

Preventing Falls in the Elderly

(2 credits)

After completing this section you should be able to:

1. Identify risk factors for falling
2. Describe the places where falls occur most frequently and ways to make those places safer
3. List possible consequences of falls
4. Demonstrate ability to assess an older person for risk of falling
5. Describe activities that can help prevent falls
6. List changes to observe and report that may lead to falls
7. Demonstrate how to assist the resident/client after a fall

1. Identify risk factors for falling

Falls (many resulting in fractured hips) are the number one reason for admissions to skilled nursing facilities. Falls and injuries from falls have risen at an alarming rate. According to the International Council on Active Aging, one in three persons over age 65 falls every year. In 2002, about 12,800 persons ages 65 and older died from falls. This equals one death per hour of that year. By 2020, the cost of fall injuries for people aged 65 and older is expected to reach \$43.8 billion.

Most falls occur without warning and may lead to a decline in independence and mobility. Older persons tend to heal slowly and therefore injuries are more severe.

Caregivers play a significant role in prevention of falls! Preventing falls and related injuries will prevent hospitalization, reduce nursing home admissions, reduce risk of premature death, and lower the cost of medical care.

Risk factors for falling include:

Physical Problems

- Elderly (frail, sick, or trouble adjusting to

normal changes of aging)

- Injuries (especially hip fractures) from previous falls
- Recovering from hip or knee replacements
- Recovering from acute illness requiring recent bedrest
- Hemiparesis, or weakness on one side of body
- Drop in blood pressure when standing up
- Diabetes
- Poor nutrition
- Lack of exercise
- Trouble sleeping



- Visually impaired or other sensory deficits
- Osteoporosis (especially women)



- Reduced mobility, unsteady gait
- Urinary incontinence, urgency, or frequency problems

Mental/Social Problems

- Living alone with little family support
- Impaired judgment/dementia
- Distracted or selective attention
- Depression
- Certain medications, including anti-hypertensive or psychotropic medications
- Alcohol or recreational drugs
- Unwillingness to ask for help or seek medical attention
- Fear of falling, especially if person has fallen previously; leads to reduced physical conditioning and weight gain
- Denial of aging process/disease process

Environmental Problems

- Improper footwear
- Environmental hazards, including clutter, throw rugs, exposed electrical cords, slippery or wet floors, uneven floors or stairs, poor lighting, and call lights that are out of reach or are not promptly answered

Normal Changes in Aging

- Changes in vision and visual perception

- Changes in hearing
- Changes in nervous system
- Changes in musculoskeletal system
- Changes in cardiovascular system

There are medical conditions that can increase the risk for falls in the elderly. The following conditions may affect a person's stability:

- Cardiovascular problems
 - Congestive Heart Failure (CHF), angina, hypertension (high blood pressure)
- Parkinson's disease
 - weakened muscles, fatigue, shuffling gait, tremors, dementia
- Stroke (Cerebral Vascular Attack)
 - partial weakness or paralysis on one side of the body, loss of vision on one side of both eyes, dementia, inner ear problems
- Alzheimer's disease and dementia
 - pacing and wandering
- Musculoskeletal problems
 - arthritis, osteoporosis, hip fractures, hip or knee replacements
- Metabolic problems
 - diabetes mellitus, hypoglycemia (insulin shock), electrolyte imbalances
- Heart Attack
- Syncope (fainting)

2. Describe the places where falls occur most frequently and ways to make those places safer

Falls occur most frequently in the bathroom. Generally, bathrooms have a small area that contains a sink, toilet, and bathtub. Maneuvering around these objects can be difficult for someone with a walker or cane. The floor gets wet from water from the sink and bathtub. Depending on the color of the floor, this water can be dif-

difficult for residents/clients to see, causing them to slip and fall.

The countertop, toilet bowl, and side of the tub become dangerous objects for the resident/client to hit his head, arm, or hip against.

