Simulation: Recreating Reality - The Learners' Stories 2010

UK Workshop Abstracts

Workshop Session A
Wednesday 15.10-16.10

A Systematic Review of Simulation in Continuing Healthcare Education
Sharon Elliott, Karen Murrell; Thames Valley University

This session will present the findings of a systematic review undertaken by Thames Valley University London as a collaborative centre of the Joanna Briggs Institute, Adelaide, Australia. The subject of the review is the effectiveness of simulation in the continuing education and training of qualified healthcare staff. The questions asked are:
1) How effective is simulation training in terms of improving the self-confidence of qualified healthcare staff in dealing with clinical situations?
2) How effective is simulation training at improving the practice of qualified healthcare staff in dealing with clinical situations?
In order to answer these questions the review includes a wide range of international studies.

Developing and Implementing a Competency Assessment Tool into a Simulation
Roy Brown; University of Wollongong

The creation of a competency assessment schedule is a challenge, a greater challenge however is to re-structure the simulation and practice based content of the curriculum, around the tool, in such a way that enhances the students learning experience. The impact on the academic and practice based teams requires leading so that the integration of the case based learning and the operationalisation of the tools is coherent in practice and in the simulation setting. These strategies are a powerful combination.

From the Cot in the Corner
Jackie Vasey, Aileen Sharp; University of Huddersfield

This workshop aims to reflect on the development of a “flexible learning space” in the University of Huddersfield, otherwise known as “Neptune Ward”. Whilst Huddersfield has excellent skills facilities, we literally had “the cot in the corner” in terms of child simulation provision. Over the last two to three years a flexible learning space has been developed, which will be discussed and demonstrated. This session will hopefully be delivered in the actual room with demonstrations of the equipment. The aim is to promote flexible development of simulation facilities, in the current financial climate where resources and space to deliver simulation are limited.

Student Midwives Experiences of OSCEs for Developing Emergency Skills
Jayne Samples, Julie Parkin; University of Huddersfield

The results of a 2009 evaluation of 2nd and 3rd year midwifery OSCEs to develop emergency skills in eclampsia, breech, shoulder dystocia, PPH and neonatal resuscitation. Covers the use of scenarios, video, teamwork, communication and the simulated woman and baby.

The Role of the Clinical Skills Technician
Tracy Clayton; University of Huddersfield

The role of the Senior Clinical Technician is multifaceted inclusive of efficient running of the skills laboratories, maintaining and servicing equipment. The role of the technician has developed with the advancement of iStan and METI products allowing for support of national trends, flexibility in curriculum developments and the introduction of new skills for the technician. (Hilton et al, 2004) The integration of iStan into the simulation laboratories and facilitation of simulated practice has had a two-fold impact upon the team. Firstly by a reduction in facilitator manpower and secondly by providing a development opportunity to the technician. Consequently resulting in heightened job satisfaction through observing the change in nature of student learning and the benefits that they are gaining from simulated practice.

Workshop Session B
Wednesday 16.20-17.20

Be Real! Creating Realism in Simulation
Lesley Benson, Yvonne Jarvis; University of Glamorgan

Simulation in nurse education has been steadily gaining momentum. The literature demonstrates that the teaching and learning of simulated clinical experiences allows multiple objectives to be taught in a realistic clinical environment without harming patients (Wilford and Doyle, 2006).

In order for the transfer of knowledge to occur, the student’s role in the simulation needs to be as authentic as possible (Campbell and Daley, 2009). The primary goal is to “suspend disbelief” allowing the students to immerse themselves in a learning experience that closely matches that encountered in real life (Cheng et al, 2007).

This presentation will showcase how The University of Glamorgan creates realism in teaching and learning through simulation. The way space is structured to look and feel like a clinical area, with necessary equipment that sets the scene for the simulation. The use of high fidelity human patient simulators to provide the opportunity to take simulation to a higher interactive level. It will demonstrate how the addition of adjuncts i.e. moulage, sounds and smells allows for very realistic representations of simulated clinical experiences.
Changing Scenario Intensity to Promote Learning in Pediatric Intensive Care
Sandra Batcheler; Bristol Royal Hospital for Children

The PICU Nursing Development Programme integrates simulated clinical experiences with didactic sessions. This allows the psychomotor, cognitive and affective learning domains to be addressed effectively within one comprehensive programme.

The simulation experiences gradually change from “high signal low noise” with a focus on group discussion and practical demonstrations to “low signal high noise” where practitioners are exposed to complex and potentially life-threatening situations.

Embedding Dementia Education in an Australian Undergraduate Curriculum
Kay Crookes, RN, BA, Grad Dip Ed.; University of Wollongong,

Dementia is a major challenge in healthcare but there is insufficient dementia-related content in undergraduate programmes. In 2006 the Australian government established four dementia training and studies centres (DTSCs) including the Eastern Australia Dementia Training and Studies Centre (EADTSC) based at the University of Wollongong and Queensland University of Technology. One of their aims is to inform curriculum on dementia care in pre-registration health programmes. The EADTSC has addressed this by developing undergraduate dementia material made freely available. This presentation will provide an overview of this initiative using a case study of a bachelor of nursing degree which has embedded dementia content across its curricula.

