Serious cognitive impairment declines 23% among older American women over a decade
23 December 2021

A new nationally representative study published online in the Journal of Alzheimer's Disease found an abrupt decline in the prevalence of cognitive impairment among American adults aged 65 and older compared to the same age group a decade earlier.

In 2008, 12.2 percent of older Americans reported serious cognitive problems. In 2017, the percentage had declined to 10.0 percent. To put this into perspective, if the prevalence of cognitive impairment had remained at the 2008 levels, an additional 1.13 million older Americans would have experienced cognitive impairment in 2017.

"We were astonished to see the prevalence of cognitive impairment decrease so sharply over such a short period of time," says lead author Esme Fuller-Thomson, director of the University of Toronto's Institute for Life Course & Aging and professor at the Factor-Inwentash Faculty of Social Work (FIFSW) and Department of Family & Community Medicine. "This decline in the prevalence of serious cognitive problems has a cascade of benefits for older adults, their families and caregivers, the health and long-term care system, and the whole US economy."

The study was based on 10 consecutive waves of the American Community Survey (2008–2017), an annual nationally representative cross-sectional survey of approximately half a million American respondents aged 65 and older, including both institutionalized and community-dwelling older adults. A total of 5.4 million older Americans were included in the study. In each year, respondents were asked to report if they had "serious difficulty concentrating, remembering, or making decisions."

The rate of decline in cognitive impairment was steeper for women than men. Women experienced a decline of 23 percent over the decade, while their male peers had a 13 percent decline during that period. The researchers conducted sub-analyses on men and women aged 65–69, 70–74, 75–79, 80–84, 85–89, & and 90+. All gender and age cohorts experienced a statistically significant decline in the prevalence of cognitive impairment, with the exception of men aged 65–69.

Further analyses indicated that 60 percent of the observed decline in serious cognitive impairment between 2008 and 2017 was attributable to generational differences in educational attainment. Extensive previous research has concluded that every additional year of formal schooling lowers the risk of individuals eventually developing dementia. Compared to children born in the 1920s, Americans born in each successive decade had much greater opportunities to pursue post-secondary education.

"It appears that these increasing educational..."
opportunities continue to pay dividends more than half a century later," says co-author Katherine Ahlin, a recent Master of Social Work graduate from University of Toronto's FIFSW. "The short-term benefits of increasing educational attainment for income, productivity and the economy are well documented, but our research suggests the long-term benefits on later-life cognitive functioning are substantial. Our findings underline the importance of ensuring each generation has access to quality and affordable education."

However, the decline in the prevalence of cognitive problems was not entirely explained by generational differences in educational attainment, suggesting there may be other factors at play that warrant future research. The authors hypothesize several possible contributors to these positive trends, such as improvement across the generations in nutrition, declines in smoking and air pollution, and the phase out of leaded gasoline.

"Our finding from this study of over 5 million older Americans is definitely a very welcome, 'good news story' indicating a steep decline in the prevalence of cognitive impairment among older Americans," said Fuller-Thomson. "We still need to investigate whether these positive trends will continue in the decades ahead and why men's rates of improvements are lagging behind those of women."


Provided by IOS Press

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.