

Compliance with CDC Fall Prevention Recommendations: A Survey of Older Adults with a Recent Fall

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Abstract Falls are the leading cause of injury-related visits to emergency departments in the United States and the primary etiology of accidental deaths in persons over the age of 65 years. Despite the consequences and the preventability of falls, there are no known data that have shown compliance with the Centers for Disease Control (CDC) recommendations among adults 65 years and older who have fallen. An IRB approved cross sectional survey was conducted at Wesley Medical Center to evaluate which CDC fall prevention guidelines have been followed in older adults who suffered a recent fall and whether or not with proper education, future falls can be prevented. Results revealed that patients were not adequately educated on fall prevention strategies.

1. Introduction

The incidence of falls, fall-related injuries, and fall-associated costs continue to rise in older adults. By 2020, the annual direct and indirect cost of fall injuries is expected to reach \$54.9 billion. [1] A fall can change a person's life and lead to disability and a loss of independence. There is an increasing incidence of emergency department falls admission annually. The emergency department in 2008 treated 2.1 million nonfatal fall injuries among older adults (65 years or older).[1] According to the Centers for Disease Control and Prevention (CDC), one in three adults over the age of 65 will fall each year. Also the CDC estimates that one older adult dies every 35 minutes due to fall related injuries.[2,3] The CDC provides guidelines to aid in preventing falls. These guidelines include leg strengthening exercises, medication review, annual vision exams, and home safety checks. Our study evaluated which CDC fall prevention guidelines have been followed in older adults with a recent fall and whether or not proper education will decrease incidence of future falls can be avoided. Fall assessment still remains largely

ignored by health care providers. [4] By determining and treating the underlying cause of a fall, it can return patients to improved function and reduce the risk of recurrent falls.

2. Experiment, Results, Discussion, and Significance

A cross sectional survey was conducted at Wesley Medical Center (WMC), a Level I trauma center, to evaluate knowledge of fall prevention strategies in adults greater than 65 years of age. The survey included 13 men and 22 women who were admitted to WMC Trauma Service secondary to a fall between July 2011 and January 2012. People excluded from the survey consisted of those who were non-English speaking, cognitively impaired, living in nursing home prior to admission, discharged to long term care facility, and those who died during their hospitalization. A 30 question survey was completed by participants during hospitalization and asked specific information on prior health issues, exercise habits, medication reviews, history of vision screening over the last year, history of home safety evaluation, as well as willingness to implement techniques to prevent falls. Participants were sent home with a *Falling Less in Kansas* tool-kit [5] which was provided by the researchers. Six to eight weeks after discharge, participants were sent a post survey to reevaluate any changes made to decrease their risk for future falls. At this time we have only received 12 completed post-surveys. From the data obtained thus far it was noted that the majority of the fall victims were female, and the mean age of these patients was 79 years of age. Over fifty percent of the fall patients did not follow three out of four of the CDC fall prevention recommendations prior to their fall. Eighty percent of the fall patients had an annual

vision exam prior to their fall. Only fifty percent of victims exercised prior to their falls and only thirty percent had a home safety evaluation. It was also noted that less than twenty percent of fall victims had their medications reviewed. Other significant findings include that greater than fifty percent of the victims were found to be completely unaware of the recommended fall prevention strategies, and the majority of the fall victims were on more than four prescription medications that may have contributed to their fall. Evaluation of the post-surveys is still being completed, but preliminary data reveals a large number of the fall patients exceedingly willing to properly find strategies and ways to help reduce their risk for future falls.

3. Conclusions

Surveys administered to adults age 65 years and older who were admitted to a Level I trauma center after suffering injury from a fall revealed that older adult fall victims are not being educated enough to adequately understand the importance of applying strategies to prevent falls. Follow-up surveys lead us to believe that patients are very willing and eager to incorporate and implement fall prevention recommendations with proper educational tools such as a fall prevention toolkit. The toolkit provides insight on how to go about creating as well as maintaining an adequate living environment, the benefits of strength training and the importance of eye exams and medication reviews. Providing fall

evention education will hopefully reduce the number of falls older adults experience and decrease the amount of injuries occurring secondary to these falls. The study has shown there is a lack of information provided to older adults regarding fall prevention strategies. It is important to determine the cause of the fall and implement advocated tactics to lessen the recurrence. Patients receiving the toolkit voiced their gratitude and appreciation for being properly and adequately educated on ways to reduce their risk for falls in the future.

4. Acknowledgements

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