management.

Methods

Patients attending primary care (Aspendale Clinic, Melbourne; n=30) and in residential care (Chelsea Manor, Melbourne; n=16) with chronic diseases were invited to attend a student-led clinic. Student teams were senior university students from medicine, nursing, physiotherapy, occupational therapy and pharmacy. During the consultation, student teams endeavoured to identify health-related issues, review medications and recommend referrals for additional services. Patients were contacted by phone 6-weeks after consultation to determine whether recommendations had been implemented and gather patient feedback on their health status.

Findings

In primary care patients health issues previously not addressed by the current treating clinician were discovered in 33% of patients. Changes to medication regimen were suggested in 43% of patients. Referrals for additional services were recommended for 77% of patients.

For residential aged care patients, active health issues previously not addressed by the current treating clinician were identified in 75% of patients. Changes to medication regimen were suggested in 31% of patients. Referrals for additional services were recommended for 44% of patients.

Further research is underway to determine the extent in which recommendations are implemented 6-weeks after consultation.

Conclusion

Evidence from this study suggests student-led interprofessional clinics may not only be an effective teaching tool, but also may improve the delivery of collaborative healthcare to patients with chronic diseases in both primary and residential care settings.

F18

Randomised controlled trial of the effect of using simulated patients on the acquisition by medical students of musculoskeletal examination skills

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Abstract

A randomised controlled trial of the effect of using simulated patients on the acquisition by medical students of musculoskeletal examination skills

Background:

Acquisition of the skills to perform musculoskeletal examinations is core to doctors' training but health service pressures and the (morally correct) desire not to inflict unnecessary pain on patients may be reducing competence of newly qualified doctors. We hypothesised that structured, scenario based training (SSBT) using simulated patients (SPs) would result in better acquisition of musculoskeletal examination skills than 'usual learning' i.e. clinical experience and teaching on wards and in outpatients.

Methods

We performed an RCT in two separate year cohorts in one medical school, randomising students to SSBT with SPs or usual learning; musculoskeletal module is in year 4 of the 5 year course. Students' examination skills were assessed in a single OSCE station; for cohort 1 (n = 208) the OSCE was in 5th year; for cohort 2 (n = 379) in 4th year. Delay between module and OSCE was ~8/12 (IQR 4-12) for intervention group and ~7/12 (4-10) for control group. OSCE examiners and statistician were blind to allocations.

Results

There was a difference in mean musculoskeletal OSCE station scores of 3 percentage points (t=2.50, p=0.013) between intervention and control arm. There was no attenuation of difference in OSCE scores with time between module and OSCE.

Discussion:

Scenario-based structured musculoskeletal skills training with SPs produces significant improvement
in medical students' musculoskeletal OSCE scores which does not appear to reduce over time.
In conclusion, SPs are effective in training medical students in musculoskeletal examination skills and more effective than traditional learning in clinic

F19

Gender inequity in Peer Physical Examination

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Abstract

Context: Peer physical examination (PPE) is a method of learning physical examination where students examine and are examined by each other. There are a number of stated advantages for PPE including; convenience, the opportunity to develop skills in a safe environment away from patients, empathy with the patient role, and familiarity with normal findings. Disadvantages include the potential physical and emotional discomfort of being examined by inexperienced peers as well as the possibility of unprofessional behaviour. In general, the majority of studies suggest that most students are happy to engage in PPE (O'Neill et al., 1998; Rees, Wearn, Vnuk, & Sato, 2009) with the proviso that female students were more reluctant to engage and that choice in respect to group composition was important.

What we did: The PPE experiences of medical students from years 2 to 4 in a four- year graduate medical programme were explored through focus groups and individual interviews. Data were transcribed and analysed using a direct phenomenological approach, to develop an understanding of the lived experience of medical students as they learnt physical examination. This presentation will focus specifically on one aspect of the study: gender issues in learning physical examination using PPE.

What we found: The themes to be discussed include:

1. Gender segregation and the influence of tutors

2. Coercion to be volunteers - for physical examination demonstration by tutors

3. A Sense of duty

4. Missed opportunity

5. Overcoming the gender barrier

Conclusion: This is an area of PPE that has not been described from a phenomenological perspective before and the insights from this study provide a challenge for all medical educators working with PPE to ensure that they provide a fair and equitable experience for all students.

F20

Reality Check: Medical students' perceptions of using volunteer and professional simulated patients to learn musculoskeletal examinations

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Abstract

Background:

Acquisition of the skills to perform musculoskeletal examinations is core to doctors' training but health service pressures and the (morally correct) desire not to inflict unnecessary pain on patients may be reducing competence of newly qualified doctors. We hypothesised that structured, scenario based training (SSBT) using simulated patients (SPs) would result in better acquisition of musculoskeletal examination skills than 'usual learning' i.e. clinical experience and teaching on wards and in outpatients.

Methods

We performed an RCT in two separate year cohorts in one medical school, randomising students to SSBT with SPs or usual learning; musculoskeletal module is in year 4 of the 5 year course. We then held focus groups to elucidate students' views on the different methods of learning

Results: themes: 1: learning with real patients: (i) Benefits of learning from real patients; (ii) Recognition of diversity in how patients present; (iii) Learning how to communicate e.g. explaining to patients how they want them to move; (iv) Engaging with patient knowledge and experience; (v) Learning to examine patients when they are in real pain. 2: learning with simulated patients: (i) Learning and practising without pressure; (ii) Availability and willingness of SPs to be examined; (iii) Receiving feedback; (iv) Preparation for OSCEs; (v) Preparation/rehearsing for "real" patients and "real" situations; (vi) Simulation as part of a continuum.

Conclusion: focus groups revealed a wide range of themes, suggesting students are sophisticated enough to identify the strengths and weaknesses of various methods of learning these skills.

F21

Towards true pedagogical competence in health care - systems thinking for the future

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Abstract

Background

Centre for Clinical Education (CCE) is a partnership between Stockholm County Council, Karolinska Institutet, and three university colleges in Stockholm. CCE has the overall responsibility for quality and coordination of clinical education throughout the healthcare system in the Stockholm County.

Insufficient pedagogical skills have been identified among clinically active supervisors and a need for a more concerted action is warranted. Several hindering factors have been identified such as lack of a comprehensive plan and obstacles for individuals not being granted leave of absence for continuing professional development.

Objective/summary of work

To meet the needs CCE has developed a plan for the development of competences including a "pedagogic staircase". The health system thinking addresses the issue as a complex adaptive system with flexibility. The model includes a web based introductory course, short courses "Stepping Stones" and a longer course at an advanced level (7,5 credit points). All courses are blended and integrated into the overall healthcare system.

Main results

Several courses have been developed with an inter-professional approach. To date, approximately 900 teachers have completed our courses. Contextualized and tailor-made activities are placed locally in a clinical setting. The use of teachers from the CCE network ensures legitimacy and former course participants return to join the CCE network thereby contributing to a "cascade effect".

Conclusion

The identified need includes a teamwork approach, systems thinking and inter-professional activities bridging the gap between academe and health care. 20

Take home message

A structure for pedagogical competences in health care provides a basis for increased quality in clinical education.

F22

The Flipped Classroom: Creativity to advance students' learning

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Abstract

The Flipped Classroom: Creativity to advance students' learning

Background

This research investigates an acute clinical nursing unit's transition from traditional lecture/tutorial to an innovative "flipped classroom". The traditional didactic lecture and teacher-led tutorial prevails in higher education, despite evidence suggesting there are more effective ways for students to learn[1,2], and to prepare students for practice[3]. The flipped model adopted comprises a sequential structure of preparation, exploration, application, and evaluation. Pre-class new clinical concepts are presented, and given context, explored, challenged and applied in face-to-face sessions. Students work together to contextualise, explain and analyse concepts with each other. Application activities encourage the students to synthesise the new knowledge in clinical practice, and evaluate their new learning.

Aim

Our aim was to meet students' needs for lifelong learning, health workforce readiness and success by remodelling the learning experience. Our interests were the students' experience of learning, and whether this approach improved their confidence and self-efficacy.

Method

Brookfield's Four Lenses[4] (autobiography (self-review), student's eyes, peer review and the scholarly literature), guided a process of critical reflection by the unit teacher. Students' perceptions of the learning experience, self-efficacy and changes to learning approaches were measured at the beginning, during, and end of semester. Participants (n=17) completed a self-efficacy survey at the beginning and end of the semester. Student evaluations of the teaching and unit were undertaken twice during the semester (n=24, n=25), and three students participated in a focus group at the end of semester. Along with the student processes, the teacher completed reflective journaling, peer mentoring and engagement with the literature.

Discussion

We hypothesised that participation in the flipped classroom would enhance students' engagement in learning demonstrated through their perceptions and self-efficacy scores. Preliminary findings suggest a highly positive student experience and a positive influence on self-efficacy.

F23

Clinical Judgment: Bridging the Academe-Practice Gap

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Abstract

New nurse graduates are not fully ready for practice according to nurse executives.[1] The deficit centers on new nurse graduates' ability to make safe, quality judgments about complex patient care. A recent mixed methods study examined a novel approach for evaluating newly hired nurses' clinical judgment, including a framework for preceptor support of new graduates.

Findings from the quantitative part of the study (n=215) demonstrated that those nurses who exhibited the highest levels of clinical judgment had 3 - 5.5 years of experience. However, the surprising finding from the qualitative part of the study: seven preceptors from two different focus groups spontaneously identified that the clinical judgment framework, comprised of an evidence-based model[2] and rubric,[3] provided beneficial support for development of new graduates' clinical judgment. They identified a range of strategies linked to the clinical judgment framework to foster reflection and assessment for development of clinical judgment. The framework gave them objective ways to assess and work with new nurses, that is, the ambiguity of identifying and describing strengths and areas for improvement in performance as well as some emotional components were diminished.

The authors posit that the framework may be useful for faculty and preceptors while students are still in their academic programs, thus serving to better bridge the gap between academe and practice. If academic and practice educators partnered during students' educational experience to use similar strategies, might new graduate nurses' transition to professional practice be smoother and faster?

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F24

Observational Evaluation of Simulation in Undergraduate Nursing Programs using Quality Indicators

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Abstract

Background

Previous research using student evaluation of simulation learning experiences has reported student satisfaction and knowledge and skills gained. These approaches provide limited information about the quality of the simulation activities.

Purpose

The purpose of this paper is to report the evaluation of the implementation of evidence based quality indicators for simulation experiences using an observation schedule for undergraduate nursing programs in three universities.

Study Design

This study was conducted to test the implementation of quality indicators for simulation learning sessions previously developed using international consensus1. A 27 item observation schedule was designed using four specific domains from the Quality Indicators: Pedagogical Principles, Student Preparation and Orientation, Fidelity and Debriefing.

Methods

Data were collected by direct observation and from video recordings of simulation sessions, independently by two academic staff; for 17 simulation sessions using a range of simulation methods; provided for 143 first, second and third year students. Eight clinical scenarios were used including: mental health, aged care, postoperative, sepsis, elderly falls and pressure area and stoma care scenarios, at three participating universities.

Findings

The highest scores were reported for the pedagogical principles domain: provision of learning objectives (90%). Debriefing was scored highly overall (70%) and was conducted within 30 minutes of each session however 40% of sessions lacked reflection and self-evaluation. Student preparation and orientation, and fidelity were scored lower than other domains. Charts were only evident in 30% of sessions, and no orientation to equipment was observed in 30% of sessions.

Conclusions

The observation schedule was an effective means of measuring the Quality Indicators across a range of simulation sessions at three study sites and in three programs for students in all years of study. It identified areas for further development of simulation sessions to improve the students learning experience.

F25

Trauma Inter-Professional Simulated Education (TIPSE)

Craig Brown[1], Jerry Morse[1], Morag Howard[2]
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Abstract

Introduction

Inter-professional education is a major component of healthcare curricula as there is increased awareness of the need to train safe, effective teams. Whilst Inter-professional Simulation-based Education (IPSE) is common in medicine and nursing curricula it is less evident in other professional groups including radiographers (Gough et. al, 2012) despite a national drive to increase allied health professions simulation training. Mackay et. al. (2007) reports that graduate radiographers are unprepared in terms of knowledge and experience in trauma cases.

We have developed a trauma inter-professional simulation-based programme as a joint venture between two Universities. Our aim was to explore the views of radiography, nursing and medical students regarding their preparedness for dealing with trauma and describe inter-professional learning outcomes.

Methods

All second-year student radiographers (n=39) and a convenience sample of nursing (n=10) and medical (n=5) students were invited to participate. Students were given a simulated trauma scenario and completed pre and post-scenario questionnaires. Paired responses were analysed using Wilcoxin paired tests (SPSS v22). Thematic analysis of free text responses was performed using NVIVO 10. Ethical Approval was granted for this mixed methods study.

Results:

54 students were recruited. Prior to completing the scenario, the majority (n=26) indicated they were unprepared to deal with trauma. Post-scenario significantly more felt prepared to undertake their role in the trauma team and had better understanding of their and other professions roles in trauma (P<0.01).

Analysis of student's perspectives regarding challenges in the trauma setting revealed four main themes; "patient factors", particularly moving and handling of trauma patients, "environmental factors" including the pressurised environment, "technical factors" including adapting radiographic technique and "communication" with patients and other professionals.

Conclusions

IPSE is an effective means of preparing undergraduate health care students to understand their and others roles within the trauma team in preparedness for professional practice.

F26

Interprofessional education (IPE) in primary care- pilot projects with volunteer students, or something more?

Fiona Kent, Jenny Keating, Miodrag Dodic
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Abstract

Background- Interprofessional teamwork in primary care settings is ideal for the management of chronic health conditions. Despite the importance of preparing all health science students for this model of practice, interprofessional placements in primary care are not routinely offered to learners in Australia. We present the results of a series of studies advancing interprofessional education in primary care settings and propose directions for future work.

Method- We conducted a systematic review and five pilot studies in community health, general practice and residential aged care, and an economic analysis. Participants were volunteer patients and students from final years of entry-level programs, and their educators. We gathered data on student reflections, experiences and learning outcomes, patient experiences and health outcomes, health services delivered by students, educator reflections, costs and logistics of clinic operations.

Results- We reviewed twenty-seven studies of IPE in primary care. The field of research is weak and little can be concluded other than that students appear to learn teamwork and knowledge of other's roles. Our empirical data support these findings and further indicate that students in IPE collaborate effectively in assessment, care delivery and appropriate referral. The costs of running clinics for student learning were higher than traditional placements. Educators across disciplines gain skills through interprofessional teaching, and report benefits in their patient management. Patients enjoy student consultations.

Conclusion- IPE in primary care is feasible, enjoyed by students and educators, appreciated by patients, and exposes students to each other's skills. Sufficient observational studies have now been conducted. Given the substantial investment in creating and sustaining these clinics, serious investigations that give us confidence that the investment is worthwhile are well overdue.

F27

Measuring the learning culture of the clinical workplace

Jennifer Newton[1], Brian Jolly[2], Amanda Henderson[3]
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Abstract

Background:

The clinical environment is fundamental to health professionals' and student practitioners' learning, and research has highlighted the disparity between academic and practice learning environments. This presentation reports on a new survey tool, the Clinical Workplace Learning Culture Survey (CWLCS), development of which has been funded through an Australian Research Council Discovery grant. The survey supports an empirically and theoretically derived model of workplace learning for health professionals that provides a framework for planning education and evaluating learning in clinical environments.

Methods:

Development of a survey of 64 items drawing upon previous published tools was undertaken and piloted (registered nurses, n=45; nursing students, n=50). Pilot analysis together with detailed analysis using a theoretical framework located in ethnomethodology, of field work observations and interviews with nurses (n=40) and student nurses (n=48) enabled modification of the tool, and a 55 item survey instrument (CWLCS) resulted. A total of 839 revised surveys were returned, with 337 nurses' and 481 student nurses' responses (missing cases n=21 excluded) contributing to a factor analysis using SPSS V21.

Results:

Thematic analyses of interviews with nurses and student nurses identified six core categories including aspects of ward culture that impact on workplace learning. Preliminary analysis using Principle Component Analysis (PCA) with Oblim rotation and Kaiser Normalization resulted in 14 factors. Further factor analysis was conducted in which the PCA was constrained to seven factors. These factors were mapped against the emergent qualitative themes and a new conceptual model on workplace learning framed.

Conclusion:

This study makes a significant contribution to the theoretical understanding of educational and cultural workplace learning in clinical practice. The emerging constructs center on the notions of teamwork, collegiality, being valued and respect to enable individuals to find a way of negotiating the system.

F28

How confident are final year medical students in performing practical skills? Does perceived competence support expertise in carrying out procedures?

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Cardiff University, Cardiff, UK

Abstract

Background and Purpose

The General Medical Council (GMC) stipulates that medical students must be able to perform 32 clinical procedures to a satisfactory standard1. Students learn these skills through e-learning, formal teaching in skills centres and assessment in clinical areas. Whilst this approach is found throughout medical schools in the UK, other countries may use different methods to teach procedural skills2, 3. This study compares the procedural skills taught at undergraduate level in a medical school in Japan and one in Wales. It asks questions about the confidence of participant students and tests their ability to perform procedures through simulated assessment.

Methodology

The study adopts interpretivism as its theoretical perspective, and employs focus group and questionnaire approaches to examine perceptions of confidence and learning of procedural skills in 44 student participants from Mie and Cardiff Universities. 23 HCP's assessed participants in 'OSCE' assessments to grade the performance of 5 procedural skills across both settings. An analytical coding framework was developed from the transcribed data and audio recordings. Data were coded and analysed using the developed framework.

Results

Data gathering from the study has recently been completed; full results and discussion will be presented in conference. Early examination of the results indicate differences between skills taught to the two participant groups. Variations in confidence levels and ability to perform practical procedures to a universally accepted standard are also indicated.

Discussion

Absence of formal approach to clinical procedure teaching may not necessarily equate to lower levels of skills performance in students taught outside the UK. Cultural differences in communities which hospitals serve may mean medical students in other countries learn procedures in different ways and quickly through necessity. Therefore, it can be accepted that in Japan, different approaches to skills teaching may be used to develop competence in medical students.

F29

Overcoming workplace inertia:supporting teaching and learning in practice

Jennifer Newton[1], Brian Jolly[2], Amanda Henderson[3]
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Abstract

"Clinically I don't think that I felt ready...when you're out there doing it with very sick patients... very hard to... be prepared for that." Karen, a newly graduated registered nurse.

Being challenged by this type of response has characterised a decade of my research into transitions from academia to clinical settings, and undergraduate readiness for practice. Contextual factors in the workplace can not only influence students' approaches to learning and interactions, but also have reciprocal effects on the existing workforce. Optimal one-on-one learning in the workplace is operationally challenging due to this complexity. This paper reports on a body of research, funded by the Australian Research Council, which has identified constructs that inform a comprehensive conceptual model of workplace learning in healthcare.

Methods:

As a component of a two year project framed in ethnomethodology where the analytic interest is in the methods individuals employ in their work and the associated learning, one-on-one audio-taped interviews were undertaken with nurses (n=45) and nursing students (n=50). Prior to the interview a period of field work observations of the participants was undertaken across a range of clinical settings in both metropolitan and regional healthcare facilities. Interview transcripts were coded and thematically analysed using NVivo10.

Results:

Analysis revealed a distinction between those practitioners who engage with the student to learn about their knowledge and understanding of practice situations compared with those who do not establish what the student already knows or needs to know. Furthermore, there is high variability in how much nurses allowed students to direct their own learning as opposed to providing continuous direct instruction.

Conclusion:

These anomalies create tension in the transfer of knowledge to practice and in workplace learning. Understanding these tensions through our conceptual model of workplace learning in healthcare provides a base for direction of the support required for learning

F031

Educational effectiveness of gynecological teaching associates. A multi-centre randomized controlled trial. Australian New Zealand Clinical Trial Registry: 363283 https://www.anzctr.org.au/Trial/Registration/TrialReview.aspx?id=363283

James Duffy[1], Samuel Chequer[1], Aaron Braddy[1], Marion Showell[3], Javier Zamora[2], Paul Kinnersley[4], Olwyn Westwood[1], Khalid Khan[1], Annie Cushing[1]
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Abstract

Objective: To evaluate additional benefits of training medical students by gynecological teaching associates compared to training involving a pelvic examination manikin using a randomized trial.

Design: 94 medical students were recruited prior to their four week obstetrics and gynaecology rotation, in seven hospitals, during the academic year 2012-13.

Intervention: The control training consisted of lectures, demonstration of the pelvic examination and practice opportunities on a manikin (n=40). The experimental group received additional GTA training, delivered by pairs of experienced GTAs to groups of four medical students (n=54).

Main Outcomes: Outcomes measured at the end of the rotation included knowledge of the correct order of examination components (yes/no), student comfort (score range: 4-16) and confidence in their technical and interpersonal skills (score range: 6-18) both captured using Likert scales. The primary outcome, measured at the end of the academic year, was performance on a station examining the female pelvis (score range: 0-54), within the end of year summative objective structured clinical examination.

Results: Groups were similar in age, gender, and ethnicity. At the end of the clinical rotation the experimental intervention had a moderate impact on knowledge (difference 29.9%, 95% CI 11.2, 48.6%, p=0.002) and student confidence (median 6 vs 7, p=<0.001) compared to control and a large impact on student comfort (difference 1.8, 95% CI 0.6, 3.0, p=0.004). At the end of the academic year the experimental intervention had a small impact on skills compared to control (median 44 vs 43, p=0.26) and was not statistically significant.

Conclusions and Relevance: Among medical students taught the female pelvic examination by low fidelity simulation (manekins) additional training by GTAs prior to clinical placements, improved knowledge, comfort, and confidence at the end of the clinical rotation but it did not improve examination skills as measured in simulation at end of the academic year.

F32

Nursing student's Anxiety in Clinical Placement

Rosalind Lau, Lisa McKenna, Georgina Willetts, Louisa Lam, Heather Buttigieg
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Abstract

Background

Clinical placement is an integral and important component of the nursing education. Nursing students have reported feeling anxious in their clinical placement. The aims of this study are to identify nursing student's sources of anxiety and to determine their anxiety levels in various clinical settings.

Methods

This is a prospective cohort study. Students will be followed at each clinical placement from the first to the final year of their undergraduate nursing education. Students enrolled in the Bachelor of Nursing course in 2014 in a Victorian university in Australia were recruited into the study. A research team member presented the study to students in their laboratory sessions and they completed the demographics and Spielberger Trait Anxiety Inventory (STAI). The first clinical placement data will be collected in September 2014. Students will complete the Spielberger State Anxiety Inventory (SSAI) on the first day of each clinical placement and SSAI and Clinical Placement Anxiety Scale (CPAS) at the end of each placement. Completed questionnaires will be returned in sealed envelopes to the nurse educators.

Results

One hundred and three six students completed the demographics and STAI. The majority were female (91.9%) and 83.1% were in the aged group 18-20 years. Half were born overseas, from 23 different countries. Slightly over half (55.9%) indicated English as their first language. The mean STAI score was 39.3 (SD 7.68).

Conclusion

To our knowledge, this is the first study that follows the same cohort of students from the first to the final year of their undergraduate nursing education. This is also the first study to compare students' anxiety levels before and after each clinical placement.

Reference

Spielberger C, Gorsuch R, Lushene R, Vagg P, Jacobs G. 1983. Manual for the State-Trait Anxiety Inventory. Palo Alto, CA: Consulting Psychologists Press.

F33

Benchmarking Simulation Use in 3 Allied Health Professions

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Abstract

The Health Professions Council Standards of Education and Training (HPC 2009) dictate that all courses must ensure their graduates meet the standards of proficiency (SOPs) for their profession (HPC 2013). D'eon (2005) indicates that students need to be challenged with progressively more complex tasks that reflect the reality of clinical practice. Within health care education simulation provides the ideal opportunity to create 'real' case studies. The use of simulated activities is well documented in medical education (McGaghie et al 2009, Issenberg et al (2005) and is currently being used widely in nurse education (McCaughey and Traynor 2010, McCallum 2007, Ricketts 2011). Simulation is a labour intensive activity which is used extensively across the Faculty of Health and Social Care at RGU. Anecdotally we hear that students find simulated activities to be useful but there is a very limited evidence base to support its use out with medicine and nursing. It is also unknown exactly how extensive the use of simulation is within the pre-registration training of allied health professionals: specifically Diagnostic Radiography, Occupational Therapy and Physiotherapy. Many of the simulated learning opportunities are now undertaken in clinical skills environments which replicate the 'real' clinical environments and utilise volunteer/simulated patients or medium/high fidelity dummies such as Simman or Metiman.

This project therefore utilised an on-line questionnaire, sent to all institutions in the United Kingdom who provide pre-registration training for Diagnostic Radiography, Occupational Therapy and Physiotherapy. The questionnaire asked what resources course teams have access to, how much use they make of them and what activities they undertake.

The survey completion date has passed and results of the survey will be presented.

P01

Implementation and evaluation of a social inclusion strategy to enhance diversity in future health care professional students: the ChefMaster competition.

Andrea Bryce, Laura Tirlea, Helen Truby
Monash University, Melbourne, Victoria, Australia

Abstract

In Australia, the need for health professionals with a greater diversity of social and cultural backgrounds able to better reflect the population accessing healthcare is pressing. We aimed to demonstrate the links between science and food, to encourage year 10 children attending schools with a low participation rate in higher education to meet entry requirements. The aim was to inspire students to study the necessary pre-requisites to enable university entry via the delivery of a cooking competition.

The ChefMaster competition was held in 10 schools already enrolled in a lower guarantee entry pathway to Monash University. The recipes chosen illustrated the chemical changes that occur when cooking food, which was supported at each school by university student ambassadors. Evaluation data was collected via questionnaire to explore students perceptions of their experience.

One hundred and thirty-eight students participated in ChefMaster with 18 progressing to the finals held at the University. Fifteen of the 18 said they would consider studying at university and continue to with chemistry in order to meet entry requirements for nutrition programs.

This strategy requires impact evaluation to determine if any of the participating students apply for and are selected into tertiary nutrition/dietetic courses. ChefMaster offers an innovative approach to increase social inclusion and diversity of undergraduate nutrition and dietetic students.

P02

An evaluation of online simulation laboratory induction

Patrea Andersen, Suzie O'Brien, Kristine Cox, Karen Watson
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Abstract

For tertiary sector providers on-line interfaces provide an efficient means of curriculum delivery1. Historically mandatory a nursing laboratory induction program had been conducted as a didactic classroom session at the commencement of semester. This was redesigned as a multimedia on-line learning module and quiz. To evaluate the efficacy of the new induction program ability to prepare students for safe laboratory practice a mixed method study was undertaken. The sample included second year Bachelor of Nursing Science students (n=236). A data base audit of quiz results, observation and focus group interviews revealed a correlation between the quiz audit findings and observational data indicating that the electronic induction failed to adequately prepare students for the practice of hand hygiene and management of hazardous waste. The focus group analysis confirmed student difficulty related to these areas. This presentation reports the results of this study and subsequent initiatives introduced to enhance on-line learning. This includes a second phase of research evaluating the use of virtual environments employing gaming technology to enhance learning of clinical skills. This presentation will be of interest to academics and laboratory staff involved in the application of WH&S policy and within laboratory spaces and interested in teaching clinical skills

P03

A Day at the Museum: Raising Public Awareness of Dementia

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Abstract

TITLE: A Day at the Museum: Raising Public Awareness of Dementia

BACKGROUND: A group of lecturers from The University of the West of Scotland, School of Health Nursing and Midwifery collaborated with South Lanarkshire Council (SLC) Education Department and undertook research on dementia awareness with school children aged 9-12 years.

Final year Adult Nursing students supported by Part 1 Adult Nursing students prepared and delivered dementia awareness sessions and workshops to simulate the experience of dementia.

Participating schools developed the learning gained from the dementia awareness session and workshops into daily classroom activities, comprising of poetry, story writing and artwork, which was subsequently exhibited at Scotland Street School Museum, Glasgow. The children's work is entitled "Dementia: through the eyes of a child". This depicted their interpretation of what dementia means to them and provided an opportunity for their work to be shared with the wider community. This exhibition also formed part of the Luminate Healthy Ageing Festival.

INTERVENTION: All students who participated in the research project delivered modified 'Virtual Dementia Experiences' to the general public who attended the exhibition over a six week period.

SAMPLE: The sample group comprised of final year students (5) and part one students (12).

METHOD: Student reflections were utilised to identify the students' perceptions of the opportunity provided to raise awareness of dementia within a museum setting.

FINDINGS: All students found this to be a rewarding experience, which allowed them to integrate theory with practice. They valued the opportunity to develop their clinical skills, literature searching, research, communication, problem solving, teaching and team working skills and to represent the university within a non- traditional setting.

CONCLUSION: This evaluation has highlighted the need to continue to be creative and to provide innovative opportunities and settings in which students can integrate theory with practice.

P04

Interprofessional Simulation in Oral and Maxillofacial Surgery

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Abstract

Core trainees in dentistry contribute to a significant portion of the assessment and management of Oral and Maxillofacial Surgery (OMFS) in-patients. They provide care for emergency and elective admissions, including the provision of an out-of-hours service. Dental Foundation training provides minimal experience of managing medical and surgical emergencies; therefore the prospect of managing acute emergencies can be daunting1 and requires support from both medical and nursing staff. We aim to develop a regional resource for learning, in a safe but realistic environment.

We piloted a programme, using tutorial based learning and high-fidelity, immersive simulation to provide candidates with increased confidence and knowledge in the assessment and initial management of the deteriorating patient. This programme utilises the interprofessional relationship, aiming to build relationships, and ultimately improve patient safety.

To date, 5 core trainees, 2 OMFS Consultants, 2 ward nurses and 1 dental nurse have participated in the programme, which took place one month into the trainees post. We plan to assess effectiveness by repeating the scenarios using in situ simulation. The programme will be repeated after 2 months with the same candidates, and we hope to continue it with future trainees.

References:

1. Kalsi, Higham, McKnight, Dhariwal. Simulation training for dental foundation in oral and maxillofacial surgery - a new benchmark. *Br Dent J. 2013 Dec; 215 (11): 571-6.*

P05

Implementation of interprofessional education in clinical skills between pharmacy and medical undergraduates

Mathew Smith[1], Sian Williams[2], Clare Cann[2], Anna Milsom[2], Emma Kidd[1], Robert Dewdney[1], Paul Kinnersley[2]
[1]School of Pharmacy and Pharmaceutical Sciences, Cardiff, UK, [2]School of Medicine Clinical Skills and Simulation Centre, Cardiff, UK

Abstract

In recent years, the UK has witnessed the publication of a series of reports highlighting a breakdown of teamworking and a lack of understanding of professional roles in healthcare that has negatively impacted on patient care. Coupled to this has been an increasing overlapping of roles between healthcare professionals particularly in the area of clinical skills. Despite clear guidance from the respective regulators it is curious that IPE is a variable feature of the initial training of pharmacy and medical healthcare undergraduates. Cardiff University Schools of Medicine and Pharmacy have sought to address this by embedding regular IPE in clinical skills within their School's curricula. We have implemented and evaluated a series of clinical skills IPE sessions between medical (300 students) and pharmacy students (120 students) in the areas of Basic Life Support, use of automated defibrillators and monitoring of vitals signs. Students clearly value these session with 85% of pharmacy students and 68% of medical students agreeing they "learnt something by observing the approach of students from the other profession". We are currently seeking to enhance the breadth of our sessions to include palliative care and respiratory clinics.

