Virtual Reality in Generalized Anxiety Disorder: A Preliminary

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ABSTRACT

Introduction: Virtual reality (VR) in head-mounted displays provides a fully immersive experience for users which can be a valuable therapeutic modality to treat generalized anxiety disorders (GAD). This study aims to investigate the effectiveness of using VR as an adjunct in the treatment of GAD. **Methods:** This study is a randomized controlled, assessor-blinded, parallel-group superiority trial. Participants were recruited from three hospitals in Malaysia. After consenting, participants were enrolled into the study according to eligibility criteria. The primary outcome measure was anxiety severity, measured by the GAD-7 scale at baseline, 2-week and 4-week. Secondary outcome measures included quality of life, measured by the WHO-5 Well-being Index and acceptability, measured by the acceptability questionnaire. The study required 80 patients to be randomly assigned to either control (standard of care, SOC) or treatment (VR+SOC) group in a 1:1 ratio. **Preliminary Results:** As of 01 July 2023, the study had successfully recruited 33 eligible GAD patients (41.3%). Preliminary analysis of demographics showed a marginally significant difference in mean age (p-value, p=0.037), and significant differences in GAD-7 scores ($p<0.001$) at baseline between the control arm and treatment arm. Visual inspection of trends showed continuous improvement in anxiety and well-being over time within the control group in the VR+SOC group as compared to the SOC group. However, more data is required to confirm these observations. **Conclusion:** Randomness is upheld in the trial. Preliminary results support the benefit of using VR as an adjunct in the treatment of GAD but do not support premature termination of the study.