

training and assessment of doctors [1,2]. This study aimed to introduce and evaluate a novel Palliative Medicine simulation session as a tool for Foundation Year 2 (FY2) doctors to gain competency and confidence in the assessment and management of life-limiting illness.

**Methods:** We designed the palliative care (PC) simulation session based on the FY2 curriculum. The three scenarios involved management of opioid toxicity, breaking bad news and shared decision-making with a role-play patient with a gastrointestinal bleed. Session faculty included a mix of healthcare professionals, but always included a PC specialist. We evaluated the session using a pre- and post-session questionnaire collecting data using 5-point Likert scales and free-text comments. We analysed qualitative data using content analysis. Researcher and methodological triangulation increased the credibility of the findings.

**Results:** The three prevalent themes noted from the pre-content analysis were Communication, Prognostication and the Process of complex decision-making. Comments such as 'Senior colleagues hesitant to have escalation discussions' and 'I find it difficult when the patient has a very different idea of how poorly they are' were examples of quotes given by candidates as pre-session challenges. 95.6% of our candidates felt that the session addressed these challenges, mainly through the debrief process. The main learning points articulated were in relation to prescribing and communication skills. Candidates expressed the importance of 'picking up communication techniques and phrases'. The debrief was the most highly valued, and frequently mentioned positive element of the content analysis. 'Open discussions' was mentioned on numerous occasions, 'I felt comfortable asking questions' and 'Discussion after SIM was very useful', all support the importance of skilled debrief.

**Conclusion:** FY2 doctors identified communication as their biggest concern when managing Palliative Care patients. Our session addressed this through open and frank debrief discussion. This allowed reflection on previous experience and peer-to-peer learning of key vocabulary when talking to patients with a limited prognosis. Further qualitative evaluation of the impact of this session on clinical practice and how peer learning could be incorporated into day-to-day skills development on the wards would be of value.

**Ethics statement:** Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

## REFERENCES

1. National Strategic Vision of Sim in Health and Care. Available from: [hee.nhs.uk](https://www.nhs.uk).
2. Palliative simulation for internal medicine trainees (PALL-SIM-IM): a nationally adopted education initiative in response to shape of training. *BMJ Supportive & Palliative Care*. 2021;11(Suppl 1):A24. Available from: [bvsalud.org](https://www.bvsalud.org)

## TECHNOLOGY

A17

### DIGITAL PATIENT SIMULATION VERSUS PATIENT ACTORS – WHAT DO PARTICIPANTS PREFER?

**Josh Bachra**<sup>1</sup>, Jonathan Wright<sup>1</sup>, Kehinde Junaid<sup>1</sup>; <sup>1</sup>Nottinghamshire Healthcare NHS Foundation Trust, Nottingham, United Kingdom

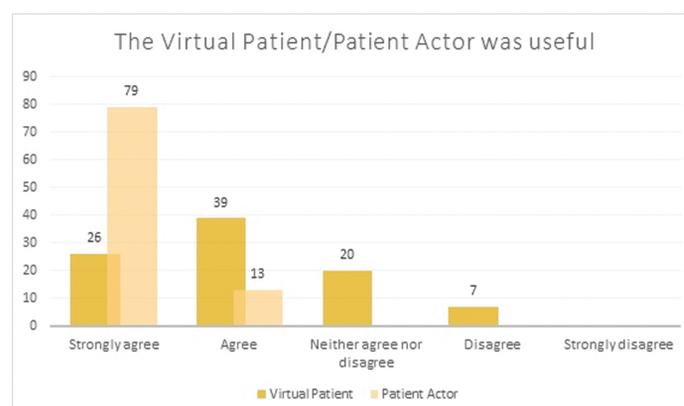
**Correspondence:** [joshbachra819@gmail.com](mailto:joshbachra819@gmail.com)

10.54531/GWJQ9126

**Background and aim:** Nottinghamshire Healthcare Medical Education delivers simulation-based learning to over 500 medical students and junior doctors each year. The scenarios for these sessions are co-produced and delivered with a simulated patient actor. In January 2023, we introduced a new type of simulation allowing participants to interact with a digital patient. The AVATr digital patient received good feedback delivered remotely [1], but we intended to use it face to face. Our aim was to find out whether participants found the digital patient more or less useful than the patient actor. A secondary aim was to explore if the digital patient was helpful in preparing for simulation with a patient actor.

**Methods:** The digital patient simulation was delivered in the morning of a full-day session to a cohort of F2 doctors. Participants sat on a chair in front of a green screen with a go-pro filming them. Participants were able to see themselves in a third-person perspective on a TV screen and interact with a digital patient. The digital patient was controlled by a facilitator who chose responses from a grid depending on what had been asked and how it had been asked. The participants experienced two scenarios – one around assessing psychosis and one on adult self-harm. The participants also had a simulation later that day with a patient actor. We collected qualitative and quantitative feedback via digital forms and analysed the results.

**Results:** Ninety-two participants attended the sessions between January 2023 and March 2023. 70% of participants Agreed or Strongly agreed that the virtual patient was useful, compared to 100% for the patient actor. If facilitator familiarity with technology was adjusted for 68% of participants, Agreed or Strongly agreed the digital patient was useful. Eighty-six per cent of participants believed that digital patient simulation helped them prepare for the patient actor simulation. Total numbers in Figure 1-A17. Reasons participants gave for not finding the digital patient useful fell into four main themes: the limited nature of the responses the patient could give, the artificiality of the arrangement, the awkwardness of the technology and the relevance of being able to see yourself in the third person.



