through experiential learning with live transgender standardized patients.

Method/design: The programmes developed address fundamentals for healthcare professionals about serving LGBT patients: inclusivity, rapport, effective communication without creating anxiety or offense, language to avoid, and other practical knowledge including various surgeries and gender-affirming care available to transgender individuals. Initial panel discussions with members of the LGBT community have proved very effective in covering realities faced by transgender patients. Implementation of Teaching OSCEs (Objective Structured Clinical Exams) utilizing transgender individuals applies gained knowledge from lectures and discussions. It is critical for learners to experience working with an actual transgender standardized patient to effectively simulate encounters. Only a person from a marginalized community can accurately portray unique experiences affecting that particular community. Advanced medical training has also been developed including training for forensic examiners.

Implementation outline: These programmes include an LGBT didactic presentation, followed by a moderated panel (conducted virtually or in-person) of transgender individuals from varied backgrounds to share personal experiences receiving healthcare. Trainees are encouraged to ask panellists questions regarding concerns on proper communication, inquire about experiences in receiving gender-affirming care and discuss how to improve healthcare for transgender patients. Subsequently, trainees have the opportunity to participate in scenarios scripted and led by transgender standardized patients (SPs) or Trans Teaching Associates (TTAs). These scenarios can be conducted virtually, focussing on interview/history taking and communication skills, which makes global reach possible. In-person hands-on OSCEs can further assist trainees by providing opportunities to visualize trans anatomy. Learner feedback on improved understanding and empathy has been overwhelmingly positive, proving the necessity of providing training for learners in the care and treatment of transgender patients.

REFERENCE

1. The Report of the 2015 U.S. Transgender Survey [Internet]. Washington, DC: National Center for Transgender Equality. 2016. Available from: https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf

116 DEVELOPING A FRAMEWORK FOR THE INTEGRATION OF SKILLS AND SIMULATION: THE 5-STAGE APPROACH

Emily Browne[1], Mike Phillips[1]; [1]*Staffordshire University, Stafford, UK*

10.54531/KYBT8535

Background: In recent years, there have been many publications providing guidance on simulation-based education and frameworks for development of faculty and delivery of simulation. However, there is not a framework for the integration and delivery of skills and simulation within a pre-registration curriculum. In 2017, Woda [1] referred to a need for a 'sequenced' integration of simulation into programmes with increasing complexity, knowledge, and exposure to simulation. Furguson [2] also found that there was a gap in how a simulation strategy becomes effectively implemented and embedded within an existing curriculum.

Aim: The aim of the study was to create a framework that integrates clinical skills and simulation increasing in complexity that can be used for any pre-registration healthcare curriculum. Ability to effectively implement and embed within an existing or new curriculum.

Method/design: We developed a framework using a five-stage approach to scaffold learning. Bringing simulation into the curriculum from the very start with the early introduction of consolidation and simulation allowing for a gradual cognitive load. Our approach builds on technical and non-technical skills alongside an understanding and exposure to simulation, by their final-year students will be debriefing their own teams in simulation and understand the use of simulation debriefing tools. This integration of skills and simulation and move away from 'task training' skills teaching aims to create both competence and confidence in students enhancing practice placements and ultimately improving the safety of patients. The approach consists of five stages: (1) online learning; (2) facilitated practical (task training); (3) simulation consolidation (facilitated simulation); (4) simulation days (remote facilitation); (5) clinical practice.

Implementation outline: The framework is being applied to the 2-year Master's programmes and nursing associate programmes as well as the standard 3-year pre-registration nursing, midwifery, operating department practitioner and paramedic programmes. Skills both technical and non-technical are introduced in years 1 and 2. In year 3, the focus is on knowledge review with a higher expectation of understanding and assimilation into the simulated environments expected. Over the 3 years, facilitation will lessen until students are leading on the simulation delivery and debrief by the end of their course. The same principle is applied to the 2-year programmes. This framework has been applied to all our healthcare courses by mapping the required skills curriculum and using the framework to build the content and set the delivery. The framework has now been adopted by another university.

REFERENCES

1. Woda A, Hansen J, Paquette M, Topp R. The impact of simulation sequencing on perceived clinical decision making. Nurse Educ Practice. 2017;26:33–38.
2 .Furguson J, Astbury J, Willis S, Silverthorne J, Schafheurne E. Implementing, embedding and sustaining simulation-based education: what helps, what hinders. Med Educ. 2020;54(10):915–924.

64 360 SIMULATION: ASSESSING BABY ROBIN

Jo Staples[1], Rose Edwards[2], Sam Pask[2], Heidi Singleton[1], John Moran[1], Debbie Holley[1], Ursula Rolfe[1]; [1]*Bournemouth University, Bournemouth, UK*[2]*Poole Hospital, University Hospitals Dorset, Poole, UK*

10.54531/MKXW2760

Background: Within a rural county, student placement locations are geographically scattered. Student feedback revealed that only students in one placement were able to benefit from the high-fidelity simulation suite resources situated at the lead hospital. Research shows students value co-created and personalized resources. Working with our practice partners we identified a cost-effective, accessible and inclusive solution, using 360 videos. Clinical simulation has been found to be effective [1] for teaching nursing skills. One limitation is the number of participants who can be involved at one time and in one place. A pilot study [2], with

nursing students (n = 217), using low-cost virtual reality headsets, demonstrated that learning via immersive approaches aided understanding of the complex concepts, provided immediate feedback about clinical decisions, and could be completed multiple times. It provided additional opportunities for safe practice and complimented their ward and clinical skills experiences. Simulation technicians and lecturing staff recognized these benefits but identified time and cost constraints as challenges. Building on this research, we designed and evaluated a small-scale pilot to improve processes.