Reduce risk of falls in bathrooms by:

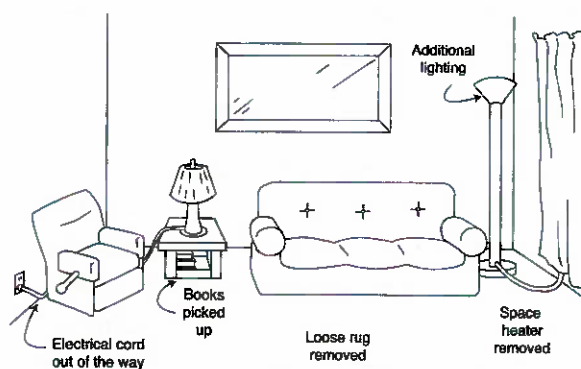
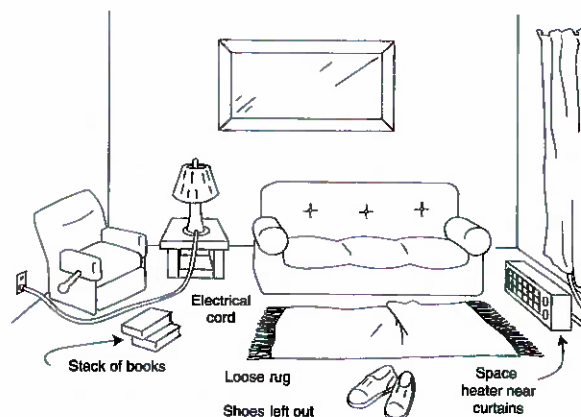
- keeping bathroom floor dry at all times
- cleaning spills immediately to prevent falls
- closing all drawers and cabinet doors as a precautionary measure
- assisting any resident likely to fall while alone in the bathroom
- using non-skid mats where appropriate
- keeping frequently-used items within easy reach
- installing grab bars in the bathtub and shower and by the toilet

Living areas contain rugs, appliance cords, and other objects casually left on the floor that increase the risk for falls in the elderly. Floors, stairs, and walkways both inside and out are other places that falls are likely to occur. Too much floor wax or spilled liquid creates a falling hazard. Inadequate or dark lighting, as well as floors with checkered or patterned designs, interfere with depth perception, leading to an increase risk for falls.

Reduce the risk of falls in living areas by:

- keeping them clear of objects like shoes and books
- keeping rugs flat or removing them to help prevent falls
- placing appliance cords against the wall or under furniture to keep residents or clients from tripping on them
- making sure that all areas that your residents or clients walk in are well-lit at all times

- cleaning up spills immediately to prevent slips and falls
- marking uneven flooring or stairs with red tape to indicate a hazard
- keeping all frequently-used items within easy reach



If handrails are not present for residents/clients to hold on to, take the time to walk them to their destination. Simple adjustments in the facility or home help keep residents or clients safe from falls.

Remember that clothing can be a falling hazard as well. Long bathrobes, gowns, or clothes that drag on the floor increase the likelihood that a resident/client will trip and fall. Ill-fitting shoes or slippers or those with little or no traction, also are dangerous. Make sure that the person you are caring for is wearing proper footwear.

3. List possible consequences of falls

Many things can happen as a result of falling. Some of these consequences can be serious. According to The Centers for Disease Control and Prevention (CDC), 20% to 30% of people over age 65 who fall suffer moderate to severe injuries, such as head trauma or hip fractures. These injuries reduce mobility and independence and increase the risk of premature death.

Fractures

Broken bones are a common result of a fall; the CDC estimates that 3% to 5% of falls in older adults cause fractures. These include hip, pelvis, wrist, arm, neck, spine, ribs, and skull fractures. As you can imagine, some of these fractures can be life-threatening.

Head Injuries

Injuries to the head are also common. Because many elderly people do not have quick reflexes, they may not always be fast enough to extend an arm to break a fall. This leaves the head completely vulnerable. Subdural hematomas (bleeding inside the brain) occur in 2%–20% of falls.

Soft Tissue Injuries

Soft tissue injuries include extensive bruising. Thirty to fifty percent of falls result in soft tissue damage, from hematomas, sprains, and dislocations.

