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Aging without injury in the United States requires action today ⋆

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Abstract

Introduction: In 2017, unintentional injuries were the seventh leading cause of death among older adults (age ≥ 65), resulting in over 55,000 deaths. Falls accounted for more than half of these deaths. Given that older adults are the fastest growing age group in the United States, we can anticipate that injuries will become an even greater health concern in the near future.

Methods: Aging without injury is possible. There are evidence-based strategies that can reduce falls. However, older adults may not realize that falls can be prevented or they may be afraid to admit their fear of falling or difficulty with walking as these issues may signal their inability to live independently.

Results: In this commentary, we will highlight what the Centers for Disease Control and Prevention is doing to prevent older adult falls. We also highlight the importance of broadening older adults' awareness about falls to successfully empower them to begin contemplating and preparing to adopt fall prevention strategies that can help them age in place.

Conclusions: Older adult falls are common and can result in severe injury and death but they can be prevented. Broadening older adults' awareness about falls can empower them to take the actions necessary to reduce their fall risk.

Practical applications: Increasing awareness about falls can help older adults, healthcare providers, and local and state health departments take steps to reduce fall risk.

Keywords

Elderly; Falls; Falls intervention; Health care provider; STEADI

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1. Commentary

Each year, approximately 30% of older adults (age 65 and older) report falling (Bergen, 2016). In 2017, unintentional injuries resulted in over 55,000 deaths among older adults (CDC, 2019). Falls accounted for more than half of these (CDC, 2019). In addition, fall death rates are rising (Burns & Kakara, 2018). In the United States, fall death rates increased 3% per year from 2007 to 2016 among adults 65 and older. A report by Hartholt et al. found that fall death rates rose by 6% per year from 2000 to 2016 among adults age 95 and older (Hartholt, Lee, Burns, & van Beeck, 2019). Due to the aging of the baby boomer population and a cost of approximately $10,000 per fall treated in the emergency department, hospital, or outpatient setting, we can anticipate that falls will become a far greater health and economic concern in the near future if more is not done to prevent falls (Burns, Stevens, & Lee, 2016; Ortman, Velkoff, & Hogan, 2014).

Aging without injury is possible. There are evidence-based strategies that can reduce falls (Gillespie et al., 2012; Stevens & Burns, 2015). Given more than 90% of older adults see a medical provider at least once a year, providers have the opportunity to inform and empower older adults to take action to reduce their fall risk (O'Hara & Caswell, 2013). In addition, research suggests that older adults are more likely to adopt fall prevention strategies if recommended by a healthcare provider (De Groot & Fagerström, 2011; Dickinson et al., 2011). In response, the Centers for Disease Control and Prevention (CDC) developed the Stopping Elderly Accidents Deaths and Injuries (STEADI) initiative based off of the American and British Geriatric Society guidelines on fall prevention as a way to prevent falls among older adults (AGS/BGS, 2011). STEADI encourages providers to talk to their older patients about falls. Providers screen older patients at least once a year for fall risk. If at risk for a fall, clinicians assess the patient's modifiable fall risk factors (e.g., gait and balance, use of medications associated with increased fall risk, vision impairment) and intervene to reduce the identified risk using effective clinical and community-based interventions (www.cdc.gov/steadi). Similar intervention strategies that focus on the prevention of multiple fall risk factors have been shown to reduce the rate of falls by 24% (Gillespie et al., 2012).

STEADI requires older adults to adapt their behavior. For example, to reduce fall risk, an older adult may need to improve their balance (Rubenstein & Josephson, 2006; Tinetti, Speechley, & Ginter, 1988). This can be done by physical therapy or participating in specific community fall prevention programs like Tai chi (Gillespie et al., 2012). In other situations, physicians may recommend that an older adult may need to stop using or taper the dose of a medication (e.g., anti-anxiety medications, pain medications) that cause side effects that increase fall risk (Pit et al., 2007; Rubenstein & Josephson, 2006; Tinetti et al., 1988). Or they may need to improve depth perception by using single vision lenses, instead of their bifocals, when taking outdoor walks (Haran et al., 2010; Rubenstein & Josephson, 2006; Tinetti et al., 1988). All of these examples require a change in behavior.