P06

Simulation improves junior doctors' confidence in their approach to the unwell surgical patient

Vivienne Blackhall, Alexis Riddell, Mahua Chakrabarti, Andrew Renwick, Mark Vella
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Abstract

Aim: Junior doctors often feel underprepared before commencing their surgical rotation. Simulation can provide a means of addressing this real or perceived performance gap. Existing simulation courses are usually run at a site distant to their place of work, are overpopulated and focus on medical emergencies. This project aims to establish a novel in-house surgical ward simulation course for new FY1 doctors.

Methods: A departmental critical events analysis and a survey of common FY1 encounters were used to generate surgical scenario topics. Local systems and protocols were built into the scenarios to improve realism. Four participants attend the course fortnightly; each gets the opportunity to act as team lead.

Results: 50 participants have attended so far. Participants rate perceived confidence relating to four domains pre and post simulation. Following simulation, the proportion of individuals agreeing/strongly agreeing that they felt confident in each domain increased. Confidence in patient assessment rose by 74%, initial management by 72%, handing over information by 64% and team-working by 10%.

Conclusions: Simulation improves perceived confidence particularly in relation to patient assessment/management and handing over information. The course will be delivered to 'preparation for practice' doctors who join us for a shadowing period prior to commencing work.

P07

Mobile learning of Clinical Skills and Simulation in remote and rural Scotland: What works, for whom and in what circumstances?

Susan Somerville
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Abstract

The aim of this presentation is to discuss simulated learning on a mobile facility in remote and rural Scotland, and to examine the development, transfer, and maintenance of safe clinical skills practice from simulated to workplace based learning environments.

The Mobile Skills Unit (MSU) is a resource designed to address perceived inequities in access to training and updating of the clinical skills of healthcare professionals in the primary or secondary healthcare sector. The design and implementation of a mobile clinical skills and simulation facility aims to promote the national clinical skills strategy throughout Scotland.

The MSU presents a unique opportunity for the observation and analysis of simulation in healthcare education and its impact on practice, to determine; 'what works, for who and in what circumstances, and what else is going on', in order to work towards "...the generation of rich understandings of the complex environments in which our collective problems are uniquely embedded" (Regehr, 2010).

For example; typically many clinical skills and simulation facilities focus on emergency training in technical and procedural skills for clinical situations that are high in risk, but low in frequency. This is part of the experience and the required expertise of the practitioners in remote and rural communities, but there is a recognition that in smaller communities' personnel are very well known to and reliant on each other, resources are limited and roles and responsibilities are often shared. Team training has a different perspective in this environment and includes support from remote Emergency retrieval services.

This PhD study has recently commenced and the research approach is yet to be finalised but details of this will be ready to be presented by the time of conference.

Reghehr, G. It's NOT rocket science: rethinking our metaphors for research in health professions education. Medical Education 2010:44: 31-39

P08

A theoretical framework to guide clinical skills assessment and student development across a Bachelor of Nursing Curriculum.

Monica Peddle, Yangama Jokwiro
La Trobe University, Melbourne, Victoria, Australia

Abstract

Background

The development of student expertise in health professional education programs remains one of the challenges for educators. Recent development of educational theory indicates that it is the repetitive practice associated with specific focussed feedback and cognitive engagement of the learner in the task that will lead to improvement in performance (1) known as Deliberate Practice. Mastery Learning (2) is an educational theory that supports the acquisition of clinical competencies to a uniform level however the time taken for the student to achieve the competency varies. Deliberate Practice and Mastery Learning are not concepts that are not currently located within nursing education lexicon (3).

Aim

To report on the development and implementation of a theoretical framework utilising Deliberate Practice and Mastery Learning to guide professional development of students through a three year Bachelor of Nursing Curriculum.

Findings.

The theoretical framework presents a substantial deviation from traditional approaches to clinical assessment of nursing students.

Conclusion.

The implementation of the new framework has enabled student to visualise their progress through the nursing curriculum and provides clear guidelines to assist academic staff provide consistent, accurate and authentic assessments to develop expertise in undergraduate health professional students.

P09

The extent, type and impact of sharps injuries in the pre-registration adult branch student population: A Systematic Review

Kevin Hambridge, Ruth Endacott, Andy Nichols
Plymouth University, Plymouth, Devon, UK

Abstract

The problem

Up to a 100% incidence rate of sharps injuries within student nurse populations (Trivedi et al 2013)

There is a dearth of research studies conducted worldwide

There are no research studies conducted within the UK

There are no Systematic Reviews into the issue

What was done?

• A Systematic Review was conducted: including a search strategy; inclusion / exclusion criteria; the many databases searched; keywords used; the screening processes utilised; the assessment of the methodological quality of papers; the data extraction method used

• 40 studies were finally selected for review including surveys, quasi-experiments, 1 case study and 1 qualitative research study

Results

• An overview of the prevalence / incidence rates (5.9-100%)

• The devices involved (e.g. IV needle 86%)

• The stages of an injection administration when injuries most commonly happen (re-capping 62.5%)

• The effect of education on injuries - if structured education has had an effect on sharp injuries

• The descibed 'causes' ('inexperience' and 'haste' being the most common responses)

• The location of injuries (Surgery 56.7%)

• The reporting and non-reporting non-reporting of injuries (non-reporting 96.24%)

• The reasons for non-reporting (e.g. clean equipment 76.5%)

• Qualitative comments (e.g. 'shocked' 'depression' 'need for support')

Discussion

• Being done at present

Recommendations for practice, education and research

• Will be presented within the poster presentation

Importance

• The first Systematic Review conducted on the topic worldwide

Reference

Trivedi, A., P. K. Kasar, et al. (2013). "An educational interventional programme for prevention and management of needlestick injuries among nursing students at a tertiary care hospital, Jabalpur, Madhya Pradesh. " Med **4**(1): 132-136.

P10

OSCE revision Application: The Pocket Tutor

Mohamed Elseedawy, Neil Harrison
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Abstract

It is logistically and financially challenging for universities to provide regular formative OSCE practice for medical students, therefore peer learning plays a vital role in the attainment of the necessary skills. Although peer learning activities encourage meaningful learning for students (Boud, 2001), it brings with it challenges. Students at the University of Dundee identified that when revising for OSCE examinations they lacked confidence in the accuracy of peer to peer formative feedback.

An OSCE revision application, aimed at smart phone and tablet use, was therefore developed to address these concerns in a user friendly way. Initially a pilot online application was developed by a team involving both students and teachers. This pilot was evaluated by students and feedback collected through focus groups. This process influenced the final production of a 'native' application, published on all main application platforms.

The application addressed all three components of the OSCE examination; procedural skills, examination skills and communication skills. It brought together all resources, both written and audio-visual, in one easy to access, portable platform. The intended result was that students had a virtual tutor to enhance the peer learning process. Student evaluation of the application strongly supported this claim.

P11

The acceptability and effectiveness of social media for changing evidence-based clinical practice.

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[1]Monash University, Victoria, Australia, [2]Monash University, Sunway, Malaysia, [2]University of Warwick, Coventry, UK, [4]Swami Vivekanand National Institute of Rehabilitation, Training and Research, Orissa, India

Abstract

Background

It is estimated that 80% of research evidence relevant to clinical practice never reaches clinicians delivering patient care (1). Social media may provide a bridge between researchers and health service providers.

Objective

The primary aim of this study was to evaluate the acceptability and effectiveness of social media for continuing professional development, and the translation of evidence to practice.

Methods

An electronic survey and semi-structured interview was completed by researchers and clinicians in Australia, Malaysia, India, and the United Kingdom.

Semi-structured phone interviews were then conducted until a saturation of themes was obtained.

A pre-post design was utilized to investigate the effectiveness of a social media training program. Outcome measures included change in attitudes, knowledge, and behaviour.

Results

Data collection for this project is in progress. To date 80% of respondents use social media for professional purposes (n=640), with 50% of all respondents using social media a few times a week or more. Only 5% of respondents believe that social media does not have a role in the dissemination of research evidence or accessing clinically useful information. The main obstacle to using social media for professional purposes was the brevity and trustworthiness of the messages. Thematic analysis of the semi-structured interviews is scheduled for completion in August, 2014. The pre-post study is scheduled for completion in October, 2014.

Conclusions

Social media provides an alternate platform to traditional methods for knowledge transfer in the continued education of clinicians and health care researchers.

Analysis of data concerning the effectiveness of social media on evidence-based practice at the point of care will be completed in September 2014.

References:

Glasziou P. Evidence based medicine: does it make a difference? Make it evidence informed practice with a little wisdom. BMJ. 2005 Jan 8;330(7482):92.

P12

Development of a practical undergraduate Surgical Skills Conference

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Abstract

Background

Postgraduate level competition for surgical training schemes is tough (Scottish Medical Training, 2013). We describe an undergraduate student-led surgical skills conference, providing students with practical surgical opportunities to complement their undergraduate curriculum.

Method

Aside from traditional keynote lectures, we offered four stations: knot-tying and suturing, chest drain insertion, orthopaedic plastering and care for the critically ill ATLS simulation. The sessions were structured around outlined learning objectives. We maintained a high tutor to student ratio (1:4) for optimal learning and feedback opportunities.

Importance of educational event

The conference filled current gaps of practical surgical procedures and gave students an opportunity to develop and refine key surgical skills and show interest in surgery early in their career. Senior students had the opportunity to facilitate and teach the safe execution of surgical skills.

Evaluation findings

Thirty-one out of forty students completed an evaluation with the majority (68%) rating the conference as "very good" and the rest (32%) as "good". Asked what they enjoyed most, they commented: "Nice selection of clinical skills", "Great hands-on experience, especially trauma session". General comments included: "Well-run, learnt valuable skills", "Very informative and enjoyable".

In conclusion, an interactive surgical skills-conference can provide an affordable and local option for extracurricular surgical training.

P13

Teaching Anatomy in the Modern Medical Curriculum: what do medical students really want?

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Abstract

Background:

Anatomy teaching is in a transition phase. Traditional cadaver teaching methods are declining and contemporary integrated undergraduate medical curriculums are replacing core anatomy curriculums.

Aims:

To establish medical students' attitudes towards anatomy in terms of 1) importance to career 2) preferred methods of teaching/ learning 3) confidence in, and application of, anatomy knowledge 4) whether attitudes are affected by future career aspirations. Data was collected using an anonymous questionnaire.

Results:

89.47% rated anatomy as important or very important. 88.24% of those wanting to do surgery and 16.67% wanting to do medicine rated anatomy as very important. 97.37% said they had never been exposed to cadaver dissection yet 76.32% rated this as very useful. Being scrubbed in theatre and tutorials were the second and third most popular teaching methods with 52.63% and 42.11% rating these as very useful respectively. 50% rated their anatomy knowledge as poor and 55.26% felt only slightly confident in applying their anatomy knowledge.

Conclusion: Confidence in anatomy knowledge and its application is low. Work is underway to explore whether a clinical approach to anatomy teaching integrating surgery, radiology and anatomy increases student confidence in their knowledge and its clinical application.

P14

Another forgotten tribe? Foundation Year Doctors' Educational Needs Concerning Clinical Anatomy

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Abstract

Background: Much has been postulated about the perceived deterioration of anatomy knowledge amongst graduates. Controversial changes to undergraduate anatomy teaching has focused studies, aimed at improving anatomy education, at undergraduate level. Little is known about levels of confidence in, and educational needs concerning, clinical anatomy knowledge amongst of foundation year doctors (FYD).

Aims: Establish FYD perceptions of anatomy related to 1) importance to career 2) confidence in anatomy knowledge and its application 3) preferred methods of teaching/ learning.

Methods: Data was collected using an anonymous questionnaire distributed to FYD in West of Scotland Deanery.

Results: 96.55% rated anatomy as important/ very important. 55.17% rated their anatomy knowledge as average. Only 6.9% felt confident in applying their anatomy knowledge clinically despite 82.76% feeling that they applied anatomy knowledge weekly or more frequently. The most popular method of teaching was tutorials with theatre sessions, cadaver dissection and seminars rated equal second.

Conclusion: Confidence in applying anatomy knowledge is low amongst FYD. Small group teaching and practical approaches to anatomy teaching are perceived by FYD as the most useful approaches to teaching anatomy. More work needs to be done to explore how clinical anatomy teaching can be maximised during FYD surgical rotations.

P15

Evaluation of a skills- based difficult airway training programme for critical care nurses (comparison with lecture- based programme)

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Abstract

A questionnaire survey in our Hospital Trust identified that, of the121 Critical Care Unit (CCU) nurses who responded, more than 60% were dissatisfied with their Difficult Airway Management (DAM) training and 68% did not feel confident to assist with DAM. These findings reflect results from NAP4, a national audit of airway related complications which highlighted widespread deficiencies in training. The aim of this service development pilot study was to compare the improvement in DAM related knowledge when DAM training was delivered in the form of either a standardised skills- based or lecture- based format. 12 CCU nurses, and for comparison, 16 anaesthetic nurses completed the training. As would be expected, anaesthetic nurses, who generally routinely receive DAM training, had a significantly higher baseline score compared with the CCU nurses. Following training there was a significant increase in DAM related knowledge in both groups with both delivery methods but there was no statistically significant difference demonstrated between the two methods of training. Challenges of delivering vital workplace based training in the presence of significant service commitments were highlighted. Consequently, a practical alternative is being developed, in the form of an interactive E-learning DAM training package, supplemented by key skills sessions.

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P16

Exploring patient feedback following participation in an undergraduate teaching course

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Abstract

At Sheffield, patients are involved extensively with undergraduate teaching and assessments organised by the Clinical Skills Team. Patients are recruited from the Patients as Educators (PaE) Programme to participate in the Foundation Clinical Skills Course conducted for third year medical students.

This is an intensive three week course which relies heavily on PaE participation. The primary aim is to help prepare the students' for their first clinical placement. The teaching focusses on history taking, physical examination, communication and procedural skills.

Following the completion of the course we requested the participating PaE's to complete a feedback form to contribute towards quality control and continuing course development.

Feedback was collected on the following: organisation of the course, patient training and the quality of the teaching session.

Organisation of the course, patient training and the quality of the teaching session were explored by utilising a subset of relevant statements and patients' were asked to grade their responses from strongly agree to strongly disagree. The PaE's were requested to complete both a Likert scale as well as providing free text comments.

The patients' feedback has been positive in terms of course organisation, patient training and overall quality of the teaching sessions. Free text comments have helped towards future planning and development.

P17

Innovative surgical simulation training in gynaecology

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Abstract

Surgical training in Obstetrics and Gynaecology has become a challenge with shortened hours and fewer registrars available to fulfil increasing service demands. We have developed a comprehensive surgical simulation programme to allow our trainees to practice techniques, gain confidence and maximise opportunities in surgical training.

Methods

We developed 6 courses using a variety of different simulation methods.

Course 1 – Cadaveric Pelvic Anatomy Course. Using cadavers, trainees practised dissecting the path of the ureter, gluteal and pudendal structures and perform a hysterectomy. They learned the anatomy relevant to continence surgery and anal sphincter injury.

Course 2 – Surgical Skills for ST1/2. Using artificial tissue and pigs, this course gave inexperienced trainees practice in techniques for making incisions, suturing and knot-tying, tissue handling, pedicle clamping, sharp and blunt dissection, handling instruments and safety with diathermy.

Course 3 – Surgical Skills for ST3-7. Using artificial tissue, pigs and cadavers, this course gives advanced trainees practice in pelvic floor reconstruction and management of surgical complications including bladder, ureteric and bowel damage.

Courses 4 and 5 – Basic and Advanced Laparascopic skills. Using 3d computer simulators, laparoscopic trainers with rabbit and pig specimens as well as whole pig laparoscopic training, trainees learn about safety, entry techniques, suturing, operative techniques and energy.

Course 6 – Surgical management of Obstetric Haemorrhage. Using pig specimens and simulated uterus, trainees practice techniques for managing haemorrhage including Rusch balloon insertion and B-Lynch sutures.

Results and Conclusion

Feedback has been very positive with all trainees reporting benefit in the workplace and recommending to others. They have found practical hands on training in the sessions using a variety of simulated models particularly useful. Junior trainees found a simulated theatre experience in course 2 with theatre nurses and trainer assistants valuable. Our simulated courses are now essential in their surgical training.

P18

Teaching Patient Handover Skills to Improve the Quality and Safety of Surgical Patient Handover.

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Abstract

Background: The European Working Time Directive means safe patient hand over is imperative. Junior doctors are involved in handovers from an early stage in their career, therefore they must be trained and empowered to perform this skill well to improve patient safety. Data collected over a 1 month period showed that frequency and quality of patient handover between Foundation Year 1 (FY1) doctors was poor.

Aim: To teach patient handover as a clinical skill to improve the quality of patient handover between assessment unit and surgical ward FY1s.

Methods: Small group tutorials were delivered focusing on The Royal College of Surgeons England guidelines on surgical patient handover. In conjunction with the FY1s a handover tool was created and introduced to reinforced integration of theoretical knowledge into their practice.

Results: The number of patients handed over improved from 15 % to 45%. The quality of patient handover improved from 0 to 100% of handovers including all recommended information.

Conclusion: Teaching patient handover as a clinical skill improved quality and number of patients being handed over. Further work exploring techniques of teaching this essential clinical skill is ongoing to utilise handover time to its maximal educational benefit for the multidisciplinary team.

P19

The Anatomy of Life-Long Learning: empowering Foundation Year Doctors to transition undergraduate teaching into ongoing professional development.

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Abstract

Background: Combining surgery, radiology and anatomy teaching results in increased interest, acceptance and confidence in knowledge and its application amongst medical students. Little is known about how best to address educational needs of foundation year doctors (FYD).

Aims: Determine FYD level of: knowledge acquisition, confidence in clinical application of anatomy knowledge and satisfaction with a course integrating surgery, radiology and anatomy.

Methods: A course teaching abdominal anatomy through common general surgeries of the abdomen and related radiology was delivered to FYD in West of Scotland Deanery. A pre and post course assessment based on Anatomy Competence Score assessed holistic anatomy knowledge acquisition. Participant satisfaction was measured through a course satisfaction questionnaire.

Results: Satisfaction was high. 100% reported the course to be relevant, useful, advanced their knowledge and said they would recommend it to FYD. 92.86% felt it improved their confidence on the subject. 58.62% felt it improved their clinical skills. The average pre and post course assessment score increased from 55% to 81%.

Conclusion: An integrated clinical approach to teaching anatomy proved both highly relevant and popular as well as an effective teaching approach in addressing the ongoing educational needs of FYD doctors.

P20

Evaluation of an interprofessional student placement: qualitative findings and implications.

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Abstract

Background: At the Karolinska University Hospital, Sweden, a two-week interprofessional education placement has been developed. The goal is to foster effective inter-professional collaborative practice; its objectives are to enable the student 1. to reflect upon one's own and other professionals' competence for enhanced patient safety and 2.with the team, to be able to analyze and meet patients' needs as well as evaluate treatment, care and rehabilitation.

Purpose: To explore whether the goal and objectives of the mandatory interprofessional education placement were being met based on the reflections of randomly-selected participating health professional students.

Methods: Participants included medical (n=2), nursing (n=4), physiotherapy (n=2) and occupational therapy (n=1) students. They worked in pairs to plan and organize patient care; tutors (n=7) facilitated students' learning. Student reflections were elicited in tutor-led semi-structured reflective sessions (30 min). There were no guidelines in the course-module description on how tutors should conduct the reflection session. An investigator, unknown to the students, recorded detailed notes on the student-tutor interactions and students' reflections (6 scheduled reflective sessions with 6-8 students/group). She then analyzed the notes in relation to the placement goal and objective achievement based on their written keywords.

Results: In two sessions, tutors focused on team communication but not in a way that appeared to stimulate idea exchange and constructive reflection about student attitudes and professional differences. Early in the placement, students emphasized the need for more collaborative practice; some wanting more support in this process. There was little reflection on student interaction in their work-based experiences. Interactions among students during the reflection sessions were observed to be supportive and reflected collaborative problem-solving. Overall, students reported experiencing a positive learning environment and support from the tutors.

Conclusions and Implications: The content and process of the reflection sessions need to be better developed within the interprofessional education framework.

P21

Student Interprofessional Non-technical skills Simulation: SINS

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Abstract

Interprofessional learning(IPL) and simulation are linked with improvements in patient safety and IPL is recommended in the undergraduate curriculum for health professionals 1-3. Non-Technical Skills(NTS) training for healthcare professionals has also been recognised as integral in improve optimising patient safety and reducing human error.4 There is limited work on IPL on patient safety at undergraduate level despite increasing emphasis at postgraduate level.

Our aim is to assess [DL1] theevaluate the benefit of an introducing an undergraduate interprofessional simulation programme. based on 'real life' critical incidents/adverse events, in improving non technical skills.

A total of 18 students(9 medical/9 nursing) will participate in three courses containing six scenarios using high-fidelity immersive simulation, based on real-life hospital critical incidents/adverse events. Each scenario will focus on NTS involved and their contribution to error. Included will be an interactive presentation introducing the impact of NTS on patient safety. Faculty will be experienced simulation facilitators. The scenarios are based on 'real life' critical incidents/adverse events, which have affected patient safety within the trust[DL2] .

Evaluation of the intervention Assessment will be achieved through questionnaires investigating knowledge/experiences of IPL and NTS pre/post simulation. The students' perceived benefits of the course will be assessed through a focus group.

This course is a pilot, with a view to mandatory integration in the undergraduate medical and nursing school simulation curriculum.

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P22

The Operating Room Crisis-Hollywood and Immersion Training Teaches How to Handle the Catastrophic or Unexpected Event.

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Abstract

Surgical education has deteriorated over the last two decades for a numerous reasons.The institute of Medicine found that up to 98,000 people die each year in U.S. hospitals from medical errors - (updated in2013, it could be as high as 440,000), effectively ending the "see one, do teach one method of education.Traumatic events in the operating room produce major physical and psychological harm. What if we could inoculate our trainees to deal with pressure the way high level professional athletes and our elite military are taught to deal with the pressure and get beyond. Critical lapses in operating room crisis management as discussed in the October 2013 issue of the American College of Surgeons Bulletin is prevalent. We propose a workshop with four teams of five individuals each that will be randomly picked to play the surgeon, scrub technician , circulating nurse, surgical assistant and anesthesiologist. Two teams will operate separately for thirty minutes on the "cut-suit", and then a second set of teams will perform the same procedure also for 30 minutes. All will include an intra-operative event. A third half hour will be discussion by all four teams together. This will include the collection of data as to the preset bias of the management of an operative crisis, discussion and surveys on the focus of team training, with the intention of stimulating discussion as to how to improve the management of an operating room crisis. The operations will be performed on live human beings wearing the latest version of the Human Worn simulator known as the CUT-SUIT. This suit will have active blood flow and realistic anatomy.

The intent is also to collect similar data at other major professional organizations involved in operating room crises. Differences and similarities will then be compared after data collection is complete.

Workshop Submissions

Intended Audience

-The target audience is all involved in Surgical Team Education,especially those comiited to learning IMMERSION TRAINING and CRISIS MANAGEMENT.

Objectives

1 Discuss preset Bias in an OR environment

2 Focus on team training

3 Stimulate discussion on how to improve

4 Attempt to compare multiple team members professional society approach to this training

P23

The First Impressions About Hybridlab Distant Training Method

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Abstract

Background. In the frame of longstanding collaboration project between Lithuanian University of Health Sciences, Crisis Research Center and Health Board of South Kazakhstan Region distant multimedia laboratories, based on electronic/digital learning (HybridLab), was established in one Perinatal Center of South Kazakhstan.

Method. Four parts of learning process were implemented: 1) **selection** of the most convenient time, place and team members by students; 2) **preparation** for the topic by watching training videos and familiarizing with algorithms, scenarios and evaluation sheets; 3) **practice** in the equipped laboratory solving clinical scenarios, by using detailed algorithms. It leads to completion the tasks correctly at the first attempt. When the task is completed, teacher assesses it virtually; 4) the student **acquiesces** automatic skills, ability to make right decisions in emergency situation and to manage stress.

Results. Over the month 60 specialists of maternal and newborn health care team (obstetricians-gynecologists, midwives, anesthesiologists-reanimatologist, nurses) were trained by Hybridlab method on the 5 topics of management of Postpartum haemorrhage (PH) and Pulmonary artery thromboembolism (PATE). Preparation for one topic for 70% of the students took 2 hours. In general, practice for every topic took 18 h. After training course 93% of all students declared strong self-confidence in the management of PH and PATE.

Conclusion. HybridLab training method ensures fast, standardized, high quality training for large groups of staff. Acquired skills are highly applicable in emergency situations. It promotes enjoyable and measurable learning process in a team. Further qualitative and quantitative investigation of the learning method is required.

P24

SOCRATES, PLATO and CATO   A triumvirate of Mnemonics as an aid to History taking

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Abstract

SOCRATES, PLATO and CATO   A triumvirate of Mnemonics as an aid to History taking

Acronyms as mnemonics are widely taught in UK medical schools, the two most popular being SOCRATES and ICE. Not infrequently students coming to interview patients particularly with chronic painful conditions are confident covering aspects of pain using SOCRATES but either forget or flounder when trying to cover aspects of disability. Their application of ICE, if at all recalled, is often blindly methodical and untargeted. In 2010 the acronym PLATO was integrated into the locomotor clinical skills module for year two Keele students to cover aspects of disability. It stands for **P**rofession, **L**ocomotion, **A**ctivities of domestic and daily living, **T**iredness/ **T**roubles and **T**ogetherness (sleep, mental stress and sexual activity), and **O**ne's own time (leisure activities). It covers all aspects of disability and can be used for any illness. An unannounced evaluation showed that recall by medical students was similar to SOCRATES apart from the full meaning of letter T.

The acronym CATO was devised as an alternative to ICE in 2011. CATO stands for **C**oncerns, **A**ims, **T**houghts and **O**pinions. ICE was considered unsatisfactory as students often employ the first word in a mnemonic with phrases such as "what ideas do you have about your illness" being frequently and inappropriately used. The initial word "concerns" in CATO is almost never wrong in any clinical situation. However CATO has not been officially approved by Keele.

The three acronyms of Classical Greek and Roman philosophers fit neatly together. One would hope that most students will have heard of Socrates and be aware of Plato. Cato rhymes with Plato and acts an internal mnemonic. However none of them will be aware that Cato (the younger) just before committing suicide read of the execution of Socrates, written by Plato.

P25

The Evolution of Class in a Bag©

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Abstract

INTRODUCTION

A group of lecturers from the University of the West of Scotland, School of Health Nursing and Midwifery collaborated with South Lanarkshire Council (SLC) Education Department to enhance the student nurse and school child learning experience through the research, development and delivery of a variety of health promotion topics to children in primary and secondary schools within the South Lanarkshire area.

A creative approach to teaching and learning, which involved the development and delivery of 'Class in a Bag'© evolved, which in one instance, utilised simulation as a means of raising the school child's awareness of dementia. This innovative and portable approach to teaching and learning formed part of a larger research study, which evaluated the knowledge and understanding gained by primary and secondary school children following the delivery of an interactive dementia awareness session and workshop to simulate the dementia experience.

METHOD

The contents and delivery of a 'Class in a Bag'© was designed to simulate some of the cognitive and sensory deficits of dementia. These materials were evaluated by the core group of lecturers and collaborators utilising participation, observation and field notes.

RESULTS

The contents and concept were received positively by all participating partners and has received a Knowledge Transfer Grant from the University, which has enabled this to be marketed through the university's online store. Class in a Bag © has been purchased by the Dementia Champions Programme, the My Home Life project and acute and care of the elderly clinical placement areas.

CONCLUSION

Creativity and team work has enabled the development of a concept which has also been integrated to the nursing curriculum and can be shared with the wider community in addressing teaching, learning and health awareness needs.

P26

STUDENTS' EXPERIENCE OF INNOVATIVE METHODS IMPLEMENTATION FOR CLINICAL SKILLS ASSESSMENT: A CASE OF LITHUANIAN UNIVERSITY OF HEALTH SCIENCES

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Abstract

Medical students today are tested on different learning outcomes – knowledge, attitudes and practical skills. The assessment of clinical competence is a central issue in medical education. OSCE offers as a reliable and valid test of clinical competence. It started in Lithuania rather recently, in September 2013. According to Rogers diffusion of innovation theory (2003), users are more likely to adopt a new technology if it is better than what it replaces, is compatible with existing values, experiences and needs, and is easy to use. This paper aims to reveal the medical students experience of innovative methods implementation for clinical skills assessment. The methods used: literature review, semi-structural interview, content analysis.

The **sample** was purposive: participants were 5th year students of Obstetrics and Gynecology course (N=208).

All students gave oral informed consent to have their OSCE sessions and agreed to fill questionnaire of open-ended questions. The principles of research ethics were followed.

The **data analysis** relies on qualitative content analysis referring to methodological attitudes of Miles and Huberman (1994). The research stages were reading of respondents' answers by distinguishing essential aspects; identification of notional elements; distribution of notional elements to subcategories and categories; integration of the categories into the context of the phenomenon being analyzed.

Expected outcomes. The research revealed didactical, technological and personal aspects of students' experience during OSCE as educational innovation. Informants experience is revealed through following categories: positive and negative subject experience, sense of meaningful experience, positive and negative emotions, self-directed learning impressions, awareness of developmental perspective and other.

It is expected, that this research will be a base for broader application of OSCE for individual student progress assessment in Lithuanian higher education.

Keywords: medical education, OSCE, diffusion of innovation.

P27

Simulation based teaching. Vadachkoria Z. M.D., Beriashvili R.M.D, PhD;   Manjavidze I. M.D., PhD; Chitaishvili D. M.D., PhD.

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Abstract

Background: The ultimate goal of undergraduate medical education is to give to medical students   knowledge, procedural and effective communicative skills. So teaching and assessment of clinical skills using simulation have became integral part of medical education in Tbilisi State Medical University and it was included in Gynecology/Obstetrics syllabus since 2011.

