Factors influencing the implementation of fall-prevention programmes: a systematic review and synthesis of qualitative studies

Child S, Goodwin V, Garside R, Jones-Hughes T, Boddy K, Stein K

CRD summary
The authors concluded there were a range of factors affecting the implementation of fall-prevention practices, and there was no key attributable factor. Successful implementation required individuals, professionals, and organisations to modify established behaviours, thoughts, and practice. This appeared to be a well-conducted review, and the authors' interpretations seem reliable.

Authors' objectives
To identify barriers and facilitators to the effective implementation of falls prevention programmes among older people living in the community.

Searching
Eight electronic databases (including CINAHL, MEDLINE and The Cochrane Library) were searched between January 1980 to January 2012 for articles published in English. A MEDLINE search strategy was presented. Editorials, opinion papers, and conference abstracts were excluded.

Study selection
Eligible for inclusion were qualitative studies that examined influences on the implementation of fall prevention programmes for older people living in the community. The views of older people and health professionals were sought.

Most of the included studies examined influences on implementation of falls prevention programmes from the perspectives of older people; others adopted the perspective of health care professionals, or both parties. Studies were conducted worldwide, with six in the UK. The interventions varied. Studies of older people gathered their views on assistive devices, exercise (home-based, hospital-based, and community-based), web-based hip fracture prevention, multidisciplinary educational falls prevention programmes, and home modification advice. Studies of health professionals included their views on the incorporation of evidence-based fall risk assessment and management processes into clinical practice, and on a range of education initiatives on fall management and home hazard reduction.

Two reviewers selected the studies for inclusion. Discrepancies were resolved by consensus, and with the involvement of a third reviewer where necessary.

Assessment of study quality
Study quality was assessed using published criteria (Wallace et al 2004). This covered clarity of research question, author perspective, appropriateness of study design, adequate description of context and sample, data collection process, links between data and interpretations, and ethical issues.

Quality assessment was carried out independently by two reviewers.

Data extraction
Data were extracted independently by two reviewers, to enable subsequent thematic analysis to identify recurrent issues arising in the studies. During this process, participant quotes were gathered.

Methods of synthesis
Meta-ethnography was used to synthesise the studies. A coding scheme was constructed. The process of data collection and synthesis was developed to arrive at further levels of interpretation, and participant quotes were used to illustrate these interpretations.

Results of the review
Nineteen studies were included. Sample size (where reported) ranged from eight to 187 participants; one study focused
on 277 provider facilities. Study quality appeared to be generally good.

Three main concepts were identified as barriers and facilitators to implementing falls prevention programmes. Many studies contributed to more than one concept, and concepts were overlapping in some cases.

**Practical considerations** (economic - 12 studies; access to intervention - seven studies; and time - nine studies):

Economic issues identified for the individual included financial costs of assistive devices, transport to and from fall-prevention interventions, and attendance fees. Many participants suggested that reasonable cost would not be a barrier to participation, although treatment choices often needed to be made in countries where this was not free-of-charge. For healthcare professionals, decisions to carry out individual fall risk assessments were inhibited by reimbursement schemes in some countries and national funding priorities in others.

Ease of access to interventions was affected by older people's ability to drive, availability of public transport, travelling distance, car parking facilities, and seasonal factors (such as weather conditions).

There was mixed response from individuals in perceived lack of time for intervention participation. Health professionals felt strongly that this was often a significant factor limiting their ability to provide complete fall risk assessments as part of the wider service.

**Adapting for community** (social and cultural - 11 studies):

Different social and cultural influences were noted on the use of assistive devices, types of exercise and their delivery format, and fatalistic attitudes towards falling.

**Psychosocial** (transforming identifies - eight studies; defining the expert - 13 studies):

Changes to a person's identity after a fall was a major theme throughout the included studies. Mismatches were noted between the views of healthcare professionals and older people in the latter's ability to cope at home. Willingness of older people to accept intervention was diminished often due to fear of loss of independence.

Some studies highlighted difficulties health professionals sometimes had in involving older people and their families in decision-making about fall risk and prevention. Particular problems included traditional assumptions about medical experts knowing best, and perceptions of competence in whether individuals and family members could properly identify fall risk; studies demonstrated difficulties of this approach from the perspective of the health professional and the individual.

**Authors' conclusions**

There were a range of factors affecting the implementation of fall-prevention practices, and there was no key attributable factor. These related to older people, families, healthcare professionals, and healthcare systems. Successful implementation required individuals, professionals, and organisations to modify established behaviours, thoughts and practice.

**CRD commentary**

The review question was supported by appropriate inclusion criteria, which were suitably broad for outcomes. A range of relevant databases were searched. Restriction to English language papers was likely to be reasonable, given the difficulties with potential bias when translating qualitative studies written in other languages. Restriction to published studies meant that relevant grey literature could have been overlooked. The review process included measures to improve consistency.

Study details were presented; these provided adequate information on the aims, qualitative methods, and participant characteristics. A recognised quality assessment tool was applied to the included studies, and the results were clearly presented. A recognised method of synthesis was used to capture diverse evidence, from descriptive to conceptual. There was clear evidence linkage between raw data and concepts, inconsistent participant views were taken into account, and the reviewers demonstrated a degree of reflexivity throughout this process.
This appeared to be a well-conducted review, and the authors' interpretations seem reliable.

**Implications of the review for practice and research**

**Practice:** The authors stated that it was important to consult with older people in clinical practice to find out what changes they were prepared to make to reduce their fall risk.

**Research:** The authors did not state any implications for research.

**Funding**
National Institute of Health Research, Collaboration for Leadership for Applied Health Research and Care (CLAHRC) for the South West of England; European Regional Development Fund; European Social Fund Convergence Programme for Cornwall and the Isles of Scilly.

**Bibliographic details**

**PubMedID**
22978693

**DOI**
10.1186/1748-5908-7-91

**Original Paper URL**
http://www.implementationscience.com/content/7/1/91/abstract

**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Accident Prevention /economics /methods; Accidental Falls /economics /prevention & control; Aged; Attitude to Health; Costs and Cost Analysis; Delivery of Health Care; Health Services Accessibility; Humans; Orthopedic Equipment; Quality of Life; Self Concept; Time Factors

**AccessionNumber**
12012043223

**Date bibliographic record published**
11/02/2013

**Date abstract record published**
16/06/2014

**Record Status**
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.