Pulmonary Embolism

A pulmonary embolism is a blood clot in the major artery of the lungs. This blood clot gets in the way of circulation to the lung tissue. Pulmonary embolism occurs in 13% of all people who die from a fall and its related injuries.

Problems Due to Physical Injuries

People who are injured from a fall may be confined to bed or have extremely limited activities. This can lead to serious problems, such as immobility, hypothermia related to decreased activity, pneumonia from inactivity and bed rest, dehydration, and pressure sores.

Psychological and Social Consequences

Falls can be devastating to residents/clients and their families, because they trigger fear, anxiety, and depression. This loss of confidence can be as bad as the fall itself. A person who has experienced a fall is often unwilling to perform routine activities or participate in rehabilitation efforts. When this person's mobility and activity become restricted, either due to lack of confidence or because a caregiver feels it is best, other problems arise, such as loss of independence, social isolation, and even being institutionalized. This last possibility is an important reason why many people will not report having a fall. They are afraid of having to live in an institution such as a nursing facility, and they do not want to lose their independence.

4. Demonstrate ability to assess an older person for risk of falling

Risk assessment for falls should be done at admission. Falls should be monitored and recorded, and risk management committees should review all incidents to identify trends, risks, unsafe conditions, environmental concerns, and preventative measures. Staff should be trained annually.

To help assess a resident or client for the risk of falling, ask him or her the following questions:

- Do you have trouble with your balance?
- Do you feel unsteady while walking?
- What makes your unsteadiness better?
- What makes your unsteadiness worse?
- Have you ever had a fall, and if so did any injuries result?

Also, observe the following:

- How the person gets in and out of bed
- How the person walks and turns (ask him or her to walk 20 feet and turn in a circle)
- How the person gets in and out of chairs
- How the person uses the bathroom or shower
- How much assistance does the person need with ADLs

Don't just take your resident/client's word on how steady he or she is. Observe for yourself!

TIP: In long-term care, identify residents who are at risk for falls by putting star-shaped stickers on their chart or room door. The star identifies the "falling star" residents while maintaining confidentiality.

It is important to provide encouragement and empathy for people at risk of falling. The better you understand and identify with the resident/client's physical needs and anxieties, the more effectively you can provide compassionate care. Help the person gain self-confidence in his or her ability to perform activities of daily living without fear of falling. For example, show the person how to change positions gradually, bending slowly with support to give the body a chance to adjust, especially when the person is feeling weak.

5. Describe activities that can help prevent falls

Exercise has many benefits and can be a

valuable tool in preventing falls and improving the well-being of those in your care. Benefits of exercise such as increasing physical strength, improving coordination, and encouraging independence are factors that help to decrease the likelihood of falls. Exercise also aids in achieving the goal to return to maximum level of functioning and independence. According to the CDC, Tai Chi is one type of exercise program that has been shown to be very effective in increasing lower body strength and improving balance.

You can help provide exercise!

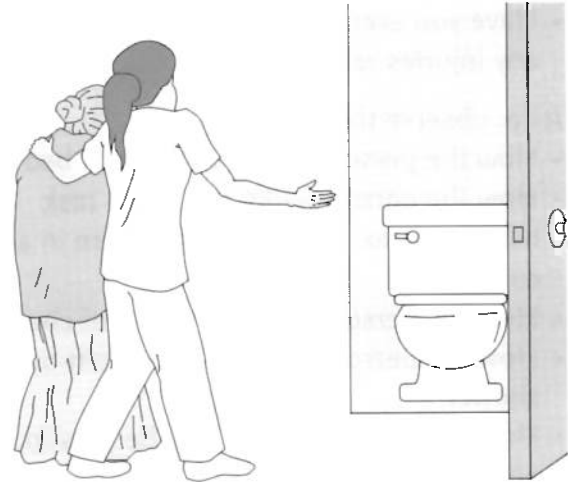
1. Find out what the person has done in the past for exercise, what the person likes to do, and what he can do now.
2. Discuss with the case supervisor what activities are in the care plan, and what you can do to assist and encourage the person with prescribed exercises. This is vital!
3. Encourage independence to regain strength. Do not do everything for them, but assist and provide positive feedback. Note how they respond to encouragement.
4. Encourage range of motion (ROM) exercises, and assist if necessary. Remind the person of good posture and body mechanics.
5. Help the person remember to think before moving! Remind him or her to use proper body mechanics. Provide cues, support, and assistance as necessary during transfers and ambulation.
6. Encourage ambulation, with or without assistive devices (cane, crutch, or walker). Use a transfer belt or gait belt