**Figure 1-A17:** Clustered bar graph comparing Likert-scale responses to the statements The Virtual Patient was useful and The Patient Actor was useful

**Conclusion:** We found that whilst participants overwhelmingly preferred simulation with a patient actor to simulation with a digital patient, the digital patient played a role in helping prepare participants for simulation with a patient actor.

**Ethics statement:** Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

**REFERENCE**

1. Mannali V, Strickland P, Clift J. Digitalised remote-delivery of AVATr Simulation in Psychiatry: a unique success in COVID-19 pandemic. *BJPsych Open*. 2021;7(S1):S146.

**LITERATURE REVIEW**

**EDUCATION**

A18

**BARRIERS AND FACILITATORS TO THE USE OF HEALTHCARE SIMULATION TO SUPPORT THE PROFESSIONAL DEVELOPMENT OF HEALTHCARE PROFESSIONALS: A SYSTEMATIC REVIEW OF QUALITATIVE RESEARCH.**

**Caroline Richardson**<sup>1,2,3</sup>, Caoimhe Madden<sup>2,4</sup>, Dara Byrne<sup>2,4</sup>, Sinead Lydon<sup>2,4</sup>, Paul O'Connor<sup>2,4</sup>; <sup>1</sup>Letterkenny University Hospital, Letterkenny, Ireland<sup>2</sup>University of Galway, Galway, Ireland<sup>3</sup>Irish College of General Practitioners, Dublin, Ireland<sup>4</sup>Irish Centre for Applied Patient Safety and Simulation, University of Galway, Galway, Ireland

**Correspondence:** [Caroline.richardson@nuigalway.ie](mailto:Caroline.richardson@nuigalway.ie)

10.54531/EBAI6237

**Background and aim:** The effectiveness of simulation-based education (SBE) in improving healthcare education among practising healthcare professionals (HCPs) is well

recognized [1–3]. However, there is limited research available that explores the facilitators and barriers to the use of these activities amongst this population. The aim of this study was to determine those barriers and facilitators that exist to the use of healthcare simulation amongst practising HCPs through the systematic review of existing qualitative literature.

**Methods:** Searches were performed using Medline and CINAHL from February to May 2022 with an updated search performed in June 2022. Reference list searches of included studies were also conducted. English-language, peer-reviewed studies that used qualitative methodology to examine barriers and/or facilitators to the use of SBE activities amongst HCPs practising in a hospital setting were included. Data were extracted and a quality appraisal tool was applied by the primary author, with 30% of included studies independently extracted and appraised by a second author to examine the agreement. Barriers and facilitators were coded inductively using thematic analysis.

**Results:** Thirteen studies were included out of a total of 2109 screened. Four main themes related to facilitators and barriers were identified: (1) management and leadership; (2) resources; (3) perceived impact and (4) learning experience (see [Table 1-A18](#)). Amongst studies, positive learning experience was a commonly identified facilitator ( $n = 10$ ), while leadership and management were a frequently cited barrier ( $n = 13$ ).

**Conclusion:** This study identified common barriers and facilitators to the use of SBE activities. By anticipating and addressing these adequately, the use and uptake of SBE activities amongst practising HCPs can be further enhanced.

**Ethics statement:** Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

**Table 1-A18:** Thematic analysis of facilitators and barriers to the use and uptake of SBE activities

| Themes                        | Facilitator codes  | No. of studies, empirical sources | Barrier codes  | No. of studies, empirical sources |
|-------------------------------|--|-----------------------------------|--|-----------------------------------|
| (1) Management and leadership | -Responsive/ supportive leadership<br>-Effective scheduling<br>-Dealing appropriately with difficult environment<br>-Visibility of managerial personnel<br>-Simulation as mandatory assessment and training tool<br>-Collaboration with other centres<br>-Common vision<br>-Good communication | $N = 7$ (64.6%)                   | -Lack of responsive leadership<br>-Lack of time/poor scheduling<br>-Staff shortages<br>-Perceptions of hierarchy<br>-Lack of interprofessional involvement<br>-Poor work culture<br>-Competing vision<br>-Poor communication                       | $N = 13$ (100%)                   |
| (2) Resources                 | -High standard equipment<br>-Engaging scenarios<br>-Familiarity with equipment/environment<br>-Appropriate personnel<br>-Adequate preparation<br>-Advanced technology<br>-High degree of realism   | $N = 8$ (72.7%)                   | -Poor realism<br>-Financial restraints<br>-Lack of equipment/facilities<br>-Limited technology<br>-Lack of best practice standards<br>-Lack of appropriate personnel (e.g., trainers, SP, limited learners)<br>-Unfamiliar equipment or facilities | $N = 10$ (76.9%)                  |
| (3) Perceived impact          | -Perceived quality and safety benefits<br>-Improved culture<br>-Multidisciplinary collaboration<br>-Core job responsibility/role accountability<br>-Valued experience<br>-Improved teaching skills and techniques<br>-Demonstrable cost-benefit  | $N = 7$ (64.6%)                   | -Participant stress/anxiety/discomfort<br>-Interprofessional conflict<br>-Ineffective use of effort or time<br>-Benefits of simulation unclear   | $N = 6$ (46.2%)                   |
| (4) Learning experience       | -Consistency in delivery<br>-Material aligned to staff interest/needs<br>-Trainer expertise<br>-High-impact learning<br>-Safe and positive environment<br>-Individualized feedback   | $N = 10$ (90.9%)                  | -Inconsistency in programme delivery<br>-Trainers seen as outsiders<br>-Limited engagement<br>-Curriculum not adapted to needs<br>-Purpose not clear   | $N = 7$ (53.8%)                   |