DOI: 10.7860/JCDR/2025/80478.21771

Effectiveness of Virtual Reality and Augmented Reality in Parkinson's Patient for Ambulophobia and Basophobia: A Case Report

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ABSTRACT

Basophobia and ambulophobia are prevalent among Parkinson's patients, stemming from the fear of falling and difficulty walking due to motor symptoms like rigidity, tremors, and balance issues. Virtual Reality (VR) and Augmented Reality (AR) are emerging technologies that enhance motor skills, balance, and cognitive function through immersive, therapeutic exercises.

A 70-year-old male patient with stage 2 Parkinson's disease underwent the 4-week intervention consisting of VR and AR exercises, with pre- and post test assessments using the Morse and ABC scale to evaluate progress. The patient underwent 30 minutes of VR and AR therapy, three times a week, for four weeks.

The results showed significant improvements in reducing ambulophobia and basophobia, as measured by the Morse and ABC scales. VR and AR enhanced motor skills, balance, cognitive function, and boosted confidence and daily mobility. The patient demonstrated improved gait quality, reduced fear of falling, and enhanced overall quality of life.

VR and AR offer promising solutions to alleviate ambulophobia and basophobia in Parkinson's patients, improving mobility, confidence, and overall quality of life.

Keywords: Parkinson's disease, Rehabilitation, Rigidity, Tremors