

themselves and their students, and they believe that this will be an important pedagogy post-pandemic.

REFERENCE

1. Cheng A, Kolbe M, Grant V. A practical guide to virtual debriefings: communities of inquiry perspective. *Adv Simul.* 2020;5:18. <https://doi.org/10.1186/s41077-020-00141-1>

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MEDICAL STUDENT ATTITUDES TOWARDS POINT-OF-CARE ULTRASOUND IN UNDERGRADUATE MEDICAL EDUCATION

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Background: Point-of-care ultrasound (PoCUS) is a bedside imaging modality that provides the operator with instant clinical patient information. PoCUS is a low-cost, radiation-free, portable diagnostic tool that is utilized in many specialities ^[1]. To the best of our knowledge, no Irish medical schools have a formalized ultrasound curriculum in place for undergraduate students. Hands-on ultrasound teaching has the potential to enhance medical students' basic understanding of human anatomy and confidence in diagnostic ability ^[2].

Aim: The aim of the study was to assess undergraduate medical students' attitudes towards PoCUS through the implementation of a rudimentary proctored PoCUS workshop.

Methodology: Third-year medical students at the Royal College of Surgeons in Ireland participated in a 1-hour PoCUS workshop as part of their fundamental clinical skills training. Medical students attended the in-person workshop repeated over 8 weeks. Students were exposed to three ultrasound stations. The first was a CAE Vimedix ultrasound simulator utilizing augmented reality colourization and 3D modelling. The second station was learning and performing an extended FAST scan with a focus on bright mode image acquisition and free fluid recognition. The third station was the practical placement of peripheral/central IV-line insertion helping students to identify vasculature while also manipulating the ultrasound transducer as a procedural adjunct. Students were asked to complete a post-workshop survey to investigate their attitudes towards ultrasound teaching in undergraduate medical education. The survey consisted of 10 questions to assess attendee's prior ultrasound knowledge, to provide constructive feedback regarding the workshop and how ultrasound can be incorporated into future undergraduate medical education.

Results: A total of 121 students completed the post-workshop survey. Of those who completed the survey, 94.2% of students had never used an ultrasound machine before and 100% had never performed PoCUS previously. Collectively, participants strongly agreed 100% that PoCUS should be incorporated into the undergraduate medical student curriculum at RCSI. In particular, 89.3% and 45.5% of students indicated that PoCUS should be included in the third- and fourth-year medicine curriculum, respectively. 85.1% of students indicated that PoCUS education would be most valuable to supplement clinical placement followed by anatomy (62.8%), pathology (59.9%) and physiology (23.1%). 86.8% of the students were interested in learning more about PoCUS through an online format.

Implications for practice: PoCUS appears to be an additional valuable learning resource for undergraduate medical students. Of the students surveyed, it is apparent that there is strong support in favour of early ultrasound integration into the future medical school curriculum.

REFERENCES

1. Karp J, Burke K, Daubaras S, McDermott C. The role of PoCUS in the assessment of COVID-19 patients. *J Ultrasound.* 2021. doi: 10.1007/s40477-021-00586-8.z
2. Campos M, Donaldson C, Rajeswaran G, Ahmad I. The role of ultrasound teaching in the undergraduate medical curriculum. *Clin Teacher.* 2018;16(5):539-540.

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HAUNTED HOUSE: THE DANGERS AND GHOSTS OF THE LIVED ENVIRONMENT

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Background: Accurate assessment of potential hazards and challenges within a home environment is essential to ensure the safety of our patients both post-discharge from hospital and within the community. Inter-professional education in this area allows students to learn from, with and about each other to provide more effective patient care. COVID-19 challenged the Arkansas Interprofessional Education Consortium (ARIPEC) to develop meaningful inter-professional activities while minimizing COVID-19 risk ^[1].

Aim: The aim of the study was to create and deliver a novel virtual home assessment simulation for inter-professional learners to improve the performance of home assessments state-wide.

Method: Faculty from three universities created rooms within a simulated home assessment environment illustrating patient characteristics, hazards, habits and interpersonal considerations. Each university created and video recorded one simulated room (kitchen, bedroom and living room) which were combined in one video to represent a home. Students received pre-course material including education on the INHOMES tool and learning objectives before the virtual learning event. The brief included education on the importance of home assessment and the INHOMES tool. The simulated home video was played to all students who subsequently were split into break-out rooms with facilitators. In inter-professional groups, students created action plans for immediate needs and for when weight-bearing status allowed increased mobility and identified professionals required to meet needs. Following this debriefs occurred in break-out rooms and then as a large group to summarize and identify take-aways. All students completed a pre-/post-questionnaire including the Interprofessional Collaborative Competency Attainment Survey (ICCAS) and evaluation of simulation methodology, home assessment and overall impression. Mean scores for 5-point Likert scores are reported.

Results: In total, 400 students participated in the 2021 event, including medical, pharmacy, physician assistant, dental hygiene, communication science disorders, physical and occupational therapy, addiction studies, respiratory care, radiography, public health, sonography and nursing. All ICCAS metrics increased pre- to post-evaluation. See Table 1.

