Preventing Falls in Assisted Living Facilities

What is the problem and what is known about it so far?
Falls are a major problem in frail older people who reside in assisted living facilities. They often result in serious injuries, such as hip fractures. Many factors predispose frail older people to falls, including unsteady gait and balance, weak muscles, poor vision, medications, and dementia (memory loss and confusion). External factors, such as poor lighting, loose rugs, poorly fitting shoes, clutter, and beds or toilets without handrails, also may cause falls. Preventing falls in frail older people requires many approaches to deal with the large number of predisposing factors. Most research about successful ways to prevent falls and fall-related injuries has involved healthier older people living in the community rather than frail older people in assisted living facilities. The methods that worked in these studies may not work in frail older people in assisted living facilities.

Why did the researchers do this particular study?
To see whether a multipronged prevention program reduces falls and fall-related injuries in older people in assisted living facilities.

Who was studied?
402 residents of nine assisted living facilities in a northern Swedish city. The average age was about 83 years (range, 65 to 100 years), and most participants were women (72%). All participants needed help with activities of daily living because of physical or mental problems.

How was the study done?
The researchers randomized the nine assisted living facilities to continue with usual care activities or to start a fall prevention program. The prevention program lasted 11 weeks. It used a combination of general approaches for the entire facility as well as approaches tailored to the needs of specific residents. General approaches included staff education; staff problem-solving conferences after each fall; elimination of external hazards, such as clumsily arranged furniture; and routine review of medications that may cause falls. Specific approaches included exercise programs tailored to individual resident’s needs and provision of aids (for example, walkers and wheelchairs) or hip protectors for some residents. After a 34-week follow-up period, the researchers compared the numbers of residents who fell, the total number of falls, and the injuries resulting from falls in the usual care versus prevention program facilities.

What did the researchers find?
More residents (56%) fell in the usual care facilities than in the prevention program facilities (44%). More residents (6%) had hip fractures in the usual care facilities than in the prevention program facilities (2%).

What were the limitations of the study?
This study tested a complex multipronged approach to fall prevention. It did not sort out whether parts of the approach worked and others did not.

What are the implications of the study?
Multipronged prevention programs can reduce falls and injuries (hip fractures) in frail older people residing in assisted living facilities.

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The full report is titled “Fall and Injury Prevention in Older People Living in Residential Care Facilities. A Cluster Randomized Trial.” It is in the 21 May 2002 issue of Annals of Internal Medicine (volume 136, pages 733-741). The authors are J Jensen, L Lundin-Olsson, L Nyberg, and Y Gustafson.