

lasted between 0 and 2 hours^[2]. In this study, we aim to gain a deep understanding of medical students' lived experiences of online Forum theatre (FT) in consulting with DA victims.

Methods: A multi-disciplinary team developed an online FT exercise, which involved a simulated consultation between a GP and DA victim. Spectators are invited to take the place of an actor or guide the actor and decide what action to take, thus helping to change the outcome of the scene. A qualitative approach was conducted, involving hermeneutic phenomenology, to explore participants' lived experience of the FT exercise. Following the online FT experience, medical students were interviewed, and interview transcripts were analysed using a template analysis approach.

Results: Five themes were developed through our analytical process: (1) 'Almost being there...but not quite': the realistic experience of FT; (2) 'Taken on an emotional journey'; (3) 'Opening and controlling a privileged space'; (4) 'Small things matter...': cultivating and maintaining rapport and (5) critically reflecting on future professional self.

Discussion: This study provides an in-depth view of a medical student's experience of online FT. Online FT has the potential to provide a novel DA teaching method for medical students. By providing students with a unique opportunity to step into a GP's shoes in a DA consultation, students can practice how they will handle a DA scenario, without any potential consequences, helping them to improve their consultation skills.

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A CROSS-SECTIONAL STUDY ON THE EFFECTIVENESS OF SIMULATION-BASED LEARNING IN EMERGENCY MEDICINE FOR MEDICAL UNDERGRADUATES IN A LOW-MIDDLE INCOME COUNTRY DURING THE COVID-19 PANDEMIC

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10.54531/PBNR8697

Background: Learning emergencies is a challenge during COVID-19 pandemic for medical students. Managing a real patient in an emergency exposes the medical students and patients to risks now more than ever before. Simulation-based learning (SBL) is a proven safer teaching method to improve technical and non-technical medical knowledge, skills, and to enhance confidence in high-income countries. There is limited literature on the effectiveness of SBL in low-middle income countries (LMICs)^[1].

Aim: This study evaluates final-year medical undergraduates' knowledge, skills and confidence improvement through a novel SBL in an LMIC during the COVID-19 pandemic.

Simulation activity outline: Four simulation scenarios were conducted by an instructor to a small group of five to six participants. The instructors were Emergency Medicine Senior Registrars or Registrars, who had prior knowledge in teaching techniques through a formal instructor development course elsewhere. The simulation sessions were based on four

scenarios. A high-fidelity mannequin, basic airway devices, IV access, monitoring devices and a defibrillator were used. Pendleton Model^[2] was used for debriefing. A pre- and post-questionnaire was used to assess improvement of knowledge and confidence level of management of the scenario.

Method: Final-year medical students of the University of Colombo were trained on medical emergency care skills and subsequently they were given the opportunity to apply skills in simulation. This course was conducted twice a week, 4-hour sessions, for 6 weeks in March and April 2021. There were four skills stations, including ABCDE assessment, airway management, defibrillation with BLS and non-technical skills. A pre- and post-MCQ was used to assess improvement of knowledge and confidence level on performing each skill. Likert-scale questionnaires were administered before and after each simulation session to assess the level of confidence in performing each task of the simulated scenario. The normal distribution of data was tested with the Shapiro-Wilk test. If the distribution of data was not normal, Wilcoxon signed-rank test was used to compare pre- and post-test scores. Paired sample t-test was used to compare pre- and post-test data if the distribution of data is normal.

Results: All 42 participants experienced SBL for the first time ever. Post-test MCQ score significantly improved compared with pre-test score ($p < 0.001$). Confidence in skills increased in all 17 domains following the skills sessions in all participants. Confidence to manage cardiac arrest increased in all 10 tasks of the cardiac arrest simulation and the total average confidence score rose from 17.1 (± 4.7) to 32.0 (± 7.7) after the simulation-based intervention ($p < 0.001$). Confidence increased significantly in all 12 domains of asthma and anaphylaxis management with the total average confidence score rising from 21.4 (± 0.8) to 39.2 (± 2.1) ($p < 0.001$). Satisfaction and attitudes towards simulation-based learning were very positive.

Implication for practice: The course has shown a statistically significant improvement of students' knowledge and confidence in skills with a high level of satisfaction. Therefore, SBL is an effective, safe and feasible alternative to train emergency medicine for the students of LMICs during COVID-19 pandemic.

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SCENARIO-BASED PERINATAL PSYCHOSIS SIMULATION FOR FINAL-YEAR MIDWIFERY STUDENTS: A QUALITATIVE STUDY

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10.54531/JTGP9733

Background: Approximately 20% of women will reach diagnostic thresholds for mood disorders during the perinatal period, and between 0.1% and 0.2% will experience a psychotic disorder^[2]. Postnatal psychosis is a dangerous condition with an often rapid onset following a baby's birth. In severe cases, symptoms may include a mother's desire to harm herself or her baby. The midwifery profession reports feeling ill-prepared to provide mental healthcare, and the adequacy of mental health content in training curricula has been questioned. The rarity of perinatal psychosis also means that clinical placement opportunities for student midwives are limited. Scenario-based simulated learning provides one possible solution to this challenge.

