

# A SYSTEMATIC REVIEW ON FACTORS INFLUENCING THE IMPLEMENTATION OF A MULTIFACTORIAL FALLS PREVENTION INTERVENTION IN COMMUNITY-DWELLING OLDER PERSONS

## Background

One out of three community-dwelling older adults (65+) fall each year. Multifactorial falls prevention interventions are effective, however poor implementation often leads to inadequate results. To successfully implement multifactorial falls prevention interventions, it is important to understand factors influencing the implementation of multifactorial falls prevention interventions in community-dwelling older adults.

## Aim(s)

This systematic review aims to investigate factors (barriers and facilitators) influencing the implementation of multifactorial falls prevention interventions in community-dwelling older adults.

## Methods

A systematic literature search was conducted on the 3th of December, 2021 and updated on the 3th of April, 2023 in five databases: PubMed (including MEDLINE), EMBASE (via Embase.com), Cochrane Central Register of Controlled Trials (via Cochrane Library), Web of Science Core Collection and CINAHL (via EBSCO). Additional relevant papers were searched by forward and backward snowballing and unpublished reports were examined in grey literature, including clinical trial registries. This review is reported according to the PRISMA guidelines and is registered in PROSPERO (CRD42022295988). Two researchers independently screened the articles on title, abstract and full text. The quality of each included article was evaluated based on a sensitivity analysis, consisting of the assessment of the relevance to the research question and appraising the methodological quality using the Mixed Method Appraisal Tool (MMAT). 'The Comprehensive Integrated Checklist of Determinants of practice' (TICD) was used to categorize influencing factors for the implementation of multifactorial falls prevention interventions in community-dwelling older persons.

## Results

In total, 29 studies of the 20.522 records were included in this systematic literature review. Influencing factors were classified as barriers (n=40) and facilitators (n=35) within the TICD checklist. The availability of necessary resources is the most reported influencing factor. Other commonly reported factors are knowledge, intention/beliefs and motivation at the level of the older persons and health care professionals, fitting of the falls prevention intervention into current practice, communication, team and referral processes and financial incentives and disincentives. Only few determinants (e.g. legislation, payer or funder policies) were mentioned at social, political and legal level.

## Discussion

Different from other systematic reviews exploring the influencing factors for the implementation of falls prevention interventions, this review included both quantitative and qualitative study designs and took all levels of the context (i.e. micro, meso and macro) into account. The determinants were categorized within the TICD checklist. The use of a determinant framework allows a uniform categorization and enables comparison between studies. An interesting finding from mapping the determinants in the TICD checklist, is that we identified determinants at a domain that is not included in the TICD checklist (i.e. family and informal caregivers). This review resulted in a more holistic understanding of the determinants influencing the implementation of multifactorial falls prevention interventions specific for the community setting.

## Implications and future perspectives

Barriers and facilitators at different levels influence successful implementation of multifactorial falls prevention interventions. Mapping of the barriers and facilitators is essential to enhance the uptake and effectiveness of multifactorial falls prevention interventions in community-dwelling older persons and to choose implementation strategies tailored to the context.