

Balance Training Using Virtual Reality Improves Balance and Physical Performance in Older Adults at High Risk of Falls

<https://www.tandfonline.com/doi/full/10.2147/CIA.S220890>

Virtual reality may provide a viable alternative intervention for falls prevention. This study evaluated the effects of virtual reality training using the Balance Rehabilitation Unity (BRU) versus exercise using a modified Otago Exercise Programme (EX) on improving balance and physical performance in the short-term restorative care setting of the Gait and Balance Gym. **(OPEN ACCESS)**

Risk Factors for Recurrent Falls in Older Adults: A Systematic Review with Meta-Analysis

<https://www.sciencedirect.com/science/article/abs/pii/S0378512220304242>

This systematic review with meta-analysis evaluated the relative risk of recurrent falls for different types of falls risk factors. Each factor was classified into one of the following domains: (1) balance and mobility; (2) environmental; (3) psychological; (4) medical; (5) medication; (6) sensory and neuromuscular; or (7) sociodemographic. **(PAID ACCESS)**

Mobile Technology for Falls Prevention in Older Adults

<https://academic.oup.com/biomedgerontology/article-abstract/78/5/861/6594705?login=true>

Recently, the need for person-centered approach utilizing personalization, prediction, prevention, and participants, known as the P4 model, in fall prevention has been highlighted. This narrative review aims to review the evidence for using mobile technology for personalized fall risk assessment and prevention in older adults. **(PAID ACCESS)**

World Guidelines for Falls Prevention and Management for Older Adults: A Global Initiative

<https://academic.oup.com/ageing/article/51/9/afac205/6730755?login=true>

Falls and fall-related injuries are common in older adults, as they can negatively affect one's functional independence and quality of life and are associated with increased morbidity and mortality. This study creates a set of evidence that makes recommendations for (1) a person-centered approach that includes the perspectives of older adults with lived experiences, caregivers, and other stakeholders; (2) gaps in previous guidelines; (3) recent developments in e-health; and (4) implementation across locations with limited access to resources. **(OPEN ACCESS)**

Review of Gait, Cognition, and Fall Risk with Implications for Fall Prevention in Older Adults with Dementia

<https://karger.com/dem/article/48/1-2/17/103471/>

Older people with cognitive impairment are at an increased risk of falls; however, fall prevention strategies have limited success in this population. This narrative review examined the literature to inform a theoretical framework for fall prevention in older adults with dementia. **(OPEN ACCESS)**

Evaluation of Clinical Practice Guidelines on Fall Prevention and Management for Older Adults

<https://jamanetwork.com/journals/jamanetworkopen/article-abstract/2787179>

This systematic review examined clinical practice guidelines for fall prevention and management for adults 60 years or older in all settings (e.g., community, acute care, and nursing homes), evaluated agreement in recommendations, and identified potential gaps. **(OPEN ACCESS)**

Multi-System Physical Exercise Intervention for Fall Prevention and Quality of Life in Pre-Frail Older Adults: A Randomized Controlled Trial

<https://www.mdpi.com/1660-4601/17/9/3102>

Effective interventions for indicated fall prevention are necessary for older adults with frailty. This randomized control trial study aimed to determine the effectiveness of a Multi-system Physical Exercise (MPE) for fall prevention and Health-Related Quality of Life (HRQOL) in pre-frail older adults. **(OPEN ACCESS)**



Embarrassment Experienced by Older Adults in Relation to Accidental Falls: A Concept Analysis

<https://www.sciencedirect.com/science/article/abs/pii/S0197457220301488>

Embarrassment is commonly felt by older adults experiencing a fall, and embarrassment may cause older adults to adopt maladaptive behaviours by not implementing fall prevention strategies. This study sought to use the Walker and Avant's eight-step concept analysis to define embarrassment as it relates to accidental falls and fall prevention among older adults. **(OPEN ACCESS)**

Beneficial Effects of Interactive Physical-Cognitive Game-Based Training on Fall Risk and Cognitive Performance of Older Adults

<https://www.mdpi.com/1660-4601/17/17/6079>

Evidence suggests that combined physical-cognitive training would be an effective fall risk reduction and cognitive improvement intervention. This study investigates the effects of interactive physical-cognitive game-based training on older adults' fall risk and cognitive performance. **(OPEN ACCESS)**

Interventions for Preventing Falls and Fall-Related Fractures in Community-Dwelling Older Adults: A Systematic Review and Network Meta-Analysis

<https://agsjournals.onlinelibrary.wiley.com/doi/full/10.1111/jgs.17375>

This systematic review compared the effectiveness of single, multiple, and multifactorial interventions to prevent falls and fall-related fractures in community-dwelling older adults. **(OPEN ACCESS)**

Effect of a Home-Based Exercise Program on Subsequent Falls Among Community-Dwelling High-Risk Older Adults After a Fall

<https://jamanetwork.com/journals/jama/article-abstract/2735075>

This article questioned whether a home-based exercise program reduces falls among community-dwelling older adults who attend a fall prevention clinic after a fall. This study aimed to assess the effect of a home-based exercise program as a fall prevention strategy in older adults referred to a fall prevention clinic after an index fall. **(OPEN ACCESS)**

Implementing an Online Virtual Falls Prevention Intervention During a Public Health Pandemic for Older Adults with Mild Cognitive Impairment: A Feasibility Trial

<https://www.tandfonline.com/doi/full/10.2147/CIA.S306431>

This study evaluates the feasibility of delivering a virtual falls prevention intervention for older adults with mild cognitive impairment (MCI). **(OPEN ACCESS)**

Effect of Senior Dance (DanSE) on Fall Risk Factors in Older Adults: A Randomized Controlled Trial

