Patient Focus: Exploring fall prevention measures for older adults, how well do they work?

A patient-led summary exploring the research evidence for fall prevention measures aimed at older adults living in the community (at home).

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Patient Focus key points:

- Targeted measures of fall prevention work well in helping to reduce the number of falls for older adults living at home
- These measures work well both for older adults at a high risk of falling and those at a low risk of falling
- Measures that include exercise or modification of home surroundings work particularly well

Background to Patient Focus

People who are older are more likely to fall. One-third of people aged 65 and above who live in the community fall at least once a year. These unexpected falls can often lead to serious injuries and stays in hospital. This can have a negative effect on people’s mental health as well as physical health, making it harder to fully recover. This ‘Patient Focus’ looks at a recent review of evidence, including studies from many parts of the world, into targeted measures for preventing falls in older adults who live at home (Seon & Soyoung, 2020).

What methods were used to undertake the review under focus?

A search of over a thousand studies up to March 2019 was undertaken by Seon & Soyoung for relevant research studies. Two independent reviewers looked at the studies to determine if they should be included in the review. Only 45 of these studies were eventually chosen to be
included based on the scope of the review, for example, the people in the studies had to be older and living in the community (at home, not in nursing home care) and the fall prevention measures had to target risk factors for falls. Studies included in the review were also assessed for the quality of research undertaken.

What were the findings of the review?
Different types of preventative measures for reducing falls were found in the 45 studies including: exercise, education, modification to the home environment, medication, mobility aids, vision and psychological support.

To explore how well these measures worked, participants were divided into 3 groups: (a) those at a high risk of falls due to a previous history of falls or other risk factors; (c) frail older people of over 80 years (c) healthy older people at low risk of falls. The review found that:

- Amongst the group at a high risk of falling and the healthy older people group, a combination of different fall prevention measures helped to reduce the number of individual falls. The measures did not make a difference to the group who were over 80 and frail.
- Amongst the healthy older people group, measures also helped to reduce the number of people that fell.
- The number of individual falls and the number of people falling decreased the most with measures that contained exercises or modification of immediate surroundings such as home hazards.
- Fall prevention measures also worked best when they were actively managed following a patient’s falls assessment (targeted measures introduced straight away) rather than referral onwards to other services.

How well was the review conducted?
It is important that the review itself is accurate and properly answers the question that was asked. A group of researchers (Palmer et al. 2021) undertook a RaCES project (Rapid Conversion of Evidence Summaries) to explore how well the review was conducted using a
‘critical appraisal tool’. This is a recognised way of appraising reviews on their methods and providing a complete summary. They found that all the requirements for producing a good quality review were met and despite some drawbacks, it was found to be a satisfactory and accurate summary of the evidence.

What do the findings mean for patients and caregivers?
The review findings suggest that targeted measures of fall prevention may be beneficial to patients in reducing the individual number of falls and the number of people falling. This may be particularly true for measures that include exercise or adaptations to the home environment. Hence, relevant professionals (e.g., nurses, physiotherapists, occupational therapists and physicians for the elderly) should consider falls prevention programmes with exercise and home adaptations for patients.

Further resources for patients, caregivers and public
Based on the findings of the review, the following resources may be useful for anyone wanting to find out more about falls prevention in older adults:

- Falls - Prevention - NHS (www.nhs.uk)
- Avoiding a fall | Elderly fall prevention | Age UK
- TUMBLES booklet.pdf (tendringdc.gov.uk)
- Preventing falls & keeping your balance: the Saga guide - Saga

The chartered Society of physiotherapy have also produced a helpful video for staying active at home including strength and balance exercises for older adults:

Stay Active at Home - Strength and balance exercises for older adults - YouTube

References


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