

Effectiveness of a VR-based Solution to Improve Practical Skills of Trainee Nurses in Sri Lanka

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Abstract - This study describes educational design research conducted to determine the usability of a Virtual Reality (VR) based learning tool to practice nursing skills. With the advancement of technology, new technological solutions have become a part of nursing education. Several technologies such as Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality (MR) can be used to overcome these problems. VR technology can be used to visualize the clinical environment at anytime and anywhere. Also, it has been identified as one of the most promising technologies to support clinical education. Therefore, a VR-based application for practicing nasogastric intubation was developed with the support and advice of a group of nursing lecturers. The application was qualitatively evaluated by nursing lecturers and quantitatively evaluated by a group of trainee nurses. Most of them had a positive opinion about embracing the new experience. In the analysis of overall satisfaction, the developed solution was found to be effective and supportive of reducing the clinical training time in the physical environment. It will quickly familiarise the trainee nurses with the clinical setting and develop the fundamental nursing skills in Sri Lanka.

Keywords - nursing training, practical skills, virtual reality