

(filmed from the patient perspective). This was integrated with content highlighting key aspects of COVID-19 care, ending with a mandatory assessment with an 80% pass mark. The e-learning was disseminated to hospital staff (doctors, nurses and allied healthcare professionals) with data collection via SurveyMonkey® from November 2020 for 3 months. Pre- and post-surveys were included to investigate the average improvement of learners and the impact of the resource on learner self-efficacy through self-rating on six learning outcomes. Free-text options in the post-survey allowed qualitative feedback, aiding continual resource development.

Results: In total, 108 learners, about half of whom were doctors, completed both surveys, with a significant difference ($p < 0.01$) between the pre- and post-learning results and an overall improvement in learners' knowledge after completion of the e-learning (Table 1). The greatest improvement was in 'Discharge requirements' (94%) and 100% of learners passed the assessment. The majority found the resource useful, and none reported finding the resource difficult to use. Most positive feedback referred to the format, resources, content and audio-visual aspects.

Implications for practice: E-learning can rapidly disseminate learning, at a time when most feel the pandemic has had a mixed or negative impact on learning opportunities (Dean E, 2020; GMC, 2020). The e-learning is continually updated with new evidence, with plans to expand access across London. An iterative process was undertaken with updates in response to learner feedback due to the speed at which the resource needed to be developed, for example, turning resources into PDFs for home access. The e-learning remains live given rising COVID-19 cases. Further work is required to investigate the effectiveness of this resource across London and how beneficial it has been for clinical work.

Table 1: Average pre- and post-learning scores of learners' self-reported knowledge and percentage improvement

Key learning outcome	Pre-learning mean (out of 10)	Post-learning mean (out of 10)	p-value	Percent improved
Recognize symptoms	7.2	9.0	<0.01	73
Understand TEPs*	6.7	8.8	<0.01	73
Treatment options	5.8	8.7	<0.01	89
Features of deterioration	6.3	8.7	<0.01	83
Escalation protocol	5.0	8.6	<0.01	93
Discharge requirements	4.6	8.2	<0.01	94

*Treatment escalation plans.

REFERENCES

- Dean E. When COVID-19 started, the CPD almost stopped. *Nursing Standard*. 2020;35(9):33–35. Available from: <https://journals.rcni.com/nursing-standard/analysis/when-covid19-started-the-cpd-almost-stopped-ns.35.9.33.s15/abs>. [Accessed 17 June 2021].
- General Medical Council. The state of medical education and practice in the UK 2020. 2020. Available at: https://www.gmc-uk.org/-/media/documents/somep-2020_pdf-84684244.pdf. [Accessed 17 June 2021].

196

PLUGGED IN SIM-VR 360 SIMULATION WITH HEADSETS: HOW DOES IT WORK?

Tim Mason¹; ¹North Devon District Hospital, Exeter, UK

10.54531/CEKH9900

Background: Simulation is a technique employed to produce an experience without going through a real event^[1], with different methods used to do this within a medical simulation. Virtual reality (VR) is the simulation of the world through a computer or device. VR has been used for procedural training and within medical education for a number of years^[2].

Aim: We had used 360 videos for remote simulation and debrief for over 3 years but as face-to-face sessions started to reoccur, we wondered whether we could use these videos to engage learners using VR headsets for short immersive sessions with a targeted debrief.

Methods: We used unscripted 360-degree scenarios of Paediatric emergency simulations, loaded onto Oculus-Go VR headsets. Between November 2020 and May 2020, we ran sessions for the paediatric and obstetric teams in North Devon district hospital, where groups of up to five learners watched a scenario, followed by a debrief led by a facilitator. We explored its acceptability, immersion and whether the debrief enriched the session through collecting feedback.

Results: We engaged 50 participants over 14 sessions. The majority of sessions occurred on night shifts. Twenty-nine staff including doctors, midwives, healthcare assistants and nurses gave feedback. All participants enjoyed the experience and wanted to do it again: 90% felt immersed and 97% enjoyed the debrief. A small minority found the experience strange and one had to stop watching because of motion sickness.

Implications for practice: Virtual sim with headsets is time-efficient, requires no bedspace and was engaging enough to be requested during out of hours shifts. Feedback proved it to be immersive, safe and enjoyable. It is cost-effective (not needing large numbers of staff or expensive manikins) and the experience reproducible. It was accessible for those who had previously been scared of simulation as they did not feel 'judged' and therefore may be a valuable adjunct to engaging those who have not in the past. Debrief was vital and allowed active discussion of learners' own experiences as well as an exploration of the medicine prompted by being immersed in the scenario. Virtual simulation using headsets and 360 videos gives learners an experience without going through the real event and we feel that it is a valuable tool for engaging teams in simulation education. Through this project have established standards that could help others engage in projects such as this.

REFERENCES

- Gaba DM. The future vision of simulation in health care. *Qual Saf Health Care*. 2004;13 Suppl 1(Suppl 1):i2–i10. doi: [10.1136/qhc.13.suppl_1.i2](https://doi.org/10.1136/qhc.13.suppl_1.i2).
- Mantovani F, Castelnuovo G, Gaggioli A, Riva G. Virtual reality training for health-care professionals. *Cyberpsychol Behav*. 2003;6(4):389–395. doi: [10.1089/109493103322278772](https://doi.org/10.1089/109493103322278772).
- Mason T, Peres NO8 Virtual sim- remote 360° simulation and debrief. *BMJ Simul Technol Enhanc Learn* 2020;6:A6.