The Remedy'sRx Press

Your Partner In Care

Tips For Falls Prevention & Preparedness

Falls prevention programs are implemented to reduce fall-related injuries, hospitalizations, nursing home admissions and functional decline.[2, 3] A fall is multi-factorial, therefore the most effective strategy is an interdisciplinary approach involving fall risk assessment and targeting the individual's risk factors (i.e. physiological/physical changes, environment hazards or medication related risk factors).[3-5]

Falls prevention is one of the biggest safety challenges in long-term care (LTC) homes.

Studies have shown that 3 out of 4 residents in a LTC home fall each year! We all need to do our part to ensure that falls are prevented and that harm is minimized if a fall does occur. Here are some tips to help you in your everyday practice:

- **There are many risk factors for falls.** They relate to the individual (history of falls, diminished lower limb strength, gait or balance impairments, visual impairment and certain medications) and the environment around them (design problems, lack of space, obstacles, equipment misuse or malfunction). Falls almost always have more than one single cause. Each resident should be assessed for their own personal fall risk.
- **Include all care team members in falls prevention strategies.**
    - ➢ Refer falls to an interdisciplinary team i.e. nurse, pharmacist, physician, physical therapy, optometrist.
    - ➢ Education on fall prevention strategies, medications and side effects to monitor.
    - ➢ Education on risk assessment, care plans, incident reporting, post-fall assessment and restraint alternatives.[3] (Restraints can cause muscle weakness and increase the risk of fall-related injuries).[14]
    - ➢ Having regular meetings to discuss how to prevent falls during resident's daily activities is very valuable. Healthcare providers, such as physical therapists, occupational therapists, dieticians, and pharmacists, have their own unique knowledge that can add to the "big picture".
- **Go beyond incident reports.** Establish a revised care plan for falls that corresponds to the resident's needs and circumstances. Use an interdisciplinary team approach to address issues that would benefit the residents.
- **Not every fall is just a fall.** If a fall occurs, there should immediately be an investigation to see if the fall is due to a medical reason, such as stroke, seizure, or dizziness. A nurse should perform an assessment of the circumstances and discuss it with a nurse practitioner or doctor.
- **Communication is important.** Avoid blame. It is not any individual's fault if a resident falls. Falls are often multi-factorial. In the case of a fall, report it and be supportive of other caregivers if they are involved.
- **We must balance patient safety and an individual's personal freedom to do activities.** People long for happiness, respect, and independence. For residents who are frail, confused, or fall easily, it may be difficult to keep them safe without making them unhappy. We want to optimize safety, while maintaining their quality of life.

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NOW LET'S TALK ABOUT FALLS PREVENTION and MEDICATIONS

In Canada, falls are the 6th leading cause of injury-related deaths and the most common cause of non-fatal injuries.[1]

Looking at Medication Related Falls

Medication-related falls are common in older adults[5] due to their physiological/physical changes, increased health concerns as well as increased medications.[6] Since medication-related falls are potentially preventable, our pharmacists play an integral role in assessing those resident's medication regimens that are associated with a risk of falls. Fall risk medication assessments are designed to identify and ensure appropriate medication use in older adults at risk for falls.

The goal is to optimize medication therapy and improve the safety and quality of life for the resident.

MEDICATION ASSESSMENT AND FALL RISK

- **Conduct** a fall risk medication assessment on admission, after a fall and periodically.[3]
- **Medications associated with risk of falls** are simplified into 3 groups. Avoid or use these medications with caution especially during initiation and dosage increase. The risks of using these medications may outweigh the benefits in older adults.[6]
    - ➢ Psychotropic medications have the strongest and most consistent association with falls particularly neuroleptics (antipsychotics), sedative hypnotics (especially benzodiazepines) and antidepressants.[3, 4, 8-10]
    - ➢ Cardiovascular medications associated with falls are antihypertensives (especially diuretics), class 1A antiarrhythmics and digoxin.[7, 9-11]
    - ➢ Other medications associated with falls are opioid analgesics, anticonvulsants, sedating antihistamines, antimuscarinics, antiparkinsons, antiemetics, antispasmodics and muscle relaxants.[7, 9-11]
- **Other risk factors to consider**
    - ➢ Older adults may have altered pharmacokinetics (i.e. reduced renal function) resulting in an increased risk for adverse drug reactions and possibly drug accumulation, and may require a dose reduction.
    - ➢ Drugs that affect the CNS (i.e. sedatives) significantly increase fall risk, especially during the 3 days following initiation or dose increase.[14] Reducing the resident's CNS medication can help reduce falls.[9]
    - ➢ Low potassium can cause weakness which could increase fall risk.[9]
    - ➢ Patients taking anticoagulant/antiplatelet are more prone to fall-related injury risk due to the increased risk of bleeding.
    - ➢ Taking more than 4 medications (both prescription and OTC) is associated with an increased risk of falls.[6,7]

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Here are some Medication Recommendations to reduce fall risk:

- Vitamin D is shown to improve muscle strength and prevent falls.[12-14] Vitamin D supplementation of at least 800 IU/day should be prescribed to older adults with vitamin D deficiency, have abnormal gait or balance or those at high risk for falls.[2]
- Minimization or withdrawal of medications associated with high fall risk.[2]
- Modification of medications by choosing safer alternatives i.e. zopiclone instead of benzodiazepine.[9]
- Dosing time adjustments for medication with sedative potential to be given at night.[9]
- Dose reduction should be considered since medications with fall risks usually have a dose-response relationship,[15] i.e. starting at one-half to one-fourth the normal adult dose and adjust dosage slowly.[9]
- Dose tapering (if indicated upon withdrawal): Chronic medications and frail elderly may require slower tapering. Drug-related adverse effects or inappropriate use of medication may require more aggressive tapering.[9]
- Monitor potential side effects i.e. orthostatic hypotension[9] or laboratory values.[16]
- Assess need for treatment of osteoporosis to reduce fracture risk in older adults at high risk for falls. i.e. vitamin D, calcium, bisphosphonates, hormone replacement therapy and calcitonin.[17]
- Follow-up is very important to assess recurrence of falls and the impact of medication adjustment.[17]

Ask your Remedy'sRx Pharmacist for advice on medications that may be associated with an increased fall risk. We will provide you with a reference list identifying these medications.

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