

FOCUS ON RESEARCH



Fall prevention clinic shows promise for reducing injurious falls in older adults

By Dana Martin

As people age, a number of factors make them more susceptible to falls – these include certain medicines, vision problems, lower extremity weakness and environmental issues.

Falls are of such concern because they often cause injuries that lead to loss of independence and, in some cases, result in death. Older adults with cognitive impairment have an especially high risk of falls. (To learn more, see the companion story to the right, “Tips for Reducing Fall Risk in Older Adults with Cognitive Impairment.”)

University of Washington researcher Dr. Elizabeth Phelan established and now directs Harborview Medical Center's Fall Prevention Clinic. The clinic offers

comprehensive fall risk-factor assessment and management and has been in operation for about two years.

The clinic's goal is to bring a clinical service that is evidence-based to the general public. Dr. Phelan felt it was particularly important for Harborview to have a focus on fall prevention because it is a major trauma center. This means Harborview takes care of many injuries that result from falls and, as a referral trauma center, patients from all over the region are seen.

“Many of those who suffer from an injurious fall never regain their independence. They go from a state of independent living, to having a hip fracture and being institutionalized, for example,” Phelan says.

A nurse practitioner sees patients in the clinic. The initial meeting includes a full assessment of all factors that can contribute to fall risk, using a one-page algorithmic protocol. A cognitive screen is performed as part of the initial assessment. For each risk factor identified, standard

Tips for Reducing Fall Risk in Older Adults with Cognitive Impairment

Cognitive impairment is one factor that increases an older adult's risk of falls. University of Washington researchers Drs. David Buchner and Eric Larson found that in a group of AD patients, 50 percent either fell or became unable to walk during a three-year period, and the fracture rate of those with AD was three to four times that of the general population.

What can be done to reduce your fall risk?

- Use a cane or walker.
- Have your vision checked regularly.
- Make changes to your living space (such as removing rugs, adding more lighting and rearranging furniture to create a clear, open floor plan).
- Wear sturdy shoes that are appropriate for the surface you are walking on (no leather soles outside, for example).
- Talk to your doctor about medicines that make you feel dizzy or off balance.
- Stand up, sit down and lie down slowly.
- Exercise (talk to your doctor before starting an exercise program). ❖

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recommendations are provided on what to do about that risk factor.

As part of the initial assessment, each patient is asked to complete a Timed Up and Go Test. This test quantifies the degree of fall risk. In this test, the patient stands up from a chair and walks 10 feet, then turns around and sits back down. The longer it takes to perform the test, the higher the risk of falls. Any patient whose risk of falling is high is offered a

referral to a physical therapist.

Vitamin D levels are checked on everyone seen in the clinic. Patients with low levels are instructed that they can take an oral vitamin D supplement. "In the past three years or so, there has been an emerging literature on the association between low levels of vitamin D and an increased risk of falls," says Phelan. "It seems that normal levels of vitamin D are necessary for adequate muscle strength and low levels may contribute to muscle weakness."

Clinic patients are seen again at the discretion of the nurse practitioner. At follow-up visits, the nurse practitioner assesses how well patients have adhered to her initial recommendations. Further recommendations are made at that time. The Timed Up and Go Test is repeated to provide an objective measure of whether there was any decrease in fall risk. Vitamin D levels are also followed up.

Dr. Phelan says there is a lot of research that looks at factors that are associated with falling in older adults and how to prevent those falls. "There are quite a few intervention studies now – randomized trials looking at how to intervene on risk factors to reduce a person's risk of falls."

But, she adds, there is very little in the way of work that translates what has been learned from these studies about fall-risk reduction into actual practice.

Dr. Phelan and her graduate research study assistant Meghann Moore are conducting a study of the Fall Prevention Clinic to determine whether those seen at the clinic have reduced fall risk. This study of the clinic's effectiveness spanned from June through December 2005. Patients seen in the Fall Prevention Clinic during that time period were matched to patients not seen – on age, gender and race. All patients included in the study were cared for by geriatricians in the Senior Care Clinic at Harborview.

