

POSTER PRESENTATION PP5

Home-Based Exercise Program Integrated with Self-Managed Education Program in People with Benign Paroxysmal Positional Vertigo With and without Vestibular Hypofunction: A Study Protocol

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ABSTRACT

Background and Objectives: Benign paroxysmal positional vertigo and vestibular hypofunction are common vestibular disorders, especially among older adults. Although canalith repositioning manoeuvres and vestibular rehabilitation are viable for managing acute symptoms, many individuals continue to experience functional limitations. Home-based exercise programmes may improve continuity of care, but many existing approaches lack structured guidance and integrated education to support long-term self-management. This study protocol describes the development, validation, and feasibility evaluation of a structured home-based exercise programme integrated with a self-managed education programme. **Methods and Analysis:** A sequential three-phase design will be employed. Phase I will develop the programme through evidence synthesis and integration of current vestibular rehabilitation principles. Phase II will evaluate content validity among eleven experts and face validity among 15 target users using the Content Validity Index, Face Validity Index, and Patient Education Materials Assessment Tool. Phase III will conduct a feasibility pilot randomised controlled trial involving 30 adults aged 60 years and above, comparing the integrated programme with standard care. Clinical outcomes will be assessed using the Dizziness Handicap Inventory, Activities-specific Balance Confidence Scale, Dynamic Gait Index, Timed Up and Go test, Five Times Sit-to-Stand Test, and EQ-5D-5L, while feasibility outcomes will include adherence, retention, acceptability, and adverse events at baseline, week 10, and week 20. Data will be analysed using descriptive statistics and two-way repeated-measures analysis of variance. **Expected Result:** The study is expected to produce a validated intervention with standardised implementation procedures and preliminary feasibility findings to inform a future definitive randomised controlled trial.

Keywords: Benign paroxysmal positional vertigo; vestibular hypofunction; home-based programs; self-managed education programs

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