Aim: To use 360 videos accessed via low-cost VR headsets to scale the clinical simulation experience for paediatric nursing students.

Method/design: Working with our local hospital and our second-year paediatric nursing students, we used agile design methods and co-creation to develop two ABCDE assessment clinical simulations (sepsis and acute respiratory illness), using a 360 camera. These videos were accessed using low-cost virtual reality headsets, Oculus Quest™, mobile devices and Microsoft HoloLens™. Qualitative evaluation sought views of students, nursing staff/academics and simulation technicians through focus groups (n = 10). Thematic analysis revealed emergent themes of flexibility of access, repetition of learning opportunity and strengthening or the practice-theory link. Challenges included user familiarity with the technology and time investment. The main impact of this project was wider and longer-lasting learning compared with traditional methods.

Implementation outline: Bite size learning chunks embedded strategically into our new nursing curriculum, for 300 student nurses studying at level 5. Harnessing the full potential of the clinical simulated experience permits students and staff to learn at a time and place of their own choosing. The ABCDE assessment will be expertly demonstrated through 360 videos, which will better prepare students for in-person simulations, saving face-to-face time explaining how to carry out the simulation. Learning from this project will feedforward to a faculty-wide multi-disciplinary clinical simulation event, informing guidelines.

REFERENCES

1. Health Education England. Developing people for health and healthcare enhancing education, clinical practice and staff well-being. A national vision for the role of simulation and immersive learning technologies in health and care. London: Health Education England; 2020: 8(1).
2. Singleton H, James J, Penfold S, et al. Deteriorating patient training using non-immersive virtual reality: a descriptive qualitative study. CIN: Computers, Informatics, Nursing. 2021.

90 COVID-19 SIMULATION PROGRAMME: RAPID TESTS OF CHANGE

Angus Cooper[1,2], Jeremy Morse[2], Craig Brown[1,2]; *[1]NHS Grampian, Foresterhill, UK[2]University of Aberdeen, Aberdeen, UK*

10.54531/VZPO5063

Background: The 'first wave' of COVID-19 created many challenges. Our hospital was fortunate to have slightly longer than many others to prepare. One of our Emergency Department (ED) challenges was that, as part of a redesigned process, patients with respiratory failure (presumed COVID-19) were to be assessed in a very different clinical area (single rooms instead of 'open plan' resuscitation room), managed by a much larger team of clinicians, using Level 3 (airborne) PPE and a modified approach to Rapid Sequence Intubation (RSI) induction of anaesthesia. Rapid cycle simulation and debrief has subsequently been described as part of a system-based learning approach during the COVID-19 pandemic [1].

Aim: The aim of this programme was to rapidly familiarize a large team with the new clinical environment and RSI process, using the learning conversation after each simulation to make an immediate change, as required, to the clinical area and/or process.

Method/design: Each simulation was an identical clinical scenario, i.e. a patient with respiratory distress for whom the need for COVID-19 modified RSI had been identified. The simulation was delivered in the rooms that were subsequently to be used for direct clinical care of confirmed or suspected COVID-19 patients.

Implementation: A process testing approach was taken. During the simulation brief, the process was talked through in detail (all expected actions and sequence), the team then performed the simulation, followed by a learning conversation that was very focussed on the challenges in delivering this process. Using mobile cameras and large screen TV, all simulations were live streamed to an immediately adjacent area, such that a large number of other clinicians could observe the brief, the simulated clinical scenario and participate in the learning conversation. Agreed changes in equipment, ergonomics and process were immediately incorporated into the next simulation. Once this area was required for direct patient care, an identical room was set up in an adjacent (non-COVID-19 clinical area) to allow daily simulated training to continue. On one occasion, where there was advance notice of the arrival of a patient requiring RSI, the team who were to be involved in the RSI 'drilled' this scenario ('just in time' simulation) whilst awaiting the arrival of the patient. It was observed that participants who had previously been less comfortable with simulation were happier with this process testing approach (knowing what is expected and with no surprises).

REFERENCE

1. Dubé M. COVID-19 pandemic preparation: using simulation for systems-based learning to prepare the largest healthcare workforce and system in Canada. Adv Simul. 2020;5:22.

105 A SIMULATION-BASED DEPARTMENTAL INDUCTION USING VIRTUAL REALITY 360

Sarah Powell[1], Eirini Kasfiki[1,2], Andrew Blackmore[1,2], David Wright[1,2]; *[1]Hull University Teaching Hospitals NHS Trust, Hull, UK[2]Hull Institute of Learning and Simulation, Hull, UK*

10.54531/EJJW6579

Background: One of the challenges faced during the COVID-19 pandemic was the need for quick departmental inductions to allow rotating and redeployed junior doctors to familiarize themselves with rapidly changing departmental environments. We were unable to continue traditional inductions due to various challenges including lack of senior staff to provide the induction due to increased workload; lack of administrative staff to support inductions due to sickness and self-isolation; and lack of physical space under the constraints of social distancing. Thus, an alternative was needed incorporating all aspects of a traditional induction. Video Reality 360 (VR360) technology and video simulation