Title:
Innovative Research: NARCAN Virtual Reality an Interprofessional Healthcare Experience

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Session Title:
Meet the Poster Authors Session

Slot:
PST: Friday, March 27, 2020: 2:30 PM-3:15 PM

Abstract Describes:
Ongoing Work/Project

Applicable Category:
Clinical, Academic, Students, Researchers

Keywords:
NARCAN, Simulation and Virtual Reality

Abstract Summary:
This study involves interprofessional students experiencing an immersive Virtual Reality 360-degrees simulation pertaining to response of an opioid overdose. This active learning environment permits simulation of assessment/management including obtaining additional assistance and NARCAN administration. Virtual reality is a teaching strategy for improving student knowledge and perceptions related to opioid management.

References:
Abstract Text:

Purpose:
In a recent study involving development of a community-based NARCAN simulation, BSN and MSN nursing students at a Midwestern public university, indicated that prior to the NARCAN simulation experience they were not comfortable with administering the opioid antidote, NARCAN. They were also not aware that NARCAN is available over the counter and can be purchased and carried by anyone. Following the experience with the VR 360 simulation, students reported an increase in knowledge related to NARCAN. Virtual reality (VR) is the digital creation of scenarios that are immersive and both visually and aurally interactive (Biocca & Delaney, 1995, Jerald, 2015 & Liou, Yang, Chen, & Tarng, 2017). During a VR 360 video immersive experience the participant learner’s body interacts with the virtual environment and the brain in turn believes that the interactions are a true cognitive experience. This technology allows practice of real-to-life scenarios in an environment that does not include risk to real patients (Buchman & Henderson, 2019a) & Freina, & Ott, 2015).

An additional benefit of this technology includes the ability to assure consistent student experience with simple to complex scenarios and promotes consistent skill acquisition (Buchman & Henderson 2019b).

Educators are challenged to provide experiences to assist students to learn real life skills that will benefit them in their future practice. The treatment of a patient with a substance abuse/addictions/overdose is complex and it is difficult to ensure consistent student experiences with this issue. This need for novel solutions to ensuring student learning opportunities led to the initial VR 360 video as well as development of a second VR 360 video with an enhanced focus on interprofessional healthcare providers and their knowledge, skills and attitudes surrounding delivery of NARCAN in an overdose situation.

The primary aims of this study are: 1) evaluate Virtual Reality 360-degrees (VR 360) video immersion as a teaching strategy for assessment and management of opioid
overdose and 2) to evaluate student knowledge and perceptions regarding opioid abuse and nursing care related to this population.

**Methods:**
In this study, a group of interprofessional students will experience an immersive VR 360 simulation of an adult opioid overdose. Participants have the opportunity to apply clinical decision-making to the assessment and management of the virtual reality patient including NARCAN administration.

We will evaluate student learning outcomes using mixed methodology, including pre/post measurement tools as an assessment of knowledge on NARCAN, and student qualitative reflections.

**Results:**
Results are pending.

**Conclusion:**
The study findings will guide the development of future research for VR 360 video experiences for nursing and interprofessional students at all levels.