Table 1: Student evaluation data from the simulated home environment assessment activity

Quality assessed	Mean Likert score (1 – strongly disagree, 5 – strongly agree)
Improve confidence	4.32
Improve communication skills	4.34
Improve reasoning skills	4.41
Improve decision-making skills	4.41
Helpful for professional development	4.46
More comfortable in completing home assessment to identify safety hazards and concerns	4.48
More comfortable to identify team members to meet the immediate and long-term needs of a patient with pain and limited mobility	4.48
The activity demonstrated the value of providing team-based home assessment education	4.54
Overall was a valuable educational activity	4.48
Simulation video portrayed the simulated environment well	4.5
Simulation video gave constructive indicators to identify patient characteristics and behaviours	4.53
Simulation provided an effective mechanism to learn home assessment using the INHOMES tool	4.52

Implications for practice: Our results demonstrate that a video-recorded simulated home environment event is successful in supporting the development of an inter-professional action plan for a home assessment using the INHOMES assessment tool. The collaborative creation of this event was essential due to the COVID-19 pandemic, but the efficacy for learning demonstrates the utility of this approach in the post-pandemic area. Virtual simulations increase accessibility for inter-professional learners to learn from, with and about each other for the benefit of our patients.

REFERENCE

- Kendrick D, Young B, Mason-Jones AJ, et al. Home safety education and provision of safety equipment for injury prevention (Review). *Evid Based Child Health*. 2013;8(3):761–939.

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CAN 'POP-UP' STYLE SIMULATION TEACHING IMPROVE THE CARE THAT OUR CHILDREN AND YOUNG PEOPLE'S EMERGENCY DEPARTMENT TEAM PROVIDE FOR CHILDREN PRESENTING WITH FEVER?

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Background: We wanted to use simulation teaching to improve our multi-disciplinary team's (MDT) management of children who presented to our Children and Young People's ED (CYPED) with fever.

Aims: The aims of the study were: first, to use simulation teaching to train the MDT in our CYPED, to improve the care delivered to children presenting with fever, measured as an improvement in our compliance with the Royal College of Emergency Medicine's (RCEM) standards [1]. Secondly, to carry out the simulation teaching in a 'pop-up' style that can be

delivered to staff within their clinical shifts on the shopfloor, without disturbing their work or the functioning of the CYPED.

Method: For cycle one of our audits, we looked at a sample of 136 children who presented to our CYPED with fever; 61 patients met the inclusion criteria and were included. To improve compliance to the RCEM standards [1], we designed a 10-min, low-fidelity, simulation-based teaching session, requiring minimal resources. When staffing and acuity in the department allowed, we carried out 'pop-up' teaching in a spare CYPED cubicle. We ran four sessions, each lasting 1 to 3 h. Within these sessions, we ran the simulation 20 times, to 40 members of the MDT. To aid flexibility, we started each teaching session as and when staff attended. Following the teaching, staff self-rated their knowledge and ability to adhere to the RCEM standards on a 10-point Likert scale. To complete our PDSA cycle [2], we repeated the audit. We looked at a sample of 192 children, 87 met the inclusion criteria and were included.

Results: Staff's self-rated knowledge of the RCEM standards [1] improved from 4.4 to 9.3 and their self-rated adherence to the standards improved from 5.4 to 9.3, on a 10-point Likert scale. This was reflected in improved compliance to the RCEM standards 1–6 [1] in the second audit cycle. The compliance with RCEM standards (1) from cycle 1 to cycle 2 was as follows: standard 1; 71% to 79%, standard 2; 59% to 78%, standard 3; 38% to 92%, standard 4; 74% to 66% and standard 5; 100% both cycles. Standard 6 is that the CYPED should provide training in sepsis recognition, which was achieved through our simulation sessions.

Implications for practice: 'Pop-up' style simulation teaching can be used to improve the care that we offer our patients, as reflected by an improvement in staff's confidence and in the department's compliance with RCEM standards [1]. We endeavour to continue to use pop-up style simulation sessions within clinical shifts to continue to learn and strengthen as an MDT. In turn, we hope that this will improve the care that we offer our patients.

REFERENCES

- Royal College of Emergency Medicine, Feverish Children Information Pack. National Quality Improvement Project, 2018/2019. Available from: <https://www.rcem.ac.uk/docs/QI%20+%20Clinical%20Audit/Feverish%20Child%20information%20pack%202018-19.pdf>
- NHS, Online Library of Quality, Service Improvement and Redesign Tools; Plan, Do, Study, Act (PDSA) cycles and the model for improvement, NHS England and NHS Improvement, 2021. Available from: <https://www.england.nhs.uk/wp-content/uploads/2021/03/qsir-plan-do-study-act.pdf>

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GENITAL EXAMINATION EDUCATION AND INSTRUCTION: LOWERING ANXIETY AND RAISING COMPETENCE

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Background: Gynaecologic Teaching Associate (GTA) and Male Urogenital Teaching Associate (MUTA) methodology have been utilized for decades in effective breast, pelvic and urogenital examination clinical skill instruction. This methodology is recognized as the gold standard of instruction when educating learners on the sensitive, invasive clinical skills techniques associated with a genital examination. While research shows it is the most effective way to learn these procedures, outside of the USA and Canada, there are few GTA/MUTA programmes at medical learning institutions.