A Tool Kit to Prevent Senior Falls: Falls in Nursing Homes

How serious is the problem?

- In 1997, 1.5 million persons ages 65 and older lived in nursing homes (Kramarow 1999). If current rates continue, by 2030 this number will rise to about 3 million (Sahyoun 2002).
- Each year, a typical 100-bed nursing home reports 100 to 200 falls. Many others go unreported (Rubenstein 1997).
- As many as 75% of nursing home residents fall annually (Rubenstein 1994), twice the rate of seniors living in the community.
- Patients often experience multiple falls—2.6 falls per person per year on average (Rubenstein 1990).
- About 35% of fall injuries occur among non-ambulatory residents (Thapa 1996).
- About 20% of all fall-related deaths among older adults occur among the 5% who live in nursing homes (Rubenstein 1997).

How serious are these falls?

- About 1,800 fatal falls occur among residents of U.S. nursing homes each year (Rubenstein 1988).
- Approximately 10% to 20% of nursing home falls cause serious injuries; 2% to 6% cause fractures (Rubenstein 1988).
- Falls can result in decreased physical functioning, disability, and reduced quality of life. Loss of confidence and fear of falling can lead to further functional decline, depression, feelings of helplessness, and social isolation (Rubenstein 1994).

Why do falls occur more often in nursing homes?

Falls can indicate underlying health problems. Nursing home residents are generally more frail than seniors living in the community. They tend to be older, have more cognitive impairments, and have greater limitations in their activities of daily living. They also tend to have more chronic illnesses, be physically dependent, and have a higher prevalence of walking problems (Bedsine 1996), all factors associated with falling (Ejaz 1994).
What are the most common causes of nursing home falls?

- Weakness and walking or gait problems are the most common causes of falls among nursing home residents. They account for about 24% of the falls in nursing homes (Rubenstein 1994).
- Environmental hazards account for 16% to 27% of nursing home falls (Ejaz 1994; Rubenstein 1994). Such hazards include wet floors, poor lighting, lack of bed rails, clutter, incorrect bed height, and improperly maintained or fitted wheelchairs (Baker 1985; Rubenstein 1994).
- Medications, especially psychoactive drugs such as sedatives and anti-anxiety drugs, can increase the risk of falls and fall-related injuries (Mustard 1997; Ray 2000).
- Other causes include difficulty in transferring (for example, moving from the bed to a chair), poor foot care (Ray 1997), poorly fitting shoes, and inappropriate or incorrect use of walking aids (Tinetti 1987).

How can falls in nursing homes be prevented?

Fall prevention requires a combination of medical treatment, rehabilitation, and environmental modification. Interventions include:

- Assessment after a fall to identify and address risk factors and treat underlying medical conditions (Rubenstein 1990).
- Physical conditioning and/or rehabilitation using prescribed exercises to improve strength and endurance; physical therapy; gait training; and walking programs (Rubenstein 1994; Province 1995).
- Environmental assessments and modifications to improve mobility and safety such as installing grab bars, adding raised toilet seats, lowering bed heights, and installing handrails in the hallways (Ray 1997).
- Review of prescribed medications to assess their potential risks and benefits and minimize use (Cooper 1994; Cooper 1997).
- Providing patients with hip pads that can effectively prevent most hip fractures if a fall occurs (Kannus 2000).
- Technological devices such as alarm systems that are activated when patients try to get out of bed or move unassisted may be useful (Rubenstein 1994).

Do physical restraints help prevent falls?

- Routine use of restraints does not reduce the risk of falls or fall injuries (Capezuti 1996).
- Restraints can actually contribute to fall-related injuries and deaths (Rubenstein 1994). Limiting a patient’s freedom of movement leads...
to muscle weakness and reduces physical function (Rubenstein 1997).

- Since new federal regulations took effect in 1990, nursing homes have reduced the use of physical restraints (Rubenstein 1994). Although some institutions have reported an increase in falls, most nursing homes have seen fall-related injuries decrease (Ejaz 1994).

References


