Virtual and Augmented Reality in the Diagnosis and Treatment of Psychotic Disorders – A Systematic Review of Literature

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Although commonly used in creative industries, virtual reality (VR) and augmented reality (AR) can be valuable tools in improving patient care and clinical outcomes, such as medication compliance, motivation, and rehabilitation. Emerging evidence has begun to establish that AR/VR strategies might be acceptable to patients with psychosis, but the effectiveness and application of these strategies remains unclear. This review addresses the gap of knowledge and investigates the clinical application and effectiveness of AR/VR technologies in the diagnosis and treatment of primary psychotic disorders. We systematically searched and reviewed 2069 studies involving AR/VR as a diagnostic and treatment approach across psychotic disorders populations. Twenty-three original articles met inclusion criteria. No studies utilizing AR were found. Included studies demonstrated the diagnostic application of VR, as well as its use in targeting various symptoms and outcomes of psychotic disorders, including positive symptoms, anxiety, and deficits in social skills, cognition, and physical activity. The majority of the studies argued that the addition of VR therapies and rehabilitation to treatment-as-usual was more effective than traditional methods alone in treating psychotic disorders. Studies also support the feasibility, safety, and acceptability of VR to patients. This is the first study to comprehensively look at AR/VR applied to diagnosis and treatment of serious mental illness, without limiting geographical setting, publication year, and diagnostic presentation. VR could prove to be highly effective in diagnosis and symptom reduction, as well as improved physical health, quality of life, and psychosocial functioning among populations with psychotic disorders.