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# Interventions for fall prevention in Community-dwelling older persons

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New Milford Primary Care, New Milford, CT

Rotation 7, February-March 2019

Mentor: Dr. Peter Anderson

# The Problem by the Numbers

- ▶ Falls in the elderly are an important problem associated with hospitalizations, early nursing home admissions, worsening function, loss of independence, lower quality of life. (1,2)
- ▶ They are associated with significant morbidity and mortality and are the leading cause of fatal and non-fatal injuries in people over 65.
- ▶ As a result, falls are not only impactful on individual's overall health and quality of life, but they also produce a large individual and national economic burden. (1,3)
- ▶ Thus, effective fall prevention strategies are an important public health measure. (1,4)

# The Problem, continued

- ▶ About 30% of individuals over the age of 65 living in the community will experience a fall in a given year; this number increases to 40% over the age of 80.
- ▶ Falls are thought to contribute to 40% of admissions to nursing homes
- ▶ Up to 5% of falls result in fractures, another 5% result in serious soft-tissue injury often requiring hospitalization or immobilization. (5)
- ▶ Admission to the hospital can result in significant decline in ADLs (between 23 and 63% from baseline to discharge) resulting in decreasing independence and quality of life. (6)
- ▶ 14.8% of New Milford residents are above the age of 65. (7)

## The Economic Impact

In 2015, direct medical cost for fatal and non-fatal injuries secondary to falls in the elderly totaled \$637.5 million and \$31.3 billion, respectively.

Both total cost and incidence of falls increased with age.

Injuries related to falls prove to be of substantial economic cost, thus implementation of evidence-based prevention strategies is essential to decrease incidence and cost associated with falls. (3)

In the United States, older adults accounted for over 30% of hospital stays in 2012, with the average length of stay being 5.2 days and costing \$12,900-13,000. (8)



<https://pxhere.com/en/photo/1066277>

# Community Perspective

- ▶ When discussing the impact of falls in the elderly, Jennifer Kolwicz, DPT and head of health and rehabilitation at Candlewood Health and Rehabilitation mentioned, “[the elderly] often have a lot of comorbidities and they may never get back to their normal health, and this impacts personal finances and family dynamics”
- ▶ Jennifer also said, “we need a lot more outreach to let people know what to look for to prevent falls”
- ▶ When discussing barriers elderly in the community face to access doctor appointment and local programs, Jasmin Ducusin, Program director at New Milford Senior center addressed this by saying, “Our WHEELS and bus programs offer rides to individuals in New Milford from their homes to [doctor] appointments and to our center here where they can partake in our strength and balance programs, as well as our many other activities.”



<https://pxhere.com/en/photo/1005261>

# Intervention and Methodology

- ▶ An informational pamphlet was produced for distribution within the New Milford Primary care clinic.
- ▶ It contains information from the literature regarding the factors that may put an individual at increased risk for fall as well as suggestions for preventative measures based on current guidelines from the literature.
- ▶ It also provides information on local organizations that provide services for elderly individuals.

# Results / Response

- ▶ When asked, many patients described falls as a concern they have frequently.
- ▶ In the office, individuals were generally open to receiving information on how to prevent falls in the home.
- ▶ Many mentioned a pamphlet as a good resource due to their availability and concise nature.



<https://pxhere.com/en/photo/1179849>

# Effectiveness and Limitations, cont.

- ▶ Due to the time constraints of the clerkship, determination of effectiveness of the pamphlet as an educational intervention is difficult. This would require evaluation over a longer period of time than the 5 weeks over which this clerkship took place.
- ▶ Other limitations of the intervention include poor adherence to reading the pamphlet despite receiving one in the office, lower socioeconomic status limiting an individual's ability to complete certain preventative measures within the home, and other barriers such as transportation or physical ability to make it to their doctor's appointment.

# Recommendations for future projects

- ▶ Data collection may be performed on a group of older adults with a similar fall risk (based on age, previous falls, etc.) before and after distribution of a pamphlet in the New Milford clinic
  - ▶ Falls over a specific time interval can be compared between a control group (those who did not receive a pamphlet) and an intervention group (those who did receive a pamphlet) in the outpatient setting
  - ▶ Incidence and severity of falls between the two groups can be compared to quantify the effectiveness of the pamphlet in educating individuals of fall risks and ways to mitigate those risks.
  - ▶ Self-reported knowledge of risks for falls and interventions to reduce falls in home can be performed through a survey as an additional way to assess the effectiveness of the pamphlet.

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Yes \_\_\_\_\_ / No \_\_\_\_\_ If not consenting as above:  
please add the interviewee names here for the  
department of Family Medicine information only.

Name: \_\_\_\_\_

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

Yes  /  
Name: Jennifer C. Kolwicz  
Name: Jennifer C. Kolwicz, Dr.

No \_\_\_\_\_ /  
Name: \_\_\_\_\_  
Name: \_\_\_\_\_

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

Yes  /  
Name: Jasmin Marie J. Ducusin  
Name: Jasmin Marie J. Ducusin

No \_\_\_\_\_ /  
Name: \_\_\_\_\_  
Name: \_\_\_\_\_