

Trouble falling asleep at bedtime or in the middle of the night? It could impact your risk for developing dementia

March 6 2023



Credit: Pixabay/CC0 Public Domain

Adding to the growing body of evidence on sleep disturbances and cognitive impairment, new research finds significant links between three

measures of sleep disturbance and the risk for developing dementia over a 10-year period. The results, reported in the *American Journal of Preventive Medicine*, associate sleep-initiation insomnia (trouble falling asleep within 30 minutes) and sleep medication use with higher risk for developing dementia.

The investigators also found that people who reported having sleep-maintenance insomnia (trouble falling back to sleep after waking) were less likely to develop dementia over the course of the study.

"We expected sleep-initiation insomnia and sleep medication usage to increase dementia risk, but we were surprised to find sleep-maintenance insomnia decreased dementia risk," explained lead investigator Roger Wong, Ph.D., MPH, MSW, an Assistant Professor in the Department of Public Health and Preventive Medicine, SUNY Upstate Medical University, Syracuse, NY, U.S.

"The motivation behind this research was prompted on a personal level. My father has been experiencing chronic [sleep disturbances](#) since the COVID-19 pandemic began, and I was concerned how this would affect his cognition in the future. After reading the existing literature, I was surprised to see mixed findings on the sleep-dementia relationship, so I decided to investigate this topic."

This research is novel because it is the first to examine how long-term sleep disturbance measures are associated with dementia risk using a nationally representative US older adult sample. Previous research has associated REM sleep behavior, [sleep deprivation](#) (less than five hours of sleep), and the use of short-acting benzodiazepines with [cognitive decline](#). Their results for sleep-maintenance insomnia support other recent studies using smaller, separate data samples.

This study used 10 annual waves (2011–2020) of prospective data from

the National Health and Aging Trends Study (NHATS), a longitudinal panel study that surveys a nationally representative sample of Medicare beneficiaries aged 65 years and older within the U.S.. This study included only people who were dementia-free at baseline in 2011.

There is no cure for dementia and recent pharmaceutical approaches to treat dementia have had limited success, pointing to the importance of preventive approaches to dementia. "By focusing on the variations in sleep disturbances, our findings can help to inform [lifestyle changes](#) that can reduce dementia risk," explained co-investigator Margaret Anne Lovier, MPH, Department of Public Health and Preventive Medicine, SUNY Upstate Medical University, Syracuse, NY, U.S..

While the mechanism for decreased dementia risk among those with sleep-maintenance insomnia is still unknown, the investigators theorize that greater engagement in activities that preserve or increase cognitive reserve may thereby decrease dementia risk.

Recent evidence indicates there is a higher prevalence of sleep disturbances among older adults than among other age groups. This could be attributed to a variety of factors including anxiety about the COVID-19 pandemic or warmer nights as a consequence of climate change.

"Older adults are losing sleep over a wide variety of concerns. More research is needed to better understand its causes and manifestations and limit the long-term consequences," added Dr. Wong.

"Our findings highlight the importance of considering sleep disturbance history when assessing the dementia risk profile for older adults. Future research is needed to examine other sleep disturbance measures using a national longitudinal sample, whether these sleep-dementia findings hold true for specific dementia subtypes, and how certain sociodemographic

characteristics may interact with sleep disturbances to influence [dementia](#) risk."

More information: Roger Wong et al, Sleep Disturbances and Dementia Risk in Older Adults: Findings From 10 Years of National U.S. Prospective Data, *American Journal of Preventive Medicine* (2023). [DOI: 10.1016/j.amepre.2023.01.008](https://doi.org/10.1016/j.amepre.2023.01.008)

Provided by Elsevier

Citation: Trouble falling asleep at bedtime or in the middle of the night? It could impact your risk for developing dementia (2023, March 6) retrieved 12 May 2024 from <https://medicalxpress.com/news/2023-03-falling-asleep-bedtime-middle-night.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.