Methods: The IV years students (n=493) of Faculty of Medicine had unique chance to learn the gynecologic and obstetric procedures during practical courses at TSMU Gynecology/Obstetrics Department . In addition the syllabus provided 9 academic hours for gynecological clinical skills and communication skills in TSMU Clinical Skills Centre. Among these 6 hours incorporated learning of two topics -intrauterine device (Tcu380A) insertion technique and subcutaneous implant (IMPLANON) insertion technique and 3 hours to master communication skills on contraceptive methods using. Gynecological simulator manikin "ZOE" and arm simulator and all need equipment were used during sessions. Each student was assessed with the checklists, that were prepared beforehand and included all steps of the procedure including hand washing, gloving and at the same time the students had chance to take a history, order and interpret investigations, initiate management plans and communicate with the patient during role-plays constructive, goal-directed feedback was provided by teacher. At the end of the academic year they had modified OSCE exam in Obstetrics/Gynecology. Each student was given 2 hours for OSCE: 50 min. for MCQ, 55 min. for OSCE Stations and 15 min. for logistic.

Results/Conclusion: The OSCE results were quite promising, during the post-exam debriefing students noted that they had enjoyed teaching and assessment of clinical skills using simulation. That may improve Gynecology and Obstetrics Undergraduate Medical Education and patient care in turn.

P28

Patient feedback to medical students: training the patient

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Abstract

Feedback is an essential part of the teaching and learning process. It provides the student with information that helps reinforce good practice, improve performance and confidence.

Volunteer patients were invited to a teaching session for first year medical students organised by the clinical skills team. Students were taught to measure and record blood pressure, temperature, pulse and respiration rate. All patients were requested to provide feedback to the students following completion of the session.

The principle aim of the training session was to bring together a group of volunteer patients who would be able to impart their own experiences and offer constructive feedback throughout the session.

Prior to the sessions all the patients were trained to give feedback to the students using the SMART model as an example. The Clinical Skills Team also taught the patients the correct responses required on their part as the student performed the procedural skills.

Following the training and teaching sessions patients were pleased that they had the opportunity to provide feedback to the participating students.

From this initial pilot, patient feedback to students has now been expanded to a number of other students-patient teaching interactions conducted at the Clinical Skills Centre, University of Sheffield.

Our next step we will be to request students and patients to evaluate this initiative.

P29

The Georgia's First OSCE in Obstetrics and Gynecology

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Abstract

Introduction of the Objective Structured Clinical Examination (OSCE) is an important part of pre-service medical education reform in Georgia initiated by USAID SUSTAIN project in partnership with Tbilisi State Medical University (TSMU) and University of Oslo. The Georgia's first OSCE in obstetrics and gynecology was held at TSMU in 2014. Overall, 495 medical students were tested at six different stations created based on required competences. Students were demonstrating their gynecological and obstetrical examination skills and IUD insertion skills using simulators, as well as family planning counseling skills with simulated patients. Of this cohort, 99% successfully passed the threshold score of 50%.

Ten focus group discussions, conducted following OSCE, revealed that the vast majority of students enjoyed case-based, problem-based, role playing teaching strategies used for OB/GYN course and evaluation through OSCE. Students also underlined a sense of achievement that they felt when they passed OSCE and admitted that OSCE was the best experience leading to their effective learning. "OSCE gave me a sense of confidence in my ability to become a competent physician" - said students.

Over the next few years TSMU is planning to expand OSCE to other clinical disciplines and eventually, fully integrate it into the medical curriculum.

P30

Improving Pre-service Medical Education in Georgia

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Abstract

Since soviet times the medical education in Georgia has been based on a didactic, teacher-directed rather than a learner-directed education. The lack of clinical practice for students presented challenges when they transitioned to medical practitioners. Since 2009, USAID SUSTAIN project, implemented by JSI Inc, has been providing technical assistance to medical education institutions in capacity building of Clinical Skills Learning Centers (CSLC). The target centers are benefiting from faculty members trainings in curriculum development, students' communication and clinical skills teaching and evaluation methods, as well as the donation of obstetric and gynecological training simulators. Medical students have the opportunity to learn and practice their clinical skills using obstetric and gynecological examination simulators and childbirth and fetal models. SUSTAIN has supported 5 leading medical schools countrywide by training of nearly 100 faculty members and setting up of 3 CSLCs. In 2014, Tbilisi State Medical University (TSMU) successfuly implemented the first Objective Structured Clinical Exam (OSCE) in obstetrics and gynecology for up to 500 students.

Simulation is an essential part of medical training. The CSLC allows a student centered approach to the acquisition of skills in a non-clinical setting before performing on real patients that is vital to build a safer health care system in Georgia.

P31

Promoting Post-Graduate Inter-Professional Education in NHS

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Abstract

Background

The World Health Organization highlighted that if health professionals learned together in Interprofessional Education (IPE), they would be more likely to work together effectively.1 However, there are many barriers to postgraduate IPE, such as historical interprofessional rivalries and different clinical responsibility.2 Furthermore, there are practical barriers such as different working patterns. Sustainable postgraduate IPE programme needs to overcome all these barriers.

Innovation

In order to promote postgraduate IPE in NHS Tayside UK, a series of workshops using simulation was established. Each workshop aim to introduce and revisit current NHS Tayside care bundles / guidelines which are evidence based and evaluated.

Result

Three different workshops covering peripheral venous catheter, central venous catheter care bundles and emergency airway management guideline were held twice per year over 3 years. The health care professionals involved were critical care, infection control nurses, anaesthetists, microbiologist, foundation doctors, medical and nursing students. The evaluation showed 95% excellent or good overall experience.

Implication

Triangulate IPE, care bundles / guidelines and simulation together will provide consistent, high quality education for postgraduate health care professionals and hence producing high performing team that provides better patient outcomes. IPE in the form of local workshops provides easy access for participants. Furthermore, simulation teaching encourages interaction and communication which will overcome many of the IPE barriers.

Key Take Home Messages

- Keep it simple, local and keep it embedded
- Use local care bundles and guidelines to ensure consistency
- Use simulation

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P32

'Realtime' scenario based simulation for transition to professional practice

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Plymouth University, Plymouth, UK

Abstract

Transition to professional practice requires adjustment to new roles and responsibilities where teamwork is essential, lack of clinical knowledge and confidence in skill performance are reported as troublesome. Simulation mimicking real life situations is a recognised teaching method which allows cognitive development as well as increasing attitudinal and psychomotor clinical skills (Bland et 2011). Students are able to rehearse practical skills and undertake decision making in a safe environment with minimal risk (McCaughey, Traynor 2010). Scenarios need to be memorable and engaging as well as enlightening and representing reality. To recreate 'reality' expert staff from clinical practice undertook their professional roles thus the paramedic was a paramedic the advanced nurse practitioner was an advanced practitioner. Involving the learner in a joint experience with experts both constructing and creating a learning situation is underpinned by constructivist learning theories extending from Vygotsky's 'zone of proximal development'. Third year Child Health Nursing students on their final skills module were divided into 2 groups one half carrying out the simulation and the remaining watching the simulation by real time filming, groups then changed places and a second scenario was enacted. Team working and communication were an integral part of the skills practised thus helping to prepare the students for the real world of nursing. Both groups took part in debriefing which included playing back sections under discussion and encouraging both groups of students to analyse e.g. decisions taken, communication within the team and care given. Clinical practitioners took an active part in the debriefing and helped to explore the rational for students decisions as learning from mistakes is an important element of simulation and is facilitated by purposeful direction during debriefing (Levett-Jones, Lapkin, 2014) Students reported repetition of systematic assessment and involvement of clinicians facilitated learning from mistakes and enhanced their preparation for registration.

P33

Verbal feedback + turnitin = student engagement

Wendy Wright, Fiona Everett
University of the West of Scotland, Glasgow, UK

Abstract

BACKGROUND:

Following a formative clinical skills assessment in Part 1 of the BSc Nursing programme students were provided with verbal feedback. The verbal feedback was given immediately following the assessment, when later asked to recall feedback students were unable to do so. Investigating the lack of recall it was felt that this was due to the stressful situation the students found themselves in. Therefore by recording the verbal feedback students were being given the opportunity to hear the feedback at a time suitable to them.

INTERVENTION: Recording verbal feedback directly to turnitin seemed a reasonable option however this would require student involvement as they would have to submit a request to turnitin to receive the feedback.

SAMPLE: 197 students attended a formative assessment in which they required to have verbal feedback provided. Six staff were responsible for assessing the students and providing feedback.

METHOD: Turnitin provided student numbers that has submitted requests for verbal feedback. Lecturing staff were asked to provide an overview of providing this method of feedback.

FINDINGS: Of the 197 students eligible to receive feedback 188 requested the verbal feedback via turnitin.

From the evaluation of the lecturers involved (6) only one lecturer did not wish to provide verbal feedback (time constraint cited as the issue). 3 utilised a standard PC and uploaded their feedback at the end of the day and 2 via ipad at the end of each assessment.

CONCLUSION: This evaluation has highlighted the need to continue to engage with technology as a means of engaging students with feedback. By using this method of feedback it allowed for instant verbal feedback to be recorded quickly and access to the student record was instant.

P34

Interprofessional Peer Assisted Learning is two company, three a crowd?

Colin Butchers, Carol Fordham-Clarke, Jayne Frisby, Dianne Reidlinger, Kevin Whelan
Kings College London, London, UK

Abstract

Abstract for Submission to Prato Clinical Skills Conference 2015

Title

Interprofessional Peer Assisted Learning is two company, three a crowd?

Purpose.

This programme has evolved from an Inter Professional scheme with nursing and medical students looking at diabetes to now include dietetic students. When the last scheme was evaluated it was felt by the faculty observers that adding nutritional assessment and diet to the scenario may enhance the session. Also when doing the literature review no peer led sessions were found using this mix of students. The students together plan and provide IPE teaching of a diabetic clinical skills scenario to their peer learners.

Aim

The aim is to assess the impact of a Peer led Inter Professional skills teaching on students perceptions of Inter Professional practice and to see if including the dietetic student group added value to the learning experience?

To assess the impact of student led content to peer teaching.

Methods.

Mixed method study using RIPLS and qualitative data of reflective diaries, hot feedback and focus group interviews

Sample size 150

Results.

To be confirmed

Qualitative:

Changes in perceptions do occur in that students learn from, with and about each other.

Quantative: analysis to be completed.

Conclusions : to be completed

RT01

Teaching professionalism: Are we attempting the impossible?

Sue Murphy, Alison Greig
University of British Columbia, Vancouver, BC, Canada

Abstract

Teaching professionalism in both academic and clinical contexts is challenging. While many agree that professional socialization and development of a professional identity is a core element of health professional curricula, effective methodologies for teaching and developing these elements is less clear; indeed, some debate whether these elements can be taught at all. Using a small group discussion format with the addition of case studies, participants will discuss their current ideas and methodologies for teaching professional elements in the curriculum, with an emphasis on their past experience of effective and ineffective strategies, both in clinical and classroom settings. The influence of factors such as professional role modelling by mentors and educators and formalized professional behavior guidelines will be discussed in relation to behavior change and development of professional identity, and will include reference to the "hidden curriculum" to which students are exposed during academic classes and clinical rotations. A definition of core professional competencies which "should" be addressed in the curriculum will be discussed in relation to both uni- and interprofessional practice; this definition will be compared with currently used frameworks such as the "Canmeds" model. This will be followed by an exploration of current research and theory regarding teaching of professionalism, and to look at potential opportunities and challenges in incorporating the latest evidence into practice in both clinical and academic settings where group participants are currently working.

Workshop Submissions

Objectives

1) To share current practice of participants in teaching professionalism including effective and ineffective strategies

2) To discuss factors which may covertly or overtly influence professional socialization and development of professional competencies and professional identity

3) To explore best practice in the teaching of professionalism including current theory and research in this area

Intended audience:

Educators involved in the teaching of professionalism in both clinical and academic contexts. All experience levels welcome; the only pre-requisite is enthusiasm / interest in teaching professionalism!

Maximum number of participants: 30

RT02

Reasonable Adjustments in Assessment - When and How they should be used?

Mairead Boohan, Marian Traynor, Sue Morison
Queen's University Belfast, Belfast, UK

Abstract

Healthcare profession educators must comply with disability legislation when designing and delivering assessments. Professional bodies provide guidelines for the implementation of reasonable adjustments. For example, the GMC's Gateway Document offers UK medical schools examples of reasonable adjustments that may be employed to accommodate students taking assessments. The NMC does not provide specific guidelines however some Schools of Nursing and Midwifery in the UK have developed their own. The General Dental Council similarly does not have assessment-specific guidance but does include general statements in its curriculum framework and Standards for Education documents. Guidelines can relate to the documentation provided, adjustments through allowances, for example, extra time to complete the assessment. Other adjustments include the provision of specialist equipment e.g. computers or special lighting. Alternative assessment venues may also be used. It is clear that there are variations within and across professions in the way adjustments are applied. An increasing number of legal challenges and concerns about patient safety point to the need for agreement about the way adjustments are applied.

General Medical Council (2008). Gateways to the Professions. Advising medical schools: encouraging disabled students. General Medical Council, London.

Kane A. and. Gooding C. (2009). Reasonable adjustments in nursing and midwifery a literature review. Undertaken on behalf of the Nursing and Midwifery Council .

General Dental Council (2012). Preparing for Practice: dental team learning outcomes for registration. General Dental Council, London.

General Dental Council (2012). Standards for Education. General Dental Council, London.

Workshop Submissions

Objectives:

Gather examples from an international audience on current practice from a range of healthcare profession educators.

Explore the adjustments that should be made for different disabilities and levels of disability.

Consider if adjustments can impact on ability to practice in future career.

Initiate discussion about harmonising the adjustments made for students on clinical education programmes.

Intended audience: Those involved in undergraduate assessment.

Level of workshop: Intermediate

Maximum number of participants: 20

RT03

Altruism: a driving force or rate-limiting factor in good clinical practice?

Adrian Sutton[1,2], marian Surgenor[1,2]
[1]University of Manchester, Manchester, UK, [2]Gulu University, Gulu, Uganda, [3]University Hospital of South Manchester NHS Foundation Trust, Mancheseter, UK

Abstract

The wish to do good can be a powerful motivating force in choosing to train as a health care profession. It may be the impetus towards using intellectual, relationship and practical abilities to seek training in a health care profession. It may support the trainee or practitioner in persisting through times when the going gets tough: altruism may be the support that helps the practitioner rise to personal or professional challenges. It may be the essential element that helps her persist in the face of what might otherwise appear to be insuperable problems, finding novel responses and perhaps new treatments.

Or is altruism at best enlightened self-interest? Is it a means of achieving personal satisfaction whilst doing something which may be of use to others? But, does the need to ensure the well-being or satisfaction of practitioners nurture a latent, unconscious sense of responsibility in patients? At worst, can it become a burden for those in need of health care services?

Arguments in support of each position will be presented to set the scene for a round table discussion of the significance and implications of altruism for professional development and how to respond any challenges which these may present.

Workshop Submissions

How can we harness the alturism to have a positive impact on the education of health care professionals

To explore the impact of altruism on professional development

Raise the challenges that this represents and explore possible solutions

Intended Audience: All practioners involved in the development of curriculum and delivery of clinical skills both nationally and internationally.

Maximum no of Participants 16.

Dr Adrian Sutton Director, Squiggle Foundation, Hon Senior Teaching Fellow, Manchester Medical School & Research Fellow, Humanitarian & Conflict Response Institute, UoM & Visiting Professor of Psychiatry, Gulu University, Uganda

RT04

Clinical Reasoning: where are we and where do we go from here?

Simon Gay, Maggie Bartlett, Robert McKinley
Keele University School of Medicine, Keele, UK

After a slow start the published clinical reasoning literature is expanding rapidly. However, many areas of this important domain are still poorly understood and the light cast upon them is only weakly powered by scant evidence.

This session sets out to examine three dimly lit areas of interest and importance in Clinical Reasoning through facilitated round table discussion. The three questions to be addressed are:

• Would medical educationalists be wiser to develop new strategies to teach clinical reasoning or new strategies to facilitate its learning?(1)

• Why do some students when exposed to current thinking about clinical reasoning actually experience a worsening of performance?(2)

• Can useful clinical reasoning really occur outside the clinical context and what are the implications if it can or if it can't?(3)

The above questions will be used to stimulate discussion, moving from one to the next as attendees determined through their active participation. Session leaders will facilitate the group discussion provoking debate where appropriate and acting as a resource where necessary. Who knows where the experience and intelligence in the room might take the clinical reasoning orientated content and in that way the facilitators will also be able to learn from the participants.

A brief summation of areas covered by the round table discussion will draw the session to a close.

References

1. Schuwirth L. (2002). Can clinical reasoning be taught or can it only be learned? Medical Education. 36, pp.695-696.

2. Gay S.P, Bartlett M.H. and McKinley R.K. (2012). Analysis of an undergraduate clinical reasoning programme using a diagnostic inventory. ASME ASM 18 to 20 July 2012, Brighton. Gay S.P, Bartlett M. and McKinley R.K., Keele University School of Medicine.

3. Croskerry P. (2009b). Context is everything or how could I have been that stupid? Healthcare Quarterly. 12(Sp), pp.e171-e176.

Workshop Submissions

Objectives

Following these multifaceted discussions group participants will have:

• Gained a clearer understanding of what the term clinical reasoning really means to them and what it means to others.

• Developed their thoughts on what factors might be important to the development of clinical reasoning in inexperienced clinicians.

• Had their perceptions of what clinical reasoning is and where it might be occurring challenged.

Intended Audience

Anyone with an educational interest in the development of clinical reasoning skills. No previous experience of clinical reasoning in medical education is required.

Maximum Number of Participants

25

RT05

Behaviour change approaches to obesity management: should we be teaching this? If so, how?

Kathleen Leedham-Green, Ann Wylie
King's College London, London, UK

Abstract

Context

The increasing prevalence of non-communicable disease has made behaviour-change skills a priority for medical education. Applying these skills to obesity has been challenging for educators, despite evidence to support the skills set for patient-centred brief interventions for behavioural change. Final year medical students at King's College London submit a reflective case study about an encounter with an obese patient during their GP rotation. An analysis of these reflective case studies indicated barriers to effective practice and informed specific teaching for all students and selected GP tutors on broaching obesity directly with patients. This has now been in place for one academic year at this medical school.

What we did

A random sample of case studies (30 from 90) from students at practices where GP tutors had not attended training were compared to case studies (29 from 29) from students at practices where GP tutors had attended training. All students received the same campus-based training. Data were analysed for content and emerging themes.

What we found

Students at trained practices reported seeing positive role modelling, support for skills, access to resources and referrals and, in some practices, protocols being developed in line with NICE recommendations. Quantisation of content showed these students were significantly more likely to report broaching conversations about obesity with their patients. Their GP tutors also reported increased confidence in both clinical practice and clinical teaching in the area of obesity. Evaluation of the GP tutor training day was positive, based on pre-training and post-training follow up, and we have demonstrated that these GP tutors were able to impact positively on student implementation of evidence-based behaviour change skills.

Conclusion

Role identity and role competency are barriers to effective practice, however these can be addressed by providing GP tutors with training in parallel with their students.

Workshop Submissions

This round table will enable us to debate our attitudes to and esperiences of teaching and learning behaviour change skills as applied to obesity management

We invite debate centered around

What are the drivers for and barriers against effective teaching and learning of behaviour approaches to obesity? Should we be teaching this at all? What do we want students to learn? How should students learn these skills? What are the impacts (positive and negative) on students of the attitudes and competency of their clinical teachers in addressing obesity as a risk to health, and how it might be addressed

Audience - developers and assessors of medical cirricula, communication teachers and researchers, Health professinoals and teachers interested in health promotion and disease prevention

Dr Ann Wylie - editor of 'Health Promotion in Medical Education from Rhetoric to Action', and lead for health promotion at King's College London School of Medicine

Dr Kay Leedham-Green- previous winner of Prato 2103 presenter prize for her work on obesity in medical education, coordinator of Practice of Medicine strand at King's College London School of Medicine

Maximum participants =20

RT06

Clinical Reasoning Skills: "Something students can be explicitly taught or Just a case of seeing lots of patients"

Anna Hammond, Janine Henderson
Hull York Medical School, York University, UK

Abstract

There is considerable literature regarding the complex nature of clinical reasoning for clinicians. Norman (2005) stated "there is no such thing as clinical reasoning - there is no best way through a problem. The more one studies the clinical expert, the more one marvels at the complex and multidimensional components of knowledge and skill that he brings to bear on the problem, and the amazing adaptability he must possess to achieve the goals of effective care".

For novices to become experts they need extensive deliberate practice to facilitate the availability of conceptual knowledge and add to their storehouse of already solved problems (Norman 2005).

The authors are aware that previously students learnt how to reason clinically by clerking lots of patients and constructing lists of likely differential diagnoses. Students were repeatedly interrogated by doctors to justify their differential diagnoses. Changes in working time directives and increased shift working mean that students are less likely to have to justify their thinking on several occasions to the same doctor who then helps them develop their reasoning skills.

Today's students face further challenges, as modern medical curricula generally focus on delivering clinical experience in system-specific rotations leaving students unable to organise information effectively when patients present with complex, multisystem illnesses.   A limitation of systems based curricula is that it does not encourage the development of clinical reasoning skills.

There is now extensive literature regarding the need to explicitly teach clinical reasoning skills to students in addition to them having lots of practice in clerking patients and then constructing lists of the most likely differential diagnoses.

Delegates at this round table discussion will be encouraged to debate whether they believe that students can be explicitly taught clinical reasoning skills or whether it is just a case of 'seeing lots of patients'.

Workshop Submissions

Round Table objectives

To consider the evidence base for the explicit teaching of clinical reasoning skills to undergraduate medical students in contemporary systems-based curricula

To consider delegates views on the relative merits for students of the explicit teaching of clinical reasoning versus 'simply seeing lots of patients'

To provide delegates with an opportunity to share their experiences of explicit teaching of clinical reasoning with colleagues

Intended audience

Tutors responsible for delivering clinical skills/ clinical reasoning teaching in undergraduate training

Maximum number of delegates 20

RT07

The Jump Past Text books To Life and Death Situations

<u>Anthony LaPorta</u>, Rebecca Bowden
Rocky Vista School of Medicine, Parker,Colorado, Uzbekistan

Abstract

The "willing suspension of disbelief"a termed coined in 1817 by Samuel Coleridge,poet and philosopher, believed that, if the writer could create a situation wher the reader could be immersed in a fantasy they believed to be real, the reader would be able to suspend rational judgment allowing themselves to be submerged in the writing. This term can be applied to live training and medical student education even more than fictional narratives. Through didactic learning, medical students can develop basic biomedical knowledge. However, most students do not get a comprehensive understanding until they are immersed into the feeling that this is real.

Initial medical school years prepare students to have purely academic knowledge. The academic knowledge, while allowing the student to regurgitate information does not add face to face practical stress. In order to bridge the gap between academic and clinical knowledge, Rocky Vista College of Medicine has developed a totally immersive Skills Course for second year medical students. The purpose was to enhance the competency and confidence of the students entering their third year, clinical rotations.

The results of this study indicate that simulation training of second year medical students facilitates achievement of educational goals. This data demonstrates that the students cortisol levels markedly increased during the first scenario, indicating a significant stress response. However,these students never again spike their cortisol levels . Cortisol levels began higher than baseline for the remainder of the study indicating apprehension .

Salivary amylase (sAA), a marker for habituation is initially low. The second day sAA level is much higher. Even more impressive, on the third day sAA spiked at the highest level thus far and never returned to baseline. This data affirms the hypothesis that the students were able to adapt to the stressful immersion scenario and overcome their initial natural response by training and habituation.

Workshop Submissions

Roundtable-Bridging the gap to clinical skill dcision making with consequences

How do we move from the book to reality

All educators of life threatening procedures

With oganization this could involve a discussion with the whole congress involved

RT08

Working with Massive Online Open Course (MOOC) to promote clinical skill development in deteriorating physical and mental health: lessons learnt

<u>Sally Hardy</u>, Warren Turner, Claire Nadaf, Susan Maddex
London South Bank University, London, UK

Abstract

Massive Online Open Courses (MOOCs) have taken the world of distance learning by storm; offering students, from across the globe, connections to university based courses of study. However, critics have raised concern over the lack of formal qualifications and academic credit from MOOCs which they claim has led to a poor quality student experience and high drop out rates. Yet for many computer literate students, accessing information via a MOOC opens many exciting avenues of learning.

At London South Bank University, two pilot MOOCs have been developed in conjunction with Health Education England health of someone from a physical and another from a mental health perspective.

In order to address the issue of poor student engagement, the approach undertaken was to provide 'drama episodes' that follow the patient experience as a central learning resource. A professional script writer and actors were engaged in bringing the patient storylines to life. Working from a conventional dramatic episode approach provided an immediate level of rapport and interest in what happens next, that enables extensive potential to identify chunks of learning from multiple perspectives.

The workshop will provide opportunity to explore the MOOC development as a creative learning tool for skill development. We outline lessons learned from co-writing the script, development of learning resources through both the process of filming and subsequent building of the learning site in an interactive way to address student engagement from the outset.

Watching and learning about clinical skills as they are being undertaken in the drama, offers both the good, poor and the best practice examples. This aims to support previous research into student engagement in MOOCs (Wilkowski, Deutsch and Russell (2014). Consideration of the audience, when building the MOOC content has become paramount in capturing the diverse needs of a global audience through enhanced technology.

Workshop Submissions

Objective: to explore the lessons learnt from developing two MOOCs on enhancing clinical skills in the areas of deteriorating physical and mental health

Intended audience: anyone interested in the use of technology to enhance learning potential and global interest

Maximum participants: 15 - 30 to ensure engagement and discussion is targetted to meet needs of the audience

RT09

The problem with feedback in clinical skills education: Student shortcoming or faculty failure?

Lynn Urquhart[1], Jean Ker[2]
[1]NHS Tayside, Dundee, UK, [2]University of Dundee, Dundee, UK

Abstract

Feedback is one of the biggest influences upon learning (Hattie and Timperley, 2007, Norcini, 2009). Yet worldwide, there is consistent dissatisfaction from medical students with the feedback they receive (National Students Survey, 2010, Krause et al., 2005) Students report inadequate, poor quality, and untimely feedback (Urquhart et al., 2014, Gukas et al., 2008, Perera et al., 2008). They identify the key features of successful feedback as specific, constructive information which helps them improve in future tasks (Urquhart et al., 2014).

However, it is not only students who have become disillusioned by feedback. Literature (from out with medical education but equally as relevant) also finds that tutors are also disenchanted with the feedback process (Price et al., 2010). Tutor dissatisfaction stems from perceived unmanageable expectations of learners as well as increased workload (Tuck, 2012). Some authors suggest that in contrast to student self-reported views of ideal feedback, all students wish is self actualisation i.e. praise (Boehler et al., 2006). Others suggest that while tutors are providing adequate feedback, that students are poorly skilled at recognising and interpreting this feedback (Chanock, 2000).

To date, interventions to improve feedback have been aimed at improving the content and delivery of feedback by the tutor. This has predominately been in the format of feedback guidelines, models and tools. Yet the dissatisfaction of students has persisted. Could this suggest that the fault with feedback lies within the learner? Are students ever going to be satisfied with the feedback they receive? Do students' perceptions of feedback reflect actual feedback practices? Or are tutors indeed providing substandard feedback? What other influences might there be upon feedback practices and perceptions not currently explored in the feedback literature?

In this round table discussion we invite debate around these questions, before discussing possible solutions.

Workshop Submissions

Objectives

• Discuss why feedback is more challenging in medical education than other higher education disciplines

• Consider those factors relating to the learner which might currently have a negative influence upon feedback receptivity

• Consider tutor factors; are there features out with the delivery of feedback which influence its success?

• Discuss the influence of the "feedback gap" upon feedback success

• Consider whether there are any institutional influences upon feedback success. How might these in turn influence student and tutor perceptions of feedback?

Intended Audience

Educators,those involved with curriculum design and medical students.

Maximum Participants

20

RT10

How Do We Foster Clinical Judgment Development Across Healthcare Professions?

Kathie Lasater, Ann Nielsen
Oregon Health & Science University, Portland, Oregon, USA

Abstract

Interprofessional health education is highly recommended or mandated in many countries and globally. Standards abound, from WHO to UK, Australasian, Canadian, and US interprofessional collaboratives, to name a few. However, the standards do not always define terminology in common use by healthcare professionals. For example, most, if not all, healthcare professions require clinical judgment skill of their practitioners for safe patient care and quality outcomes. Yet, definitions of what clinical judgment is and how healthcare educators foster its development may be different across professions and even countries.

The purpose of the roundtable is to learn from each others' experiences about best practices for fostering this critical non-technical skill. Starting with a universal assumption that clinical judgment is required for ill-defined, difficult patient situations without a clear path, this roundtable will explore definitions of clinical judgment and examine pedagogical strategies for fostering it as well as apply these to a case study exemplar. Examples of questions to guide the interprofessional discussion include:

• How do your profession and/or national standards define clinical judgment?

• How do you work with your professional students to foster the development of clinical judgment?

• How would a physician/nurse/therapy specialist think about the exemplar case study?

• What would be their expectations of other healthcare professionals in the exemplar case study?

At the end of this roundtable, the various perspectives will be summarized to bring increased awareness and mutual understanding to the conclusion.

Workshop Submissions

The overarching objective of this session is to learn different best practices re: developing clinical judgment.

Specific objectives include:

Identify some similarities and differences among professionals' use of clinical judgment;

72

Explore at least one evidence-based theoretical framework of clinical judgment;

Discuss pedagogical approaches that foster clinical judgment development.

Intended audience is educators from healthcare professions who foster the development of student thinking.

Optimum number of participants is 15, representing an equal distribution of professions. However, appropriate discussion strategies can be employed for more or less than this number. It is critical to have participants from more than one profession.

RT11

What are the skills required for junior doctors' when patients deteriorate in a regional hospital ward?

Adele Callaghan[1], Leigh Kinsman[2], Simon Cooper[1], Natalie Rodomski[1]
[1]Monash Univeristy, Victoria, Australia, [2]Univeristy of Tasmania, Tasmania, Australia

Abstract

Training health practitioners to recognise and respond to clinical deterioration in acute care is essential to ensure patients are safe from preventable harm. This requires the health practitioner to accurately assess and interpret signs and symptoms and promptly escalate care for these patients. However, contextual skills for the junior doctor are not always made explicit, even though junior doctors are frequently called to review patients who are potentially unstable or deteriorating.

