

POSTER PRESENTATION PP4

Vestibular Rehabilitation for Older Adults: Where Are We Now and Where Next?

Hanan Ahmad¹, Azliyana Azizan²

¹ Physiotherapy Unit, Department of Rehabilitation Medicine, Hospital Sultan Abdul Aziz Shah (HSAAS), Universiti Putra Malaysia (UPM), 43400 Serdang, Selangor, Malaysia

² Centre of Physiotherapy, Faculty of Health Sciences, Universiti Teknologi MARA, Puncak Alam Campus, 42300 Bandar Puncak Alam, Selangor, Malaysia

ABSTRACT

Background: Age-related vestibular dysfunction and dizziness are prevalent and are strongly associated with falls, mobility limitation, and diminished quality of life. Although vestibular rehabilitation is increasingly used in older adults, the evidence base remains clinically heterogeneous and intellectually fragmented. **Objective:** To map the global research landscape of vestibular rehabilitation in older adults and delineate the evidence base to inform future research directions. **Methods:** A bibliometric analysis was conducted on records retrieved from Web of Science and Scopus. The search combined terms related to vestibular rehabilitation, vestibular dysfunction, and older adults. Only English-language articles and reviews were included. ScientoPy supported data integration, deduplication, and performance analysis, whereas VOSviewer enabled science mapping and network structures, including keyword co-occurrence. **Results:** 473 records were analysed, demonstrating a marked increase in publication output after 2010, with a peak in 2025. The United States and the University of Pittsburgh emerge as the leading country and institution. Highly cited studies emphasised BPPV guidelines, rehabilitation effectiveness, peripheral hypofunction, mechanism-based interventions, and age-related vestibular decline. In parallel, three interconnected themes: functional rehabilitation outcomes, ageing and fall-risk assessment, and patient-centred outcomes integrating emerging technologies were identified as shaping future directions. **Conclusion:** The field demonstrates maturation alongside persistent fragmentation, with incomplete integration across domains. Current trajectories emphasise multidimensional, patient-centred care, requiring future integrated geriatric pathways, broader global participation, and stronger focus on implementation, frailty, cognition, and digital rehabilitation.

Keywords: Vestibular rehabilitation; older adults; dizziness; falls; bibliometric analysis; postural control

Corresponding Author:

Hanan Ahmad

Email: farhanah.ahmad@upm.edu.my