responds to it. It provides real-time, haptic and constructive performance feedback to the intervention being carried out.
Implementation outline: The use of technology-enhanced simulation for healthcare education is a novel area and with the fast acceleration of game mechanics development, there is scope for medical education to be delivered in this way. The technology-enhanced simulation app will be launched on the Apple and Google Play Store to all healthcare professionals around the world. Feedback will be gathered from users to allow further developments of the product. The overall outcome is to produce a network of mobile apps to deliver medical education in an interactive, engaging and easily accessible way to help clinicians prepare for emergency medical situations anytime, anywhere.

44 A 3-WEEK VIRTUAL OBSERVATIONAL CLINICAL PLACEMENT FOR PRE-REGISTRATION PHYSIOTHERAPY STUDENTS USING SIMULATION TEACHING AND LEARNING PRINCIPLES

Robyn Stiger[1], Katy Baines[1], Mark Williams[1], Joanna Pierce[1]; [1]*Oxford Brookes University, Oxford, UK*

10.54531/VMXE8374

Background: Clinical placement capacity was highly affected by the COVID-19 pandemic. Key issues in January 2021 included: international travel restrictions, high infection rates, reduced clinical educational capacity and the requirement for many individuals to self-isolate for 10 days. A contingency plan was necessary to maintain student progression, enabling them to join the workforce without delay. It was important to ensure that any placement contingency met the required module learning outcomes and standards, centring around non-discriminatory practice and confidentiality, professional and personal behaviours, communication, policies and legislation, health and safety, reflection, evidence of learning, critical incident review and personal development. Given the pressures of lockdown during the pandemic, student experience and well-being was an important consideration.
Aim: The aim of the study was to investigate whether the learning outcomes of a clinical placement experience can be met through a virtual observational placement model adopting simulation principles.
Method/design: The virtual placement experience was led and facilitated by academic faculty staff from Oxford Brookes University who were trained in simulation delivery. It was delivered in partnership with clinicians from Oxford Health NHSFT, Healthshare Oxfordshire, Great Western NHSFT, Warwick Physio & Rehab, the Bosworth Clinic, Oxford University and Oxford University Hospitals NHSFT. The placement lasted 3 weeks, with a week in three core areas (Cardiorespiratory, Musculoskeletal and Neurology).
Implementation outline: Eight pre-registration MSc physiotherapy students attended the placement from the outset, increasing to 15 students over the placement period due to student self-isolation requirements. A variety of simulated and real observational opportunities were provided, including live-streamed in-/outpatient face-to-face patient assessments/treatment appointments, community virtual follow-up appointments, pre-recorded assessments/treatment interventions and community-based virtual rehabilitation classes, and patient record keeping. Clinical reasoning discussions were delivered following each observational opportunity, using an advocacy-inquiry debriefing approach by the academic faculty [1,2]. Student assessment was equivalent to a face-to-face observational placement, including a presentation discussing the skills they had observed and developed (Figure 1). Qualitative and quantitative student and faculty feedback were collected pre- and post-placement. Identified opportunities included: (i) exposure to a variety of observational areas of practice enhances the curriculum; (ii) enhanced learning due to additional time for peer, clinician and academic facilitated debrief; (iii) enhanced student experience particularly for international students or those having to self-isolate. This clinical placement experience was highly rated by students with potential for wider implementation. The use of advocacy-inquiry debriefing and additional support provided by the academic faculty warrants further investigation to maximize student learning opportunities on clinical placement.

Figure 1:

REFERENCES

1. Rudolph JW, Simon R, Dufresne RL, Raemer DB. There's no such thing as 'nonjudgmental' debriefing: a theory and method for debriefing with good judgment. Simul Healthcare. 2006;1(1):49–55. Doi: 10.1097/01266021-200600110-00006.
2. Rudolph JW, Simon R, Rivard P, Dufresne RL, Raemer DB. Debriefing with good judgment: combining rigorous feedback with genuine inquiry. Anesthesiol Clin. 2007;25(2):361–376. doi: 10.1016/j.anclin.2007.03.007.

65 PUTTING IT INTO PRACTICE: A SIMULATION-BASED EDUCATION PROGRAMME FOR PARENTS

Jessica Smith[1], Abigail Tyer[1]; [1]*University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, UK*

10.54531/XZNW3865

Background: The Paediatric Long-Term Ventilation (LTV) team are increasingly discharging children home with LTV via a tracheostomy. As a result, more parents are being asked to play the role of a nurse. They receive training, prior to discharge, in highly skilled tasks to enable them to care for their child's long-term health needs at home. Whilst Simulation-based Education (SBE) is widely used in the education of health professionals, it is not currently part of the educational programme for these parents/caregivers.
Aim: The aim of the study was to undertake a quality improvement project to produce an SBE programme for parents/caregivers of children being discharged home on LTV via a tracheostomy. The main objective was to improve the safety of patients through improving the confidence of parents/caregivers in managing and escalating emergencies prior to their discharge.

