



COE COLLEGE

Nurses Perceptions Regarding The Use of Technology and Virtual Reality for Pain Management

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Abstract

The purpose of this study is to gather information on healthcare professionals' perceptions regarding the use of technology for evidence-based practice. Therapeutic Virtual reality (VR) is a promising treatment intervention that has been shown to reduce pain by distracting individuals through immersive technology. While research supports the use of VR for various health-conditions, there is a lack of research examining healthcare provider perceptions of using technology including VR. The poster will discuss implications for clinical practice and identify additional gaps in the research literature regarding virtual reality as a non-pharmacological intervention for pain.

Background

- The US population is growing older and experiencing a multitude of medical conditions including chronic pain concerns.
- Over 100 million U.S. adults suffer from acute or chronic pain.
- The management of pain concerns will continue to be an area of focus given that 20% of Americans will be over the age of 65 in the near future.
- There continues to be a significant gap between research evidence and implementation in clinical practice.
- A growing body of research supports VR as a therapeutic tool that reduces the perception of pain, the need for analgesic medication, and length of hospitalization.
- There is a lack of empirical support regarding nurses perceptions and beliefs about using innovative technologies, like virtual reality, with medical patients.
- The survey was based on the Technology and Acceptance Model (TAM).
- TAM is used to assess the perceptions of healthcare professionals regarding new technology which has been proven effective in implementing telemonitoring systems, but no research has been conducted specifically on perceptions of VR.

