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Preventing falls: The latest information on what works

A fall is one of the worst things that can happen to one of your elders.

Fact is, they're a leading cause of death and disability in elders.

A fall can completely destroy an elder's quality of life, and many never recover from a fall.

Here are some facts about falls:

- only one in four elders with a hip fracture make a fully recovery;
- one in two lose forever the ability to walk independently;
 - one in five die within 12 months, as a result of complications.

The good news is that many falls are preventable. And one of the major reasons for this, say researchers, is highly informed caregivers, who know exactly how to keep their elders on their feet.

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Most important: Keep them moving

Regular exercise is a key factor in falls prevention.

Many research studies conclusively show that elders who get regular exercise have significantly less falls.

And this includes frail elders, who are only able to do a small amount of exercise, such as short walks.

You should encourage your elders to stay active in whichever way they like and suits their conditions; consider, for example, walking, gardening, cycling, dancing.... and so on.

This will help them maintain strong muscles and bones, as well as good balance and flexibility, in turn reducing their risk of falls.

Regular exercise is a key factor in falls prevention

Get them out of their wheelchairs

A major problem that causes lack of exercise, muscle weakness and falls is spending too much time in wheelchairs.

If they're able, you should get your elders up and out of those wheelchairs for regular exercise, as much as possible.

And you should never keepd them in wheelchairs just for the convenience of caregivers.

What happens when they spend too much time in wheelchairs, is that their muscles become weak, and they lose their abilities to balance.

So, when they do attempt to walk, they can easily fall. In fact, this is a major cause of falls in elders.

Try Tai Chi

Tai chi, a gentle form of exercise originated from an ancient Chinese martial art, seems to work particularly well for elders.

The journal *Age* reports, for example, that practicing tai chi daily for 30 minutes, or more, improves the ability of an older person to maintain their balance when they trip.

Note: If your elders have not done any exercise for a while, make sure they get physician approval before starting any type of physical activity. But they key is to get them to exercise regularly, and not let them sit around doing nothing day after day.

Even regular 15-minute walks are valuable.

Educate them

Another important thing you can do is to educate your elders about the importance of avoiding behaviors that may result in a fall.

Some of them simply don't know that they can help themselves in this way.

So, make sure you sit down together, say, once a week, and go through the things they should and should not be doing to prevent falling.

Advice for your elders

Some things your elders should avoid doing to prevent falls include:

- Getting up at night with the lights out.
- Rushing around.
- Standing up too quickly, especially after eating.
- Sitting on too-low chairs.
- Carrying bulky items that prevent them from seeing their feet while walking.
- Not holding onto grab bars.
- Dragging their feet while walking, instead of picking them up.
- Wearing slippers or socks, instead of shoes.
- Wearing clothes that drag on the floor.
- Attempting to sit in a walker without locking it, first. (According to recent estimates, this behavior alone causes falls in approximately 50,000 elders, each year.)

You should do all you can to get your elders, who are able, out of their wheelchairs for regular exercise. This will help prevent muscle weakness and gait problems... a major source of falls.

Even short walks can be effective.



Falls and vision

Vision problems are one of the major reasons for falls.

So, you need to ensure that all your elders undergo regular eye checks and have the proper glasses. And, also, that their glasses are clean and not overly scratched.



More visual recommendations:

- Make sure that sunglasses, if used, are not too dark or too light.
- Cover shiny surfaces with cloths or mats, as glare increases the risk of falling.
- Have your elders stop at the door for a few moments, when going from indoors to outdoors, and vice versa, so that their eyes can adjust to the light change.
- Ensure that rooms are well lit, and provide lamps that illuminate directly the object your elders need to see.

Make the environment safe

You may also want to make the environment as fall proof as possible. Here are some things you can do:

- Check that the carpets have not loose edges.
- Keep the floor dry and free from clutter and telephone/ electrical cords.
- Place rubber mats in the bathroom.
- Make sure chairs, coffee tables and other furniture are near the wall, not in the middle of the rooms.
- Have night-lights installed in the bedroom of each elder.
- Adjust the height of the beds in such a way that, when the elders sit on it, their feet stay flat on the floor.



Make sure everything is well-lit, and that night lights are used

Why elders fall

There are a number of reasons (called risk factors) that make older people more likely to fall than younger ones.

According to authors writing in *American Family Physician* the most significant reasons for elders falling include

- Lower extremity muscle weakness
- A history of falls related to gait balance problems
- Improper use of an assistive device
- Visual impairments
- Depression
- Cognitive impairment

Also, the authors said that use of certain medications was "strongly associated" with increased falling, including psychotropic medicines, cardiac drugs, diuretics, and anticonvulsants.

In fact, they stated that "starting a new antipsychotic medication was associated with a very high risk of falling."

So watch those elders who have those new meds very carefully.

The initial assessment

Researchers agree that a successful falls prevention program starts with your falls assessment program.