<https://academic.oup.com/ptj/article/100/4/600/5695649?login=true>

Older people's participation in structured exercise programs to improve balance and mobility is low. Senior Dance is an alternative option, as it may provide a safe and fun way of targeting balance. This randomized controlled trial study aimed to investigate the effect of Senior Dance on balance, mobility, and cognitive function compared with a control intervention. **(OPEN ACCESS)**

STOPPFall (Screening Tool of Older Persons Prescriptions in Older Adults with High Fall Risk): A Delphi Study by the EuGMS Task and Finish Group on Fall-Risk-Increasing Drugs

<https://academic.oup.com/ageing/article/50/4/1189/6043386?login=true>

Healthcare professionals may be reluctant to deprescribe fall-risk-increasing drugs (FRIDs). This study sought to support clinicians in managing FRIDs and to facilitate the deprescribing process, STOPPFall (Screening Tool of Older Persons Prescriptions in older adults with high fall risk). **(OPEN ACCESS)**

Effectiveness of Multifactorial Interventions in Preventing Falls Among Older adults in the Community: A Systematic Review and Meta-Analysis

<https://www.sciencedirect.com/science/article/abs/pii/S0020748920300493>

This systematic literature review aimed to examine the effectiveness of multifactorial fall prevention interventions among community-dwelling older adults and compare subgroups that differed in their degree of fall risk and the intensity and components of interventions. **(PAID ACCESS)**

Physical Activity Programs for Balance and Fall Prevention in Elderly

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6635278/>

Due to demographic changes, the world's population is progressively aging. This study aimed to systematically review the scientific literature to identify physical activity programs that increase balance among older adults. **(OPEN ACCESS)**

Orthostatic Hypotension and Falls in Older Adults: A Systematic Review

<https://www.sciencedirect.com/science/article/abs/pii/S1525861018306352>

Orthostatic hypotension is a potential risk factor for falls in older adults, but existing evidence on this relationship is inconclusive. This systematic review and meta-analysis examined the association between orthostatic hypotension and falls. **(OPEN ACCESS)**

Reaching Older People with a Digital Fall Prevention Intervention in a Swedish Municipality Context – an Observational Study

<https://www.frontiersin.org/articles/10.3389/fpubh.2022.857652/full>

Evidence suggests that falls in old age can be prevented by exercise programs that include balance training, functional exercises, and strength training. This study aimed to describe the recruitment process, estimate the reach rate at the population level and describe participants' characteristics and representativeness in a digital fall prevention intervention study. **(OPEN ACCESS)**

Older Adults' Preferences for, Adherence to, and Experiences of Two Self-Management Falls Prevention Home Exercise Programs: A Comparison Between a Digital Program and a Paper Booklet

<https://link.springer.com/article/10.1186/s12877-020-01592-x>

Using eHealth solutions may be a way to increase access and reach a wider population for fall prevention exercise programs. This feasibility study explored the choice of program, adherence, and self-reported experiences comparing two exercise programs – a digital program and a paper booklet. **(OPEN ACCESS)**

‘Managing Pieces of a Personal Puzzle’ – Older People’s Experiences of Self-Management Falls Prevention Exercise Guided by a Digital Program or a Booklet

<https://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-019-1063-9>

Self-management programs can potentially increase access and reduce costs related to exercise-based fall prevention. This study aimed to explore older people’s experiences of a self-management fall prevention exercise routine guided by a digital program (web-based or mobile) or a paper booklet. **(OPEN ACCESS)**

Wearable Inertial Sensors to Measure Gait and Posture Characteristic Differences in Older Adult Fallers and Non-Fallers: A Scoping Review

<https://www.sciencedirect.com/science/article/pii/S0966636219301663>

Wearable inertial sensors have grown in popularity to assess fall risk objectively. This systematic review aimed to identify gait and posture differences among older adult fallers and non-fallers, which can be measured using wearable inertial sensors. **(OPEN ACCESS)**

Inclusion of Medication-Related Fall Risk in Fall Risk Assessment Tool in Geriatric Care Units

<https://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-020-01845-9>

Even though a patient’s fall risk may be scored on admission, the medication-induced fall risk may be ignored. This study developed a preliminary categorization of fall-risk-increasing drugs (FRIDs) to be added as a risk factor to the existing fall risk assessment tool routinely used in geriatric care units. **(OPEN ACCESS)**

Facilitators and Barriers to Enrolling in Falls Prevention Programming Among Community-Dwelling Older Adults

<https://www.sciencedirect.com/science/article/abs/pii/S0167494319300068>

This cross-sectional survey sought to identify factors that increase the likelihood of enrolling falls prevention programming among community-dwelling older adults. **(PAID ACCESS)**

Older Adults' Perceptions and Recommendations Regarding a Falls Prevention Self-Management Plan Template Based on the Health Belief Model: A Mixed-Methods Study

<https://www.mdpi.com/1660-4601/19/4/1938>

This mixed-methods study aimed to identify older adults' perceptions and recommendations of a Health Belief Model (HBM)- based falls prevention self-management plan template.

(OPEN ACCESS)

Prevalence, Risk Factors, and Burden of Disease for Falls and Balance or Walking Problems Among Older Adults in the U.S.

<https://www.sciencedirect.com/science/article/abs/pii/S0091743519301999>

This study assesses the prevalence of falls, factors predicting future falls, and health impacts of falls and balance or walking problems for U.S. older adults. It examined baseline factors predicting falls at follow-up. It also estimated the impact of falls and balance/walking problems on health-related quality of life (HRQOL), mortality, and quality-adjusted life years (QALYs). **(PAID ACCESS)**