

VRNURSE4KIDS: PREPARING NURSING STUDENTS FOR FUTURE HEALTHCARE: VIRTUAL REALITY IN PAEDIATRIC SETTINGS

Background

Virtual Reality (VR) allows users to be fully immersed in a virtual world through a multisensory experience¹. It has been demonstrated that VR decreases pain and anxiety in children during Nursing procedures². Therefore, VR has become increasingly applied in hospitals. However, few studies assessed nurses' health technology perceptions and acceptance and it is largely unknown to what extent VR is part of the nursing education. Therefore, the VRNurse4KIDS project started, focusing on the use of VR in pediatric settings.

Aim(s)

The VRNurse4KIDS project intends (1) to increase awareness and attention for VR among students, teachers and healthcare professionals, (2) optimize their knowledge, competences and skills and (3) to improve quality of nursing education by integrating digital competences and VR in the nursing program.

Methods

The project consists of the following activities: (1) identification and understanding of barriers and facilitators towards implementation of VR in hospitals through focus group discussions, (2) development of a digital competence framework for nursing education, focusing on VR, (3) designing and development of an open-source e-learning training course on VR, including evaluation with a pre- and posttest design, (4) development of an instruction film including implementation of VR during nursing procedures, (5) skills lab training on VR, followed by implementation in clinical practice.

Results

Barriers and facilitators towards VR were identified among different stakeholders (e.g. health care professionals, nursing students, lectures) using the Technology Acceptance Model. Digital competences for nursing education with focus on VR were elaborated, using the European DigComp tool. An interactive, open source eLearning on VR is currently designed, consisting of six modules. The eLearning will be tested among nursing students (fall 2023). An instruction film is developed on how to integrate VR during venipuncture and will be followed by a skillslab training for nursing students (spring 2024).

Discussion

The stepwise and total approach of this project contributes to the innovation of nursing education. The VRNurse4KIDS project triggers nursing students for new technology, making them pioneers for implementing digital innovations into practice, thereby optimizing pediatric care.

Implications and future perspectives

As the use of VR is becoming more widespread in health care, it is important that nursing educators take the lead to integrate innovative health care technologies into nursing curricula.

References

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