American Family Physician authors report that a "multifactorial risk assessment" is the most consistently effective strategy to prevent falls."

This assessment involves

- your elders undergoing a full medical evaluation
- nursing staff taking the elders' history of medications, diseases, previous falls, etc.,
- completing a fall risk assessment tool.

Fall risk assessment tools are, generally, preferred to history taking because their validity has been tested in studies.

Of the several available, the most widely used in nursing homes and hospitals, and also the most reliable, according to recent findings published in the *Journal of Gerontological Nursing*, is the Morse Fall Scale (MFS).

MFS is available at http:// www.sacramento.networkofcare.org/ library/

Morse%20Fall%20Scale.pdf.

It includes six items, is easy to use, and takes less than three minutes to complete.



It's important that you use each elders' assessment results.

Remember, though, that your assessment is of very little use if you don't follow up and use the information you've gained for each of your elders.

Using the results of your assessment, your elders who are identified to be at risk of a fall should then be evaluated by your falls team.

The post fall assessment

Also, each time an elder falls, you should conduct a post fall assessment. Here are some of the items that the National Center for Patient Safety (NCPS) recommends should be in this assessment:

- 1. Date/time of fall
- 2. Elder's description of fall (if possible)
 - a. What was resident was trying to accomplish at the time of the fall?
- b. Where was the resident at the time of the fall (patient room, bathroom, common room, hallway etc.)?
- 3. Family/guardian and provider notification

- 4. Vital signs (temperature, pulse, respiration, blood pressure, orthostatic pulse and blood pressure lying, sitting and standing)
- 5. Current medications (were all medications given, was a medication given twice?)
- 6. Patient assessment a. Injury
 - b. Probable cause of fall
 - c. Comorbid conditions (e.g., dementia, heart disease, neuropathy, etc.)
- d. Risk factors (e.g., gait/bal ance disorders, weakness)
- e. Morse/Hendrich Risk Assessment
- 7. Other factors:
- a. Resident using a mobility aid? If so, what was it?
- b. Wearing correct footwear?
- c. Clothing dragging on floor?
- d. Sensory aids (glasses, hearing aids, was veteran using at the time?)
- e. Environment
- Bed in high or low position?
- Bed wheels locked?
- Wheelchair locked?
- Floor wet?
- Lighting appropriate?
- Call light within reach?
- Bedside table within reach?
- Area clear of clutter and other items?
- Siderails in use? If so, how many?
- f. Was the treatment intervention plan being followed? If not, why not?
- g. Were the falls team and other nurses notified?

Remember that your initial assessment is of no help to your elders, if you don't use the information in it to help protect each elder from falling

The main causes of falls in nursing homes

The Centers for Disease Control and Prevention (CDC) report that muscle weakness and gait problems are the most common causes of falls in nursing homes... 24% all falls in these facilities.

But the CDC also says that environmental hazards are also a major cause of falls in nursing homes... causing 16-27% of nursing home falls.

The CDC lists the following as proven falls-prevention techniques for nursing homes:

- Starting off with a thorough initial assessment.
- Maintaining an ongoing staff education program about falls risk factors and prevention strategies.
- Making changes in the nursing home environment to make it easier for elders to get around safely. Changes the CDC recommends include:
- Installing grab bars
- Adding raised toilet seats
- Lowering bed heights
- Installing handrails in the hallways
- Providing hip pads
- Using alarm devices that go off when elders try to get out of bed or move around without help.

What about restraints?

Contrary to what some may think, research shows that restraints do not prevent falls.

In fact, research shows that they actually increase the rate of falling, because an elder who is restrained much of the time develops weak muscles and balance problems, that make a fall more likely when the elder is up and about. Be sure and get all the training you can in falls prevention. It will pay off for your elders!



Specific advice

The VA, based on their studies of falls and their prevention, has these specific recommendations for falls prevention:

In their rooms:

- Set up elder's room so they can exit the bed from their strongest side
- Make sure everything's within easy reach: call button, light switches, and so on.
- The room should be well-lit.
- The room should be free of clutter and tripping hazards.
- Bathroom and exit doors should be clearly marked.
- Fall prevention posters should be posted in the elder's room.
- Use non-slip floor mats.
- Have available proper footwear, either treaded slipper socks or hard soled shoes.
 (Also make sure their clothing does not drag on floor.)

Note: The VA advises that treaded socks should NOT be worn if there are rugs in the environment, as this could increase their chances of falling.

 Do not use full side rails, unless medically required, as they are considered restraints and increase likelihood of death due to entrapment, and can cause the

- elder to fall further when attempting to climb over rails.
- Give each elder extensive training in the use of their assistive devices.

In the bathroom:

Since many falls occur in bathrooms and showers, VA caregivers recommend the following interventions:

- Use slip resistant strips on the floor and in the tub, or a cleanser that increases floor traction even when wet.
- Make sure shower grab bars are installed, and covered with a traction-increasing material.
- Install transfer bars on toilets that are the proper height.
- Showers should have a stool, so the elder can sit while showering.
- Use raised toilets.

