

Title of Intervention: Falls and injury prevention program for older adults

Intervention Strategies: Provider Education, Environments and Policies, Individual Education

Purpose of the Intervention: To decrease falls in older people with higher and lower levels of cognitive functioning

Population: Older people disabled by cognitive or physical impairment and their caretakers

Setting: Residential care facilities in Umea, Sweden; health care facility-based

Partners: Not mentioned

Intervention Description:

- **Provider Education:** All staff, including non-medical, were invited to a four-hour educational session. The session, led by a physician and physiotherapist, covered risk factors for falls and intervention measures.
- **Environments and Policies:** Environmental hazards in common areas were reduced. Staff also made adjustments in the residents' accommodations. Adjustments included removal of loose carpets, repair of doorsteps, provision of grip bars, new beds, and firm mattresses, furniture changes and improved lighting. Staff also supplied and repaired aids related to mobility (walkers, wheelchairs, belts for assisted walking, and fitted footwear). Hip protectors were offered free of charge to residents who were thought particularly likely to suffer a hip fracture. A post-fall problem solving team was created to hold "conferences" to meet weekly and discuss fall reports. The team was comprised of a physician, nurse, physiotherapist and other staff members.
- **Individual Education:** The individual physical therapy program was adjusted to the specific impairments and disabilities of the resident. Resident-specific training to improve physical function targeted strength, balance, gait and safe transfer. Strength and balance exercises emphasized moderate to light intensity training that progressively challenged the resident's capacity. The exercise sessions lasted from less than one hour to more than three hours per week, depending on the specific needs and motivation of the resident.

Theory: Not mentioned

Resources Required:

- **Staff/Volunteers:** Medical and non-medical staff, instructors
- **Training:** Not mentioned
- **Technology:** Not mentioned
- **Space:** Meeting and activity rooms
- **Budget:** Not mentioned
- **Intervention:** Mobility aids, educational materials, physical therapy equipment, repair tools
- **Evaluation:** Access to patient records

Evaluation:

- **Design:** Randomized controlled trial
- **Methods and Measures:** The residents' charts were reviewed for falls.

Outcomes:

- **Short Term Impact:** Not measured
- **Long Term Impact:** In the higher cognitive capacity group, the time to first fall was significantly longer for the intervention than for the control. In the intervention group, those with higher cognitive capacity had significantly lower rates of fall events. The lower cognitive capacity intervention group had significantly fewer injuries than the control.

Maintenance: Not mentioned

Lessons Learned: Targeted supervision of the residents' transfer and attention to changes in acute health condition, apart from exercise, may be important factors to emphasize in the anticipation and reduction of falls by residents with lower levels of cognition.

Citation(s):

Jensen, J., L. Lundin-Olsson, et al. (2002). "Fall and injury prevention in older people living in residential care facilities. A cluster randomized trial." *Ann Intern Med* 136(10): 733-41.

Jensen, J., L. Nyberg, et al. (2003). "Fall and injury prevention in residential care--effects in residents with higher and lower levels of cognition." *J Am Geriatr Soc* 51(5): 627-35.