Graduating medical students and junior doctors have identified that they are uncomfortable, lack knowledge and experience anxiety when exposed to a deteriorating, or unstable patient in an acute ward setting. This presentation will describe a mixed method approach in order to explore the factors that influence final year medical students and junior doctors' ability to recognise, respond and manage the deteriorating patient in a regional hospital ward. Data will be collected using semi structured interviews and patient chart reviews. Delphi method with clinical experts will determine competencies in this clinical context.
The competencies developed will inform the design of a simulation program for final year medical students and junior doctors to recognise, respond and manage the deteriorating patient in a regional acute hospital ward.

References:

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S01

A comparison of assessment by simulated patients and faculty in simulated clinics in general practice.

Maggie Bartlett, Simon Gay, Robert McKinley
Keele School of Medicine, Stoke on Trent, UK

Abstract

Background: At Keele Medical School, students have taken part in untimed simulated clinics in a general practice setting, where simulated patients (SPs) graded their clinical skills using a validated consultation skills assessment instrument [1]. They gave written feedback to the students including a statement of their strengths and weaknesses and specific strategies for improvement.

Aim: To compare faculty with SPs in their assessment of, and feedback about, students' consultation skills

Method: Student consultations were recorded, with their consent and with the approval of the school's ethics committee. Two members of faculty independently graded the consultations. The results were compared between faculty and SPs and the degree of agreement calculated. The written feedback will be compared using qualitative methods.

Results: 22 recorded consultations will be assessed by faculty. Initial analysis on 10 cases shows the Pearson correlation between total scores allocated by clinician and SPs varied between 0.61 (p=0.06) and 0.13 (p=0.7). The analysis of all data will be complete for the conference.

Discussion: Simulated patients can give feedback which students find useful [2]. We aim to find out if our SPs' assessments of students' skills, and the written feedback they provide, are comparable with those of faculty.

References

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S02

Title: Better Together – the success of an educational partnership between the NHS and Sub-Saharan Africa

Marian Surgenor[1,2], Adrian Sutton[1,2], Emmanuel Moro[2,1]
¹University Hospital of South Manchester NHS Foundation Trust, Manchester, UK, ²Gulu University, Faculty of Medicine, Gulu, Uganda

Abstract

Background:

The Gulu-man Link is a highly successful National Health Service Sub-Saharan educational partnership which has several unique features. The link has been successful in delivering high quality, sustained educational learning outcomes to health workers, students and academics in Ugandan institutions, through the establishment of novel delivery processes designed to deliver cutting edge clinical skills teaching. Simultaneously, it has improved the clinical learning environment within hospital.

Research: In October 2014 the medical student graduates will be the first cohort to have experienced the full clinical skills programme. The programmes were delivered by inter-professional, multi-disciplinary teams from the UK in collaboration with our Ugandan colleagues. We intend to follow 30 of these students (half the year group), through their year of internship. We are intending to evaluate the impact of the programmes in the following areas of their practice.

A change in culture among health care professionals where team working becomes the normal way of practice,

Confidence in communication of patient condition and escalation of care between health professionals

Proper recognition and assessment of patients with deteriorating health.

Training in response to deteriorating health including maternal care.

Developing a sustainable culture of patient and staff safety in daily clinical practice.

Conclusion:

We will compare this group with a control group of interns who have not experienced the link's programmes. We will use questionnaires, focus group discussions and supervision reports. We will report in detail the outcome of our findings.

S03

In the Pink: Evaluation of an "out of hospital" clinical placement with an emergency response team at an entertainment venue.

Helene Metcalfe[1], Linda Hart[2], Rosemary Saunders[1], Helen Dugmore[2]
[1]University of Western Australia, WA, Australia, [2]Events Health Mangement, WA, Australia

Abstract

This innovative study explored student nurses experiences of a clinical placement in an 'out of hospital' environment. Eight student nurses from a Graduate entry nursing program in Western Australia attended a four day clinical placement with a not for profit organisation delivering emergency response care at an entertainment venue in Perth. Under the supervision of a Registered Nurse students performed assessment and delivery of care to a variety of clients who required medical assistance at the venue.

Using a quantitative case study approach, students completed an online evaluation of their placement experience. The diversity of clients and presenting symptoms especially those presenting under the influence of illicit drugs and alcohol challenged the students in a variety of ways. This clinical placement gave students the opportunity to undertake clinical practice and interact with a multi-professional team within the unfamiliar setting of an entertainment venue.

Results suggest the nursing students found this placement to be a unique learning experience which complemented their clinical placement in an emergency department at a tertiary teaching hospital. With the demand for suitable clinical placements in the acute sector nationally this study shares the breadth of the students' experience and offers an alternative but worthwhile clinical placement.

S04

Accelerated learning and leadership through a nursing student-led clinic

Cynthia Stuhlmiller, Barry Tolchard
University of New England, Armidale New South Wales, Australia

Abstract

Nursing students at the University of New England have developed and lead a health and wellness clinic in in New South Wales Australia. The clinic was established as a means to address the shortage of nurse clinical training opportunities in rural and remote areas while serving a disadvantaged community in priority health areas. The clinic enables self, GP, and other agency-referred persons to receive student-delivered drop-in assessment, treatment, health education, coaching and guided self-help packages specific to the person's physical and mental health concerns. Students also lead numerous health promotion and prevention initiatives such as women's health, dental care, sexual health, stroke recognition, after school groups, quit smoking, disease self-management, fitness and nutrition programs, mass screenings, and hand held records. The telehealth program enables remote persons to have access to help and specialist care from home, community or Aboriginal Health Centres.

The *New England 4G Framework of Guided Self-health*, a cognitive behavioural model, underpins the work of the clinic. The **4G** approach includes: 1) **G**athering information to detect, assess, and measure health problems, 2) **G**enerating a collaborative health action plan, 3) **G**iving health information and print/internet CB-based self-health packages, and 4) **G**uiding use of packages using face-to-face, phone, or e-health follow-up and measures.

The community has embraced the integrated approach to health and wellness that the students deliver. In return, the students are honing skills in community outreach, the consultation process, setting up a one-stop clinic, and being responsive to individual and group health needs as they emerge. The opportunity to create, lead manage and follow through is unsurpassed in this unique setting. The students are proud to be using their newfound leadership skills to inspire community members to enrol in health career programs. This presentation will focus on accelerated skill development resulting from student-led service learning.

S05

Precision of tutors' assessments of student clinical placements. Teachers' practices and a new modified method ("RANGE") of pass/fail decision-making

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Abstract

Background

Three distinct stages have been identified which contribute to a student's final mark during his clinical rotations: Stage 1 - Assessment of ability: Stage 2 - Evaluation against expectations: Stage 3 - Numerical grading. Problems exist with all three stages; in this study only stage 3 has been addressed. Clinical tutors may tend to grade inflation and be reluctant to fail a student. There is evidence in the literature that grading is both inflated and highly imprecise within and between medical schools. Factors contributing to this include fear of repercussions, lack of appropriate training and personal beliefs about the marking system. We will present a new modified system of marking students who perform non-quantitative tasks (including most clinical skills) which we believe may substantially improve the fidelity of grading ("RANGE"). This will be accomplished by more truly reflecting the inaccuracy and uncertainty inherent in the evaluation process, and by exempting the clinical tutor from direct pass/fail determinations which can lead to grade inflation.

Methodology

In order to compare practices in this faculty with those reported before, we will survey the opinions of clinicians who teach and grade clinical medical students with regard to their experiences and attitudes to grading medical students during their clinical clerkship rotations. A validated questionnaire has been designed for this purpose.

Participant recruitment

Clinicians will be recruited by:

1. Appeals at public meetings e.g. Clinical Retreat

2. Appeals at meetings of faculty clinical groups

3. Appeals by personal contact in the workplace

Data analysis and results

Data analysis will be quantitative and qualitative.

Presentation:

•1. "RANGE"

•2. Questionnaire format

Initial results

S06

Developing and implementing the e-Clinical Tool in a Bachelor of Nursing.

Monica Peddle, Yangama Jokwiro
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Abstract

Background

The traditional approach to assessment of nursing students on clinical placement requires competency based assessments performed by clinical educators, documented on rigid paper based tools. There is little opportunity for student reflection or contribution to their professional growth, defining learning needs or developing personal goals. Newer developments in eportfolio pedagogy, such as PebblePad, provide greater capacity for students to reflect on their practice, identify strengths and weaknesses and develop personalised learning plans to guide their professional development. In 2014, the eClinical Tool was introduced in a Bachelor of Nursing Program to support the assessment and development of nursing student's competencies on clinical placement in year one nursing subjects using the PebblePad platform.

Aim

To report on the development, implementation and impact of an eClinical Tool on nursing students' professional development.

Method

The eClinical Tool was implemented across the first year of the Bachelor of Nursing program in 2014, with over 503 students who completed placements at over 20 clinical facilities in metropolitan and regional Victoria. The implementation of the eClinical tool and the impact on student perceptions of their growth, development and engagement in learning in the clinical setting was evaluated using descriptive exploratory approaches.

Findings.

The successful implementation of the e-Clinical tool required actions relating to preparation of and support of:

1. Clinical Facilitators

2. Students

3. Clinical Facilities

4. Academic Educators

Conclusion.

The eClinical Tool presents students with unique opportunities to engage in learning and personal development during clinical placement to support professional growth. It develops reflective practice and enables students to develop individual learning plans based on areas of strength and areas requiring improvement in their practice. Further the eClinical Tool enables the School to gather live data regarding progress of students during clinical placement.

S07

An App to improve feedback following Workplace-Based Assessment

Janet Lefroy, Adrian Molyneux, Simon Gay, Maggie Bartlett, RK (Bob) McKinley
Keele University School of Medicine, Staffordshire, UK

Abstract

Outline of the work:

At Keele we have developed instruments and an online process for workplace-based assessment (WBA) and feedback (1–3). These are currently in use but the process has been evaluated as rather difficult to use especially in some clinical settings and the written feedback summary is not in an attractive format.

This action research project is ongoing with the aim of enhancing the ease of producing, and the utility of, the feedback captured following WBA. We postulated that use of a hand-held assessment device including audio recording should make it easier for a dialogue to take place while the assessment is being completed.

Cycle 1 of the action research involved developing, piloting and revising a new platform with apps for assessment and feedback for both consultation skills and clinical procedural skills.

Cycle 2 (2014-15) involved roll-out of the apps to all year 3, 4 and 5 medical students and their clinical tutors with monitoring and evaluation by student surveys, focus groups and tutor interviews.

Results:

Comparison will made with the previous system using routine evaluation data triangulated with focus group evaluation.

Conclusions:

The results could be of interest to other medical schools looking to solve similar problems.

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S08

Developing Evidence-Based and Reflective Practice Skills using iSAP

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Abstract

Context:

Integrating Science and Practice (iSAP) is a computer based simulated learning environment where real issues typically encountered in the clinical setting are investigated. Benner suggests that simulations are 'powerful teaching tools' to enable critical thought, allowing the student to test their abilities in a no pressure environment.(1)

What Happened:

A realistic clinical case is presented along with the professional issues and resources for the student. Students construct an evidence based clinical action plan in response to the scenario. Upon submitting this plan, the student can then compare his/her plan to that prepared by an expert.(2)

Unlike the traditional case study or problem-based learning activity, iSAP allows upload of radiographic images, video clips and other media to enhance visual learning.

Conclusion:

iSap is currently used throughout the four year radiography curriculum and is being introduced in the Graduate Entry Medical Program at the Rural School of Health at Monash. This integrative learning tool simulates what clinical practitioners would encounter in a challenging clinical environment - one that is often ambiguous, fraught with interprofessional conflict, difficult for novice practitioners to understand and navigate and most importantly critical to the outcomes of patients. Evaluation of iSAP demonstrates that users find it an effective and realistic learning tool. This presentation will demonstrate how iSAP is used to support the acquisition of evidence-based and reflective practice skills amongst students in health disciplines at Monash University.

References:

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S09

Through the looking glass: The use of old age and bariatric simulation suits in clinical skills education.

Janet Hunter, Tracy Lindsay, Karen Rawlings-Anderson
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Abstract

Healthcare needs of the world's population reflect the changing demographic. Worldwide obesity has doubled since 1980 (EASO, 2013). In the UK one in four adults are obese (Health and Social Care Information Centre, 2012). The number of older persons worldwide (60 +) are expected to reach over 2 billion by 2050 (Department of Economic and Social Affairs Population Division, 2013). In the UK, the population of over 65 year olds will increase by 50% to 16 million by 2030 (Age UK, 2014).

Nurses are required to provide person centred care. This may be difficult for those who have not engaged with older adults and those who are morbidly obese. This can make it difficult for them to appreciate the challenges that these patient groups may experience.

The creative use of simulation suits, both bariatric and older adult, has provided an opportunity for student nurses to explore the lived experience of these patient groups. Student feedback has positively evaluated this experiential learning and suggests that this educational strategy has enhanced understanding and appreciation of some of the physical, emotional and psychological difficulties that these patient groups face.

A formal research project has now been designed to evaluate the influence of simulation suits on the attitudes of nursing students towards older adults and those who are morbidly obese. The findings will be discussed in light of the use of simulation suits as a meaningful educational strategy.

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S10

Interuniversity Teamwork Creating a New Clinical Skills Centre in Belgium: defining priorities.

Claire de Burbure, Fernande Lois, Dominique Vanpee, Philippe Meert
Université catholique de Louvain, Brussels, Belgium

Abstract

Background

Redesigning our medical curriculum in line with the Bologna decree enabled gradual integration of teaching clinical skills throughout the reduced 6-year program.

Objective

With an increasing number of medicals students (over 5000) at the Université catholique de Louvain (UCL), the need for a Clinical Skills Centre, scheduled to open mid-September 2014, became obvious.

Methodology

The clinical skills courses developed by clinicians, nurses and general practitioners over 20 years including academics' and students' desiderata were integrated into curricular design. Staff training, visits to other centres and six-monthly cost appraisals were planned in order to help define priorities.

Results

All clinical skills courses currently offered internally and externally will move to the new facilities. Manager training (AMEE Masterclass, visits of other clinical skills centres) indicated where costs could be kept to a minimum (eg. replacing video equipment with tablets). Experiences from others helped us to chose judiciously between didactic and audiovisual tools, software and teacher training for optimal space management and teaching efficiency.

Conclusions

Joint interuniversity efforts by the various teaching teams to consolidate and develop training and organizational efficiency in the new Clinical Skills Centre contribute to going from strength to strength in this new venture for UCL-Health Sciences.

Workshop Submissions

Objective : Defining priorities for the creation or redesigning of Clinical Skills Centers in today's world.

Intended audience : Clinical Skills teachers, students, faculty authorities

Maximum number of participants : 20

S11

What are the perceptions among medical students on seeing variations in method in the demonstration of the physical examination?

Charlotte Adams, John Frain
University of Nottingham, Nottingham, UK

Abstract

Aim

Does variation in teaching examination techniques cause discomfort to students preparing for assessment and for practice? What understanding do students have of variations in technique between doctors examining the same patient?

Background

Elicitation of physical signs is more accurate when performed according to the original descriptions in the literature. It is against these that their utility should be taught and then judged (1). Students have called for a more rational approach to teaching of the physical examination (2). A lack of standardization of techniques is suggested as one reason for the variation both within and between examiners (3). Students report, particularly when preparing for assessments, discomfort when observing clinical teachers performing the physical examination in different ways.

Method

Qualitative phenomenological analysis undertaken by semi-structured interview of medical students. Data analysis facilitated by Nvivo 10.

Results and findings

Students experience frequent variation in demonstration of examination technique particularly in the respiratory system. Emotions reported included frustration, confusion and indifference. Perceptions of the utility and accuracy of the physical examination were affected. Although some anxieties were assessment-related concerns arose also regarding the effect of inaccurate and possibly suboptimal physical examination on patient care. Students will be interviewed again prior to finals.

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S12

A retrospective review of Paramedic completed patient clinical records to identify types of incident attended and skills used prehospitally.

Tristan Henderson[1], Ruth Endacott[1], Jonathan Marsden[1], Sarah Black[2]
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Abstract

Background

The rapidly advancing field of out of hospital care, in conjunction with the 'specialist generalist' nature of paramedicine has seen a significantly expanding scope of practice (Association of Ambulance Chief Executives, 2011).

Frequency of use for some skills is limited and may be relevant for less than one percent of the ambulance service workload. (National Confidential Enquiry into Patient Outcomes and Death, 2007; National Audit Office, 2010).

Aim/Objectives

The aim of the study is to evaluate the core Paramedic skill set; objectives are to:

Identify the types of incidents commonly attended by a large UK ambulance service

Identify infrequently practised skills/procedures within a large UK Ambulance Service

Ascertain whether factors such as geographical location are associated with skills practiced by Paramedics

Methods

Six hundred patient clinical records, covering urban and rural stations, taken from a one year period will be retrospectively reviewed. This sample size has been calculated using a formula designed to estimate population prevalence with good precision (Naing, Winn & Rusli, 2006) and should identify incidents and skills with a prevalence of over five percent.

Simple descriptive analysis and cross-tabulations will be used to interpret the data in relation to the objectives.

S13

Feedback Quality Instrument (FQI): testing and refining the foundation FQI using participatory action research.

Christina Johnson[1],[1], Jennifer Keating[1], Debra Nestel[1], Associate Professor Elizabeth Molloy[1]
[1]Monash University, Melbourne, Australia, [2]Monash Health, Melbourne, Australia

Abstract

The Feedback Quality Instrument (FQI) is designed to assess and guide an educator's role in high quality verbal feedback within health professions clinical practice. An educator is responsible for creating an optimal learning environment that enables a learner to realise their potential. The instrument seeks to identify those key components that promote learner engagement, motivation and improvement in subsequent performance. Items are based on an extensive literature review and refined during three rounds of a Delphi Process in collaboration with an expert panel. The foundation FQI contains 25 items that describe observable educator behaviour. Each item is scored on a 5-point Likert scale, plus a global rating of perceived utility for the complete feedback episode. The next stage in the evolution of the FQI is currently being planned, to enable further refinement of the items and rating scale. Participatory action research will be used to test the instrument and gather information on user interpretation of the items (using 'talk aloud' interviews with educators and learners as they use the instrument), time to complete and user views on engagement with the instrument. The items on the foundation FQI will be presented in addition to the results of this first testing phase.

S14

The implementation of new dispatchers' training programme

Ruta Nadisauskiene[1],[2], Lina Bardauskiene[1],[2], Paulius Dobozinskas[1], Birute Kumpaitiene[1],[2]
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Abstract

Background. Kaunas Ambulance Service (KAS) is accredited by the International Academy of Emergency Medical Dispatch, but without the status of a Centre of Excellence for use of the Medical Priority Dispatch System (MPDS). The purpose of the study was to determine the new dispatchers' training programme effect on enhancing dispatcher's knowledge and skills for successful acquiring of the MPDS.

Methods. The new programme was grounded on social constructivist theory, cognitive theory of multimedia learning and based on electronic/digital learning materials, blended learning, HybridLab, multimodality, collaborative and cooperative learning. The features of HybridLab were successful step-by-step solving of simulated call situation in the real workplace, getting a virtual feedback. We evaluated the duration of tests accomplishment and calculated EMD compliance of simulated and real calls before and after programme implementation in KAS according to the protocol.

Results. The tests' solution time was statistically significantly shorter after training (p=0.03). After programme there were statistically significantly improved the chief complaint selection (p=0.02), key questions interrogation (p=0.00) and total compliance score (p=0.04).

Conclusion. New training program helps to promote active engagement of students in their own learning by stimulating constructive, self-directed, collaborative and contextual learning and by using patient problems as triggers of learning.

S15

Debriefing practices of rural medical educators: a mixed methods study

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[2]WA Country Health Service, Perth, Australia

Abstract

Simulation-based learning is more than learners immersing themselves in clinical scenarios. Key to the learning, and ultimately improving patient outcomes, is the ability for the learner to reflect on gaps in their performance and how they can adapt and develop knowledge and skills that can improve their future practice: the aim of debriefing in post simulation activities . There is a substantial body of evidence addressing the importance of the debriefing phase of simulation based training; however, in relation to the use of post simulation debriefing, evidence specifically addressing its use in rural practice is sparse. The aim of this research project is to explore the current practices of the post simulation debriefing activities in rural Western Australia.

This study will use a mixed methods design, specifically a sequential explanatory design. More weight will be given to the qualitative component of the study (ie, quan QUAL). In the first phase of this study, the quantitative, demographic data will be collected first using a web-based survey, and second using a tool featuring a 7 point likert scale to rate the debrief. In the second phase a qualitative approach will used in the form of in-depth interviews to further explore and explain the results from phase one. Descriptive statistics will be used to summarise the findings from phase one. Differences in scores obtained and proportions of participants and measures of central tendency in the demographic groups will be compared using non-parametric statistics (Mann Whitney U Test and Kruskall Wallis). In terms of analysis for phase two, each interview will be audio recorded and transcribed verbatim. All data will be analysed using Colaizzi's seven-step framework to formulate meaning and themes.

Data collection is expected to occur between October 2014 and February 2015, with preliminary results available for discussion in May 2015.

S16

Masked educationalists: creating simulation for mental health nursing students to advance their communication skills around sensitive issues and challenging behaviour

Inga Heyman, Scott Macpherson, Fiona Culligan, Debbie Banks
Robert Gordon University, Aberdeen, UK

Abstract

Masked educationalists: creating simulation for mental health nursing students to advance their communication skills around sensitive issues and challenging behaviour

Volunteer patients are frequently used in delivering simulation to pre - registration health care students to practice clinical and communication skills in a safe environment. There are occasions when using patient volunteers could be viewed as unethical and may have a detrimental effect on the volunteer; for instance when the topic is highly sensitive, such as substance use or when challenging behaviour is required. The accessibility of contemporary High Fidelity Patient Silicone Simulation (masks) has created opportunities for educationalists to enhance the psychological fidelity of any simulation activity. This type of simulation, that has been pioneered in Australia, with a focus on physical health care, suggests this type of learning can also increase clinical competence and confidence (Reid-Searl et al 2011).

Through wearing the mask the educator's clinical experience can enhance the realism of patient behaviours and the educator, as the patient, can prompt, control and guide students to specific learning outcomes.

This case study explores the experiences of a group of mental health nursing students of simulation with masked educators playing the role of patients with challenging behaviours and exploring sensitive issues. The findings will be presented at the conference in May.

References.

REID-SEARL, K., EATON, A., VIETH, L. AND HAPPELL, B. 2011. The educator inside the patient: student insights into the use of high fidelity silicone patient simulation. Journal of Clinical Nursing. 20, pp. 2752-2760.

S17

A communication workshop led by hearing impaired healthcare consumers

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University of Adelaide, Adelaide, South Australia, Australia

Abstract

Introduction

The University of Adelaide Medical program is a 6-year under graduate curriculum. In final year students have a common program of teaching to prepare them for transition to internship.

Aims

To evaluate student perceptions of a communication workshop run by healthcare consumers with hearing impairment. The presenters' satisfaction with the sessions was also assessed.

Methods

Year 6 Medical Students attending the "transition to internship" teaching program in 2014 were scheduled in groups of 10 to attend a 1-hour session involving role play of consultations with hearing impaired patients. The sessions were led by hearing impaired healthcare consumers. Prior to the workshop students were asked to view an online communication module, which includes the principles of good communication in healthcare settings, and a spoken account of one hearing impaired patient's negative experience with a hospital outpatient system.

Following the session students were asked to rate the session in terms of learning value, enjoyment, informative presentation and appropriateness for their stage of learning.

Results

Students rated the sessions very highly in terms of learning value and enjoyment. Although most considered the sessions appropriate for their stage in learning, many indicated they would have preferred opportunities to access such sessions earlier in their medical course. They valued the interactive nature of the sessions and the perspective of "real patients". The presenters unanimously rated the sessions as worthwhile and valued the opportunity to participate in this teaching initiative.

Conclusion

The patient led workshop format was highly valued as a learning opportunity by clinical students and considered worthwhile by volunteer presenters. Feedback from students will be used to further refine and improve this workshop format.

S18

iSoBar as a checklist to improve team situational awareness during clinical rounds in an interprofessional student training ward.

Edward Stewart-Wynne[1], Fiona Geddes[2], Phill Della[2]
[1]Royal Perth Hospital, Perth, Australia, [2]Curtin University, Perth, Australia, [3]Curtin University, Perth, Australia

Abstract

Ward rounds are an integral part of patient care with junior medical officers and allied health professions traditionally taking passive roles in this hierarchically bound clinical routine. While the literature suggests that interprofessional collaboration and applying systematic approaches to ward rounds result in improved patient outcomes and reduced clinical errors, research identifying suitable training protocols to ease the transition for students from observing ward rounds to actively participating in them is limited. This presentation reports the results of a video reflexive study of ward round practices in the Inter-professional Student Training Ward (STW) at Royal Perth Hospital.

Based on the iSoBAR checklist for clinical handover an iSoBAR ward round framework was developed to assist final year medical, nursing, physiotherapy, occupational therapy, pharmacy and social work students evaluate and conduct interprofessional ward rounds. The research aim is to examine the efficacy of an iSoBAR checklist for Student Training Ward Rounds. The hypothesis is that communication training & the implementation of the checklist will result in improved Team Situational Awareness.

A qualitative mixed methods approach was adopted for this study. Video recordings of STW rounds conducted using the iSoBAR tool were compared with recordings of rounds conducted without the checklist. Comparisons of Team Situational Awareness indicators (based on Reader & Flin et al, 2011) involving both Accuracy & Alignment of Discharge Likelihood & Likelihood of Patient Deterioration are reported.

This study demonstrates how adopting a tool such as iSoBAR can provide students and health professionals with a common structure to logically integrate patient information and organise clinical tasks in ward rounds, enhancing shared situational awareness of patient progress.

S19

Expert Decision Making in Acute Care (Work in Progress)

David Lowe[1], Jean Ker[2], John Kinsella[1]
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Abstract

Expert performance is the mastery of existing knowledge and techniques in a given domain then expert decision making (DM) is the selective application of these cognitive and technical abilities. The development of DM is of critical concern within medical education at both post graduate and undergraduate level. A key aspect of decision DM research is defining 'the expert' so as to inform the development of the novice. Development of expert DM is not a time based endeavor but relies on active and adaptive evolution of the cognitive constructs.

Aims

1. To anaylse and evaluate the decision process within acute care and the continuum between novice and expert.

2. To explore the impact of enhanced decision-making on acute care

3. To create a framework / model describing expert decision-making within acute care

Methods

Drawing from ethnographic methods observation and interviews will be conducted to iteratively develop inquiry and analysis of the data. Observation will involve shadowing of senior clinicians and examining the decision making process that enables them to develop management strategies. In addition, educators/ subject experts will be interviewed on how they approach delivery of decision making teaching and development of expertise. This will enable crystalisation of the themes expressed by these complementary groups.

Following this the proposed work a series of semistructured interviews will be performed focusing on development of themes and elucidating features of enhanced DM.

Key Questions

What defines Expert Decision Making?

What are the characteristics of Clinical DM Expertise?

What factors influence the development of Expert DM?

How can DM teaching be enhanced?

Results

Results from the thematic analysis of semistructured interviews and field notes analysed using nVivo will be presented. A model of decision making in acute care will be presented.

S20

"Live" PBL: Real integration of learning clinical reasoning and communication skills

Janine Henderson[1,2], Alison Blakeborough[2],[1]
[1]University of York, York, UK, [2]University of Hull, East Yorkshire, UK

Abstract

Background

Problem-based Learning (PBL) equips students with teamwork skills and fosters development of self- directed learning. Most PBL is driven by "virtual" cases in the first two years of the curriculum to present prepared scenarios as the focus for discussion.

We designed a Student-selected component (SSC) using simulated patients (SPs) engaging students in problem formulation throughout the session. This approach aimed to encourage second year undergraduate medical students to integrate their own knowledge more fluently in the patient encounter whilst developing communication skills and clinical reasoning.

Presentation

PBL scenarios were designed based on core psychiatric disorders, covering all biopsychosocial aspects of those disorders. Students interviewed the SP to derive the information required to formulate the patient`s problem for the PBL session, integrating development of communication skills within the PBL process.

Problem formulation, development of mental state examination and clinical reasoning skills were facilitated by the two SSC tutors.

Evaluation

Results of evaluations and student feedback are presented outlining benefits in development of:

• Ø core psychiatric knowledge and understanding

• Ø clinical reasoning skills

• Ø Communication skills

• Ø Confidence in approaching and addressing psychiatric problems in consultations

• Ø Interest and enthusiasm in psychiatry as a career

S21

Communication through interpreters. How effective is training on practice?

Angela ROWLANDS, Angus HODDER, Annie CUSHING
Barts and the London School of Medicine and Dentistry. Queen Mary University of London, London, UK

Abstract

Context:

People whose first language is not English are more likely to experience inequalities in health care (Fazil and Kai 2004). Consultations even with interpreters may fall short of identifying patients' concerns and understanding (Seale 2012). Doctors need to be skilled in communicating effectively through a third person. This study evaluates the teaching of such skills to third year medical students.

What we did:

Teaching involved video demonstration and practice with interpreters and role players. Of the 328 students in the year, 197 attended the session and 131 failed to attend. The end of year summative OSCE included a station on eliciting a history through an interpreter. An OSCE is an intermediate for practice in clinical settings and constitutes level 3 in Kirkpatrick' taxonomy of educational research (Malick 2010).

What we found:

Analysis revealed 87% of attendees and 80% of non attendees passed the station. Further analysis of mean scores and component items identified which aspects of training improves students' skills, in an OSCE setting, of building a relationship and achieving understanding in a triadic consultation using an interpreter.

Conclusions:

Training reduced failure rates specifically for the interpreters station of the OSCE. Intervention was worthwhile for the weaker students but not so much for the competent students. The attendee cohort were more likely to use key skills in interviewing through interpreter interaction directly with the patient both verbally and non - verbally. Training enhances the key skills in interviewing through interpreters.

S22

Clinical Skills Teaching by Tele-conferencing-The cost effective solution for rural practitioners

Colville Laird, Brenda Cottam, Fiona Mair, Graeme Ramage
BASICS Scotland, Aberuthven, UK

Abstract

The use of teleconferencing for the purposes of medical education is now well established. The use of simulation via teleconferencing to teach clinical skills is not well established but could have enormous benefits particularly for the teaching of practitioners who work in remote and rural areas and in whom the evidence would suggest there is a need for regular updating, particularly of resuscitation skills. The benefits include minimal time loss and no travel or accommodation expenses. Resulting in considerably lower costs to practitioners or their employers. A number of papers have been published which show that teaching clinical skills by teleconferencing is possible but there are no papers that describe the regular use of this type of education in mainstream healthcare. The authors have encountered a number of organisational difficulties in providing this type of service without incurring massive cost. Despite these difficulties this service is now being offered on a regular basis. This is provided using Internet-based teleconferencing and is available to any practitioner with a broadband connection and a web cam attached to their computer. This paper describes the practical difficulties and the solutions required to allow this service to be offered. Despite the obvious benefits this service does not have the uptake expected. The reasons for this will be discussed as the authors believe that this is a service which is highly beneficial to patient care and should be developed further.

