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Enhancing Nursing Students' Engagement Through an Immersive System

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Abstract

Context: Learning skills and procedures requires awareness of the environment, which is a challenge, especially in the first year of nursing education. The use of a room equipped with an immersive system could be relevant in this context. This system recreates realistic and multisensory environments, including those that are difficult to reproduce in regular simulation facilities (Liu et al., 2019). The use of the immersive system improves spatial projection skills and attention to environmental elements while allowing collaborative learning (de Back et al., 2020).

Objective: To pilot test two procedural simulations in an immersive room with first year nursing students.

Intervention/Method: Two clinical scenarios were targeted to be experienced in the immersive room. The first involved interacting with a person with a neurocognitive disorder next to a nursing station. The person could interact with the virtual elevator to simulate leaving the unit or enter a room. The second scenario aimed at the safe transfer of a patient in the evening after surgery, into a room occupied by another sleeping patient, with the possibility of interacting with the equipment. After the simulation, an anonymized survey was sent to students to gather their perception of the experience. Facilitators' feedback was also informally collected at the end of the activity.

Results/Observations: A total of 72 students responded to the survey (response rate 19%). Respondents found this learning environment stimulating and realistic, which, according to their perception, positively contributed to their learning. Suggestions to optimize the use of the immersive system were made, including adjustments to briefing and sound effects.

Conclusion: The use of the immersive system seems to have increased students' engagement, leading them to consider the environment in their interventions. This innovative technology will be used again with other students in the upcoming semesters. (Disclaimer: This abstract was presented in French at Expo SIM 2023).