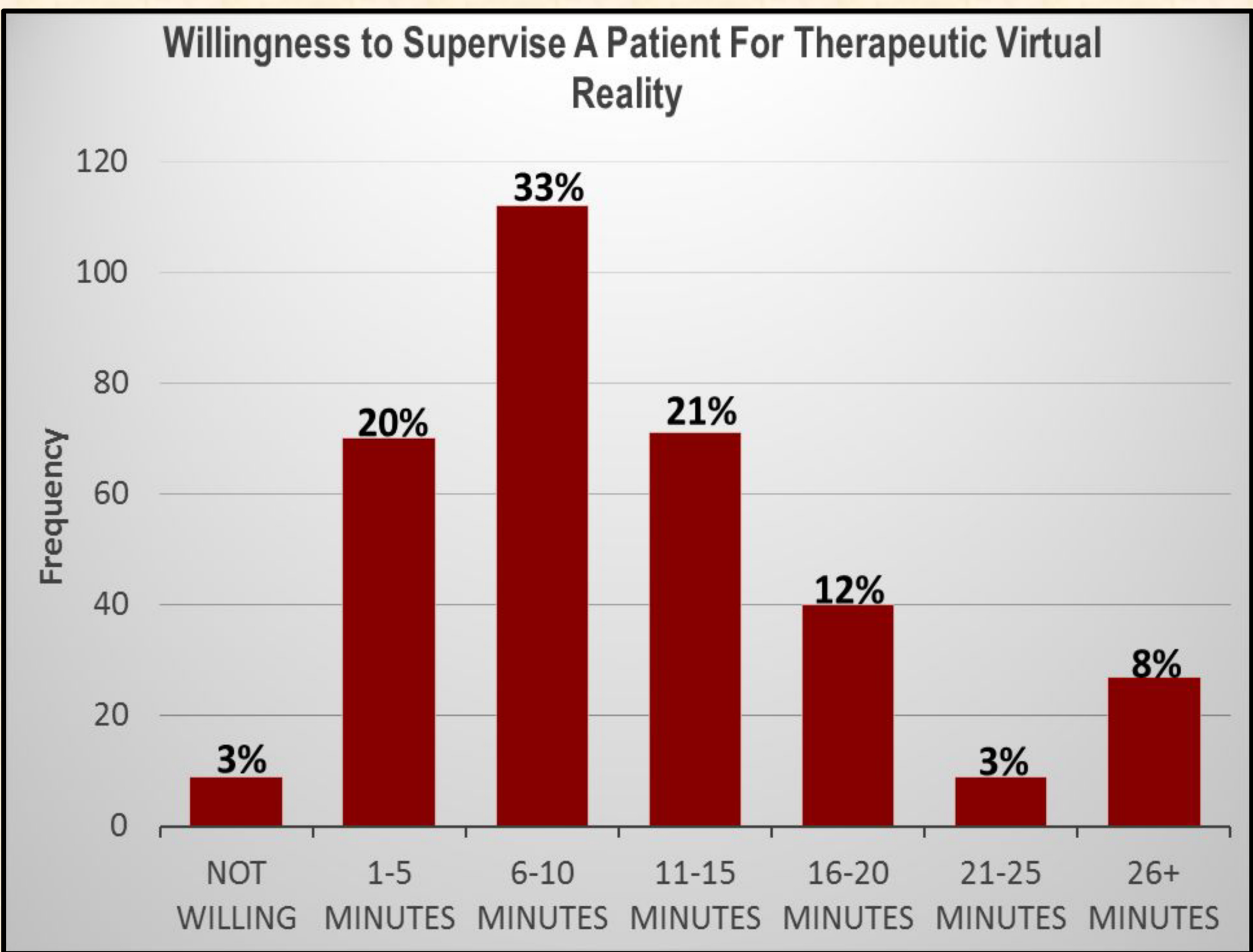
Methodology

Sample Methods

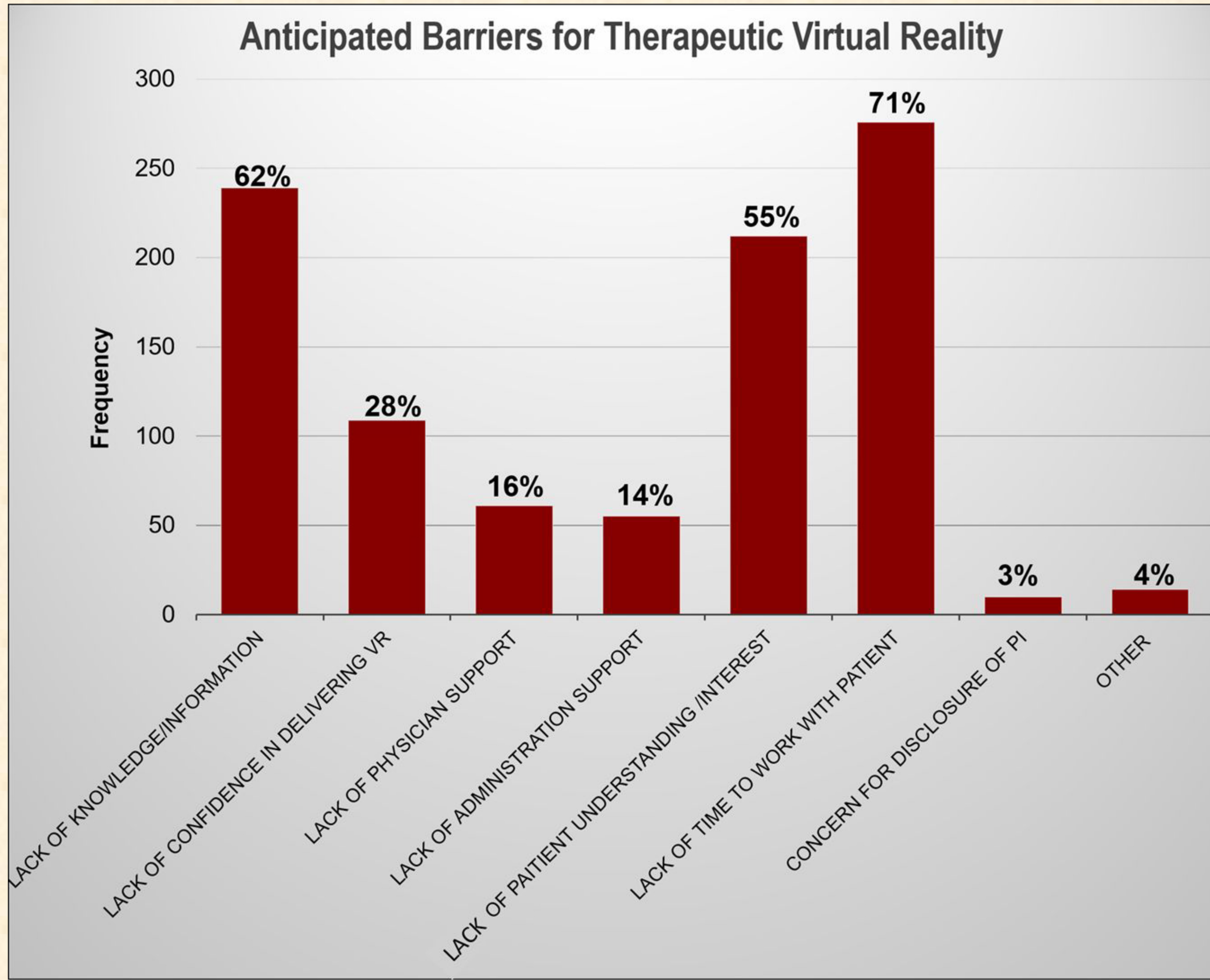
- The Healthcare and Technology Online survey was distributed to 25 Eastern Iowa nurse managers who distributed the survey to their respective healthcare teams.
- The survey was completed by direct care providers who had professional nursing degrees.

Demographics

- Attempted Survey: 385
- Completed Survey: 335
- Gender: F - 97% M - 3%
- Years Worked: Up to 10 years - 48%, More than 10 years - 52%
- Race: White- 83%
- Work Setting: Clinic: 20%, Unit: 80%
- Level of Education: LPN & RN: 35%, BSN: 56%, MSN & PhD: 9%



Results



Discussion

- Many nurses are unaware of the benefits that distraction has on perceived pain.
- Most nurses have had less than 5 experiences with VR with 50% reporting they had never used VR.
- Nurses' biggest concerns include a lack of time with patients, personal knowledge, and patient knowledge for implementing VR for pain management.
- Measuring nurses perceptions will be helpful in determining the most effective way to implement VR as a tool for pain management in a hospital setting.
- Future steps will look into determining the feasibility of implementing VR before pursuing a more extensive and long-term evaluation of a hospital-based VR intervention on inpatient outcome.
- Next steps include a pre-survey with semi-structured interviews, followed by training, and a post-survey.

References

References are available upon request to jruarez@coe.edu