There were 43 patients seen in the Fall Prevention Clinic from June through December 2005. These 43 patients served as "cases" for study purposes and were matched to 86 "control" patients who were not seen in the Fall Prevention Clinic during that time period. These study participants had a mean age of 79 years, 70 percent were female, and about a third were non-white.

One novel aspect of the study is that it is being done in the context of the usual health care environment, as opposed to being an intervention imposed on a health care delivery system, as is often done in clinical trials. As Dr. Phelan says, "I wanted to actually have something real-world up and running and then evaluate it."

The study is unique because, while most fall studies focus on number of falls as a main outcome, this study is looking in particular at injurious falls,

OCTOBER 24

Healthy Aging Partnership (HAP)

October Falls Prevention Workshop for Professionals

"Standing Strong, Moving Forward: Falls Prevention Strategies for Older Adults"

Wednesday, October 24th
Tukwila Community Center
12424 42nd Ave. S., Tukwila

Professionals who work with older adults will gather useful tips and the latest information on falls prevention featuring national and local experts, including keynote speaker Lynn Beattie of the National Council on Aging.

The full-day workshop will include breakout sessions, demonstrations, vendor exhibits and a panel presentation on local falls prevention programs.

The \$60 registration fee includes a continental breakfast and full lunch.

For more information and to register, go to www.4elders.org or e-mail info@4elders.org.



Can you trust what you read?

meaning those that result in injury, such as hip fracture. According to Dr. Phelan, it is injurious falls that lead to loss of independence, morbidity, disability and even death.

This study is so recent that the results have not been written up as of the printing of this newsletter, but Dr. Phelan reports that the preliminary data suggest that being seen in the Fall Prevention Clinic significantly reduces the percentage of patients with injurious falls. Additional analyses of the data are still being conducted, but according to Dr. Phelan, "It looks as if the clinic is benefiting people who are being seen by reducing the chance of someone having a fall with injury."

Highlights of this research will eventually be reported on the clinic website. ❖

To learn more about the clinic, visit www.uwmedicine.org/PatientCare/MedicalSpecialties/SpecialtyCare/HARBORVIEW/falls/index.htm

By Cecily Jenkins, Ph.D.

If you read the newspaper, watch television or surf the Internet, you know the overwhelming amount of medical information available. Some is scientifically sound, some based on opinion, and some is incomplete or even misrepresented.

Evaluating the credibility of reports is very challenging for the unprepared consumer. Do you have the necessary tools to make sense of what you read and hear? Are you "information literate?"

Asking the following questions can help you decide what to believe.

1. Where does the information come from?

PEER-REVIEWED JOURNALS: Articles published in reputable peer-reviewed journals

are the most respected source of information, as the work has been reviewed by other qualified members of the profession. If you have difficulty obtaining or

interpreting findings from these primary source articles, turn to professionals skilled in explaining such data to help you understand the results and conclusions.

THE INTERNET: The Internet is a rich source of information but because it is unregulated, you should check the sponsorship of a website to establish its reputability. Some reliable websites providing health information include:

- Government agencies (ending in .gov)
- National nonprofit organizations (ending in .org)
- Medical specialty groups, and university medical centers (ending in .edu)
- Web addresses ending in .com may have valuable information, but many are commercial sites designed to sell you something.

TV AND PRINT: Look carefully

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Did you know?

Dimensions had its inaugural issue 21 years ago in 1986!

The title "Dimensions" was chosen to reflect the many stages and faces of Alzheimer's disease.

As you may have noticed, we've "refreshed" the layout of our newsletter. Let us know what you think!

Some reputable websites for information about Alzheimer's disease:

- **www.alz.org** – Alzheimer's Association website
- **www.nia.nih.gov/alzheimers** – Alzheimer's Disease Education and Referral Center of the National Institute on Aging (ADEAR)
- **www.ClinicalTrials.gov** – National Institutes of Health website provides information about federally and privately supported clinical research, including information about specific trials and news about recent results.
- **www.medlineplus.gov** – A service of the U.S. National Library of Medicine, this website archives health news from the last 30 days, drug information for both prescription and nonprescription medications, a medical encyclopedia and a link list of health libraries, databases and resources.