

Disturbed sleep linked to poorer daytime function in older women

October 1 2007

One of the first large-scale studies to examine the association of sleep behaviors, neuromuscular performance and daytime function in a community dwelling of older women finds that poorer sleep is associated with worse physical function in older women during the daytime, according to a study published in the October 1 issue of the journal SLEEP.

The study, authored by Suzanne E. Goldman, PhD, of the University of Pittsburgh, was based on a total of 2,889 women, who participated in the 2002-2004 examination of the Study of Osteoporotic Fractures. The subjects wore actigraphs, which measured sleep variables including total sleep time and hours awake after sleep onset during the night and daytime napping behavior. Neuromuscular performance measurements included gait speed, chair stands and grip strength, while functional limitations were assessed as self-reported difficulty with one or more of six instrumental activities of daily living.

According to the results, women who slept less than six hours per night walked 3.5 percent slower than those who slept six to 6.8 hours. Those who slept greater than or equal to seven-and-a-half hours took 4.1 percent longer to complete five chair stands than those who slept 6.8 to seven-and-a-half hours. With higher wake after sleep onset, gait speed was 9.1 percent slower. It took 7.6 percent longer to complete five chair stands, and odds of functional limitation were 1.8 percent higher. Women with one to 1.8 hours of daytime sleep had higher odds of a functional limitation than those with less than 0.5 hours.

“The results suggest that those women with more disrupted sleep as characterized by shorter sleep duration and longer wake time during the night, and those with greater daytime sleepiness as characterized by napping behavior, were at greater risk for poorer neuromuscular performance and poorer daytime function,” said Dr. Goldman. “Women with objective measures of poor sleep had more trouble performing independent activities of daily living. These results held up even after adjustment for multiple confounders and other explanatory variables.”

Some of the more common sleep disorders in older adults include:

- Insomnia affects almost half of adults 60 and older.
- Obstructive sleep apnea (OSA) can elevate the risk for high blood pressure, stroke, heart disease, and cognitive problems. Snoring, a symptom of OSA, is a very common condition affecting nearly 40 percent of adults, and is more common among older people.
- Restless legs syndrome, where one experiences uncomfortable feelings in the legs, affects more than 20 percent of people 80 years and older.
- Periodic limb movement disorder, a condition that causes people to jerk and kick their legs every 20-40 seconds during sleep, is evident in almost 40 percent of older adults.

Not sleeping well can lead to a number of problems. Older adults who have poor nighttime sleep are more likely to have a depressed mood, attention and memory problems, excessive daytime sleepiness, more nighttime falls and use more over-the-counter or prescription sleep aids. In addition, recent studies associate lack of sleep with serious health problems such as an increased risk of obesity, cardiovascular disease and diabetes.

While most people require seven to eight hours of sleep a night to perform optimally the next day, older adults might find this harder to obtain. Older adults must be more aware of their sleep and maintain good sleep hygiene by following these tips:

- Establishing a routine sleep schedule.
- Avoiding utilizing bed for activities other than sleep or intimacy.
- Avoiding substances that disturb your sleep, like alcohol or caffeine.
- Not napping during the day. If you must snooze, limit the time to less than one hour and no later than 3 p.m.
- Stick to rituals that help you relax each night before bed. This can include such things as a warm bath, a light snack or a few minutes of reading.
- Don't take your worries to bed. Bedtime is a time to relax, not to hash out the stresses of the day.
- If you can't fall asleep, leave your bedroom and engage in a quiet activity. Return to bed only when you are tired.
- Keep your bedroom dark, quiet and a little cool.

Although sleep patterns change as people age, disturbed sleep and waking up tired every day are not part of normal aging. Those who have trouble sleeping are advised to see a sleep specialist at a facility accredited by the AASM.

Source: American Academy of Sleep Medicine

Citation: Disturbed sleep linked to poorer daytime function in older women (2007, October 1)
retrieved 23 April 2024 from

<https://medicalxpress.com/news/2007-10-disturbed-linked-poorer-daytime-function.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.