The EADTSC has developed a web-based resource Dementia Education Online (DEO). DEO consists of three online modules each equivalent to a one-hour lecture plus a two-hour tutorial. Evaluation of this resource consists of a systematic tracking process of where the resource is being used and an online evaluation form completed by participants. Teaching activities consist of face-to-face sessions delivered by clinical and research experts and clinical simulation related to dementia care for undergraduate students. A case study will demonstrate that buy-in from senior academics along with that of content experts, is required to achieve penetration of dementia content into nursing curricula.

Learning Transfer in Simulation
Marilyn Lee, Vicki Elfrink; University of Alabama

In this presentation findings from a multi-site evaluation of the Learning Transfer Tool (LTT) is described. The LTT measures students’ perceived changes in cognitive processes required for delivery of safe nursing care such as prioritization of patient needs, delegating care and communication skills. Findings from the pilot as well as the long-term study are discussed.

Our Experiences of Introducing and Integrating High Fidelity Simulation
Susan Walker, Mike Barker, Angela Lee; University of Salford

This session will be useful to those who have yet to purchase high fidelity simulators and those who have them ‘still in the box’.

Session Aim: To share experiences and lessons learned whilst introducing and integrating High Fidelity Simulation into the Faculty of Health and Social Care, University of Salford, and both pre and post registration nurse education.

Session Outcomes: By the end of this session, the delegates will be able to:
- Identify the value of a time line and action plan for introduction and integration of high fidelity simulation
- Discuss the importance of technical support and the value of a simulation

Coordinator:
- Explore the creation of a safe environment for staff education
- Evaluate the learning experience from the staff and student perspective

Simulation Not for Dummies
Michelle Chappell, Carl Covill; University of Huddersfield

This workshop focuses on preparing students for primary care experience. Developments in student nurse curriculum and advancements in community practice imply that future practice will be community orientated (Darzi, 2008); hence it is fundamental to develop educational strategies, which directly relate to skills using simulation as a learning method (Garside and Prescott 2009).

A literature review aims to determine the need for development of primary care skills by identifying and evaluating formal/informal methods required to develop student understanding of the needs of patients in a primary care setting (Modernising Nursing Careers 2006).

SORT:Ed
Karen Currell; University of Huddersfield

A healthcare simulation board game set in its first application in the paediatric setting.

The game is being developed for commercial sale. Future versions are in development including mental health, accident and emergency, schools version.

Low fidelity simulation allows participants in the game to gain insight and experience into paediatric nursing and other multidisciplinary team roles. SORT:ED is copyright protected and is being developed with support from grant from Yorkshire forward and Yorkshire enterprise fellowship.

Workshop Session C

Thursday 11.35-12.35

Integrating Clinical Decision-Making and Critical Thinking Abilities
Dawn Ritchie, Gill Langmack; University of Nottingham

Critical clinical thinking requires skilled and active interpretation and evaluation of observations, communication and information together with an ability to present reasoned argument. This presentation will identify issues, which must be addressed when integrating clinical skills via simulation into the paediatric nursing curriculum in order to develop critical, clinical thinkers. Feedback from students, the obstacles and recommendations for integrating simulation and e-learning into the curriculum will be presented.

(continued next page)
Medical Emergencies in the Dental Setting – Raising Standards through Blended Learning
Michael Lowry, Anthony Hoswell & Alan Mighell
The University of Leeds, Leeds Dental Institute

The dental team includes Dentists and Dental Care Professionals. Clarity on the standards required of members of the dental team faced with an acutely unwell person has been set out by the Resuscitation Council and endorsed by the General Dental Council (GDC). We will describe development of blended learning opportunities that include online resources and team-focused simulation in a dedicated facility to prepare dental team members to recognise and appropriately manage these infrequent, but important events.

Paediatric Assessment Recognition and Stabilisation
Linda Daniel; Yorkshire and Humber Critical Care Network

Early signs of serious illness in children may not be obvious due to physiological compensation. Evidence suggests that recognition of and response to these signs is often delayed and sometimes inappropriate (CEMACH 2008, DoH 2008). Inadequate communication and weak teamwork often feature in reports of patient safety incidents to the NPSA. By exposing learners to point of care simulation, situations they are unlikely to encounter every day can refresh and enhance their assessment team-working and communication skills.

Real World Or Out Of This World? An Evaluation Of The Effectiveness Of SiRe
Karen Ousey; University of Huddersfield

The use of stimulation, in the form of clinical skills labs, has been widely used in undergraduate nursing programmes for decades, yet little is known about the effectiveness of this educational strategy. Two Schools of Nursing have collaborated to evaluate the usefulness of simulation within their respective undergraduate nursing programmes. One clinical skill, blood pressure measurement, was selected as the focus for this study. Results of the analysis will be discussed.