S23

Surgical familiarisation for medical students

Scott Oliver, Catrina Pickard, Juliette Murray, Catherine Paton
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Abstract

Medical students' lack of familiarity with operating theatres can limit the educational value of their first clinical surgery attachment (1,2). We piloted a "surgical familiarisation course" to orient students with the theatre environment and etiquette. This begins with a guided tour of the theatre suite and an informal discussion of basic theatre etiquette. Students then split into groups to be taught, using a four-stage approach (3), the correct technique for surgical scrubbing, donning sterile gowns and gloves, basic instrument handling and suturing.

We deliver the course at the beginning of each five-week attachment using dedicated equipment and protected teaching time. Faculty are drawn from the clinical staff likely to be encountered by students in the operating theatre during their attachment. The recurring costs are equivalent to £8.30 per student.

To date 30 students have participated in the course. Feedback, collected after the five week attachment, indicates high subsequent engagement with operating theatre sessions, which students attribute to their familiarity with the environment and being extended opportunities to "scrub in".

Familiarisation courses are inexpensive, and can maximise educational value by allowing students to feel comfortable and learn in unfamiliar clinical environments. We plan to further evaluate and develop our course this academic year.

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S24

Anatomy in Action: comparing medical student and foundation year doctors' educational needs.

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Abstract

Background: Little is known about educational needs surrounding anatomy during transition from medical student (MS) to foundation year doctor (FYD).

Aims: Compare attitudes of MS and FYD towards anatomy teaching and an integrated clinical approach to anatomy teaching.

Methods: A course teaching anatomy by teaching common surgeries of the abdomen and related radiology was delivered to MS and FYD separately. Data was collected through anonymous questionnaires and satisfaction survey validated through pilot study. Pre and post course assessment based on Anatomy Competence Score assessed holistic anatomy knowledge acquisition.

Results: 89.47% MS and 96.55% FYD rated anatomy as important/very important. Cadaver dissection was the most popular method of teaching for MS. Tutorials was the most popular with FYD. 55.26% MS felt only slightly confident, and 6.90% FYD felt confident in applying their anatomy knowledge. Both rated the course as excellent (85.71% MS;75.86% FYD). 95.24%MS to 100% FYD and 52.38% MS to 58.62% FYD felt that the course advanced their knowledge and clinical skills respectively. 78.57% MS and 92.86% FYD felt the course improved their confidence on the subject. The average pre and post course assessment score increased from 66.96% to 96.07% for MS and 55% to 81% for FYD.

Conclusion: Confidence in anatomy knowledge is low amongst MS and FYD. This study highlights the need to view progression from MS to FYD as a transition, not a watershed, with the implicit need to support those involved by continuing education of the basic sciences from university into clinical practice. An integrated clinical approach to teaching anatomy has proven popular and effective in addressing knowledge acquisition and improving confidence during this transition phase.

S25

Dream Team - A pregraduate surgical talent development project

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Abstract

Dream Team is an extracurricular pregraduate surgical talent development project founded in 2009 at Aarhus University Hospital, Denmark. It aims to identify and develop laparoscopic surgical talents during medical school. Dream Team contains two parts: 1) a weeklong boot camp where app. 10 % of 8th semester students acquire basic surgical skils and laparoscopic techniques. The boot camp is completed with an individual test. 2) Identification and selection of the eight best medical students from the boot camp, who will enter a four month mentorship program at a surgical department. During the mentorship the students will be in operation room at least once a week and participate as much as their skills allow.

Dream Team differs from similar pregraduate programs as it selects the most talented students, but does the boot camp select the best and does the mentorship program provide optimal learning? A PhD project aims to critically analyze and develop Dream Team. The PhD project is based on theories about deliberate practice[1] and social learning[2]. In addition, we compare surgical talent development[3][4] with talent development in elite sport in order to inspire, refine and develop Dream Team. This presentation will present preliminary results from the PhD project.

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S26

What are students frightened of?

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Abstract

Background

Despite extensive consistent integrated early clinical experience at HYMS, students have often been noted to struggle in making the transition from the largely University-based Phase I (2 years) to immersion in the clinically-based Phase II. Tutors report student difficulties in adopting an appropriate attitude to learning in this environment; some are noted to respond to this by minimising the time spent on the wards with obvious consequences for their experience and education.

Presentation

A new "Core Clinical Skills and Professional Expectations" course, lasting 2 weeks was introduced in August 2014 for students making this transition. This block aimed to address many areas which students have been noted to struggle with, including professionalism and development of clinical diagnostic reasoning and skills for independent learning.

Evaluation

Students were asked to identify their own fears and anxieties about moving into the clinical environment. All students completed a brief survey at both the beginning and the end of this two week period which included identification of their own sources of anxiety in approaching immersion in the clinical environment. Results of this survey are presented and discussed with implications for clinical teaching

S27

Simulation for the masses not masses of simulation- The integrated use of simulation and PRS voting to teach clinical decision making.

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Abstract

Background

Personal Response Systems (PRS) increase students' understanding, initiates discussion and is an efficient method of collecting answers from large groups allowing immediate feedback. (Innes & Main, 2013) Similarly High-Fidelity Simulation allows low-frequency but high-acuity scenarios to be taught in safe environments (Wang et al, 2011; Daniels et al, 2010).

Specific Idea/Innovation

This study proposes to integrate the use of both simulation and PRS voting to assess if this combined method of instruction assists in teaching clinical decision making for final year medical students and is an acceptable, novel and alternative method of instruction from the student's perspective as it is recognised that simulation is both time and cost expensive.

Methods

Prospective randomized study:

Consenting final year medical students from Aberdeen University, on their surgical placement, were randomised to one of two educational intervention groups. The control group received standard lecture case based discussions. The intervention group received a lecture with simulation and interactive PRS voting. Both groups received 4 scenarios over 4 weeks. Assessment was by single best answer multiple choice questions. In the final week participants completed a 5 point Likert-scale evaluation questionnaire. Approved by College Ethics Review Board

Results

35 consenting students participated in the study. There was no statistical difference in the mean scores between the two groups. Students in the Simulation and PRS group reported that they would like to use this method of educational instruction again (Strongly agree n=18/18), that it was enjoyable (strongly agree n=17/18), that it encouraged student-teacher interaction and was an extremely satisfactory means of learning about medical decision making.

Conclusion

Adding PRS voting to simulation is an effective means of delivering simulation to the masses for teaching medical decision making to senior medical students. Further work should evaluate the cost benefits of simulation for the masses in this respect.

S28

What is the impact of a taught programme on clinical reasoning in 4th year medical students? A comparative study.

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[1]Keele University School of Medicine, Keele, UK, [2]Brighton and Sussex Medical School, Brighton, UK

Abstract

Background

The diagnostic thinking inventory (DTI) measures structure of memory and flexibility of thinking, believed to be relevant in clinical reasoning(1). How much improvement in student DTI scores is course dependent and how much is due to other factors, such as inherent power of natural analysis(2), remains unclear.

Keele's 4th year curriculum includes a clinical reasoning programme situated in general practice. The Brighton and Sussex 4th year programme includes a general practice module, covering advanced communication skills with clinical attachments and simulated surgeries. Clinical reasoning strategies are not explicitly covered.

This offered an opportunity to compare DTI scores before and after a general practice placement with and without explicit clinical reasoning teaching.

Methodology

The DTI offers an inventory of manageable length which asks questions that medical students can answer. The inventory was completed before and after the year 4 general practice programme at Keele and Brighton-Sussex.

Results

134 Keele and 135 Brighton and Sussex students were studied. 105 useable data pairs resulted, (70 Keele, 35 Brighton-Sussex).

Discussion and conclusions

Data analysis demonstrated marked differences in DTI performance between the two groups. We will present the DTI trajectories within each medical school, discuss the results and offer possible explanations for them.

S29

A simulated sensory experience for school children: A student nurse's perspective

Wendy Wright, Fiona Everett, Caroline Adam, Winnie Mcgarry
University of the West of Scotland, Hamilton, UK

Abstract

As the key to quality care for the person with dementia is the ability of others to understand what it is like to live with dementia, experiencing the challenges of some of the cognitive and sensory deficits experienced by some people with dementia first hand may develop understanding of behaviours you may see. Therefore through a simulated dementia experience designed to increase the knowledge and understanding of the schoolchildren and to enhance the student nurses' research and development of dementia awareness it is hoped that improvement in the care of people with dementia will take place.

Student objectives were to research, contribute and deliver dementia awareness sessions to primary and secondary school children and to synthesise their knowledge and understanding of dementia.

Method. In 2013 four schools from South Lanarkshire (three primary schools and one secondary school) (n=120) pupils took part in dementia awareness workshops delivered by the student nurses (part 1 and part 3) from the University of the West of Scotland. Questionnaires were given to students in order to evaluate session delivery.

Findings.

The student nurses generated a 100 % response rate to the questionnaire.

When asked to comment on what they enjoyed about the dementia awareness sessions 48% identified working with children and interacting with pupils and teachers; 20% found that it improved their communication: 24% found it rewarding to have the opportunity of informing and promoting health and wellbeing; 8% enjoyed the opportunity to plan and organise a health promotion activity; 12% gained confidence speaking in a large group; 12% found being able to apply theory; 4% found applying terminology for this age group and for 4% it was the challenge of the whole experience that was enjoyable.

S30

Preparing students to work with Australian Aboriginal and Torres Strait Islander people: A student perspective.

Alison Francis-Cracknell, Claire Palermo, Karen Adams
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Abstract

As a result of colonisation, Aboriginal* peoples in Australia continue to demonstrate significantly higher burden rates of disease compared to non- Indigenous Australians (Australian Bureau of Statistics 2013). A critical human rights issue for healthcare professionals is to attain the skills and knowledge required to ensure improvements to Aboriginal health equity. This research aims to explore inter disciplinary student perspectives on the curriculum currently being delivered to Year 4 Physiotherapy and Year 3 Nutrition and Dieteics students regarding Aboriginal and Torres Strait Islander health to enable this student perspective to be incorporated into effective curriculum design and delivery.

An interprofessional workshop was run for two years to develop the capacity of students to work with Aboriginal peoples. A mix of didactic lectures together with group activities covered content on history related to contemporary health and well being, cultural understandings of health and wellbeing, working effectively with Aboriginal Hospital Liaison Officers in clinical practice, and local examples of successful programs targeting Aboriginal peoples. Students completed a researcher developed pre and post survey that included questions on the importance of including Aboriginal* health in their undergraduate education and topics such as the connection between history and contemporary health outcomes and impacts of racism.

Preliminary analysis indicates 96% of post survey participants rated this curriculum as very important or important in healthcare professional education in particular the Aboriginal Hospital Liaison officer role (100%) . This information has informed a second research project currently underway at Monash University aiming to draw interdisciplinary fields of health sciences together to develop consistent, assessed, evidenced based curriculum that scaffolds over year levels. The aim is to ensure that all Monash health science students graduate equipped to work effectively with Aboriginal peoples and that curriculum is inclusive for Aboriginal students.

*Aboriginal here indicates Australian Aboriginal and Torres Strait Islander peoples

S31

"No distance": UQ interprofessional, intercultural clinical placement model in Hue, Vietnam

Allison Mandrusiak, Anne Hill, Ruth Dunwoodie, Amy Fagan, Teresa Quinlan, Jennifer Strong
The University of Queensland, Brisbane, Queensland, Australia

Abstract

Background: This presentation will describe a model of interprofessional, intercultural clinical placement experience developed by the School of Health & Rehabilitation Sciences at The University of Queensland (UQ), Australia, in partnership with the Office of Genetic Counselling and Disabled Children (OGCDC) Hue, Vietnam. On these placements, UQ students from physiotherapy, occupational therapy and speech pathology, supervised by clinical educators, work for 4 weeks with staff at OGCDC and its partner schools, centres and villages to provide focussed delivery of sustainable management practices for children with physical, communication and learning needs and for their families and staff. Prior to leaving for Vietnam, students participate in a suite of workshops to develop readiness to practice in interprofessional and intercultural contexts. To date, three years of successful placements involving 26 students have occurred, with positive impact each year on approximately 40 teaching staff and volunteers, and 130 children and their families.

Evaluation: A range of evaluation strategies have been employed to investigate outcomes and to refine this model, exploring perspectives from the student, educator, and in-country partner.

Implications: This model provides opportunities for students to build interprofessional and intercultural awareness through participating in clinical placements in an international and diverse community, and foundation for development of future placement opportunities.

S32

Innovative Multiprofessional Simulation Training in Obstetrics

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Abstract

Emergency drills are an integral part of training for all staff working in the labour ward. There are several courses available (eg ALSO, MOET) which are invaluable in allowing clinicians to practice the routines and skills necessary for managing obstetric emergencies. Often the participants are at a similar level or have the same job. Traditionally, team roles are assigned randomly to the group regardless of experience or clinical role. This is stressful and distracting as participants have to think what another would do in a situation instead of practising what they themselves would do. Therefore, we decided to develop an obstetric simulation course for multiprofessionals.

Course information

Two groups of professionals were invited to the course. Each group comprised a senior, junior and foundation obstetric trainee, an anaesthetic trainee and 2 midwives. Each group participated in a scenario with the other group observing. After feedback, the groups swapped and another clinical scenario was played out. Real equipment, a mannequin and simulated drugs were required. The scenarios used were management of haemorrhage and management of eclamptic seizure.

Results and Feedback

The participants assumed their usual clinical role within the team which was valuable as they could concentrate on what would be expected of them in the real life situation. The teams observed that communication within the team with strong leadership is necessary to manage emergencies well. They found there needed to be greater direction from the team leader so that no clinical tasks were missed out.

Future

In the future, we intend to include consultant and clinical support staff in our courses. We will also add different types of scenarios so that there may be more emphasis on anaesthetic or midwifery complications. It is also important to practice scenarios that are infrequent but have important consequences, such as amniotic fluid embolism.

S33

Using healthy ageing as a vehicle for interprofessional education

Sharyn Hunter, Catherine Johnston, Rohan Rasiah, Elysa Roberts, Gjyn O'Toole, Lesley MacDonald-Wicks, Haley Croft, Clint Newstead
University of Newcastle, Newcastle, NSW, Australia

Abstract

This presentation will provide a description of a project which explored the feasibility of using healthy ageing as a vehicle for interprofessional education (IPE) with undergraduate health professional students.

There is increasing awareness of the importance of maintaining the health of older people (WHO, 2002). Promotion of healthy ageing requires an interprofessional approach (WHO, 2002; Health Workforce Australia, 2012) yet the majority of the education of Australian health professionals continues in discipline specific programs with little evidence of IPE (Lapkin, Levett-Jones & Gillian, 2012) or IPE and health promotion of older people (Kent & Keating, 2013).

A project is currently underway using a strategy that engages students from a range of health professions in IPE and health promotion of older people. Twenty students from five health professions are being recruited nursing, physiotherapy, nutrition and dietetics, pharmacy and occupational therapy. This strategy consists of two stages: firstly the students from different health professions are paired and then interview an older Australian who is living in the community using a validated tool, the Healthy Ageing Quiz (HAQ) (Cyarto, et al., 2013); and secondly the student pair present their findings from the interview at an interprofessional case conference (ICC) with other interprofessional student pairs, and educators from the different health professions. An educator from each health discipline will also lead a discussion, based on the interview findings, about an aspect from the HAQ. At the completion of the ICC the student pair will create a Health Action Plan which will be reviewed by the educators. This project is being evaluated to determine its ability to develop the students' IPE competencies of role clarification, communication, team functioning and collaboration, and the students' understanding of health promotion of older people.

S34

Establishing a Community of Practice to advance clinical skills education and practice for teaching sensitive examinations: Creativity or added complexity?

Neil Sefton, Richard Turner, Christine Clifford
University of Tasmania, School of Medicine, Hobart, Tasmania, Australia

Abstract

Establishing a Community of Practice to advance clinical skills education and practice for the teaching of sensitive examinations: Creativity or added complexity?

This presentation will focus on our experience of establishing a Clinical Teaching Associates (CTA), Community of Practice (CoP), as an approach to support our sensitive examination teaching program.

CTAs in our program are men and women from the community, employed on a casual basis in a challenging, quasi-partnership role with the University of Tasmania (UTAS). As Universities are encouraged to increase community engagement to support the delivery of quality teaching, establishing a CTA CoP is one way of achieving this. A CoP has the advantage of bringing together a community of people with a common goal, to share experiences and views. The CTAs are engaged as trained as specialist simulated patients to support a safe learning method of a acknowledged difficult set of genital examination skills, to a variety of students. CTAs have evolved to support the delivery of such programs, but also bring their experiences and expectations to the learning environment.

The project objectives are to establish a sustainable CTA CoP through collaborative, guided meetings. The project offers numerous benefits to CTAs practice, strengthens UTAS community partnerships, supports teaching and learning priorities, and adds to the future research agenda. Cultivating a CoP nevertheless has a number of challenges.

S35

The Hidden Curriculum in Near-Peer Teaching

Lisa McKenna, Brett Williams
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Abstract

Background: Near-peer teaching (NPT) involves senior students teaching junior students clinical skills. It provides opportunities for peer-teachers to develop a number of skills such as mentoring and facilitating effective learning. NPT provides important skills development for graduates to support learners in the clinical setting. This presentation reports on how NPT learning encounters deliver more than merely intended learning outcomes, but also an equally valuable hidden curriculum.

Methods: NPT has been used at Monash University in nursing and paramedic curricula for a number of years. Following these learning experiences, and as part of ongoing research around the topic, we have conducted focus groups with nursing and paramedic students and tutors which have been analysed using thematic analysis. In all of these, aspects of hidden curriculum have emerged.

Results: Focus groups have uncovered a range of unintended learning outcomes, particularly for junior students. Most often such learning encompasses issues around the course, managing themselves, clinical placement experiences and expectations. Senior students hold a valued position and validate for junior students what they are learning.

Conclusion: NPT offers more learning possibilities than those intended. The content of these learning encounters is not teachable in regular classroom activity as near-peer teachers possess an authority over this type of information that academics do not have. More work is required to further elicit the impact and scope of the hidden curriculum in such learning and teaching encounters.

S36

Inter-professional learning that makes sense

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[2]*University of South Australia, Adelaide, SA, Australia*

Abstract

Introduction

Medicine at the University of Adelaide is a 6-year under graduate program. Pharmacy students at the University of South Australia complete a 4-year under graduate program.

Both groups of students commence learning practical therapeutics predominantly during their clinical attachments (Medicine in Year 4 and Pharmacy in Year 3).

Aims

To evaluate perceptions of an inter-professional workshop to develop prescribing and medication counseling skills of students.

Methods

Year 4 Medical Students undertaking their Medical unit attachment and Year 3 Pharmacy students in their pharmacotherapeutics course were scheduled to attend a 1-hour workshop session. The session involved inter-professional groups of 2-3 students completing tasks relating to a case scenario. Tasks included: prescribing for the case; determining doses; predicting adverse effects and role-play of consultations.

Following the session students were asked to rate the session in terms of learning value, enjoyment, benefits of an inter-professional group and appropriateness for their stage of learning.

Results

Participation in the activities was good. Students rated the sessions very highly in terms of learning value and enjoyment. Most considered the sessions relevant and appropriate for their stage in learning. They valued the interactive and practical nature of the sessions.

In particular students commented on the benefits of interacting with students from another discipline and how their skills were complementary.

Conclusion

The inter-professional workshop format was highly valued as a learning opportunity by both medical and pharmacy students. The pairing of clinical students from different professional groups at a similar stage of learning was key to the success of this format. Feedback from students will be used to further refine and develop inter-professional learning in both programs.

S37

From Fairies to Simman: Lessons from Tolkien for simulation based medical education

Lysa Owen
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Abstract

This presentation explores theoretical frameworks for realism in Simulation based education (SBE). This merits discussion as much research and literature focusses on enhancing realism, although it has been argued that more (physical) realism does not necessarily lead to better learning. (1) This presentation asks "Can the concept of primary and secondary realities, as described by Tolkien,(2) help us understand what we are trying to achieve with reality, realism and authenticity in SBE". This presentation relates Dieckmann's (3) domains of physical, semantical and phenomenological realism to Tolkien's primary and secondary realities. Results of a qualitative analysis of learner's attitudes to simulation were iteratively compared with existing theoretical models of reality and realism and showed that although physical and semntical reality may be flawed, learning was still valued. However, as Tolkien's conceptualisation suggests, if the reality of the created world is internally consistent then one can fully engage in the secondary reality. Understanding of, and attention to detail in creating internal consistency within the secondary reality may lead to more effective engagement and consequently better learning, as well as more cost-effective use of resources in simulation based learning.

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2. Tolkien, J.R.R. Tree and Leaf. New York: Harper Collins; 1964.

3. Dieckmann P, Gaba D, Rall M. Deepening the Theoretical Foundations of Patient Simulation as Social Practice. Simulation in Healthcare. 2007;2(3):183-93 10.1097/SIH.0b013e3180f637f5.

S38

Longitudinal care of standardized patients: An innovative curriculum to teach senior medical students clinical care and electronic health record skills

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Abstract

Opportunities for future physicians to practice key clinical skills are essential. At one US medical school, students participate in a four-year Doctoring Program which includes a one-week Internship Preparation Elective (I-Prep) for about-to-graduate medical students. In this course, every senior medical student participates in a series of Longitudinal Patient Encounters in one of three clinical tracks (internal medicine, surgery, or pediatrics) depending on their future specialty. In each track, the student sees the same standardized patient once daily for a different clinical issue at each visit. With the assistance of 1) an electronic health record (EHR) teaching system (Neehr Perfect) and 2) an innovative behavior grid for preserving relationship-centered interviewing skills in the computerized setting, students act as the continuity-of-care physician for the duration of the patient's accelerated treatment course. An example of this treatment course includes a regular check-up, an emergency room visit, and an inpatient visit. The goal of this curriculum is to create a lived experience of the typical responsibilities of a new physician caring for a patient with a common medical condition over time.

Based on this paradigm, workshop participants will first become familiar with the overarching goals and structure of the Doctoring Program and its capstone I-Prep Elective including the development, implementation, and evaluation of three different longitudinal patient tracks, each with three separate encounters. Via demonstrations by workshop leaders, participants will have the opportunity to experience two different encounters in one track, both as learners and as instructors. In addition to their clinical decision making, students' skilled use of the EHR is formally assessed. Discussion of the merits and limitations of this creative curriculum will follow. Finally, participants will be invited to consider the potential use and application of this material in their own educational settings.

Reference: Wald HS et al. Acad Med. 2014;89(3):380-6.

Workshop Submissions

Participants will:

1. Become familiar with the four-year Doctoring Program at one US medical school, including a one-week Internship Preparation Elective (I-Prep) for senior medical students.

2. Experience, both as learners and instructors, a key feature of the I-Prep Elective: three different longitudinal patient tracks with standardized patient cases, an electronic health record teaching system, and an innovative behavioral grid.

3. Consider the merits and limitations of presented curricula and assessment tools.

Intended audience: Undergraduate and graduate teachers, those interested in pedagogy for longitudinal clinical care, written documentation and its evaluation. All experience levels welcome.

Maximum participants: 40

S39

Physiological and Psychological Anxiety in Novice Nurses in a Simulated Setting

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[2]Saudi Arabia Cultural Mission, Canberra, Australia

Abstract

Simulated learning environments can cause anxiety for undergraduate students. Anxiety can impede learning, the application of knowledge, interfere with critical thinking and decision making (DeMaria et al., 2010), and impede technical and nontechnical skills (Keitel et al., 2011). However, research on this issue is scarce. The primary aim of this study was to investigate the effect of anxiety on undergraduate nursing students' (n=60) educational outcomes in a simulated setting. This study adopted a multiphase mixed methods research design comprising two phases. Physiological anxiety was measured by monitoring participants' Heart Rate Variability (HRV) and psychological anxiety was captured according to the Stressors Appraisal Scale (SAS) during two simulated emergencies. Participants' outcomes (technical and non-technical performance) were assessed through OSCEs and a teamwork assessment tool [TEAM]. Photo-elicitation interviews were used to capture participants' decision-making processes incorporating Schatman's dimensional analysis process (Kools, McKCarthy, Durham, & Robrecht, 1996). In Phase two experts reviewed performance for additional insights into performance issues. Preliminary qualitative and quantitative outcomes (OSCE, TEAM, SAS and HRV data) will be reported in this presentation.

S40

Teaching Student Teachers: the challenges and rewards of developing a 21st Century teaching skills course for medical students.

David Blanchard, Jon Broad, Ashley Howarden, Victoria Silverwood
Keele University, Keele, UK

Abstract

Context: Although teaching is a core clinical skill for medical students and all doctors need to be able to teach, few medical schools offer intracurricular training in teaching skills1. Introducing a new teaching course into an established curriculum may present challenges but can also produce rewards.

What we did: We developed a Teaching Student Teachers (TST) course to introduce students to a range of teaching skills. We faced, and overcame, challenges including who, what, when and where to teach; advertising, obtaining student feedback and finding tutors and other resources.

What happened: The TST course ran for three hours over two separate evenings. Each session consisted of whole group presentations and small group practical work. The presentations covered feedback, small group teaching, basic educational principles and evaluation of teaching. The practical sessions involved skills teaching and small group presentations. The course was piloted on 22 Year 4 medical students and evaluated by immediate student completion of feedback forms.

What we found: An evaluation form completion rate of 100% (n=44) was achieved. All (100%) of the evaluation forms described at least one positive aspect of the course including: overall course content (62% of forms), teaching a skill (14%), giving a presentation (14%), and the size of groups involved (14%).

Suggestions for improvement (67% of forms) included: environmental factors (12%), having more challenging topics for presentations (12%) and making the skills taught more complex (12%).

Conclusion: Despite the challenges, an initial pilot of the TST course showed that students found it rewarding, supported its overall structure and provided useful suggestions for its improvement. Further challenges remain as we expand provision of the course into the undergraduate curriculum.

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S41

The Simulated Ward Rounds: A University of Sheffield initiative involving patients from the 'Patients as Educators' Programme

Amir Burney, Martin Hague, Emma Hudson, Lucy Morgan
University of Sheffield, Sheffield, UK

Abstract

The 'Simulated Ward Rounds' are an annual event organised by the Clinical Skills Team, University of Sheffield. Introduced in 2007 for fourth year medical students, the concept was extended to third and final year students in 2008. The primary aim of the simulated ward rounds is to give students an opportunity to interact with real patients and to improve their history taking, physical examination and communication skills. All patients are recruited from the Patients as Educators group (PaE) Sheffield and the simulated ward rounds are conducted at the Clinical Skills Centre at the Northern General Hospital, Sheffield.

The Academic Lead for Clinical Skills is responsible for the briefing, overall facilitation and debriefing. Final year students help facilitate the simulated ward rounds organised for third year medical students and Foundations Doctors (FY2) help facilitate the ward rounds conducted for final year students. At the end of each individual interaction medical students are given feedback on their performance by the patient and facilitator.

The students' and patients' evaluation of past simulated ward rounds has demonstrated the efficacy of the learning experience. The program has been very well received both by medical students and the Patient as Educators group. This is a work in progress and we shall be presenting student and patient evaluations from the "Simulated Ward Rounds" scheduled between October 2014 and November 2014.

Medical students get the opportunity to see patients in a controlled and safe setting, gain an insight into their own understanding of a variety of patient conditions and have an opportunity improve history taking and physical examination skills. Patients provide powerful feedback to the students thus helping students develop confidence for future. The final year medical students and Foundation Doctors obtain valuable experiences of facilitating a learning experience and giving feedback.

S42

Acting 4 Health: Recruiting and training actors for simulated patient roles in health care simulation

Patrea Andersen, Joanne Loth
University of the Sunshine Coast, Queensland, Australia

Abstract

Simulated patients, also known as patient actors, are commonly used in simulation. The quality of the actors' performance is vital to successful learning outcomes. Accessing people with the appropriate skill set and managing the associated costs of employing actors is a challenge for education providers. This presentation reports research outcomes from an interdisciplinary project designed to prepare, recruit and train drama students for simulated patient roles in nursing simulation. The undergraduate drama elective course 'Theatre Internship' was modified to include 100 acting hours and a two day Acting 4 Health Programme. Action research (Hearn et al., 2009) incorporating three cycles of development and reflection were employed to evaluate the programme and its impact on learning in simulation. A modified Simulation Satisfaction Experience Scale (Levett-Jones et al., 2011) and focus group interviews were used to collect data. Results from the research and information regarding the programme setup and content will be reported. The presentation will highlight lessons learnt during the implementation process and make recommendations for future development. The presentation will be of interest to academics and clinicians using simulation to teach clinical skills. While established for Nursing and Midwifery the information provided in this presentation is transferable to other disciplines.

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S43

Use of video-analysis to evaluate the effectiveness of debriefing for interprofessional simulation with medical and nursing students

Ruth Endacott[1,2], Thomas Gale[1], Anita O'Connor[1], Martin Roberts[1]
[1]Plymouth University, Plymouth, Devon, UK, [2]Monash University, Melbourne, Vic, Australia

Abstract

Interprofessional learning (IPL) has been shown to improve attitudes and awareness of other professionals' roles with improved patient outcomes as a result. Simulation is increasingly used for IPL; inter-professional debrief provides a key learning opportunity in IPL.

The aims of this study were to: 1) evaluate levels of facilitation required to engage interprofessional groups and 2) evaluate effectiveness of questions used to elicit specific learning outcomes. We recruited 50 final year medical students and 47 final year nursing students to work in inter-professional teams managing two simulated patient scenarios.

We analysed 20 video-recorded interprofessional debriefing sessions using the TeamGAINS model (Kolbe et al 2013) and the WHO learning outcomes for IPE (Thislethwaite 2010). Overall, the debriefing videos contained mostly narrative ('what happened?', 'how did you feel?') and advocacy-inquiry ('I saw you trying to ... what was on your mind?') type questioning by facilitators. By the second debrief, questioning flowed more naturally and guided team self-correction ('what alternative could you have used?') was increasingly apparent. Feedback from the analysis, with video-clips, was shared with the faculty. Video analysis was an appropriate method for analysing quality of interprofessional debrief; TeamGAINS provides a useful framework for debrief facilitation in an interprofessional context.