Changing behavior can be challenging. The Transtheoretical Stages of Change model describes behavior change as a gradual process that occurs over time. This model includes five stages: pre-contemplation, contemplation, preparation, action, and maintenance

(Prochaska, Redding, & Evers, 2008). During pre-contemplation an individual is not thinking about change or may be unaware of the need to change their behavior. Contemplation occurs when someone weighs the benefits versus the costs of the proposed behavior change. Preparation refers to when a person starts to believe that changing their behavior may result in health benefits. During this stage they may experiment with small changes. Action refers to when the individual takes definitive action to change their behavior. Lastly, maintenance is the point in which a person decides to keep the new behavior for the foreseeable future (Prochaska et al., 2008). Successful public health prevention strategies help individuals move from one stage to the next. Given some patients will not have contemplated falls as a health issue while others will be eager to take action, STEADI includes talking points for providers on how to talk to their patients about falls and fall prevention wherever they are in the five stages of change. The STEADI resource, "Talking about Fall Prevention with Your Patients," offers suggestions on how to encourage a patient to move from one behavior stage to the next, moving patients closer to preparation, action and maintenance (www.cdc.gov/steadi).

STEADI-based falls programs have been successfully integrated in primary care settings (Casey et al., 2016; Eckstrom et al., 2017; Johnston et al., 2018). An internal medicine and geriatrics clinic at Oregon Health and Sciences University implemented STEADI into their clinical practice. They screened two-thirds of eligible older adults for fall risk with 22% of these screening at high-risk for a fall (Eckstrom et al., 2017). A health system in New York recently reported on their STEADI-based fall prevention program. Out of older adults screened for fall risk, 19% screened at risk for a fall. They found that older adults, at risk for a fall, who were given a fall prevention care plan to reduce their fall risk had a reduction in fall-related hospitalizations compared to older adults, at risk for a fall, who did not receive a fall prevention care plan (Johnston et al., 2018) However, not all providers in the United States are currently talking to their older patients about falls. We must do more to encourage older adults to initiate the conversation with their healthcare providers.

One way to encourage older adults to speak to their providers is to broaden older adults' awareness and understanding about falls, risk factors and how to prevent falls from occurring. The contemplation stage requires awareness and some older adults may not be aware that they are at risk for a fall (Hill, Day, & Haines, 2014; Robson, Coyle, & Pope, 2018; Yardley, Donovan-Hall, Francis, & Todd, 2006). Older adults may not understand the seriousness of falls (Laing, Silver, York, & Phelan, 2011; Shankar, Taylor, Rizzo, & Liu, 2017). Some may believe falls are merely a consequence of aging that cannot be prevented (Elskamp, Hartholt, Patka, van Beeck, & van der Cammen, 2012; Høst, Hendriksen, & Borup, 2011; Howard et al., 2018; Shankar et al., 2017). While these issues are real and difficult to navigate, state and local health professionals and fall prevention organizations can increase awareness by using existing data to inform older adults about how common, serious, and preventable falls can be. To help increase older adults' awareness, CDC has state-based data available on falls incidence, mortality and cost (https://www.cdc.gov/homeandrecreationalsafety/falls/index.html). CDC also has educational brochures for older adults on how to identify fall hazards in their homes, and how to manage postural hypotension which may lead to a fall (www.cdc.gov/steadi).

Increasing awareness about falls, fall risk factors, and how to prevent falls can empower older adults to maintain their independence and age without injury.

Biography

Robin Lee is an epidemiologist and the Team Lead for the Home and Recreation Team within Home, Recreation and Transportation Branch, Division of Unintentional Injury Prevention at the Centers for Disease Control and Prevention. Dr. Lee and her team conduct research and implement programs on how to prevent the occurrence of unintentional injuries at home, school, and in recreational areas. Topic areas include falls, drowning, fire and burns, infant suffocation, playground safety, and sports related injuries. **Dr. Lee** has a bachelor of science in Human Biology, a masters of public health and a doctorate in epidemiology from the State University of New York at Albany. She has authored and coauthored numerous presentations and scientific publications and has received awards for her public health and volunteer service.

Briana Moreland is an Oak Ridge Institute of Science and Education (ORISE) fellow on the Home and Recreation Team in the Division of Unintentional Injury Prevention at the Centers for Disease Control and Prevention. She received her Masters of Public Health in epidemiology from Columbia University and her Bachelor of Arts in molecular, cellular, developmental biology from the University of Colorado.

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