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Introduction: Simulation-based education is becoming integral to healthcare professional education due to its effectiveness in improving clinical skills and knowledge in a safe and controlled environment. Full-scale simulation (FSS) is commonly used, however, Visually Enhanced Mental Simulation (VEMS) is still a developing modality. It includes visuals of a patient and equipment, and think-aloud to identify students' thinking and interactions during a clinical scenario as in FSS [1,2]. We aim to explore the perspectives of nursing students and lecturers concerning FSS and VEMS.

Methods: This mixed methods study (IRB approval aHSK/PGR/UH/03692) involved 150 adult nursing students exposed at least once to either or both FSS and VEMS. Some also volunteered to be interviewed. Healthcare lecturers from the same higher education institution received a VEMS guide to understand what it is, think about its application in their programme, and were invited to be interviewed.

Results: Interview participants included 11 students and 10 lecturers with no or limited simulation experience. Students reported that VEMS provided a different learning experience to FSS. They felt both approaches had the same conceptual fidelity. Observers prompted scenario participants during classroom-based VEMS whereas observers in FSS were in an observation room with noise issues from peers and difficulties hearing VEMS participants. Students also reported feeling intimidated when being watched remotely during FSS, while VEMS provided a more reassuring environment. They appreciated the VEMS visuals prompting their thinking but missed the opportunity to use real equipment.

Lecturers noted that VEMS could be an alternative for non-technical skills training sessions and provide learning outcomes similar to FSS. They recognised that FSS could be more intimidating than VEMS due to its often high reliance on technology. They reported that VEMS should be a supplementary training modality but not standalone as it is not appropriate for technical skills training. They suggested that FSS was not needed in undergraduate education due to being complex, and VEMS could suffice in most of the training. Additionally, VEMS, being a classroom-based activity, it enabled the engagement of a greater number of students.

Discussion: The overall study showed that VEMS and FSS provided similar learning outcomes [3], but VEMS offered a more comfortable learning environment. While FSS remains an essential tool for developing clinical skills, VEMS could be a valuable alternative for some non-technical skills training sessions. The findings of this study could inform educators' decision-making when selecting simulation methods for healthcare students and professionals' education.

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.

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ORIGINAL RESEARCH

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PERSPECTIVES OF STUDENTS AND LECTURERS IN HEALTHCARE PROFESSIONAL EDUCATION ON TWO DIFFERENT SIMULATION MODALITIES

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