Kolbe M et al TeamGAINS: a tool for structured debriefings for simulation-based team trainings. BMJ Qual Saf 2013; 22: 541-553

Thistlethwaite J et al. Learning outcomes for interprofessional education (IPE): literature review and synthesis. Journal of Interprofessional Care 2010; 24: 503-513

S44

Re-designing a final year bachelor of nursing subject in the pursuit of clinical reasoning skill development through simulation.

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Abstract

Reflective learning and clinical reasoning skills are highly valued and even deemed essential in healthcare professions where constantly changing situations require effective and efficient reasoning and decision-making processes (Parker & Myrick, 2009). Research suggests the capacity of simulation-based learning (SBL) as a technique to stimulate the development of metacognitive processes such as clinical reasoning is dependent upon a purposeful and structured approach to curriculum design (Dreifuerst, 2010; Hoffman, 2007; Kuiper, Heinrich, Matthias, Graham, & Bell-Kotwall, 2008; Lapkin, Levett-Jones, Bellchambers, & Fernandez, 2010).

In October 2014, the Australian Catholic University School of Nursing, Midwifery and Paramedicine re-designed a final semester Bachelor of Nursing subject from lecture-based to simulation-based mode of delivery, with a focus on developing clinical reasoning skills. The ensuing simulation program took a unique approach of incorporating two existing resources designed to develop clinical reasoning skills in undergraduate nursing students; written scenarios based upon an eight-step clinical reasoning framework (Levett-Jones, 2013); and the validated six-step Debriefing for Meaningful Learning© (Dreifuerst, 2010) debriefing framework.

The success of this re-design was dependent upon specialised knowledge and skill in both the facilitation of the simulation program and the Debriefing for Meaningful Learning© framework. This presented as a significant challenge as the subject was to be conducted simultaneously on five campuses across the eastern seaboard of Australia, involved over 1500 undergraduate nursing students, and in excess of 30 academic staff both continuing and casual; many of whom had limited prior experience of SBL.

This presentation will present: the design principles underpinning this innovative curriculum; an overview of the simulation program; and the strategy employed to support academic and technical staff. Finally, preliminary data will be presented regarding student and staff satisfaction with this subject.

Note: changes in student clinical reasoning will not be presented as this is the focus of future research.

S45

Increasing students' preparedness for undertaking community nursing roles through simulation.

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Abstract

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Gillian Morris, Lecturer, Queen Margaret University, Edinburgh

Increasing student nurses' preparedness for undertaking community nursing roles through simulation.

Background

Community nursing teams are specialist in the delivery of care to older adults, contributing to the increasing provision of complex care in community settings, a process which involves some of the most vulnerable members of society and often in extremely challenging environments (Department of Health, 2013). In the United Kingdom, nurse education programmes must prepare nurses to deliver increased care outside hospitals (NMC 2010).

Simulation has an established history in preparing nurses to become competent in clinical skills. Undergraduate nurse education has traditionally focused simulation on more hospital-based scenarios. However, Unsworth et al (2011) argue that simulation has not been developed to its potential for primary care environments.

Students will participate in an innovative low fidelity simulated home scenario which allows the practising of clinical skills taught during the year. Students assume the roles of patients, carers and nurses.

Study Aim

This study aims to evaluate first year nursing students' learning around caring for patients within a home setting through the use of simulation.

Method

A mixed method evaluation study will be undertaken with a single cohort of 40 undergraduate first year student nurses. Focus group interviews and questionnaires will be used to gather data for analysis.

Implications for Practice

It is anticipated that community focused simulation can better prepare students for nursing patients in home environments.

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S46

Dietetics Placement Education: An online module for practice educators

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Abstract

Introduction: Historically The London Dietetics Placement Team based at Kings College London and London Metropolitan University work in collaboration to deliver a two day 'Introduction to Practice Education' workshop for dietitians new to student training.

Dietitians find it difficult to attend training as highlighted in the BDA Training Needs Survey (2013). 95% of respondents reported they would like to participate in online learning courses which they could access at a time convenient for them.

The London Dietetics Placements Team therefore designed a short course for dietitians to enable them to be able to supervise students on placements. The course which takes approximately 6 hours to complete covers placement expectations, teaching, assessment and giving feedback to student dietitians on placement and the responsibility of a student trainer.

Results: Since January 2014, 32 dietitians working in full range of placement sites (acute, community, specialist and private). All those who completed the course found it effective in increasing their level of knowledge. Reported benefits included skill developing in providing constructive feedback, increase confidence to teach students and encouraging self-reflection.

Conclusions: The online course has been successfully launched and enables dietitians to provide appropriate and effective placement training.

British Dietetic Association (BDA) (2013) BDA Training Needs Survey. [online] Available from: www.bda.uk.com/ced/TrainingNeedsSurvey.pdf (accessed 19/11/2013)

S47

Value of a national simulation education program: a qualitative description

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Abstract

Background

The National Health Education and Training in Simulation (NHETSim) program (2012-2014) aims to provide Australian health professional educators with foundation level training in facilitating simulation-based education [1]. Participants can either complete modules online or via workshops or a mixture of both. There are two core modules plus eleven electives. The electives cover a range of simulation modalities, including part-task trainers, manikin-based simulation and simulated patients.

As of September 2014, NHETSim has trained over 2900 educators.

Methods

A series of 24 individual interviews was conducted in 2013 as part of a program evaluation. Responses to questions which explored the value of NHETSim were extracted from verbatim transcripts. A preliminary thematic analysis drew from the 'qualitative description' tradition, which seeks to describe the participants' experiences, close to their own perceptions [2,3].

Results

Four major themes were identified:

- 1) broadening horizons
- 2) learning aspects of debriefing and briefing
- 3) structuring and planning
- 4) increasing confidence.

Conclusions

The most striking finding was the value that participants placed upon introductory skills, such as spending more time on debriefing or structuring a simulation session. In addition, there was a sense that participants also began to "think differently" about simulation-based education and this might affect future approaches to facilitation.

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S48

ACORN - A Community Orientated Resource for Nursing: a bespoke primary care simulation suite.

Caroline Adam, Winifred McGarry, Margaret Brown
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Abstract

The University of the West of Scotland (UWS) has developed a unique Primary Care simulation environment for pre and post registration nursing and midwifery students. ACORN, A Community Orientated Resource for Nursing is a bespoke designated Primary Care suite where students are able to simulate events which commonly take place within a community setting. The learning takes place in 'real time' as the students progress through 4 designated areas; the DOMUS Home Care environment, Reception area, GP Room, and Treatment Room. Additionally, UWS has collaborated with NHS 24 and is in the process of developing an 'out of hours' telecommunication station which will support students and provide opportunities to further develop prioritisation and decision-making skills.

The scenarios are developed by staff who have experience in Primary Care. Students also contribute to the scenario portfolio by developing their own scenarios based on personal reflection. Student involvement allows for a sense of ownership and encourages engagement in the simulation process. Scenarios are uploaded onto hand held tablet devices for use by the students and facilitators, with video links and additional resources to promote and ensure effective learning.

This innovative approach to teaching and learning has been piloted with one cohort of Year 3 students (n=133). Evaluations are overall positive, highlighting the importance of early and accurate assessment, problem solving skills, effective communication and identification of strengths and weaknesses in clinical practice.

Simulation provides an active learning strategy where any potential mistakes can be made within a safe and supported learning environment. This provides students the opportunity to practice technical and non-technical skills to enhance competency development moving them further along the continuum toward competent performance. (1)

Used in conjunction with the University's existing Acute simulation, we believe that ACORN is the missing link to simulate the *complete patient journey*.

S49

Feedback and evaluation of clinical skills using a customized online learning portfolio

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Abstract

Feedback and evaluation of clinical skills using a customized online learning portfolio

Context

In 2014, PebblePad, an online learning management system and ePortfolio, was introduced in the radiography program at Monash University replacing paper-based workbooks as a repository for recording of clinical skills and assessment. While portfolios may be used to evaluate different learning goals they are especially useful where higher levels of learning are expected, such as critical thinking (Davison et al, 2003).

What happened

A customized ePortfolio allows Monash radiography students to demonstrate learning outcomes, critical thinking, nursing tasks, evidence-based and reflective practice, displaying their achievement of clinical competence through multifaceted learning portfolios comprising images, text and other media.

For radiographers, the image is an essential component of practice. The ability to upload high quality images from the clinical site and critique these images is invaluable for their development. Further, synchronous and asynchronous communication allows staff to provide support and intervene where necessary - especially at risk students.

Conclusion

A customized ePortfolio encompassing varied evidence and feedback allows authentic appraisal of progression and achievement of competence throughout the continuum of clinical learning with the potential to carry on into future practice. This presentation will demonstrate how the ePortfolio and associated tasks developed by Monash Radiography staff support clinical learning and achievement of clinical competence.

References

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S50

Does use of Bluetooth stethoscopes enable first year medical students to more accurately identify abnormal heart and lung sounds ?

Magdy Abdalla, John Frain
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Abstract

Aim

Does the use of electronic stethoscopes allowing contemporaneous auscultation by students and teacher improve clinical competence of first year medical students in the interpretation of lung and heart sounds?

Background

Studies suggest a paucity of auscultation skills in senior students, trainees in residency programs and qualified clinicians [1,2]. More training in auscultation is required during undergraduate and postgraduate speciality training [1,2]. Technological advances may help facilitate this [3]. Students may more easily learn complex sounds such as splitting of heart sounds at an earlier stage [3]. Use of electronic stethoscopes aid feedback to the learner during auscultation and help address the issue of examiner variability. They may have also a place in assessment. This study examines their use at an earlier stage of training than previously.

Method

First year students without hearing impairment or previous auscultation were randomised to training using either electronic stethoscopes or the traditional model. Following training each group's proficiency in interpretation of sounds was assessed.

Data analysis

Quantitative and qualitative data was collected for each group. Comparison of the intervention and control was made using a Mann Witney U test. Qualitative data was analysed for each group.

Results

These will be discussed during the presentation. (200 words)

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S51

Operating Anatomy: student satisfaction and knowledge acquisition through an integrated, clinical approach to teaching anatomy

<u>Alison Bradley</u>, Jon Griffin, Graema Guthrie
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Abstract

Background: Anatomy teaching is in transition due to contemporary changes in undergraduate medical curriculums. New methods of delivering anatomy teaching must be developed. Evidence shows that combining surgery, radiology and anatomy teaching results in increased interest and acceptance amongst medical students as well as increased student confidence in clinical skills and knowledge base [1].

Aims: 1.) Deliver a course integrating surgery, radiology and anatomy. 2.) Determine student satisfaction and impact on student knowledge, comprehension and confidence in knowledge and in clinical skills.

Methods: A pilot study was carried out on senior medical students rotating through general surgery. This validated course assessment and satisfaction questionnaires. A course teaching abdominal anatomy through common general surgeries of the abdomen and related radiology was delivered. A pre and post course assessment based on Anatomy Competence Score which incorporates MCQ, OSPE and OSCE to assess the three domains of: theory, practical application of knowledge and clinical application of knowledge respectively was carried out [2].

Results: Student satisfaction was high. 85.71% rated the course as excellent and 92.85% would recommend the course to fellow students. 95.24% and 52.38% felt that the course advanced their knowledge and clinical skills respectively. 78.57% felt the course improved their confidence on the subject. The average pre and post course assessment score increased from 66.96% to 96.07%.

Conclusion: An integrated approach to teaching anatomy proved popular with students and improved both student knowledge and confidence.

References:

1. Dettmer S et al. 2010. Teaching surgery, radiology and anatomy together: the mix enhances motivation and comprehension. Surg Radiol Anat 32:791-795

2. Schoeman S, Chandratilake M. 2012. The anatomy Competence Score: A nre marker for anatomical ability. Anat Sci Educ 5:33-40

S52

Video-reflexive ethnography: Enhancing clinical skill development by making patient encounters count in health care education

<u>Kenneth Walsh</u>[1,3], Patrea Andersen[2], Rick Iedema[1,5], Kim Walker[1,4], Karen Ford[1,3]
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Abstract

Despite clinical innovation, new information technologies and teaching methods, little has appeared to have changed in the way in which we research and evaluate the outcomes of continuing education in healthcare, and how this impacts on practice improvement. This presentation explores the use of video-reflexive ethnography (Ledema, Mesman & Carroll, 2013), as a technique to capture clinical encounters within healthcare environments that can be used to facilitate continuing education. This includes teaching clinical skills, patient safety, enhancing improvement and reshaping organisational practices. Drawing on the principals of video feedback research (Heath and Hindmarsh, 2002; Pink 2007), comparable to debriefing and the use of video and live streaming in observational simulation, this approach facilitates an opportunity to critically analyse encounters and initiate discussion to determine learning and development needs. How the technique is applied, the challenges and opportunities for using everyday practice encounters as learning and practice development will be discussed. This presentation will be of interest to academics and clinicians interested in continuing education and the use of technology in enhancing learning.

References:

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S53

Tension Pneumothorax recognition and immediate management: Does simulation and small group work fill the lack of specialist cardiothoracic teaching?

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Abstract

Background: The recognition and management of tension pneumothorax is an important competency throughout a doctor's career. The teaching of this has largely relied on didactic teaching, ward-based teaching & tutorials, with little opportunity for active simulation in a safe environment.

Aims and objectives: To assess whether a small group tutorial highlighting the dangers of tension pneumothorax followed by a simulated learning session with active management could be an adequate substitute for ward-based teaching. It will also look to establish whether or not both methods of teaching improved: a) knowledge of the risks of tension pneumothorax; b) competency in the skills required managing this condition and c) the confidence of the student in dealing with this scenario.

Study population: Two groups of students have been identified. One based in Aberdeen, which has an onsite cardiothoracic surgery unit; the other in Inverness which does not have a cardiothoracic unit and relies on teaching in a tutorial and simulator based environment. Three complete rotations will be surveyed.

Method: Students will be surveyed at the beginning and end of each block. The survey will use a combination of visual analogue scales and multiple choice questions to assess: knowledge of and confidence in dealing with a tension pneumothorax.

Two overall comparisons will be made. The first will look at each individual group, to look for a correlation with time spent on the block and a progression in knowledge skills and confidence in dealing with a tension pneumothorax. There will then be a comparison made between the two groups, again assessing the same variable.

Results: We expect that small group tutorials and simulator sessions will prove to be an adequate substitute for ward-based teaching.

S54

The Use of Simulation in Trauma Radiography Education

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Abstract

Introduction

Simulation is a well established clinical teaching tool within nursing and medical undergraduate education. However there is a lack of evidence for its use in undergraduate allied healthcare education (Alinier et al, 2014).

Mackay et al (2008) found that diagnostic radiography graduates felt unprepared for multi-trauma radiography due to a lack of 'hands on' experience in this area. This finding poses a conundrum for undergraduate radiography education providers as how best to facilitate radiographic practice in trauma radiography. This study investigates the use of simulation in trauma radiography education.

Methods

Trauma simulation equipment (emergency monitors, Accident and Emergency (A&E) trolleys and head immobilisers) were introduced in the clinical skills area during a trauma radiography role play simulation.

A focus group (n=5) was conducted with a convenience sample of radiography students involved in the simulation who had subsequently been on an A&E placement. The focus group interview was transcribed verbatim and analysed using thematic analysis.

Results

Although this low fidelity simulation was perceived positively, analysis of the students' perspectives regarding simulation in trauma education disclosed the following main themes; the need for 1) more realistic simulation, 2) trauma simulation with other healthcare students, 3) use of volunteer patients to generate realism in simulated practice and also an overall lack of confidence in the trauma environment.

Conclusions

High fidelity inter-professional simulated trauma education incorporated into undergraduate diagnostic radiography courses can provide an effective, safe environment for radiography practice and potentially alleviate the perceived lack of confidence in the trauma setting. Further research is required to explore the impact of simulation in diagnostic radiography trauma education.

S55

Assessing Basic Life Support Skills in Pre-registration nursing-A wrong or a right way?

Nina Raphaela Godson, Carol Oldroyd, Alison Day
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Abstract

Basic Life support is mandatory within Pre-registration health care courses with the emphasis on delivering quality chest compressions(1). Non- traditional teaching methods may be more efficient,and previous research has reported skills acquisition and retention using self directed learning strategies(2).This RCT compared the skills acquisition and retention of students recieving a self directed e-learning package with those recieving face to face traditional teaching instruction.150 participants were recruited,resulting in a 131 complete sets of data for teh initial assessment(a standardised 3 minute scenario).The sample consited of 58 face- to-face and 73 online students.Data was collected using video footage,alongside a computerised RAS manikin and scored using the Cardiff BLS test(3)adapted version.Data analysis used non parametric Mann Whitney tests, and Wilcoxon Sign Rank tests to compare each group to RC(UK) guidleines for compression quality.The results showed a significant difference in teh mean number of compressions performed correctly(face to face group 40. 47 and on-line group 25.97;P=0.035,both groups were significantly short of the expected number,indicationg that there were concerns with acquisition of BLS skills,regardless of the teaching methods(4)This presentaion will examine some of the possible underlying reasons and explore the challenges of promoting quality compressions within the constraints of the present curriculum.

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S56

Development and Accreditation of a National Standardised Training Program for SPs & Creation of Centralised Database of SPs for Hire

Beverley Sutton[1,2], Rachel Riordan[1], Debra Nestel[2], Tanya Edlington[1]
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Abstract

Background

Simulated patients (SPs) have been part of health professions education in Australia for approximately 15 years. Traditionally, recruitment and training was done piecemeal by different programs, resulting in inconsistent training as well as a general lack of understanding among SPs about the educational philosophy of using simulation in health professions education. Further, the logistics and cost of recruiting and employing SPs became prohibitive for many programs. The objective of this project was to develop a model to provide consistent training in SP practice across Australia. Those SPs trained would become part of the database of SPs for hire. Summary of work

First, experienced SP educators were engaged to create and deliver a one and a half day training course pilot for new and experienced SPs. Four pilots were delivered providing a continual improvement process. A facilitators' guide has been developed to allow for replication with fidelity across Australia.

Secondly, HEAL, as a Registered Training Organisation (RTO) submitted the course to the Australian Skills Quality Authority (ASQA), which is the Australian governing body for accreditation of education and training courses. The course achieved accreditation in January 2014. HEAL offers the only accredited course in Simulated Patient Practice in Australia (& possible internationally).

Finally, a coordinator was hired to create the supporting documentation and develop processes and procedures for the program.

Summary of results

Course participants have provided positive qualitative and quantitative feedback. Even experienced SPs reported having gained a new understanding of role preparation, simulation in education and feedback.

To date, health professions education programs have started to hire SPs from the database with very positive evaluations.

Conclusions

Accreditation of the training course has brought a new level of professionalism to the SP arena. Future plans include developing different levels of training to allow for differing complexity in SP practice.

Perspectives in mastering mastery in clinical skills

Patricia Green, Jo Bishop, Tracy Nielson, Patricia Johnson, Victoria Brazil
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Abstract

Aims

To ensure all students on graduation are able to demonstrate evidence of mastery of all procedural skills required. Mastery is used as a term to demonstrate a level of expected proficiency.

Historically, students would be required to undergo assessment of procedural skills during OSCE examination only. We recognise that all students should be competent at all procedures before their intern year and that the continual assessment throughout the program at a passing or failing level will not only drive student engagement but improve safety.

Method

Within the Clinical Skills theme at Bond, a range of competencies have been identified that require demonstration of mastery as appropriate for the specific year of learning. Each procedural skill is taught by demonstration, small group teaching and supplemented with videos developed by faculty for student's self-directed learning. The marking criteria checklists are available to students.

Result

All students are assessed individually and given feedback, verbally and written format. The 'mastery assessment' takes place using simulated patient or task trainer with an educator in the room. Feedback includes a review of the checklist; what was done correctly, what was omitted and how the student could improve. On reaching the required level of skill, students were deemed to have achieved "mastery". Within year 3 students are required to demonstrate competency of the published skills before they are eligible to sit their end of year exam.

Conclusion

The one-on-one teaching without time pressure as well the published outcomes gives students a clear understanding of what is required to achieve a pass. We recognise that students will not always need to perform many of these procedures under 'stressful' conditions. Minimal numbers of students have required repeat attempts, several students per year have needed focused training and more attempts to 'pass'.

S59

Building Capacity for Interprofessional Learning in Clinical Placements: Reflections on Developing an Evidence Base for Learning, Teaching & Collaborative Research

Kathryn Ogden, Jessica Woodroffe, Kim Rooney
University of Tasmania, Launceston, Australia

Abstract

In an age of complex patient needs, the ability to communicate and collaborate for effective patient care has never been a more important attribute of healthcare graduates. This project sought to develop and implement a suite of interprofessional learning (IPL) activities to be implemented in a range of clinical learning settings. A series (n=12) of IPL activities for medical, nursing and allied health students (n=62) were developed by a team of multidisciplinary clinicians and educators and delivered through clinical placements over 12 months. These activities were in the areas of acute care, health literacy, pharmacology, diabetes management, cardio-rehabilitation, health promotion, nutrition, cancer management and primary care. Each activity was developed to address a range of clinical skills and competencies and included diverse methodological approaches to teaching and learning. IPL capabilities for effective collaboration and disciplinary practice were targeted, including clinical skills and knowledge, patient care, collaboration, ethics and best practice. The activities were evaluated through a mixed method approach The evaluation found that students and facilitators from a variety of disciplines recognized the importance of collaborative learning in the areas of patient care and planning and a better understanding of the roles and responsibilities of different health profession.

S60

Challenges facing clinical skills education and practice in Australia

Mary Cruickshank
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Abstract

Background

Today in Australia, clinical skills education and practice are becoming increasingly complex with its particular contextual, pedagogical and technological challenges. In order to address these complexities, a Clinical Engagement Model was developed in 2013 for an undergraduate nursing program at the University of Canberra in Australia. The Model is framed by contemporary research on work-integrated learning which assists students to learn and actively engage with practice-based settings. The Clinical Engagement Model aims to provide a flexible and innovative approach that provides a high quality learning experience for student nurses participating in a practice-based environment.

Aim

The aim of this paper is to provide an overview of the Clinical Engagement Model and report the findings from the evaluation of the Model that was conducted in 2014.

Study Design

This evaluative study is utilising questionnaires to survey first, second and third year nursing students at the completion of their clinical placements. Ward based and community registered nurses are also being surveyed and follow-up focus groups with clinical nurse educators and clinical nurse managers are being conducted.

Results

This is a work in progress at the time of abstract submission.

Conclusion

In order to address the complex issues associated with clinical nursing education, it is imperative that a strong, supportive workplace learning culture is developed and nurtured by both the higher education sector and healthcare facilities. While anecdotal evidence suggests that the Clinical Engagement Model is viewed positively by nursing students and healthcare facilities, this paper will report on the results of the evaluation study and the implications for this work-based learning model.

S61

What stops students from working well in clinical environments?

Janine Henderson, Anna Hammond
Hul York Medical School, York, UK

Abstract

Background

It was clear that many students floundered on entering the second phase of the HYMS course, struggling to adapt to moving from the closely supervised and scheduled first two years to the more chaotic demands of full-time clinical placements. Tutors` comments include: "It`s almost as though they have forgotten everything they had learned in the first two years." Despite their extensive early clinical experience and highly clinically-contextualised problem-based learning the students did not appear to have the necessary skills to make a natural transition to effective learning in the clinical environment.

This has been explicitly addressed in the introduction of a new two week transition block at the beginning of Year 3 for all students. This presentation outlines this process and its evaluation.

Presentation

• The two week block includes:

• Professionalism and clinical reasoning: taught sessions and workshops

• Clinical reasoning: undertaking full clerkings and developing thinking skills

• Experiential sessions in the ward/clinical environment followed by guided reflection

• exploration of "difficult issues" focusing on areas identified by students as provoking complex emotional responses

• practical sessions including "how to" advice from tutors and older peers about how to get the most out of the chaotic clinical environment

Evaluation

Results of the student evaluation of the two week transition are presented along with tutor observations and plans for further development

S63

Learner- centred Communication Masterclasses

Anna Hammond
Hull York Medical School, York University, UK

Abstract

Background

HYMS 3rd and 4th Year MB ChB students frequently encountered communication challenges on clinical placements, despite extensive communication skills teaching in the first two (university based) years of the course.

Presentation

Compulsory Communication Masterclasses were introduced for 3rd and 4th year students to provide an opportunity for them to address Communication and Professionalism challenges they have encountered on clinical placement.

The student-centred Masterclasses are led by Primary /Secondary Care clinicians working with experienced Simulated Patients. They provide an opportunity for students to role play Communication/Professionalism challenges and receive feedback from their peers, Simulated Patient and tutor to help identify strategies for dealing with similar challenges in their future career.

Evaluation

Students are required to complete an online evaluation which includes descriptive and Likert scale feedback.

Students give consistently positive feedback on these sessions, and highlight appreciating the opportunity to reflect and learn from clinician tutors about real-life communication/ professionalism challenges.

 This student evaluation informs Staff Development Masterclasses for tutors, tutored by faculty and run similarly to the Student Communication Masterclasses. These provide an opportunity to address challenges that tutors have encountered when tutoring Masterclasses and ensure that tutors deliver a consistently high quality student-learning experience.

S64

Engaging students early, to build a 'Professional Clinical Disposition' using 'flipped learning'

Aileen Wyllie

University of Technology, Sydney, Australia

Abstract

Background

Flipped learning is a popular approach to pedagogical learning (Francl 2014).

Method

An interdisciplinary, interactive workshop project to capture first year students, exposing them to what professionalism means.

Learning Materials:

• Video of the graduate abilities expected of students by the completion of the three year course.

• Video clips of clinicians and nursing unit managers discussing professional attitudes.

• Students have e-portfolio accounts where they record artefacts.

• A subject called 'Professional identity' develops goals and strategies.

• YouTube video to support students using the e-portfolio

A two-hour workshop was undertaken during the simulation week May 2014. 750 students self-enrolled online into groups of 30 students. A video was made of workshop tutors for 'train the trainer' future use. The items above were used as part of this interactive workshop.

Workshop objectives:

Lay a foundation for later subjects building on the concepts

Results

Professionalism is more difficult for students to grasp than 'hands on' skills. A questionnaire achieved 74% return rate. Students could see the benefits: especially hearing from 'real' clinicians'. Workshop was extracurricular: not 'tied' to a subject.

Conclusion

The workshop sparked the idea of a 'boot' camp for undergraduates to get early exposure to the abilities and responsibilities of professional clinicians.

References

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S65

Experiences of Graduate Entry Medical Students in acquiring professional values and 'professionalism' during the preclinical course

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Abstract

Aim

To explore the evolution of the professional attitudes and values of preclinical Graduate Entry Medical students during the first two years of medical school.

Background

Students showing a lack of professionalism early in the course are more likely to encounter problems during their subsequent careers (1) and that there is erosion in professionalism during their time at medical school (2, 3). Yet we do not really understand how and why students' attitudes to professionalism change and develop throughout their medical school education. The 'hidden curriculum' is pivotal in erosion of professionalism during medical school (4).

Method

This is a longitudinal, qualitative study using interpretative phenomenological analysis with a group of UK Graduate Entry preclinical students with interviews during their first 18 months. This enabled us to explore more deeply their changes in attitude to professionalism over time and how the students feel about these changes.

Data analysis

Transcribed interviews are being analyzed using an interpretative phenomenological data analysis facilitated by Nvivo 10.

Results

The study has received ethical approval to follow the students through to graduation from the course. Our presentation will discuss the results and themes from analysis of the students' preclinical interviews.

References

1. Papadakis M A, et al. *Disciplinary action by medical school boards and prior behaviour in medical school.* New England Journal of Medicine. (2005) 353:2673-2682.

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S66

Is the Chicago Professionalism Survey valid as a method of measuring professionalism in UK medical students?

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Abstract

Aim

To establish the relationship between a validated measure of students' conscientiousness and changes in attitudes to professional behaviour as measured by the Chicago Professionalism Survey (CPS) during the first year of medical school.

Background

The Durham Conscientiousness Index (DCI) is a tool which has been replicated at Cork medical school as well as having been validated in its original institution (1). The DCI measures the student's conscientiousness, a trait considered to be a significant predictor of professionalism. The CPS has illustrated a deterioration in professional values among preclinical students in the United States but it has not been validated for use in the United Kingdom (2).

Methods and analysis

Audit and collation of anonymized medical student data collected routinely by the medical (e.g. attendance records) to calculate a DCI score

Change in attitudes identified by the Chicago Professionalism Score administered early and at the end of the second term at medical school among graduate entry medical students

Correlation between the validated DCI score and changes in attitudes identified by the CPS for each student over the first year of medical school using appropriate statistical tests of correlation

Results

Results will be presented and the effect on the School's professionalism teaching discussed.

References

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S67

Money makes the (medical assessment) world go round: How costly is an OSCE?

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Abstract

Introduction

The OSCE is an important component of assessment and yet is undoubtedly expensive (Patricio, et al. 2013). This study aims to evaluate the costs for one OSCE examination at one medical school however the message of the unrecognised cost of clinical exams is important for all.

Methods

In 2013 the Aberdeen University held a two-day OSCE for 185 final year students. The costs of different stages of development and administration of this high-stakes OSCE were determined.

Results

This OSCE cost our institution £65,328.

Question development & testing costs approximated £6,280, £419 per question.

Production costs were mostly examiner and patient training time, £8,154.

The majority of costs occurred administering the examination including consumables, catering and staff time £52,504. The largest expense was examiner time £26,938.

Post-examination costs included administrative tasks, exam board meeting and checking failed papers, £3,191.

The most expensive station was depression history taking utilising actors, costing £5,105, an additional £2981 to the standard question cost. The cheapest station was prescribing, a total station cost of £2,760, an addition of only £636 to the standard cost.

The total cost per student was approximately £293.

Discussion

Cost in medical education assessment is a complex area; there are differences across institutions that lead to huge variations in cost, the use of volunteer patients in our institution incurs no cost, however other institutions pay up to £230 per patient.

The main cost associated with the conduct of the OSCE is examiner time.

Conclusion

The OSCE is expensive to run. With students and regulators demanding formative as well as summative OSCES costs are significant. Further work will need to identify whether the OSCE is value for money and tie to measures of utility- is it generalizable, valid, acceptable and economically feasible? (Walsh, et al. 2013).

S68

Winners and Losers: Metaphors in Simulation

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Abstract

This presentation discusses metaphor use in participants talk about their experiences of simulation based medical education (SBE). Metaphor use is often unconscious and can be powerful and help us gain a deeper understanding of cognitive, attitudinal, emotional and social aspects to simulation based learning and the relationship of teacher, learner and patient in simulation. (Charlotte E. Rees, Knight, & Wilkinson, 2007)

The research question "What can metaphors reveal in participants' talk about simulation"? was approached using qualitative methodology to explore attitudes to simulation of medical students and doctors at various stages of training or practice(Schmitt, 2005). Semi- structured interviews were carried out in naturally occurring learning groups, identification of metaphorical talk and categorisation into themes.

