E3-8: Fall-Related Injuries in Older Adults: A Systematic Review of the Evidence

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Abstract:
Introduction: Falls and subsequent fall-related injuries are a common clinical problem experienced by elders across settings. Falls in long-term care (LTC) facilities are associated with increased costs to the healthcare system, approximately $6200/resident/year. Systematic reviews and meta-analyses have focused on fall-related injury outcomes of community dwelling elders; however, other than hip fracture prevention programs, findings of fall-related injury studies conducted among elders in LTC settings are not synthesized.

Method(s): A systematic review was conducted to achieve the following aims: 1. Synthesize what is known about fall-related injury risk factors in LTC residents; 2. Summarize fall-related injury interventions that seek to reduce the consequences of fall events; 3. Describe types of fall-related injuries and outcomes associated with these injuries. Comprehensive keyword searches of Medline, CINAHL, and EMBASE through June 2009 and reference lists of included studies were used.
**Results:** Search results yielded over 250 studies reporting falls and fall-related injuries. Studies were further divided by setting, level of scientific evidence, and substantive findings related to injurious falls to elicit 29 LTC studies for in-depth review. On a researcher-generated quality assessment tool, the six RCTs received a mean =10/13 (range 9-13), 21 observational studies: mean =4.9/8 (range 2-7), and the 2 descriptive studies: mean =4.5/5 (range 4-5).

**Discussion & Conclusions:** Overall, reviewed study results are inconsistent and of limited power to draw firm conclusions about fall-related injuries. However, taken as a group, the aims of this review were addressed and practice recommendations for fall-related injury prevention are offered. Several risk factors appear repeatedly (i.e., prior falls, psychoactive medications, restraints) with a majority of fall-related injuries being categorized as “minor” (34-81%, mean=58%). Although the number of severe injuries (i.e., fractures, death) related to falls may be few (3-19%; mean=9%), consequent morbidity and mortality rates are substantial and costly. Corresponding fall-related injury prevention programs focus primarily on resident-specific targeted risk abatement.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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