Hallways and common rooms

- Free of clutter and tripping hazards, such as equipment, electrical cords and spills.
- Well lit at all times.
- Accessible, sturdy handrails available.
- Provide chairs as "rest stops" down the hall.
- Provide chairs that are sturdy and easy to get out of.

Recommendations for falls prevention for those with Alzheimer's disease

Elders with Alzheimer's disease are much more prone to falling that your other residents.

But there are things you can do to help prevent these falls.

Veterans Administration caregivers recommend the following interventions for those with Alzheimer's disease, which are proven to reduce falls in this group of elders:

This includes residents who forget their limitations

1. Use Bed & Chair Alarms

These alarms can be used to alert the staff when a resident is attempting to transfer on their own. There are two types of alarms:

- a. Pressure sensor alarms. When the weight of the pa tient is removed from the sensor the alarm sounds.
- b. Tab alarms.

When the patient moves beyond the length of the string attached to them the alarm is sounded.

Both of these alarms can be hooked up to the nurse call system and can sound at the nursing station.

2. Bed Placement

The bed can be placed along the wall so that the patient exits towards their stronger side.

This eliminates the need for side rails along the side of the bed, reducing the likelihood of bed entrapment.

3. Hip Protectors

Hip protectors are a good intervention for residents with dementia and other cognitive deficits.

They allow the patient to be active while helping to prevent hip fractures if they fall.

Since muscle weakness is one of the main causes of falls, all of your elders, who are able, should get regular exercise.

And... this includes your frail elders, too, as research shows that they can benefit significantly from even a very simple exercise program, such as short daily walks.

Just be sure that your exercise programs are approved for each elder by medical personnel.

Do not let your elders sit around doing nothing all day long!



Generally, residents should wear them all the time; however, some elders may find them uncomfortable at night.

But keep in mind the hip protectors only work if they're being worn when a fall occurs.

4. Frequent Checks on the elder

The elder should be checked on frequently if in their room.

If the elder is prone to wandering, a safe place should be provided that is supervised and set up with comfortable chairs and handrails.

5. Mobility Aids

When elders with cognitive impairments use mobility aids, several things should be done to ensure the patient knows how and remembers to use the aid.

- a. Mobility aids should be placed directly next to the patient's bed on the side that the patient exits.
- b. Residents should use the mobility aid frequently to increase the likelihood that they will remember how to use it.

- This will work in the same way that elders with cognitive disorders still know how to tie their shoes.
- c. To assess a resident's knowledge of how to use their mobility aid, ask them to use it, not just explain how to use it.

But, even if an elder can't explain how to use their mobility aid they may be able to use it.

Note: You can download a PDF of the US Department of Veteran's Affairs National Center for Patient Safety Falls Toolkit from your online subscriber site.

This is a 140-page booklet with nearly everything you need to know about implementing a successful falls prevention program in your facility.

It contains much basic information, suggested staffing and programs, detailed falls prevention lists, falls assessment forms, suggested falls team structures, and more.

Things you can do to prevent falls

Learning objectives:

- 1. To gain an understanding of the disaster that falling is for an elder.
- 2. To learn what to watch for, and change, in the elder's environment that can prevent falls.
- 3. To understand the importance of regular exercise in preventing falls.
- 4. To understand the importance of getting elders up out of wheelchairs for regular exercise.
- **1. True, False.** Statistics show that one in five elders who fall, die within 12 months from complications.
- **2. True, False.** Giving them regular exercise, even in small amounts, is one of the most effective things you can do to prevent falls in your elders.
- **3. True, False**. You should not let your frail elders exercise, as they may fall during the exercise program.
- 4. True, False. Sitting too much in wheelchairs is a major cause of falls in elders.
- **5. True, False.** Using the results from Initial Assessments is a valuable tool to prevent falls in individual elders.
- 6. What are some of the things you can do to help prevent falls in elders with Alzheimer's disease? (Check all that apply.)
 - a. Use full bed side rails for all of your elders.
 - b. Use bed and chair alarms.
 - c. Keep them in wheelchairs as much as possible, for their own safety.
 - d. Make frequent checks on them.
- **7. True, False**. You should set up an elder's room so they can exit the bed from their strongest side.
- **8. True, False.** It's a good idea to continually educate your elders on what they should be doing to prevent falls.
- **9. True, False.** Using restraints actually increases falls, since sitting too much can weaken their muscles.
- **10. True, False.** You should always be on the alert for environmental hazards, such as clutter, cords, slippery areas, and so on, as those hazards are a major reasons for falls in longterm care.

Name	Date	Score

Answers to Falls Quiz

- 1. T 2. T 3. F 4. T 5. T 6. b, d 7. T 8. T 9. T 10. T