Simulation and Clinical Skills Child Health Forum
Kathryn Summers; Canterbury Christ Church University

The use of high fidelity human patient simulators provides educationalists with opportunities for innovative practice activities that focus on simulated, student centered, learning activities. This developing area of nursing curricula has been in response to regulatory guidelines, which recognize the value of such learning activities, and has facilitated its inclusion in pre-registration nursing programmes. (Nursing and Midwifery Council (NMC) 2007).

At Canterbury Christ Church University Simulation as practice hours has been introduced into year one and year three of the September 2009 pre-registration child nursing programme. This initiative has been supported through the development of the Simulation and Clinical Skills Child Health Forum. This forum was established in 2009 and since then has provided an opportunity for mentors/practice learning facilitators and educators from a number of fields of practice concerned with the care of children, young people and their families to come together and participate in simulated activities. Members of this forum assist with the simulation activities as part of the students practice hours within the University setting.

Skills Acquisition through Simulation: A Learner’s Experience
Keeley Wade, Colette Rutter; University of Huddersfield

Two post-graduate learners experiences of undertaking a Professional Certificate in Acute Illness. The theory was supported by acquisition of associated clinical skills through simulated practice. The experience gained and development of Nursing practice will be discussed. Content is related to the NICE Guidelines and the impact of knowledge and competence gained and relevance to patient safety.

The Human Factors Debrief
Neal Jones, Aintree University

Human factors training has been utilised by high risk industries for over 60 years, most notably in aviation and nuclear fuel’s. Human factors can be identified as the elements of human behaviour that directly contribute to approximately 80% of error irrespective of professional domain.

The principle of the debrief, is to provide a facilitated reflective learning environment following a simulated scenario, although it is equally valid as a mechanism for deconstructing real life error’s.

De-briefing is not the same as critiquing, it is not a passive process within which substandard elements of the delivery of patient care are identified by an instructor, instead it is an active process within which the student makes sense of the elements of their behaviour that lead to error, and is supported through the mechanism of reflection.

Utilising iStan in the Mental Health and Learning Disability Nursing
Steve Hemingway; University of Huddersfield

In December 2009, The University of Huddersfield and South West Yorkshire Partnership Foundation Trust were awarded funding to produce a training package including a physical health framework and accompanying interactive DVD. This collaborative project seeks to educate senior healthcare assistants, student nurses and registered nurses undertaking preceptorship in mental health and learning disability care settings. This presentation will show iStan has been utilised to provide an interactive educational medium for the students test their knowledge learned from the physical health framework.

The physical health status of the person diagnosed with mental health or learning disability condition has been described as a “care gap”. The aim of this project is to improve the baseline knowledge for the target audience of the typical physical health presentations and subsequent assessment and interventions.
Health Care Assistants (HCAs) are essential members of the MDT (Multi-Disciplinary Team). On many wards they are relied upon to carry out the measuring and recording of patient observations and the calculation of Early Warning Scores (EWS). This can play a vital role in getting acutely ill patients timely care from appropriate Health Professionals.

The re-creation of clinical events to simulate crisis situations enables the HCAs to rehearse and explore their vital role in the management of that event in a safe environment.

Simulation enables the HCAs to identify potential errors, gives them the opportunity to recognize their important role within the healthcare team and to explore strengths and areas for improvement in their own practice.

This modern innovation of simulation excels as an exciting educational tool for all members of the multi-disciplinary team to rehearse essential skills.

Embedding case-based learning into a pre-registration programme is crucial to providing real life experiences for entry-level practitioners. We have adopted an approach that embeds underpinning knowledge development and problem solving around the cases used to learn. Student enthusiasm for using real cases evaluates well supporting our curriculum pedagogy. In order to maximise these opportunities we are developing and using the cases throughout the course.

The Royal United Hospital recently opened a fully equipped simulation suite on site in Bath. The suite includes a simulation room, debrief room, mock ward and clinical skills area. We have adult and paediatric high fidelity patient simulators and a number of medium and low fidelity manikins. The suite has always been very popular among doctors and medical students, who immediately saw the benefits of this type of training. Engaging professional nurses in simulation training was initially more difficult. However since the appointment of a dedicated Medical Simulation Specialist Nurse in January 2010, we have been able to integrate simulation training into a number of courses and study days and develop some new projects. As a result, simulation training is becoming more and more popular and nurses of all grades are recognising the advantages of this type of training. Please see our poster display for more information.

Simulation is an event or situation made to resemble clinical practice as closely as possible. The minute-to-minute care and monitoring of critically ill patients requires nurses to possess advanced assessment skills. Simulation workshops are facilitated every Monday during term. Scenarios are developed that require students to use classroom knowledge, incorporate assessment skills and develop critical thinking skills to adequately perform a full patient assessment. Students evaluate that working through scenarios sharpen their critical-thinking and psychomotor skills.

High-fidelity simulation is a useful mechanism to aid progression, development and skill acquisition in nurse education. However, nurse lecturers are daunted by sophisticated simulation technology. This poster presents a new method of introducing human patient simulation, whilst seeking to demystify the roles, responsibilities and underpinning pedagogy. Performing in front of people, repeated practice and taking on a new role teaches students to act, think and be like a nurse. This supports student learning and enhances self-confidence.