The results demonstrated that the metaphor of LEARNER STUDENT INTERACTION AS WAR was common across all participant groups. Similar insights have been described in doctor-student-patient realtionships(Charlotte E. Rees et al., 2007) and students assessment realtionships(Charlotte E Rees, Knight, & Cleland, 2009),however this presentation adds to our understanding as we see similar metaphorical concepts extending across the post graduate divide into experienced practitioners in the simulation learning setting.

We can infer that the concept of opposition is prevalent in SBE. Faculty should be aware of this dynamic in simulation based teaching.

References

Rees, C. E., Knight, L. V., & Cleland, J. A. (2009). Medical educators' metaphoric talk about their assessment relationships with students:'You don't want to sort of be the one who sticks the knife in them'. Assessment & Evaluation in Higher Education, 34(4), 455-467.
Rees, C. E., Knight, L. V., & Wilkinson, C. E. (2007). Doctors being up there and we being down here: a metaphorical analysis of talk about student/doctor-patient relationships. Social Science & Medicine (1982), 65(4), 725-737.
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S69

3-D printed model of liver for preoperative simulation and rehearsal of partial hepatectomy

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Abstract

Introduction Hepatectomy is the procedure of choice for most hepatic tumours. It is the only curative option for colorectal cancer liver metastases. Significant recurrence and complications risks mandate the need for adequate preoperative rehearsal. 3D printing technology is expanding and finding applications in medicine. The aim of this study is to produce 3-D printed model of a liver based on patients' radiology data, to be used in operative rehearsal in open and laparoscopic hepatectomies.

Methods Volumetric software was used to segment and extract surfaces of liver structures and tumour from CT and MRI data of a patient with a resectable liver tumour. Extracted surfaces were edited to overcome data errors. The final structures where printed in 3D to create models of hepatic vessels, ducts and liver tumour.

Results The resulting graspable model of liver structures provides good anatomical detail and represents the spatial relationship between important structures. It can be easily manipulated and explored from different angles.

Conclusions A graspable, 3D printed model of liver provides accurate visualisation of liver anatomy and spatial relationship between structures. The material used allows for easy manipulation. The model could provide a promising learning tool in laparoscopic and open liver resection for surgical trainees.

S70

Graduate nurses' knowledge of the functions and limitations of pulse oximetry

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Abstract

Background:

Pulse oximetry (PO) is a technology ubiquitous in the modern clinical setting. While its ability to accurately reflect hypoxaemia has been established, its contribution to improving patient outcomes is less certain.1 Previous studies indicate that clinicians demonstrate a broad range of deficits in PO knowledge.2 Pre graduate education has been identified as a potential source of this knowledge deficit and has been recommended by authors as an important target of investigation. 3

Methods:

A cross-sectional, comparative design was utilised. A previously validated tool was used to survey a convenience sample of graduate nurses (GN). Cohort1 (n= 210): nurses attending their first graduate nurse program orientation. Cohort 2 (n=97); nurses at the end of their graduate nurse year. Clinical scenario questions were developed, validated by an expert panel and added to the tool to explore the relationship between GN's PO knowledge and their clinical utilisation of PO.

Results:

Mean total knowledge score was 11.64 (55.4%) + 2.29. An independent t-test indicated no significant difference in scores for Cohort 1 (11.61, SD = 2.32) and Cohort 2 (11.68, SD = 2.22; t (305) = -.22, p = .83, two tailed). ANOVA was utilised to explore the impact of Cohort and University on clinical application of PO. There was a statistically significant difference in cohort groups: F (2, 304) = 8.12, p = .000 as well as university groups F (4, 302) = 2.2, p = .05.

Discussion:

Analysis to date indicates that there are deficits in PO knowledge amongst graduate nurses in Australia. Some knowledge appears negatively correlated with clinical experience and pre-graduate University education appears correlated to the ability to apply knowledge to clinical scenarios. The analysis of results is not complete at the time of this abstract submission.

S71

Results from the Airway management study utilizing a blended learning approach examining the transfer of skills into clinical setting.

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Abstract

Introduction

Many skills taught during undergraduate years are not able to be replicated when most required. Airway management is one key skill area identified as expected knowledge. Yet the literature indicates that junior doctors are not able to do this well. 85% of junior doctors indicated they were confident in maintaining an adequate patient airway, however only 40% ventilated effectively and 45% used suitable additional devices where required (1).

Method

This study used a mixed method study to analyse, evaluate, examine, how students learn looking at theory, clinical application in the anaesthetic room and student perspective. The core airway competencies of students in the clinical setting were compared with the current education and an integrated package with online interactive component and simulation training.

Initial Results

• Students indicated involvement in direct patient care was important for their learning

• The online learning was not utilized by all students

• Knowledge that there was an assessment on a real patient was a powerful motivator

• The clinical and theory assessments became a useful tool s for student learning

Discussion

Currently most critical care rotations (2) have limited clinical assessment. Students reported that the testing pre and post helped guide their learning. This has identified the need to modify current curriculum to enhance student learning. Literature indicates this is a growing area of research interest (3).

Unless an educational tool is mandatory, strategically not all student's access, thus design of whole curriculum must account for this.

One junior medical officer was identified as being very enthusiastic tutor. Involvement of junior medical officers in ongoing education and assessment of airway skills would have a two-fold benefit revision of a core skill for them and increase the ability of upcoming graduates. Theoretically this has good basis (4) .

S72

Does an integrated communication and clinical skills teaching session for measuring Blood Pressure improve the students performance.

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University of Dundee, Dundee, UK

Abstract

Brand S, (Clinical Skills Tutor) University of Dundee Clinical Skills Centre

Short Oral

Presentation

Introduction

While directly observing Year 2 medical students' carrying out a consultation and taking a simulated patient's blood pressure it was noted this skill was poorly exhibited by some of the students Evidence from the literature confirmed that this is not a new problem McKay et al (1992).

Aim

This study aims to determine if an integrated communication and clinical skills teaching session would address variation in performance, improve skill acquisition, skill retention and performance.

Methodology

Using an action research approach 42 students from year 1 were invited to take part and randomly assigned to a test group and a control group. Data collection was undertaken using a modified (DOPS) assessment tool and BP checklist with peer and tutor assessors. (Clark and O'Connell 2012).

Results

Summary of the analysis showed the Control Group baseline results as 64%. The Test Group result showed 82.7% which represents an improvement in performance of 18.7% from base line.

Conclusion

This action research study shows that an integrated session for consultation skills and the practical of skill of taking blood pressure led to improvement in performance.

References

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McKay D.W, Raju M.K, Campbell HR. (1992). Assessment of blood pressure measuring techniques. Medical Education, May 26 (3) 208-212

S74

Full Training Immersion from Point of Injury to Recovery Room: Measuring Salivary Cortisol and Amylase While Correlating Effective Training.

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Abstract

Rocky Vista University College of Medicine has developed 5 day high intensity, tactical, emergency and surgical training course from point of injury through emergency room and operating room to recovery room.This course produced equivalent or improved technical and cognitive skills over the standard 8 week surgical rotation.

Stress immersion training and stress habituation have been briefly presented in Prato in 2013. Previously subjective data only was recorded. This abstract presents new salivary bioscience data never seen. The environment for the course utilized the "CUT-SUIT on a TV/Movie studio including realistic experience of living in the communmity.

Methods Student 2nd year medical students (22) and California federal firemen (8) were involved in five days of immersion training where they lived and performed in a simulated environment. There were eight events with a total of fifty-five different patient scenarios.During the scenarios salivary amylase (sAA) and cortisol levels were collected per the method of Salimetrics Inc. ResultsData analysis shows that students exhibited autonomic nervous system (ANS) reactivity with minimal hypothalamic-pituitary-adrenal axis (HPA) reactivity. Findings indicate that students were able to react to the challenges by increasing focus, attention, cognitive function, and executive function to successfully complete the tasks in the scenarios as opposed to becoming stressed and exhibiting increased negative effects. Complete analysis data shows dramatic significance of the benefit of the trainining in cognitive and technical skills and how it relates tro stress. The evaluation of stress and habituation to student performance is analyzed. This indicates that while the physiologic stress response is still be heightened throughout the course, outcomes as measured by student competency assessment are not negatively affected.

DiscussionImmersion training elicited appropriate stress response in salivary cortisol. Reactivity in s-alpha amylase combined with improvements in pre vs. post skills assessments and diminished perceived stress, demonstrate that students responded with ANS activity to focus attention, overcome stress and learn requisite skills.

S75

In resus, in need of help! - In-situ Simulation for Doctors new to Emergency Medicine

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Abstract

Foundation Year 2 (FY2) doctors in Emergency Medicine (EM) have a steep learning curve in order to safely manage acutely unwell patients in an unfamiliar environment. Traditional, didactic induction programmes cannot provide adequate preparation for this. Simulation of these procedural and clinical challenges benefits clinician competency, confidence and patient safety.(1)

Eight FY2 doctors were enrolled for a 30-minute, one-on-one simulation session when new to the department, to test their ability to operate resuscitation equipment, manage medical emergencies and orientate them to the resuscitation room and local protocols. A scripted scenario, using a mannequin (Laerdal©) and simulated monitor (iSimulate©), was performed in the resuscitation room during a normal clinical shift. All training elements were physically carried out by the candidate or competency demonstrated in teaching an assistant (faculty member) - the "does" and "shows how" of Miller's Pyramid(2)

Post-course feedback demonstrated a significant improvement in the candidates' confidence to work independently, manage medical emergencies and to locate and operate resuscitation equipment. The longer term benefit of the training and impact on patient care will be evaluated with ongoing in-situ multi-professional simulation and further candidate feedback.

This simulation training has been incorporated into the FY2 EM induction programme.

1. Aggarwal et al. Qual Saf Health Care 2010, 19 (Suppl 2): i34-i43.

2. Miller GE: The assessment of clinical skills/competence/performance. Acad Med 1990;65 (suppl):S63-67

S76

Proactive Multi-Professional In-Situ Simulation in an Acute Medical Setting: the future way to train in teams

Valerie Dimmock[1], Sam Murray[1], Deblina Dasgupta[1], Eleanor Wood[1], Emily Twigg[2], Richard Stead[1]

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Abstract

We deliver regular simulation training for the multi-professional medical emergency team.

Participants are briefed before undertaking a scenario and introduced to the simulation equipment. Methods of training are explained to patients in the ward. Scenarios are based around clinical incidents and mapped to curricular objectives. Feedback was collected from trainees and patients/public. Outcomes included the identification of any clinical governance issues.

Over 10 weeks, 9 sessions were delivered. Sessions required 1-2 faculty members to run the scenario and debrief. 36% of the medical registrar cohort received the training. On other occasions junior doctors had the opportunity to 'act up' as the registrar in a challenging scenario.

34 multidisciplinary training experiences were delivered. 100% agreed that it was beneficial to train within their usual work environment. 97% agreed that it was useful to train with other members of the multidisciplinary team. All patients who provided feedback felt reassured that their doctors were undertaking training. Patients commented that training 'would give confidence in doctors' abilities' and staff demonstrated that 'they cared'.

In situ simulation encourages training in teams and has positive effects on multidisciplinary workings. Observing patients/families support and expect doctors and nurses to receive this type of teaching and it encourages a culture change whereby learning becomes part of the normal working week.

S77

Delivery an in-house Surgical Training Programme: Trainee Viewpoints

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Abstract

Aims

With the current reduction in trainee hours worked, concern has been raised that traditional surgical teaching is not sufficiently adequate. Our unit introduced a programme covering technical skills; case discussions in small groups & knowledge based learning.

We describe the trainee-reported viewpoint of this programme.

Methodology

Post-programme, trainees were sent a questionnaire examining aspects of the programme and asking them to rate its overall utility. Data was collected using a web-based questionnaire, with a combination of Likert-type scales and open box questions. Results were collated and key themes identified.

Results

During the study period, eleven surgical registrars were involved with the teaching programme. Seven completed responses were obtained. Overall, 85.7% of the respondents reported this training programme provided an "excellent" addition to their current existing training. 80% of respondents found technical skills labs to be "very relevant" for their current state of training. 100% of respondents reported the same for case discussions & journal exercises.

Discussion

Overall, there was a very high satisfaction level amongst trainees with the programme. Respondents perceive a need for additional training opportunities and a programme such as we have devised appears to fulfil numerous overlooked teaching requirements.

S78

Near-peer Teaching in Paramedic Education: Results from 2011-2013

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Abstract

Background: Near-peer teaching (NPT) involves senior students teaching junior students clinical skills, and provides opportunities for peer-teachers to develop a number of skills such as public speaking, mentoring and facilitating small groups. These skills are all important for paramedic students to develop throughout their undergraduate studies. The objective of this study was to examine the perceptions and satisfaction levels of paramedic students participating in NPT over a three-year period (2011-2013) at a large Australian university.

Methods: A cross-sectional study using two NPT questionnaires: Clinical Teaching Preference Questionnaire (CTPQ) and Peer Teaching Experience Questionnaire (PTEQ). Both questionnaires use a five-point Likert rating scale for responses (1=strongly disagree, 5=strongly agree).

Results: A total of n=74 peer-teachers (senior students) and n=361 peer-learners (junior students) participated in the study over the three years. Overall, results for the peer-teachers were positive with the majority of items reflecting high levels of satisfaction, for example, 'What I have learnt in this unit will help with my graduate paramedic role' (mean=4.47, SD=.60), and 'I have developed skills for teaching basic clinical skills' (mean=4.28, SD=.69). Similar positive results were also produced by the peer-learners, for example, 'Teaching is an important role for paramedics' reflecting a mean score (mean=4.46 in 2011; mean=4.52 in 2012; mean=4.60 in 2013).

Conclusion: Results from the three years have shown that the NPT program has been effective for the peer-teachers who participated; developing teaching, mentoring and learning skills to adopt during their graduate year and future career in the paramedic discipline. Similarly, the results also suggest that peer-learners believe that NPT is a valuable teaching method. These findings are consistent with previous research on NPT using students from other health disciplines.

S79

SILVER-Q-L&I: Assisting medical, nursing and paramedical students to transition into the workforce as confident, work ready professionals in rural Queensland

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Abstract

Current clinical training modalities rely heavily on professional entry healthcare students learning through experience whilst on clinical placement. For reasons of patient safety, healthcare students are rarely permitted the opportunity to utilise learnt clinical decision making skills and make tangible management decisions in 'real life events'. Consequently, medical, nursing and paramedical students are often left wondering if they have the skills and ability to do the job for which they have been trained.

The SILVER-Q LIVE program gives professional entry students the opportunity to work together as part of a collaborative healthcare team prior to entering the healthcare workforce. The SILVER- Q program enables students to work collaboratively in a supportive, vertically integrated, simulated learning environment. Students practice learnt skills and knowledge, develop an understanding of their role within the healthcare team and evaluate their own professional performance.

For participating students an INTERACTIVE eLearning package has been developed to support their preparation for the LIVE session. The package can also be used for revision and reflection post participation. The offset of this package is that for students living and studying in remote areas this INTERACTIVE eLearning program ensures anywhere, anytime access to current learning modalities.

This presentation will provide an explanation of program structure, implementation and evaluation.

KEY WORDS:

- Inter-professional Learning
- Vertical Integration
- Flipped Classroom

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S80

Video Assisted Situational Awareness: VASA (Work in Progress)

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Abstract

Context

The use of Point of View Video(PoVV) enables students to observe clinical environment during simulation as the particpants experience it. This enables them to appreciate the focus of the individual within the simulated environment and the information they are utilising to drive task completion.

Developing Situational Awareness (SA) during medical school training requires students to understand the complexity of the environment in which they will work. Perhaps the simplest definition is 'knowing what is going on around you' but this requires an ability to filter information from a variety of sources into schema that enables action. SA allows clinicians to process the available environmental information to influence the decisions they make.

Question?

Does the use of Point of View Videos enhance Situational Awareness teaching?

Setting and Participants

An acute care ward simulation for approximately 18 final year medical students.

Intervention

Six acute care scenarios were recorded with POVV and standard simulation set up. The scenarios were designed to explore SA as clinical information was discovered during each scenario. Video segments will be shown to students during a workshop of 10 final year students in a sequential manner and used as a vehicle to explore SA. The discussion will centre on intepretation of clinical information, its impact on future actions and subsquent priorisation of tasks.

Method

SA teaching will use alternately randomly selected traditional or POVV to facilitate the debrief. The intervention will be evaluated using focus groups and post intervention questionnaire.

Results

Results from interviews and post intervention questionaire.

Ref

Bizzotto, Nicola, et al. "Video in Operating Room GoPro HERO3 Camera on Surgeon's Head to Film Operations—A Test." Surgical innovation (2013): 1553350613513514.

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S81

Further analysis of first year medical students' responses to a "flipped classroom" approach to clinical skills teaching.

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1Monash University, Churchill, Victoria, Australia, 2Flinders University, Adelaide, South Australia, Australia

Abstract

Aims

Clinical skills teaching in the pre-clinical environment has a relatively short history compared to other themes within medical education. Ensuring that students transition from being observers to fully participating in the skills lab environment is a goal of many clinical tutors and programs. Analysis of the key aspects of our program that benefited from access to tutors was undertaken and our clinical skills program underwent significant pedagogical change in mid-2012. Known as a "flipped classroom" approach, we have taught using this format for the past two years. Our program covers history and examination of all systems with the introduction to some basic procedures. Evaluation of this program was undertaken in November 2013.

Methods

A questionnaire was administered to students following the formative OSCE in Semester two, to evaluate the effect of the clinical skills "flipped classroom" approach on students' behaviours and attitudes. Expectations of students' preparation and the provision of feedback in the new format encouraged full participation in all aspects of the program including physical examination. The survey explored levels of preparation and confidence levels following a full year of the program.

Results

Using a paper-based questionnaire, students' perceptions of the clinical skills program as taught through the flipped classroom were explored. An excellent response rate was obtained and students reported high levels of confidence in their ability to perform the majority of the basic skills covered by our course. A sample of these responses covering approximately ten per cent of the results was presented at ANZHPE in July 2014. The success of this approach as demonstrated by the results indicated students' acceptance of the program.

Conclusions

A flipped classroom approach to teaching clinical skills can be an efficient and effective model of empowering students in the pre-clinical skills environment.

S82

Incorporating Simulated Patient Feedback in Debriefing and Appraisal of Clinical Skills.

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Abstract

The diversity of Simulated Patient (SP) use in health care simulation is well documented as is the vital role that debriefing plays in learning (Levett-Jones and Lapkin, 2013). There are however, differing opinions regarding SP input in debriefing and the role they might play in evaluation and providing feedback about student performance (Bokken, van Dalen and Rethans, 2004). This presentation showcases an undergraduate nursing simulation experience at University XXX where two methods of debriefing using SP's were employed to facilitate student feedback. The first involved students viewing a live streamed interview capturing the SP perceptions of performance in relation to specific clinical competencies. The second approach involved face to face communication between SP's and students in debriefing sessions. Survey and focus group interviews were used to collect data from SP's (n=6) and first year undergraduate nursing students (n=216) involved in post simulation debriefing. Key advantages and challenges of each method will be presented including recommendations for the management of SP's feedback in simulation. A brief outline describing further research involving SP's in simulation will be provided. The presentation will be of interest to academics and clinicians seeking to include SP perspectives in student feedback and evaluation of clinical skills.

Reference

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S83

Addressing the needs of simulated patient educators: An evidence-based online resource - the Victorian Simulated Patient Network

Debra Nestel, Jennifer Harlim
Monash University, Clayton, Australia

Abstract

The aims of the Victorian Simulated Patient Network (VSPN) are to:

• Develop a sustainable online network;

• Provide high quality resources in simulated patient (SP) methodology;

• Expand SP-based education; and

• Improve education in patient-centred care.

Although SPs have contributed to health professional education for many decades, there are limited resources available on all facets of SP work. SP practices are expanding. The VSPN provides a repository of evidence-based resources to facilitate the uptake of high quality SP practices.

The modules are of interest for educators, clinicians, SPs, program administrators and others engaged in SP work.

There are currently 13 modules covering various aspects of SP methodology have been developed, including training methods for SPs for role portrayal and feedback, program management, SPs in assessment, debriefing, and several others. Illustrations of SPs at work, example scenarios, frameworks to support SP-based education, and links to key publications are included within the modules.

Each module is designed to take participants approximately two hours and does not involve formal assessment.

Launched in December 2012, the VSPN currently has over 450 members (August 2014). In the first year, seven workshop activities were held to promote the network in Victoria, Australia. Although designed as a statewide network, members are from all over the world. In response to feedback from members, in October 2014, we are moving to an interactive platform whereby members can pose questions, share ideas and resources. The network is currently free to members. The response to the VSPN suggests there is a strong need for such evidence-based resources.

The VSPN (www.vspn.edu.au) was funded by Health Workforce Australia and the Department of Health as part of the Simulated Learning Environments program.

S84

Passing the Baton: Handover of Care skills and behaviour in Final year Medical Students

Ujani Basu, Lysa Owen
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Abstract

This poster describes Clinical Handover behaviour of senior medical students in a simulated setting. The researchers were interested in finding out if formal handover teaching resulted in effective and safe handovers,(1) and to make recommendations for future teaching.

Skills and behaviours demonstrated by final year medical students in a ward simulation experience were evaluated and scored according to a priori criteria derived from established best practice guidelines. (2) (3) Video recordings of 50 simulations were assessed using the designed tool. Ninety per cent of participants discussed all ward in-patients, with 78% mentioning presenting complaint and 66% mentioning vital signs. 98% mentioned what interventions they had carried out and a further 70% made recommendations to the incoming team. However, none of the students identified patients by their Community Health Index (CHI) number and only 36% read back their handover to the outgoing staff. Global scoring of the domains of process and perception showed 73% of participants as adequate in each domain.

Clinical handover in final year medical students is safe and competent in some areas, but areas of inadequacy remain. It would be important to understand the reasons for this and to target future teaching interventions to enhance skills and behaviour and produce safe, competent graduates equipped for foundation year programmes(2).

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2. Cleland J, Ross S, Miller S, Patey R. "There is a chain of Chinese whispers...": empirical data support the call to formally teach handover to prequalification doctors. Quality and Safety in Health care. 2009;18(4):267-71.

3. Gordon M. Training on handover of patient care within UK medical schools. Med Educ Online. 2013;18:1-5.

S86

Lucky Last : Interns refect formative feedback during pre-internship.

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Abstract

Background: Urethral catheterisation (U/C) is one of the core procedural skills which interns are expected to perform safely. We hypothesised that by providing feedback to our pre-intern students (PRINTS) on their U/C performance, their future performance of U/C as interns may benefit.

Aim: This study sought to evaluate the impact of feedback in U/C PRINT, and to explore the practice and performance of interns during the first four-five months of their internship.

Methods: Between 2013 and 2014, two cohorts of interns n=66 were invited to complete an anonymous questionnaire survey which contained nine closed and one open question.

Results: Participant response was 41/66 (62%), 21/38(55%) were male and 17/38(45%) female. Most interns 35/41(85%) reported that PRINT feedback in U/C was beneficial to their practice as interns, with independent performance and success being 30/40(75%), and overall confidence to perform U/C was 29/41 (95%). Interns who were attached to their original teaching hospital had a slightly higher frequency in U/C in performance by 13/14 (93%) when compared to those who were attached to other hospitals which was 15/24(62%) Male interns had a greater frequency of performing U/C on male patients 7/21(33%) had performed more than 5, compared to one female intern 1/17(6%) P=0.04 Further U/C training in internship was reported to be adequate by 11/41 (27%) of interns, their performance confidence was increased by P=0.03, when compared to the 21/41(73%) who had little or nil

Conclusion: Our results substantiate our hypothesis that feedback in U/C during PRINT was of benefit to most interns' confidence and performance. Educational reinforcement in U/C during internship had further impacted on intern confidence to perform; however, further education is not universal in all hospitals and highlighted the need for feedback in PRINT.

S87

Does the location of the learning through simulation activity impact on student engagement?

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Abstract

Background

Traditionally in Bachelor of Nursing programs, simulation activities are conducted on campus with academic facilitators. Funding by Health Workforce Australia has enabled the development of Simulation Centres of Excellence in Melbourne, Australia. These centres provide opportunities for undergraduate health professional students to experience simulation activities within a hospital context. In 2014, a learning through simulation program was developed and implemented in the Bachelor of Nursing program at La Trobe University, Melbourne Campus. Over 500 students enrolled in year one and two nursing subjects experienced two learning through simulation activities at hospital based simulation centres or on campus.

Aim

To determine if the location of the learning through simulation activity impacts on undergraduate health professional students engagement in learning.

Method

Mixed methods were used to compare the engagement of students at each site. A modified version of The Student Engagement Questionnaire (1) was completed by students at the conclusion of the simulation activities. Ethical approval for the study was obtained.

Findings.

Analysis of data using SPSS identified significant results (p<0.05) in four of the 17 items in the survey. A high level of internal consistency for the modified scale was indicated with Cronbachs alpha of 0.930. Students appreciated the opportunity to experience learning at a hospital and valued the input of hospital based facilitators in their program. However student's identified that the skills, knowledge and abilities of the simulation facilitator was a significant factor in their engagement in the learning activity.

Conclusion.

The findings of the study indicate that students are highly engaged in simulation activities and certain aspects of engagement are impacted by the location of the activity and the expertise of the simulation facilitator. Further investigation is required to explore this phenomenon.

Structured Reflection as a Transition Strategy for New Graduate Nurses: Early Findings

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Abstract

The first year of practice for new graduates in healthcare is challenging. Clinical judgment is a critical skill that develops with practice and has been identified as a deficit for new graduate nurses.[1] Clinical judgment development depends on many factors, including reflection to process new experiences and a supportive workplace culture that fosters learning.

The overarching aim of this mixed methods, experimental study is to gain insight to positively influence the transition of new graduates into practice. The specific purposes are to: (1) assess the effect of a structured reflection intervention, using clinical anecdotes and discussion;[2] and (2) evaluate the relationship between workplace culture and clinical judgment development.[3] Participants include 60-80 new graduate nurses on two coasts of the United States; treatment group participants experience structured reflection in three sessions over their first year of practice. All participants will complete two surveys, the Health Sciences Reasoning Test (HSRT), a normed critical thinking survey, and a validated workplace culture survey, at the beginning and end of their first year in practice. It is hypothesized that treatment group participants will score higher in aspects of clinical judgment[3] as well as on the HSRT and that higher scores on the workplace culture survey will correlate to higher scores on the HSRT and clinical judgment.

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2. Newton, J. M. & McKenna, L.G. (2009). Uncovering knowing in the graduate year: An exploratory study. *Contemporary Nurse, 31*(2), 153-162.

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Educating junior clinicians about error disclosure- The experiences and perceptions of consumers

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Abstract

Background

Disclosure of medical error and incidents to patients is recognised as central to quality patient care and risk management. However, a review of the literature highlights patients are often dissatisfied with the disclosure, and clinicians struggle with these challenging conversations.

Despite the emergence of the 'patient voice' in education, there are no published studies of open disclosure (OD) education that directly involves the 'patient as teacher'.

Aim

This paper aims to describe the experiences and perceptions of consumers who assisted with the development and co-facilitation of an interprofessional OD program for junior clinicians.

Methodology

Four consumers were recruited and attended a preparatory training program. They subsequently co-facilitated the OD program alongside clinical facilitators and provided program feedback. Participants were interviewed post- program. Interviews were transcribed and analysed thematically.

Results

Three participants had experienced a previous healthcare related incident, with one suffering significant harm. The consumers contributed in varying ways depending on their backgrounds and skill sets. These past experiences and altruism were motivators to participate. New knowledge, personal growth, positive beliefs and attitudes about clinicians and the organisation were reported.

Conclusion

Consumers, educators and clinicians can experience mutual benefits from collaborating on patient-centred models of education.

S90

Using Art to Improve Visual Analysis and Patient Context Skills

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Abstract

Context

Third year medical students attend the Potter Art Gallery for a two-hour small group seminar jointly conducted by an Art Historian and a Palliative Care physician during their Palliative Care rotation. The students are introduced to visual thinking strategies and skills in visual analysis to enhance their clinical diagnostic skills and their abilities to consider patient contexts.

What we did

A teaching room with specially chosen figurative art works is used. The session commences with an explanation of the aims of the project emphasising that there are no right or wrong ways to look at art. The initial activity, a description of a work by the Art Historian, depends on the size of the group, other attendees and the temporary exhibitions. The students then, either singly or in pairs, view one work and describe it closely in terms of style and content. The facilitators encourage discernment of any clues as to the social status, physical or psychological health of the person or people portrayed. The students provide their interpretation of the content of the work. The session concludes with consideration of aspects of non-verbal communication in relation to the patients and families seen in the rotation.

Conclusion

This rotation was chosen because of the paramount need in Palliative Care to understand both the patient's perspective and those of the patient's important others and because an awareness of the potential ambiguity of visual data in a context in which there is 'no right or wrong answer' relates to the complexities both of the human condition and much of palliative medicine. It is hoped that the students in this pilot project will have an improved ability to acknowledge the multiplicity of factors in both art works and clinical situations as well as the ability to creatively engage with 'narrative' concepts.

S91

Students as Teachers of Simulation - Can it work?

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Abstract

Introduction

It is a GMC requirement for doctors to teach (1) and gain teaching experience at undergraduate level (2). At our institution, students are involved in peer education, but not in formal curriculum.

We carried out a pilot study where senior medical students (SMS) acted as student tutors (ST) delivered simulation based teaching (SBT) to junior medical students (JMS).

Methods

We identified acute-care themed core-curricular SBT for JMS at our institution. SMS with varying levels of teaching experience were invited to facilitate, following a short training session. The teaching involved 2 practical 'stations' lasting 25 minutes each, one facilitated by a SMS, the other by regular faculty.

The JMS, faculty and simulated patients were asked to provide qualitative and quantitative feedback on their experience of being taught by, or teaching alongside, a SMS.

Results

5 out of 6 sessions run by SMS were rated above 4 on a 5 point likert scale for clinical knowledge and confidence. JMS identified benefits of being taught by a SMS.

Discussion/Conclusions

This trial demonstrates that SMS can facilitate core-curricular SBT, allowing SMS fulfilling GMC requirements. For JMS the sessions were beneficial and provided a good environment for questions. The implications of wider deployment need to be fully explored, including teaching quality.

References

1 General Medical Council, *Good medical practice*. London: General Medical Council, 2006

2 General Medical Council. *Tomorrow's Doctors*. London: General Medical Council, 2009

S92

Students helping students – an evaluation of repeated simulated practice learning exercises upon student opinions regarding preparation for nursing internship.