as necessary. Make sure assistive devices are in good repair.

7. Encourage using transfer benches, sliding boards, grab bars, etc. as necessary.
8. Assist in safe transfers to chair, wheelchair, shower chair, toilet, and bed.
9. Observe and document functional activities. For example: walked 10 feet on Monday, 20 feet on Tuesday. Note the number of repetitions performed.
10. Pay attention to the level of physical activity, reaction times, steadiness or unsteadiness of gait, use of or need for assistive devices or other help, difficulty with transfers, or any changes in ability during each visit.
11. Use the “get-up-and-go” test. Observe the person’s ability to stand up from a seated or prone position and walk. This is the best assessment of stability, strength, gait, and balance, and it rules out injuries to the lower extremities, pelvis, or spine.
12. Report if the person is not able to perform exercises due to shortness of breath.
13. Remind the person of previous successes if person is experiencing “barriers” to exercise or ambulation. Maintain a positive attitude and help the resident/client do the same.

Another important thing you can do to help prevent falls is to always leave a **call light** within reach of the resident/client and to answer call lights promptly! Answering a call light immediately prevents the person from trying to get up and do something by him- or herself. Also, fol-

lowing a toileting schedule and offering frequent trips to the bathroom will prevent a resident/client from trying to get up on his or her own.



6. List changes to observe and report that may lead to falls

Observe and report signs and symptoms of a possible problem, including the following:

- Dizziness, syncope (fainting)
- Changes in nutrition:
 - Eating habits
 - Encourage proper diet, vitamins, nutritional supplements
 - Observe emotional signs and symptoms related to food intake
- Changes and decline in:
 - Vigor
 - Social interaction
 - Ability to communicate
 - Ability to perform ADLs
- Emotional upset or loss of important person
- Lack of familiarity with surroundings

The following concerns must be reported to the supervisor regarding medications:

- Confusion about taking medication
- Taking too much, too little, mixing up medication

- Refusing to take medication
- Unsteadiness or reduced abilities due to medication

7. Demonstrate how to assist the resident/client after a fall

If someone suddenly begins to fall, protect both yourself and the falling person. Do not let the person pull you down, and do not try to stop the fall. Use good body mechanics, keep a wide stance, and try to guide the person safely to the floor. (See illustration below.)

Following are some guidelines for assisting the person who has fallen:



1. Calm the person who falls; it can be very frightening.
2. If you found the person on the floor, begin with a quick cardiac assessment: vital signs, pulse, respiration, blood pressure.
3. Mentally search for anemia, hypoxia (lack of oxygen to the tissues), and what happened right before the fall.
4. Ask the person what happened.
5. If person has no recollection of the fall, it should be assessed as an emergency. The person needs to see a doctor.
6. Assess for injury. Do not move the person until you have established that they have not injured themselves. If no apparent injury, help the person up off the floor if your facility allows this. Help person rise onto hands and knees and pull him- or herself up using a sturdy chair. Do not lift the person!
7. If injuries are present, assess for bleeding, make comfortable, call 911, and notify your supervisor. Do not attempt to move the person. An EMT, RN, or MD should assess the person before moving him or her.
8. Stay with the person, keeping him or her comfortable until help arrives. Sit next to the person on the floor. Provide privacy if necessary.

Every agency or facility will have policies about documentation and reporting incidents such as falling. Ask about the policies and procedures of your facility.

