Introduction In-situ simulation is new in our unit and faculty development is at an early stage too.

When planning this scenario, we noted emerging themes in simulation literature including standardised outcome reporting and realist evaluation. We designed a realist evaluation to assess effectiveness of this simulation and inform future faculty development.

CONSORT reporting of methods

Participants (18): Nurses - 6 theatre, 3 auxiliaries, 1 student, 3 recovery; 2 surgeons; 3 anaesthetists

Orientation: lecture explaining scenario conduct, debriefing and psychological safety. Participation invited. Pre-brief to manikin, monitor and operating theatre

Simulator type: Resusci Anne (Laerdal, Norway), Trumonitor (Trucorp, NI).

Environment: ENT theatre. Surgical equipment available

Simulated event: 8 year old child develops airway obstruction secondary to clot whilst in recovery after uneventful adenotonsillectomy. Requires emergent return to theatre for bronchoscopic clot retrieval.

Instructional design: medium fidelity scenario. Learning outcomes = recognise obstructed airway; organise return to theatre; locate and assemble bronchoscopy tray Debriefing method:
advocacy inquiry by trained facilitator.

Results 72% first-time participation in in-situ sim

100% (18) enjoyed scenario and would like to participate again

Free-text ‘take home messages’ recorded by candidates. These were categorised into themes.

We found the ‘take home messages’ demonstrated that intended learning outcomes were delivered successfully. From the realist evaluation perspective, the chosen context (in-situ scenario) and mechanism (team-training & deliberate practice with feedback in debriefing) achieved the desired outcomes (pre-planned learning objectives delivered).

Discussion Realist evaluation is comprised of four key themes:

1. Formulating a working theory: ‘team training and deliberate practice is facilitated by simulation’

2. Hypothesis: ‘paediatric scenario conducted in-situ with the MDT will provide training in teamwork, communication and technical knowledge’

3. Observations: ‘take home messages analysed and categorised into themes.’

4. Programme Specification: ‘scenario design and conduct successfully delivered intended learning outcomes to the MDT. Method shared with faculty for introducing simulation in other subspecialty areas.

Conclusion We advocate realist evaluation methodology in local in-situ simulation exercises. We believe it aids simulation quality control and faculty development.

REFERENCES


Background Undergraduate medical education is expensive and there is a drive to deliver an increasing amount of education
through simulation and other innovative techniques. It is important that the benefits of using these costly bespoke and novel modes of teaching are justified.

Medical students are assessed in a variety of ways but we had not formally done this using simulation. We decided to assess pre block performance and then re-measure this performance at the end of the block using high fidelity simulation. A tool was designed for the purpose of formative assessment in order to determine the progression of technical and non-technical skills.

Summary of project A total of 17 senior medical students from Leicester Medical School were assessed at the commencement of, and end of, their acute care placement. They were individually tasked with managing a 10 minute scenario consisting of a patient with chest sepsis following multiple fractured ribs.

The assessment was undertaken by 2 or more experienced faculty who measured the student’s ability to perform an ABCDE assessment, provide appropriate medical management and escalate care using SBAR. Our assessment tool allowed scoring in technical skills and human factors domains. The pre and post block score were collected and compared. Data was analysed ascertain any improvement in performance.

Summary of results All students performed better during the post block simulation assessment. Interestingly, the weaker students were shown to have made the greatest overall improvement. Our assessment tool showed good validity and inter-rater reliability for technical skills but there were variances between faculty evaluations related to human factors.

Discussion, conclusion and recommendations Assessment drives learning We used simulation assessment to benchmark student performance. This project was worthwhile and the assessment of the undergraduates using simulation was achievable. Whilst expensive, simulation can be used to map the progress of undergraduates and offer assurances to the curriculum planners. Our scoring tool was both effective and easily applied to technical skills, however, measuring human factors performance remains a challenge. This was a worthwhile project and further work would be beneficial in the future.

REFERENCES

P26 USING SIMULATION TO LEARN HOW TO TRANSPORT A CRITICALLY ILL PAEDIATRIC PATIENT SAFELY

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Background It is well recognised that transport of critically ill patients between hospitals has the potential for adverse events. The same could apply for the movement of similar patients within the hospital.

A team moving a patient from a familiar to unfamiliar environment can pose challenges. Human factors have been shown to affect the safe transport of a patient. Teams must communicate effectively and handover safely to prevent harm to patients transferred.

Based upon a real life event, we delivered a paediatric transport simulation within our hospital to test our current transfer practice, provide learning to our teams and identify further latent threats.

Summary of Work Our simulation involved a critically ill baby being transported from our emergency department on one side of the hospital to the theatres on the other side. This simulation involved transport across a public area and therefore approval was sought from the clinical and divisional directors. The simulation was multidisciplinary in nature involving paediatric, emergency department and anaesthetic teams. A time that suited all three specialties was chosen as well as when there was theatre availability.

The focus of the simulation was on the preparation and transport, not the initial assessment and stabilisation of the baby. The scenario was debriefed using the Diamond model and feedback was obtained using our in-situ feedback form containing Likert scales and free text responses.

Summary of Results 11 candidates across the specialities participated in the transport simulation with their paediatric experience ranging from nil to 10 years.

The feedback was very positive with participants appreciating the realism and immersive nature. They commended the use of multiple teams as it allowed practice of communication between them and an understanding of each other’s roles.

Positive learning outcomes included the importance of clear communication, regular handovers/recaps, and how a ‘simple transfer can involve a lot of preparation and decision-making’. Average confidence increased from 2.6 to 4.1/5 post scenario.

Discussions, conclusions, recommendations Our transport simulation raised important learning points for our team and identified latent threats, which have now been rectified e.g. resuscitator not checked, access to theatres for all staff.

We aim to run a similar multiprofessional simulation every 6 months to other common areas paediatric patients may be transported to like radiology. There is also potential to involve our network transport team (KIDS) to deliver and practice an inter-hospital transfer simulation.

REFERENCES
2. Dickenson P, Eynon CA. Improving the timeliness of time critical transfers: removing ‘referral and acceptance’ from the transfer pathway. IJCSS, April 2014, Volume 15, Number 2

P27 USING A SIMULATED COMMUNITY PHARMACY AND ROLE-PLAY TO TEACH FUTURE PHARMACISTS

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Background Dispensing and supplying medicines to patients are fundamental aspects of community pharmacy; pharmacists must be able to provide advice about the product(s) being supplied to promote the safe and effective use of medicines. The innovative teaching activity outlined below aimed to enable future pharmacists at Queen’s University Belfast to learn about this part of practice and demonstrate their competence.

Summary of work Third-year pharmacy students (n=120) undertook a ‘Proprietary Dispensing’ component (compulsory attendance at 16-weekly classes). Classes encompassed a formative session with pharmacist staff and dispensing of prescriptions (with formative assessment before summative). Other