Aim: The aim of the study was to explore final-year midwifery students' experiences of a perinatal psychosis, scenario-based simulation (SBS).

Simulation activity outline: A 1-day SBS learning activity with two scenarios of women exhibiting psychotic symptoms. Each scenario included a background narrative, actors' roles with partial scripts and comprehensive patient clinical information. Two midwifery students acted as assessment staff in each scenario whilst their colleagues took observer roles. Guided debriefing followed each scenario.

Method: The study was conducted in March 2020 at a UK Higher Educational Institute. It employed an exploratory, descriptive design to capture qualitative data from 11 final-year midwifery students who took part in the SBS. Data sources included semi-structured interviews and information shared during scenario debriefings. Data were thematically analysed following the seven-step process of Dahlgren and Fallsberg^[2]. Ethical approval for the study was granted in July 2019 (LRU-18/19-13171).

Results: Three main themes emerged from the data. The SBS facilitated learning through different ways of knowing. Students drew on personal experiences to identify communication and care challenges, re-appraised assumptions they held about mental health and ethnicity and articulated the benefits of peer learning. Students held equivocal views concerning the adequacy of mental health content in existing curricula, and not all had encountered women with perinatal psychosis on clinical placements. Clinical environments were highly valued learning contexts for the observation of staff and the gradual, supervised application of practice skills. Both learning mechanisms were replicated in the SBS, which helped the students realize attributes and skills in themselves necessary for the care of women with perinatal psychosis. The SBS facilitated transformative learning through its realism and the development of skillsets not amendable to didactic teaching, e.g. teamwork and communication skills. Debriefing helped to cement learning in the minds of students.

Implications for practice: The SBS was an effective form of pedagogy that enabled invigorating and deep learning. It is recommended that other educators consider its use, particularly for conditions that students do not always encounter in clinical placements. Well-prepared, detailed scenarios are recommended to promote realism and each SBS should be followed by a structured debrief. Developments should be accompanied by evaluative methodologies to gauge their impact and further research is needed to better understand how SBS can be used more effectively throughout midwifery education.

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37 SIMULATION AS A PROACTIVE PATIENT SAFETY TOOL

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10.54531/JPSD8969

Background: Traditionally, *in situ* simulation has been used to improve patient care by identifying knowledge or skills gaps and improving teamwork and non-technical skills. However, there are little data demonstrating objective improvement in morbidity and mortality directly attributed to *in situ* simulation^[1]. There is a growing recognition of the use of *in situ* simulation to detect latent safety errors (LSEs)^[1,2]. These are errors of system, environment or teams which may be unrecognized until they are identified in the stressful and realistic conditions of a simulated scenario in a clinical environment. Currently, no standardized system is described to score type or severity of LSE limiting the reproducibility and application of this approach to harm reduction.

Aim: The aim of the study was to develop a tool to detect latent safety errors during *in situ* simulation which is fully integrated with existing Trust safety metrics.

Simulation activity outline: *In situ* simulation in a district general hospital across community and acute clinical areas.

Method: Multi-professional *in situ* simulation was led by an experienced facilitator. A pilot phase was limited to the Acute Medical Unit and informed the thematic classification of errors. Further *in situ* simulation took place in medical, surgical, emergency department and community hospital settings. Thematic analysis was completed using the framework of Trust incident coding (Radar Healthcare). During the simulation sessions, latent errors were identified and discussed in the debrief. A data collection proforma was developed using an iterative process over 12 months using Microsoft forms. This research was funded by Health Education England South West Simulation Network with the support of the local Somerset Simulation Team.

Results: During the pilot phase, 73 participants took part in 7 simulations on AMU. Facilitators identified 28 latent errors. Comparison with other sources of safety data (formal incident reporting and critical care outreach team data) showed that *in situ* simulation identified errors in oxygen and fluid management unrecognized by other data sources. In the second phase, 146 participants took part in 32 *in situ* simulations. Facilitators identified 82 latent safety errors and coded them into 18 error types (see Table 1). Work is ongoing to compare these to trust incident reports.

Table 1: Latent safety error by incident code

Theme	No. of latent errors detected	Radar incident code	Total by incident code
Oxygen use and equipment	12	Medical devices	43
Defibrillator use and equipment	13	Medical devices	
Fluid delivery and equipment	4	Medical devices	
Glucose monitoring equipment	2	Medical devices	
Other equipment	7	Medical devices	
Location of equipment	5	Medical devices	
Incorrect medication dose	1	Medication	5
Other medication issue	4	Medication	
Access to a locked area	3	Health and safety/ environment	11
Emergency call system issue	2	Health and safety/ environment	