

Study finds significant differences in frailty by region and by race among older Americans

24 September 2015

A large-scale survey of older Americans living at home or in assisted living settings found that 15 percent are frail, a diminished state that makes people more vulnerable to falls, chronic disease and disability, while another 45 percent are considered pre-frail, or at heightened risk of becoming physically diminished.

The Johns Hopkins Bloomberg School of Public Health study found [frailty](#) to be more prevalent in [older people](#) and more common among women and the poor. In addition, the study found wide regional differences in the U.S., with older people in central southern states more than three times as likely to be frail than those in the western states. The researchers also found significant [racial differences](#), with blacks and Hispanics nearly twice as likely to be frail as whites.

The study is published in the September 2015 issue of *Journals of Gerontology: Medical Sciences*.

Frailty, once thought of as a generalized fragile state that befalls some people as they get older, is increasingly considered a medical process in and of itself. Frailty is thought to be exhibited by a set of symptoms including weakness, exhaustion and limited mobility. It often progresses separately from any underlying conditions, and is also common among patients with chronic diseases such as heart disease and diabetes, especially in their advanced stages.

Understanding frailty, and finding ways to prevent its onset or slow its progression, could improve older people's quality of life by extending their so-called robust years. It could also increase their chances of surviving surgery, for example; previous research has suggested that older, frail patients are less likely to survive major surgical

procedures. Reducing frailty could lower health care costs, since frail persons are prone to falls and falls often lead to hospitalization. Hospital care is the largest component of Medicare spending.

Of their findings, the authors were most surprised by the significant racial and regional differences, says study leader Karen Bandeen-Roche, PhD, the Frank Hurley and Catharine Dorrier Professor and Chair of the Department of Biostatistics at the Johns Hopkins Bloomberg School of Public Health. The study is believed to be the first that examines regional differences in frailty in the U.S.

"We can't really explain the regional differences," says Bandeen-Roche, who also co-directs the Johns Hopkins Older Americans Independence Center and is a Core Faculty member at the Johns Hopkins Center on Aging and Health. "We know there are health differences across the country, differences in diet and to some extent exercise habits. Observing the relatively low prevalence in the mountain west, you can imagine an active lifestyle might be a factor." As for the racial differences, Bandeen-Roche says it's too early to speculate, noting that they could be due to any number of factors, and merit further study.

For the study, researchers drew on interviews with 7,439 participants in the 2011 National Health and Aging Trends Study, a longitudinal study of people age 65 and older drawn from Medicare records. Participants, who resided either at home or in an assisted living facility, completed a two-hour, in-person interview that assessed frailty using several criteria: exhaustion, weakness, low physical activity, shrinking and low walking speed. Participants were also asked about their medical history and ability to perform daily tasks such as meal preparation and other household activities. The researchers assessed probable dementia with

a combination of questions and cognitive tests.

Among the survey's other findings: Residents of assisted living facilities were more than twice as likely to be frail than those living in private homes. Prevalence increased with age, with 9 percent of those ages 65 to 69 found to be frail compared to 38 percent of those aged 90 or older. Among the frail, more than half had fallen in the previous year, and more than one-third had fallen several times, with 40 percent of those who had fallen being hospitalized.

As frailty becomes better understood, the researchers hope clinicians will develop recommendations that specifically address risks associated with frailty, for instance, having people engage in strengthening activities before major surgery. Such recommendations, if adapted by older people who had not yet slipped into advanced frailty, could help delay or even prevent its onset.

Aside from the 15 percent found to be frail, the researchers also found that 45 percent were what the authors deemed "pre-frail," or older people who have begun to experience the same symptoms of frailty, but to a lesser extent. "It's a question of degree," Bandeen-Roche says. The so-called pre-frail are a prime target of study in order to help researchers understand the progression of frailty so doctors can develop recommendations - for instance, changes in diet or exercise - that could extend a person's robust years.

"We would love for frailty assessment to become a standard component of assessment of older Americans," Bandeen-Roche says. "Understanding frailty could potentially help us extend people's quality of life into their later years."

More information: "Frailty in Older Adults: A Nationally Representative Profile in the United States" *Journals of Gerontology: Medical Sciences*

Provided by Johns Hopkins University Bloomberg School of Public Health

APA citation: Study finds significant differences in frailty by region and by race among older Americans (2015, September 24) retrieved 3 June 2022 from <https://medicalxpress.com/news/2015-09-significant->

[differences-frailty-region-older.html](#)

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.