Method/design: Through a focus group including parents/caregivers of children receiving LTV via a tracheostomy, who are already at home, we aim to co-produce this project, with the patient voice and experiences at its core. We plan to undertake the SBE with one or more parents/caregivers in a location separate from the clinical setting, that is designed to replicate their home environment as best as possible [1]; present will be one facilitator from Simulation Services (SS) and one clinical expert from the LTV team. We have written a bank of scenarios, including accidental decannulation, ventilator failure and respiratory arrest requiring cardio pulmonary resuscitation and phoning of the emergency services. However, scenarios will be chosen and individualized to suit each family's needs. We will debrief in a separate room and this will be led by the SS facilitator, with the expert from the LTV team invited in to support with their clinical knowledge.
Implementation outline: Over the next 4 months, baseline data will be collected with a Likert scale of confidence ratings for each of the planned scenarios, prior to the SBE. We will collect these data again immediately after the SBE, and then again at 3 months. We will also ask, at both of these time points, if there is anything additional that the parents/caregivers would have wanted from the SBE and how it can be improved. These data will allow us to evaluate and develop the programme for future families through a plan-do-study-act cycle approach. To understand where SBE fits within the wider education provided to parents/caregivers, we will ask them which elements of their education they have found most useful, and why.

REFERENCE

1. Thrasher J, Baker J, Ventre K, et al. Hospital to home: a quality improvement initiative to implement high-fidelity simulation training for caregivers of children requiring long-term mechanical ventilation. J Pediatric Nurs. 2018;38:114–121.

200 PARAMEDIC ONLINE SIMULATION: A NOVEL APPROACH

Charli Watkins[1,2], Martin Hilliard[1,2]; *[1]University of Gloucestershire, UK[2]University of Worcester, Worcester, UK*

10.54531/CQWQ8045

Background: In response to an initial lack of opportunity for frontline ambulance placements during the early stages of the COVID-19 pandemic, a university lecturing team developed a novel, interactive online simulation format for student paramedic education.
Aim: The technique aimed to provide the students with the opportunity to continue to practice and refine their questioning and clinical decision-making abilities, even without having a physical patient present.
Method/design: The subsequently developed format was designed to help ensure continuing development of newly acquired clinical assessment principles. Case-based scenarios took the students through key stages of a pre-hospital patient encounter. These were carefully created to resemble the real-life setting as closely as possible.
Implementation outline: The Blackboard Collaborate teaching platform was utilized in conjunction with pre-designed slides on Microsoft PowerPoint to facilitate the learning activity. Open access images of specific scenes, hazards, people and medication were selected to create visual cues and context for the initial stages of the call, with pre-recorded sounds enhancing this experience. Students were encouraged to use microphones and the chat functionality of Blackboard to interact with their simulated patient, who was played by a lecturer, and responded in real time. Simulated monitors and pre-recorded heart and lung sounds were utilized to provide students with clinical information in a similar timeframe and format to real-life clinical encounters. On the basis of the information gathered, students then devised clinical treatment plans and delivered virtual 'handovers' verbally. Debriefing immediately followed the scenario, with self-reflection from participating candidates actively encouraged and supported. Spectating students were then invited to provide their observations on the scenario itself, including facilitation of peer review. All scenario debriefs further contained specific learning points for discussion and exploration, helping to ensure learning was meaningful, with a strong relationship to contemporary issues in paramedic practice. Students reported a high level of satisfaction with this technique, repeatedly describing it anecdotally as both engaging and useful to their clinical development. Facilitator learning has included refinement of techniques and strategies, along with widening participation with other professions. Subsequently, the format has been employed in teaching a range of different healthcare professions, along with being used for online inter-professional learning events between student paramedics, nurses, and midwives, and registered pre-hospital clinicians alike.

113 MAKING VIRTUAL A REALITY DURING A PANDEMIC: IMPROVING LEARNING OPPORTUNITIES IN MEDICAL EDUCATION THROUGH VIRTUAL REALITY SIMULATION

Sally Shiels[1,2], Amy Irvine[3,5], Sarah Flaherty[3,4], Helen Higham[1,2]; *[1]Oxstar Oxford Simulation Teaching and Research, Oxford, UK[2]Oxford University Hospitals NHS Foundation Trust, Oxford, UK[3]Oxford Medical School, Oxford, UK[4]Hamilton General Hospital, Ontario, Canada[5]Royal Victoria Infirmary, Newcastle-upon-Tyne, UK*

10.54531/TGCJ1767

Background: William Osler was the first to be credited with taking medical students out of the lecture theatre and to the bedside [1]. However, the COVID-19 pandemic has not just taken medical students out of lectures but also away from the bedside. Virtual reality simulation (VRS) can provide students with a computer-generated environment where users interact with virtual surroundings and patients in any location [2]. To mitigate the gap in clinical experiences we created an education package using VRS for medical students during the initial phases of the pandemic.
Aim: Could VRS provide a meaningful learning opportunity during the first wave? Could we elicit the strengths and weaknesses of virtual simulation in medical learning?
Method/design: We used the Oxford Medical Simulation (oxfordmedicalsimulation.com) VRS platform where the learner manages an acutely unwell patient with specified learning objectives (opting for the 2-D to make it accessible to students at home). Scenarios were grouped, accompanied by didactic learning resources and released on a weekly schedule. Data were collected with consent on the number of scenarios accessed, performance score and student feedback.
Implementation outline: The VRS course ran for 5 weeks (access extended to 11 weeks). In total, 224 students expressed an interest in accessing the VRS platform. Of the 224 students, 64 accessed the scenarios (50% first-year students). The students accessed 821 scenarios. The average score on all first attempts of scenarios was 75%; second attempts 78% and third attempts 90% (Figure 1). Qualitative feedback: 'I like...the