Explore and Experience: Utilizing Virtual Reality to Enhance Assessment Skills

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Abstract

Background/Introduction
Assessment is a crucial skill to ensure patient safety and improve outcomes. First-semester prelicensure nursing students possess minimal assessment skills, hands-on experience, clinical knowledge, and critical thinking to assess patients and their surroundings. A 360-video virtual reality (VR) scenario was designed by course faculty to simulate a hospitalized patient experience and provide students the opportunity to visualize and identify threats to the patient and their environment.

Purpose
The purpose of the activity was for first-semester prelicensure nursing students to improve environmental and patient observational assessment skills and identify issues that could impact patient safety utilizing virtual reality.

Methods or Processes/Procedures
Nursing faculty collaborated with instructional technologists to develop objectives and plan the VR activity. The scenario consisted of a standardized patient in a hospital room with numerous threats impacting patient safety. The scenario was filmed using a 360-camera to allow an unobstructed view of the patient and room. The video was edited down to four minutes and uploaded to the VR platform. The 360-video VR simulation enabled the students to be fully immersed.

Results
Evaluation consisted of an 8-Likert scale question survey and two open-ended questions about the benefits of virtual technology and recommendations for improving the activity. Overall, 94.12 % of students rated their experience using virtual technology as “excellent” or “very good.” Additionally, 94.12% of students stated that they “strongly agree” or “agree” with the statement that they “want to continue participating in future VR activities.” The qualitative analysis determined that the VR activity enhanced learning opportunities and professional learning experiences.

Limitations
The limitations of this activity include the large cohort size and the limited number of VR headsets available.

Conclusions/Implications for Practice
A variety of teaching techniques help students improve their knowledge and clinical judgment. Incorporating virtual reality provides students with a safe and immersive environment for learning and preparing for clinical settings.

Biography

Carol Bruno is an Assistant Professor at the University of Texas Medical Branch in Galveston, Texas. She has taught Health Assessment for 8 years to 1st-semester nursing students. She has been both a Course and Lab Coordinator in the Health Assessment course. She has a BSN from the University of Texas System School of Nursing , an MSN from Walden University, and her DNP from Grand Canyon University.

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