

Virtual Reality Balance Training on Geriatric with Balance Disorders – Boon or Bane? Systematic Review

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Abstract

Introduction: Balance disorder is the most addressed problem in the elderly, affecting physical activity and quality of life. Virtual reality can be an interesting intervention with task-specific training that is fun and motivating. Purpose: This systematic review aimed to determine the effect of Virtual Reality on elders with balance disorders and to facilitate early recovery by incorporating technology and individualised therapy.

Methods: Pubmed, Cochrane and Google Scholar are three electronic databases accessed using the PICO search strategy and by hand searching.

Eligibility Criteria: Only randomised controlled trials were included, Elderly population, literature only on English, recent 5 years of literature 2020 to 2024, Virtual Reality interventions in Physiotherapy, compared with conventional exercises, one among the main outcomes measured as balance or Gait. Studies Appraisal method: With PEDro- Physiotherapy evidence database quality assessment tool to assess the quality of studies.

Results: Of the 11 studies, most showed greater benefits in balance and gait outcome measures. Among the 11 studies included, most showed greater benefits of Virtual reality on balance and gait outcome measures, and very few studies showed any differences in virtual reality compared to conventional exercises.

Conclusion: Virtual Reality Balance training for the elderly can be a promising intervention in physiotherapy, becoming cost-effective, fun-filled, and motivating nowadays.

Implications: This study clarifies better physiotherapists treating elders with balance disorders, using virtual reality as the most engaging and adherent.