

The Emerging Role of Virtual Reality Rehabilitation and Pelvic Floor Muscle Training in Urinary Incontinence

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ABSTRACT

Urinary Incontinence (UI) is the uncontrollable release of urine, a condition that impacts millions of people around the world and can severely affect their overall well-being and daily activities. It is a prevalent and chronic disorder that affects millions of individuals globally. UI has significant detrimental effect on physical health. Traditional treatments, including behaviour therapy or strengthening the pelvic floor muscles, demonstrates significant improvement in UI. By leveraging Virtual Reality (VR) technology, individuals with UI can engage in interactive and personalised exercises, enhancing motivation and treatment outcomes. A creative approach has shown potential to improved motivation, adherence, with treatment outcome for persons with UI. The purpose of this research is to explore the effectiveness of VR rehabilitation combined with Pelvic Floor Muscle Training (PFMT) in management of UI signs and pelvic

floor muscle strength of individuals with UI. This review utilised PubMed, Google Scholar, and Cochrane to search relevant full text literature and identified 25 studies between 2010 and 2024 years comprising cross sectional studies, observational studies, systematic reviews, semi experimental studies and comparative observational studies. After removing duplicates, 15 articles were found to be pertinent to the review. According to the review, VR rehabilitation has great potential in treating UI by strengthening the pelvic floor muscles, reducing symptoms, and promoting adherence. It is a compelling substitute for conventional methods because of its gamified and captivating features. This narrative review highlights the revolutionary potential of VR in pelvic health care. VR therapy improved the Pelvic Muscle Testing's functionality; however, these gains were comparable to those of traditional PFMT.

Keywords: Behaviour therapy, Quality of life, Strengthening