

Functional impairment in middle age often leads to further decline

November 13 2017



Credit: CC0 Public Domain

Nearly 40 percent of individuals who experience an episode of functional impairment in middle age see further functional decline, or even death, within 10 years, according to a study by researchers at UC

San Francisco and the affiliated San Francisco VA Health Care System.

In a 22-year data study of nearly 6,900 middle-aged [adults](#), the researchers also found that more than 1 in 5 developed functional impairments before age 64, making the condition more common than normally assumed. The study appears Nov. 14, 2017, in *Annals of Internal Medicine*.

"Our findings challenge the traditional thinking that [functional impairment](#) in [middle age](#) is just a temporary phenomenon," said lead author Rebecca Brown, MD, MPH, assistant professor of medicine in the Division of Geriatrics at UCSF. "We show that people who experienced even a brief episode of functional impairment in middle age were at increased risk for further [functional decline](#) over time."

The findings also suggest that interventions to prevent further functional decline in older age may hold promise for middle-aged adults, she said, but need to be tailored to meet their unique needs.

Basic activities of daily living, such as bathing, dressing and getting out of bed or a chair, are critical for personal independence. Older adults who develop difficulty performing these activities, known as functional impairment, have lower quality of life and higher risk of acute care use, nursing home admission and death.

Functional impairment is commonly believed to affect adults age 65 and older, but is also present in middle age. About 15 percent of adults age 55-64 have difficulty performing those basic activities, the authors said, compared to 20-25 percent in ages 65 and older.

In the *Annals of Internal Medicine* study, Brown and her colleagues analyzed data from 6,874 adults who participated in the National Institute on Aging's Health and Retirement Study (HRS), which

examines the changes in health and wealth of Americans over age 50. They focused on participants ages 50-56 without functional impairment at enrollment in 1992, 1998 and 2004. Participants self-reported impairment every two years until 2014, by telephone or in person.

At the start of the study and each follow-up survey, participants reported whether they had difficulty or needed help in performing each of five functions - bathing, dressing, transferring, going to the bathroom and eating - as well as five instrumental areas - managing money, managing medications, [grocery shopping](#), preparing meals and making telephone calls.

Studies in older adults suggest that while some have persistent functional impairment after an initial episode, many improve, although individuals who improve are at high risk for recurrence. To understand whether similar patterns were true in middle-aged adults, the researchers also examined four outcomes at the two-year and 10-year follow up: recovery of functional independence, persistent functional impairment, further functional decline and death.

Dressing, Grocery Shopping Most Common Middle Age Impairments

Overall, Brown and her colleagues found that 22 percent of HRS participants developed functional impairment between ages 50-64. Two years after initial impairment, 37 percent had recovered independence, but 50 percent had persistent impairment, 9 percent had further decline and 4 percent died. At 10 years, only 28 percent had recovered from their initial impairment and remained independent throughout.

The most common impairment was dressing, which affected 14 percent of individuals by age 64. Transferring was next at 11 percent, followed

by going to the bathroom and bathing (7 percent), and eating (3 percent). About 70 percent of participants only had one initial impairment, and in those with two, the most frequent pairing was transferring and dressing.

Results were similar in instrumental factors: 19 percent of HRS participants developed these impairments between the ages of 50-64, and most only had one initially. Difficulty in grocery shopping was the most common, affecting 10 percent by age 64, followed by managing money (8 percent) and preparing meals (6 percent). The most frequent pairing was shopping and cooking.

By contrast, previous research in [older adults](#) has shown that instrumental impairment is much more common than functional impairment at any given age. Bathing is usually the first functional disability in this age group, followed by dressing, transferring, going to the bathroom and eating.

"Overall, we found that functional impairment in middle age has some important similarities to functional impairment in older age, but also some important differences," Brown said. "For example, there are different patterns of difficulty with individual daily activities."

The researchers noted that several aspects of the study may have led to underestimating the impact of functional outcomes, including using self-reporting instead of objective measures, potentially missing short-term impairments that occurred between the two-year assessments, and missing individuals with greater functional impairment, due to difficulty completing later surveys.

Provided by University of California, San Francisco

Citation: Functional impairment in middle age often leads to further decline (2017, November

13) retrieved 15 May 2024 from

<https://medicalxpress.com/news/2017-11-functional-impairment-middle-age-decline.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.