Can in-hospital falls really be prevented?

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ROSEMONT, Ill.–While falls are a common cause of injury, particularly in older, hospitalized patients, some may not be as preventable as once thought. According to a new literature review published in the Journal of the American Academy of Orthopaedic Surgeons (JAAOS), many of the risks that frequently cause falls are not adequately addressed with the fall prevention initiatives used in healthcare facilities.

Falls are the leading cause of fatal and nonfatal injuries to older people in the United States. Each year, more than 11 million people older than 65 years of age fall—one in three senior citizens.

In hospitals, approximately 3 to 20 percent of inpatients fall at least once during their stay. These falls are considered "preventable" by the Centers for Medicare & Medicaid, and therefore healthcare facilities are held accountable for the costs of treating any resulting injuries. However, in this literature review, the authors found that hospitals may not be able to prevent most falls, as many risk factors are not under the caregivers' direct control.

For example, one study, examined in the review, found that comprehensive fall prevention programs, including patient education, vision assessments, and walking aids did not reduce the incidence of falls for patients undergoing a typical inpatient hospital stay (median of seven days). Such strategies are more effective in long-term care (i.e., 20 or 30 days) or carefully managed home care settings.

Another study indicates that there is a strong correlation between falling and delirium that supports the need for early identification and management of delirium in the hospital. This suggests that patients receiving intervention including pre- and postoperative assessments and management of postoperative complications for delirium are less likely to receive fewer serious injurious falls, but it is unknown whether this data is applicable to typical inpatient hospital stays.

"Of course, hospitals should educate patients and the families, use bed rails, keep beds low, keep floors dry and clear of clutter—all the common sense things that can reduce the risk of falls," said Terry A. Clyburn, MD, orthopaedic surgeon, University of Texas Medical School at Houston and co-author of the literature review. "But we found no proof that falls in hospital are, in fact, preventable. And if not, they should not be categorized as a preventable occurrence and the burden shouldn't be borne by hospitals."

The methods currently utilized by healthcare settings to reduce falls are either not harmful or do not increase risk and may be safely continued. Many patients who suffer falls in the hospital have internal risk factors, other conditions, or disabilities that increase their likelihood of falling, such as diabetes, Parkinson's disease, osteoporosis or arthritis, history of stroke, vision or hearing problems, malnutrition, dizziness and vertigo, incontinence, and the use of medications that can alter a person's mental status. Medication for internal medical risk factors may be modified to reduce falls, but evidence suggests there is no conclusive difference in the number of falls during typical, shorter length hospital stays at institutions with or without multifaceted falls prevention programs.

"You have a patient who already needs hospital care for another condition, who may have recently undergone general anesthesia, who may be on strong pain medication," Dr. Clyburn explains. "In the short time that the patient is admitted, it's difficult to also manage all the other

risk factors that can contribute to a fall."

Falls-related injuries can have serious results:

- Twenty percent of falls require medical attention;
- Falls can be fatal, or can cause a decline in a person's health that eventually leads to death or disability;
- Most patients with hip fractures (a common fall-related injury) are hospitalized for about one week; after they are discharged, up to one in four adults who lived independently before their hip fracture has to stay in a nursing home for at least a year after their injury; and
- Treatment of the injuries and complications associated with these falls costs the United States $20.2 billion annually.

While there are many steps patients may take to reduce their risk of falls, long-term care prevention such as exercise programs focused on strength, functional performance, and balance training are most effective at reducing in-hospital falls. Further research in randomized controlled trials is necessary to design the best fall prevention protocols for patients.

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