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Abstract

Background

Undergraduate pre-registration nursing students in the Republic of Ireland are required to undertake a 36 week internship at the end of their educational programme. The aim of the Internship is to consolidate theory and practice (An Bord Altranais 2005). In order to prepare students for the complexities of the clinical practice environment, a simulated practice exercise was devised and implemented in order to promote situated contextual learning (Lave and Wenger 1991).

Description

A 15 bedded ward setting with individual patient scenarios and scripts was developed. Students assigned to a 'simulation practice' group acted as nurses in a ward based simulation. The exercise was then repeated enabling the simulation practice group to act in a patient role. Students assigned to 'simulation assistance' group supported the simulation practice group by acting as additional staff, patients and observers. Over the six week simulation period, 108 students rotated through both groups experiencing the simulated practice exercise from multiple perspectives. This poster provides a detailed presentation of the findings of an evaluation survey comparing and contrasting opinions of learning amongst students in both cohort groups.

Results

The simulated practice exercise was viewed by both groups as useful, challenging and making a significant contribution to learning. The duration of simulation exercise was found to be appropriate by both groups. The simulation nursing practice group felt tested on all domains of competence with some variations in opinion regarding peer observation between both groups. More detailed analysis of findings will be presented in the poster.

Conclusions

Initial analysis suggests that the simulated practice exercise is a legitimate means of participation in a ward based situation thus supporting situated contextual learning. The presence of variation of opinion regarding peer observation between groups suggests that relevance and realism remain a challenge for creative simulation developers (Owen, Ker 2013).

W01

Making the most of simulated patients: feedback in patient centred simulation

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Abstract

Introduction

Patient-centred consultations are critical in good health care and therefore in medical education. Simulation is a well-established and effective technique in medical education which allows learners to practice clinical skills safely. Simulated patients (SPs) can be trained to give feedback from a different perspective which complements that from faculty. The patient-centredness of feedback can be increased by training SPs to provide feedback on whether students deliver case-specific safe and effective outcomes of care from the patients' perspective, in consultations which are unobserved by faculty [1]. The feedback is then centred on the patient's experience rather than on the clinical content [2]. This provides a different model to using generic feedback tools that are based on observation of consultation skills rather than on clinical outcomes from the patient's perspective.

Both Keele and Otago use simulated clinics in primary care to give students the opportunity to run complete, uninterrupted, unobserved consultations , including management planning and shared decision making. Feedback is given by SPs on the whether consultation outcomes were achieved from the patient's perspective and by faculty on record keeping and case presentation. This workshop utilises our experience.

Content and Structure

1. Opening plenary

   - Introduce ideas , theory and evidence

   - Describe Keele and Otago simulated clinics

2. Small group work

   - Identifying safe and effective patient-centred outcomes in clinical scenarios

   - Designing simulation scenarios involving feedback from SPs.

3. Closing plenary - discussion of experiences and learning points.

References

[1] Williamson M, Walker T, Egan T, Storr E, et al (2013). The safe and effective clinical outcomes

(SECO) clinic: Learning responsibility for patient care through simulation. *Teaching & Learning in Medicine*. 25(2):155-158.

[2]Bleakley A. and Bligh J. (2008). Students learning from patients: Let's get real in medical education. *Advances in Health Sciences Education*, 13:89-107

Workshop Submissions

Objectives:

To develop skills in constructing patient-centred simulation scenarios utilising specific patient outcomes

To discuss opportunities and methods for maximising effectiveness of SP feedback as part of outcome based simulation.

To share our experiences of outcome based SP simulation techniques and stimulate discussion on advantages and disadvantages.

Intended Audience: Educators with an interest in simulation and simulated patient feedback.

Maximum number of participants : 25

W02

Promoting Interprofessional Education

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Abstract

Introduction

Inter-Professional Education (IPE) occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care. The World Health Organization (WHO) highlighted that if health professionals learned together, they would be more likely to work together effectively.1 High performing team provides better patient outcomes and IPE enhances team working2 and hence postgraduate IPE should be promoted. However, there are many barriers to postgraduate IPE, such as historical interprofessional rivalries and different clinical responsibility.3 Furthermore, there are practical barriers such as different working patterns. Sustainable postgraduate IPE programme needs to overcome all these barriers.

Workshop Format

The workshop will be in the format of small group discussion. Each group of 4 to 6 participants will be assigned the following tasks:

1. Each member of the group will identify one area of expert practice that he / she would like to teach other professionals in an IPE setting and discuss why is the chosen area of expertise is important to other professionals.

For example, pharmacists may want to teach parental nutrition preparation, critical care nurses may want to teach the practical aspect of parental nutrition administration.

2. Explore the obstacles and challenges in establishing the IPE sessions outline in task 1.

3. Suggest solutions to overcome the challenges and obstacles and prioritise the solutions into action points.

Each group will discuss their proposals with the rest of the participants.

References

1. World Health Organization (1988) Learning Together to Work Together for Health. WHO, Geneva.

2. Hammick M, Freeth D, Koppel I, Reeves S and Barr H. A best evidence systematic review of interprofessional education: BEME Guide no. 9. Medical Teacher 2007; 29: 735-751.

3. Headrick LA, Wilcock PM and Batalden PB. Interprofessional working and continuing medical education. British Medical Journal 1998; 316: 771-4.

Workshop Submissions

Objectives

1. To raise the participants' awareness of opportunities for implementing IPE in their own clinical teaching context.

2. Explore the obstacles in establishing IPE.

3. Suggest solutions to overcome obstacles in establishing IPE.

Maximum 20 participants

Intended audience: Health care professionals from various background and clinical skills educators.

W03

Optimising Learning Opportunities in the Trans-Digital Age for Both Generations

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Abstract

Younger clinician-   "I can learn everything I need to know from the web!"

Older clinician- "Want to bet? But while you're at it, look this up…"

Thanks to advances in technology, the next generation of clinicians is learning in rapidly evolving ways, their skills and knowledge are assessed using simulated and structured scenarios, and they have access to "information just in time" to answer questions that arise in clinical situations. However, access to practical learning experiences is often at risk because of changes in organisational practice focused on efficiency and safety goals. Time for supervised learning is at an all-time premium and the vocabulary across the digital divide is widening. The roundtable discussion, led by a trans-Tasman father & son combo focuses on sharing experience and technological expertise so that learning means getting the narrative right—encouraging on-the-job expertise development while using both enhanced web fact finding skills with evidence-based experiential clinical sense-making.

Workshop Submissions

Roundtable Discussion

Objective- recognise where the same words mean different things as the culture of "trial and error" gives way to "click and scroll" while the goals are still shared and the values still drive both generations.

Intended audience- teachers and learners, who should be both things at the same time!

20-30 people

W04

The role of simulation in the teaching and assessment of professionalism.

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Abstract

Context: While much of the recent development in clinical skills has focussed on advances in technology and its applications in clinical skills, the broad area of professionalism has gained increasing curriculum and assessment prominence, particularly for employers and regulators. Based on a combination of professional codes of conduct, ethics and law, the contemporary teaching and assessment of professionalism is difficult because the key issue is not so much related to knowledge but to the application of knowledge in the real world. Simulation may therefore play a role in building competence and confidence in managing common professionalism issues. For example, should simulated patients be used in encounters such as: 1. Peers: one student asks another to sign him/her in to practical session; 2. Senior colleagues: presenting a case for advice or responding to adviceafter hours by a registrar; 3. Patients: responding to comments about perceived poor practice by another professional; 4. Employers: a mock performance appraisal. While there is a gap between competence and performance, how effective is this approach in preparing future health professionals for some demanding roles.

Conclusion: This workshop will discuss a framework for including such simulations for teaching and assessment as part of a more programmatic assessment of graduate outcomes that includes OSCE and workplace-based assessment. A list of potential professionalism issues that are suitable for simulation (both teaching and assessment) will be developed and their use in health professional programs will be encouraged.

Workshop Submissions

Objective: to elaborate a framework for teaching and assessing professionalism through both simulation and workplace-based activities

Audience - any educators involved with learners in any health profession

Maxiumum participants - 20

W05

Have you tried this app? Workshop on Academic productivity

Lysa Owen, Natalie Lafferty, Ben Shippey
University of Dundee, Dundee, Scotland, UK

Abstract

What tools can busy academic writers use to enhance their creativity? Increasing demands on the time of academics and clinical teachers can cause many constraints on the development of scholarship and collegiality. Smarter approaches to organisation of data, task management, productivity and writing may help scholars to balance time and work and find motivation to write. The workshop facilitators will bring together some examples of practical tools, tips, software and apps which can enhance the productive academic writing lives of participants. Some software and apps will be available for hands on practice. There will be opportunities to try some writing strategies and techniques. It is anticipated that some participants themselves will bring their own favourite apps, tips and tools to share in this collaborative workshop.

The workshop will address participants personal learning objectives but can include goal-setting, overcoming procrastination, pomodoro technique, marking up literature, organising references, free writing, outlining, as well as software and applications which the workshop facilitators have found helpful in their own academic writing.

Workshop Submissions

Objectives: By participating in this workshop participants have an opportunity to explore a range of productivity strategies, applications and software which can enhance their creative and productive academic writing. Participants will be invited to share their own experiences and recommendations on enhancing academic creativity.

Audience: Early career researchers may find this particularly valuable, as well as those who are seeking innovative ways to organise and retrieve data. No prior experience is necessary. It would be helpful, but not essential for participants to bring a laptop or device which they can use for some of the writing exercises.

Max: 20 participants

W06

Becoming an effective clinical educator: lessons learned from the literature

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Abstract

Providing learning experiences for students in the clinical setting is often an integral part of the clinician role, and can be challenging. Practitioners chosen to educate students are often experienced health care professionals with excellent clinical skills, however may have limited experience providing clinical supervision and education to learners. High workloads and the demands of clinical practice add additional challenges to planning and implementing a successful learning experience. Planning for clinical learning experiences may end up being be largely opportunistic, or based on the educators own learning experiences or teaching style, potentially leading to a suboptimal learning experience for the student.

This workshop will explore a theory-based approach to planning and implementing a student learning experience in the clinical setting. The work of educational theorists such as Malcolm Knowles's principles for teaching adults, Schon's work on reflection, and Lave and Wenger's theory of legitimate peripheral participation have direct relevance to teaching and learning in the clinical setting. By using a theory-based approach, clinical educators can plan and deliver a meaningful clinical education experience in a timely way which provides the learner with the optimal chances of success, as well as providing tools for lifelong learning. During this participative "hands on" workshop, participants will use techniques such as small and large group discussion, case studies and role play to share their experiences with student supervision and education, examine relevant literature and to think conceptually about planning a learning experience for their own specific clinical environment. In addition, participant experience in dealing with challenges such as the unmotivated learner, and the learner in difficulty, will be placed in a theoretical framework and used to co-created potential solutions and strategies for when things "do not go as planned".

Workshop Submissions

Objectives:

By the end of the session, participants will be able to:

1) Provide examples of how to improve current clinical education practice by using educational theory

2) Integrate educational theory into the planning of a learning experience for students in a specific clinical setting

Intended Audience:

Clinicians who currently provide learning experiences for health professional students in the clinical setting, or to those who are considering doing so in the future.

Maximum number of participants: 30

W07

Creativity in developing clinical skills for education and practice: a workplace learning culture exercise

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Abstract

The complexity of workplace learning in healthcare can influence the opportunities for an individual practitioners' capacity for skill development. This is because learning is constrained by countless interactions and cultural artifacts that can either enhance the individual's opportunities for learning or, undermine the richness of affordances that such a workplace setting, as healthcare, has to offer 1, 2. Engaging with workplace pedagogy connects staff with change potential at both structural and agency levels. This situated learning furthers the capacity for individual practitioners and teams (as agents of change) to increase their sphere of influence, spiraling out into organization wide, sustainable cultural change. Extraneous events further influence this delicate balance towards social emancipation, promoted through a values driven interwoven social interchange. Being able to interpret, differentiate and reconceptualise events as they emerge is a major challenge for transformation, yet is at the very heart of transformative change. Therefore, in facilitating the development of clinical skills for practice, a critical consideration is whether the particular clinical environment supports a learning culture. Using critical creativity and appreciative inquiry approach this workshop is designed to enable participants to map out their workplace learning culture. Understanding the central constructs that support workplace learning is important for educators in their facilitation of students' learning and skill development.

References:

1. Newton, J.M., Jolly, B. & Henderson, A. (2014) A re-examination of nurses' and students' learning in the workplace. Nurse Education Today DOI: 10.1016/j.nedt.2014.07.001
2. Hardy, S., Jackson, C., Webster, J. & Manley, K. (2013) Educating advanced level practice within complex health care workplace environments through transformational practice development. Nurse Education Today, 33 1099-1103

Workshop Submissions

Through participation in the workshop participants will:
1. Explore the use of critical creativity as a method for reflection;
2. Gain an understanding of appreciative inquiry as an approach to facilitating practice change;
3. Discuss central concepts that support learning in the workplace; and
4. Take back tools and actions to creatively enhance work based skills development.

Intended audience:

Clinicians and educators interested in exploring two different methods of facilitation in unpacking workplace culture. No prior experience is necessary, however participants need to be prepared to interact and participate in a creative activity.

Maximum number of participants: 20

W08

Integrating the anatomy of a joint with the teaching of its clinical examination

John Frain, John Judson
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Abstract

Clinical anatomy may be considered anatomy applied to patient care [1]. Good patient care requires a thorough physical examination built on an understanding of the underlying anatomy. This is particularly important for future clinicians who will work in settings in which access to imaging technology may be limited [1]. The history and examination remain important diagnostic tools despite technological advances [2-3]. Anatomy remains a core subject in medical education [4]. It should be taught in the context of its clinical relevance utilising appropriate aids to do so [5]. Anatomical knowledge of medical students may be insufficient for safe medical practice [6]. Early exposure of students to the clinical relevance of anatomical principles may aid the acquisition of knowledge and understanding by students [7]. Students exposed to clinical scenarios in their learning together with use of cadaveric specimens, peer examination and imaging report deeper understanding, the stimulus to further study, and a perception of increased future usefulness of the knowledge [8]. Use of multimedia alongside traditional materials aid this understanding still further. Students report increased satisfaction overall with the course which emphasizes the clinical relevance of the basic sciences within problem-based clinical scenarios [9]. An integrated approach to teaching the correlates between anatomy, clinical examination and the findings on imaging may likewise lead to a more nuanced application of anatomical knowledge in the light of the history and examination [10].

This hands-on workshop will explore all of these themes in the context of a practical and integrated examination of the knee joint. Evaluation will be made of the design of the anatomy of the knee, its susceptibility to pathology and how understanding the anatomy and its correlates in clinical examination and imaging can help drive the differential diagnosis of the patient presenting with symptoms in this joint.

Workshop Submissions

Learning objectives

• Helping students identify clinically relevant anatomy

• Identifying barriers to use of anatomy in clinical practice

• Increasing confidence in the identification of clinically relevant surface landmarks

• Using surface anatomy to drive clinical reasoning and differential diagnosis

• Understanding correlates between clinical anatomical change, physical examination and imaging in an evidence-based physical examination

Intended audience

Teachers of clinical examination, clinical reasoning and/or evidence-based medicine at all levels

Maximum participants

15-20 persons

W09

How might TQM enhance your Workplace Based Assessment?

Janet Lefroy, Simon Gay, Maggie Bartlett, RK (Bob) McKinley
Keele University School of Medicine, Staffordshire, UK

Abstract

Context

Total Quality Management (TQM) is not new - it is a widely used and accepted tool within industry. TQM can be usefully applied to medical education (1) and yet this approach is rarely used to help address challenges within this domain.

Keele Medical School has a Total Quality Management (TQM) approach to delivering 1400+ workplace based assessments per annum. Facilitators will use this experience to assist workshop participants in the exploration of the possible benefits of TQM for workplace based assessment within their own organisation.

Format

1. Introductory Plenary: to orientate delegates to the principles of TQM to ensure a shared starting point.

2. Clarifying Challenges: In small groups, delegates will have opportunity to discuss the challenges to WBA within their own curriculum.

3. Presentation: brief outline of the TQM approach to workplace based assessments at Keele.

4. Practicalities: In small groups, delegates will be able to explore how the strategies contained within Keele's TQM approach might offer solutions to the previously identified challenges to workplace based assessment within their own context.

5. Aspiration to Inspiration: closing discussion will bring together the reflections of attendees and focus on the challenges of workplace based assessment and the potential solutions TQM offers.

Workshop Submissions

Objectives

Following the workshop participants will be able to:

Recognize opportunities to strengthen the performance of workplace based assessment within their organisation.

• Identify a wide range of strategies to promote the quality of workplace based assessment within their clinical context.

• Appreciate the value of the synergistic application of simultaneous continuous quality improvement strategies to workplace based assessment.

Intended audience

Those with an interest in introducing or increasing the workplace based assessment contribution within their institution.

No previous experience required.

Maximum number of participants: 40

W10

The Sheffield 'Patients as Educators' Programme: Implementing patient training prior to being involved in medical education

Amir Burney, Martin Hague, Michelle McGregor
University of Sheffield, Sheffield, UK

Abstract

Traditionally medical students see patients in outpatient clinics, General Practice or as inpatients; however, changes within the National Health Service (UK) have led to shorter hospital stays and with the increasing numbers of medical students have, at times, limited the opportunities for students to see certain types of patients.

In response to these changes the Patients as Educators (PaE) programme was initiated by the University of Sheffield in 2004. This aim was to provide undergraduate medical, dental and nursing students with the opportunities to interact with a wide variety of patients at our clinical skills centre.

An important component of the programme is the training that the patient requires prior to being involved in an educational session. Following a selection process all patient volunteers receive a structured training programme to prepare them for teaching and assessment sessions.

Patients who express an interest in joining the programme are invited to meet the PaE team to establish how, when and why they wish to be involved and indeed if they are ready to be involved.

Patients are subsequently invited to an induction session where the PaE team demonstrate some of the likely scenarios that the patients may be involved with. At the conclusion of the induction session the patients are invited to participate in a scheduled teaching session.

Prior to attending a self-selected teaching session the PaE is provided with specific training which is delivered by the Clinical Skills Team. The aim of the training is to facilitate the tutor, student and patient interaction thus maximising the learning experience. Additionally, the PaE's are provided with structured training, enabling them to participate in various formative and summative assessments.

Workshop Submissions

Objectives:

• To help participants to develop an understanding and application of the key principles required for training 'Real Patients' for teaching and assessments.

- Participants could use this experience to help develop similar training programmes or expand existing programmes within their own organisation.

Activities

- A short overview of patient involvement at Sheffield Medical School.

- Small group discussions regarding patient training in medical education.

- Presentation of the patient training programme delivered at the University of Sheffield.

- To network and share experiences with participants.

Intended Audience:

For all healthcare professionals, involved in patient training within their teaching and assessment programmes.

Maximum Participants 20

W12

Values Exchange: Engaging students in clinical ethical enquiry through a creative web-based learning community.

Chantal Perera[1], Linda Ross[1], Jaime Wallis[1], Amanda Lees[2,3], David Seedhouse[3]
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Abstract

Ethics education is an essential component of university healthcare programs and ethical behaviour is a key attribute of health professionals globally. Teaching and assessing values and ethics in clinical decision making is challenging, and the effectiveness of that teaching remains the subject of debate. Students tend to see clinical issues as having 'right' and 'wrong' options, however issues in healthcare disciplines are often 'grey' with degrees of 'correctness'. Teaching approaches that allow students to explore individual beliefs, seek diverse views, and encourage the formation of new viewpoints are necessary.

Values Exchange (VX) offers an innovative and interactive alternative to traditional pedagogical approaches. VX is a networked web-based learning community supporting students to think deeply about ethical issues in their practice. Its democratic, transparent and egalitarian ideology is underpinned by a values based theory founded on the idea of recognising and valuing diversity.

Through a series of interactive screens, students consider clinical cases and scenarios with various contextual factors. Students reflect on their reasoning and identify factors influencing their views through semi-structured and free-text responses. Each learner may access the choices (and underpinning reasoning) of others, adding depth to their understanding of individual values and practices. This two-tiered experience, whereby students deliberate a case and then contemplate the reasoning of others, encourages ongoing reflection and collaborative learning.

This workshop will elaborate on the challenges associated with teaching ethics in clinical practice and obtaining student engagement at a deeper level. An overview of the VX software and insight into the implementation and assessment across undergraduate health disciplines will be provided. Participants will have the opportunity to work through an online case with the assistance of the workshop facilitators. The workshop will conclude with a discussion about introducing and embedding VX into curriculum and opportunities for cross-institutional classroom learning and research projects.

Workshop Submissions

Objectives:

• Discuss the challenges of clinical values and ethics education

• Provide an overview and demonstration of Values Exchange (VX)

• Demonstrate how the VX software has been used across health disciplines including assessment   practices

• Highlight how critical thinking and reflective practice skills can be developed and enhanced.

• Provide a 'hands on experience' of VX featuring a range of clinical cases and scenarios

• Discuss resultant data and how this can be used for teaching and research purposes

Audience:

Educators interested in innovative, interactive and creative methods to incorporate genuine clinical ethics education into curriculum.

Participants

25-30

W13

Clinical Diagnostic Reasoning: Equipping students with peer-instruction skills to work together in developing their clinical diagnostic reasoning

Janine Henderson, Anna Hammond
Hull York Medical School, York University, UK

Abstract

Workshop Format

An introductory presentation covering best evidence in current medical education literature regarding development of diagnostic clinical reasoning skills for undergraduate students

Small group work focusing on clinical tutor-identified real case scenarios to enable delegates to identify teaching and learning approaches to help undergraduate students to develop diagnostic reasoning skills. This will include consideration of facilitation of peer-peer approaches for development of clinical reasoning skills

A closing plenary will include

• DVD demonstrating the authors' approach to facilitation of skills development in this area

• Further discussion about the student-led approach

• Reflection on incorporating novel approaches in delegates` own curriculum and teaching sessions

• Presentation of the authors student "pocket guide" hand-out

• Questions/Answers/Sharing best practice.

Workshop Submissions

Objectives

To consider clinical tutor-identified, specific, student cognitive-processing difficulties in clinical diagnostic reasoning in contemporary systems-based curricula.

To consider specific challenges for students in developing their own clinical reasoning skills, following a transition from university to clinical teaching environments.

To aid development of students` ability to consider their own clinical reasoning skills and facilitate development of these skills in their colleagues

To share best practice with colleagues

To discuss the authors` example of curricular innovation in this area

Intended audience

Tutors responsible for delivering clinical skills/ clinical reasoning teaching in undergraduate training

Maximum number of delegates 24

W14

"And for my next trick…"- Developing tutors' skills for active tuition of clinical reasoning in the presence of the patient.

Simon Gay, Maggie Bartlett, Bob McKinley
Keele University School of Medicine, Keele, UK

Abstract

Context

This workshop builds upon clinical reasoning workshops held at Prato in 2011 and 2013. Participants will explore potential strategies for development of tutors' skills in the active tuition of clinical reasoning within clinical practice.

Clinical reasoning and clinical management skills are important parts of student clinicians learning, with the expectation that decision making and patient safety will be improved[1,2,3,4]. Tutors need to learn how to maximise teaching potential for the efficient tuition of clinical reasoning in the presence of the patient.

Format

1. Introductory Plenary – to orientate delegates to the aspects of clinical reasoning which will be considered and to ensure delegates have a shared starting point.

2. The Tuition of Clinical Reasoning in the Presence of the Patient – In small groups, delegates will observe videoed examples of real "bed-side" teaching of students by clinicians as a stimulus to discussion of the potential clinical reasoning teaching opportunities that exist and the various methods and structures which can address them.

3. Closing Plenary – the closing discussion will bring together the reflections of the attendees and focus on the constraints on teaching clinical reasoning in real-time clinical practice, some potential techniques and the faculty development solutions required to promote them.

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[4] Gay SP, Bartlett M, McKinley RK. Teaching clinical reasoning to medical students. The Clinical Teacher. 2013:10;308-312.

Workshop Submissions

Objectives

Following the workshop participants will be able to:

• Recognize opportunities to strengthen proactive "bed side" teaching of clinical reasoning within their clinical environment

• Evaluate individual tutors' clinical reasoning teaching skills

• Generate strategies for individual tutors to develop their clinical reasoning teaching

• Discuss current opinion about teaching and learning clinical reasoning

• Reflect on their personal experience of learning and teaching clinical reasoning

Intended audience

Those with an interest in the development of clinical reasoning skills for health care practitioners.
No previous experience required.

Maximum number of participants: 40

Equipment required: ability to show digital video with sound

W15

Health and Sustainability Scenario-based Skills workshop

Janet Richardson, Jane Grose, Janet Kelsey, Maggie Doman
Plymouth University, Plymouth, UK

Abstract

Climate change and resource scarcity pose challenges for healthcare in the future, yet there is little to raise awareness about these issues in health and social care organisations or in the healthcare curriculum; healthcare professionals are poorly equipped to practice in a changing climate. Procurement and waste management amounts to 65% of the total NHS carbon emissions in England and health and social care organisations need to engage in mitigation strategies. One of the challenges in clinical education is to illustrate the relevance of sustainability to healthcare. This workshop is based on our own research in health and social care waste management and sustainable procurement that was developed into a sustainability and health training session using scenario-based learning.

This session has been delivered to over 300 student nurses; evaluations demonstrate changes in attitudes towards and knowledge of sustainability and climate change. Sustainability is now embedded across the Nursing and Midwifery curricula at Plymouth University. By using clinically relevant scenario-based learning, sessions are delivered alongside clinical skills, thereby emphasising the importance of sustainability to actual practice.

The workshop will focus on one scenario that raises concern about the potential future availability or plastics, and the consequences this might have on patient care. Using items used in everyday clinical practice, participants will consider both threats to supply, alternative resources, and appropriate disposal. Other items that could be threatened by interruption in the supply chain, for example as a consequences of the natural resources from which they are made, will also be discussed.

Workshop Submissions

Workshop objectives

1. To highlight the importance of sustainability in healthcare and nursing

2. To illustrate how sustainability can be embedded into healthcare curricula using a scenario-based skills approach

3. To engage participants in discussion about the teaching of sustainability alongside clinical skills

Intended audience

Healthcare educators and researchers

Instructors qualifications

The workshop instructor is a nurse academic who has been teaching sustainability issues for a number of years. She is a member of the team responsible for developing and evaluating this innovative scenario-based approach.

Maximum number of participants 30

W16

Ethical analysis and reflective practice as tools for managing oneself in novel and complex professional situations

Adrian Sutton[2,3], Marian Surgenor[2,3], Emmanuel Moro[3], James Okello[3]
[1]Manchester Medical School, Manchester, UK, [2]University Hospital of South Manchester, Manchester, UK, [3]Gulu University Medical School, Gulu, Uganda

Abstract

Professionalism requires an appreciation by practitioners of their place in the lives of their patients and those towards whom they have professional responsibilities e.g. their colleagues, students and trainees: as 'proto-professionals' students have equivalent responsibilities. Medical science alone cannot always describe 'Best Practice'. The wishes of individual patients will determine what is felt to be the most desirable outcome and govern what the practitioner may be able to do or decisions about resource allocation may govern what is possible. These may present practitioners, at any stage of their career, with significant challenges in terms of formulating what they can reasonably do. Understanding the nature of the autonomy, authority and responsibility of the different participants in clinical encounters are central themes in medical ethics: this understanding can be operationalised to facilitate decision-making in novel and complex situations.

Clinical situations may also evoke emotions which can adversely impact upon the ability to formulate the optimal response or to avoid acting more on impulse, driven by the interactive intensity or the personal significance of the situation for the practitioner. One of the purposes of Reflective Practice is to understand psychodynamic factors which may influence professional behaviour in order to enhance development and reduce the likelihood of less desirable or unprofessional practice. As with ethical analysis, developing the ability to reflect in the immediacy of situations may facilitate problem-solving and good practice.

The workshop will consist of presentation of examples of these processes to illustrate their theoretical underpinning and creative integration into practice as a prelude to participants contributing examples from their own experience for consideration of the applicability and usefulness of the model. Further consideration can then be given to its translation into practice for professionals at various stages of training and practice and in different settings.

Workshop Submissions

Objectives:

1. To illustrate the value of ethical analysis, particularly as related to autonomy, responsibility and authority, as a tool in clinical practice and education.

2. To illustrate the value of Reflective Practice as a tool to assist in the management of complex clinical and teaching situations (with specific reference to psychodynamic factors).

3. To provide participants with an opportunity to examine the potential value of these to their own practice and to training and continuing professional development.

Intended audience:

Clinicians,students and teachers at all levels

Maximum number of participants in the proposed workshop 16

W17

The Reflective 'Selfie' - A new point of view for feedback and debrief

Jean Ker[1], Neil Harrison[1], Roderick McLeod[1], David Lowe[2]
[1]University of Dundee, Dundee, UK, [2]University of Glasgow, Glasgow, UK

Abstract

'To capture meaningful experiences' is part of the mission statement of GoPro, a company producing exciting new videoing equipment. To achieve this for our learners could profoundly enrich their learning experiences.

Attaining competence in technical skills and developing non-technical skills in our healthcare professionals is vital for the delivery of high quality patient care (Glavin 2003, Kneebone 2002). It is therefore important that we look for innovative opportunities to enhance the acquisition of these skills.

Kolb's model of experiential learning supports the theory that self-review and reflection, following a simulated learning activity, is vital to the development of a skill (Issenberg, 2006). This process can be enhanced by the use of video to provide cues for the learner to reflect on (Forrest, 2013). The majority of video recordings involve a record of actions from an entirely different perspective to the one the learner experiences. Can we therefore further enhance the processes of reflection, planning and future deliberate practice by providing our learners with a video record through their own eyes?

GoPro have produced easy to use cameras that allow clear recording of an activity from the learner's perspective. These cameras have already been used to create film for instruction (McDonnell 2012, McCaslin 2014) and have also been used in theatre to display procedures (Bizzotto 2013). At the University of Dundee we are exploring their wider application to clinical skills learning in the following areas:

Improved learning through the practitioner-view-of-point video

Enhanced quality of formative assessment and feedback

Learner motivation through providing a novel and exciting learning experience

In this workshop participants will get the opportunity to explore the theory and applications of this video feedback method. The workshop will be practical allowing participants to create a video and trial their ideas with direction from the experienced team.

Workshop Submissions

The workshop aims to provide participants with the theory behind this educational intervention and demonstrate to participants how it is currently being used to optimise learning. Participants will have the opportunity to shoot videos using this innovative hardware and discuss potential applications in their educational setting.

Intended Audience

Max 16

This workshop will be of interest to all educators involved in teaching both technical and non-technical skills at an undergraduate or postgraduate level.

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