



Getting a good night's sleep:
new research on how sleep may impact
your patients' risk for dementia

By Brookdale Senior Living

You probably field a lot of questions from patients about sleep.

It's our modern-day holy grail — the quest for a good night's sleep — and for good reason. Research shows that good [sleep is as essential for good health](#) as diet and exercise. A restful night can improve mood, memory, brain performance and overall health. But, on the flip side, not getting enough quality sleep may raise the risk for heart disease, stroke and obesity. Now Alzheimer's and dementia researchers are asking the question: does getting too little quality sleep increase the chances of getting dementia later in life?

One of the challenges in determining the role sleep plays in the risk for and progression of dementia is figuring out if insufficient sleep is a symptom of the brain changes that underlie dementia or if lack of quality sleep can actually help cause those **changes in the brain**.

Lack of quality sleep may increase the risk of developing dementia

A [new study](#) reports some of the most convincing findings yet that suggests that people who don't get enough sleep in their 50s and 60s may be more likely to develop dementia when they are older. The study followed 8,000 people in Britain for nearly 25 years, beginning at age 50. Nearly 30 years later, researchers found that those who consistently reported **sleeping fewer than six hours** on an average weeknight were about **30 percent more likely** to be diagnosed with dementia than people who regularly got seven hours of sleep.

There are several theories about why too little sleep may increase the risk for dementia, especially Alzheimer's. Some [studies](#) have found that cerebrospinal fluid levels of amyloid, a protein that clumps into plaques in those living with Alzheimer's, rise when someone is sleep-deprived.

Other [studies](#) of amyloid and another Alzheimer's protein, tau, suggest that sleep is important for clearing proteins from the brain or limiting the production of these proteins. And still, other [research](#) suggests that being awake for more hours and being sleep-deprived may lead to an increase in other dementia risk factors due to fatigue, such as when a lack of regular exercise or poor diet leads to obesity, hypertension and diabetes.

Sleep-wake disturbances as a symptom of dementia

Reduced nighttime sleep, sleep fragmentation, nocturnal wandering, sundowning and excessive daytime sleepiness are [common and often debilitating features](#) of dementia, including Alzheimer's disease.

In fact, [sleep-wake disturbances](#) may be one of the earliest symptoms in preclinical Alzheimer's and often precedes cognitive symptoms. Evidence from animal and human studies suggests that Alzheimer's pathology itself, including the presence of amyloid plaques and tau tangles, disrupts the sleep-wake cycle. Prolonged wakefulness may also increase levels of soluble amyloid- β in the brain, and in turn, exacerbate the disease pathology further.

It turns out [deep sleep](#) may be neuroprotective. Growing evidence suggests that during deep sleep, the brain appears to [wash away waste products](#) that increase the risk for Alzheimer's disease, including the proteins that cause an accumulation of plaques and tangles.

[New research](#) also suggests that this stage of sleep — when dreams are rare, and the brain follows a slow, steady beat — can help reduce levels of beta-amyloid and tau, two markers of dementia, including Alzheimer's. Scientists are now looking for ways to induce deep sleep, and there's some [evidence](#) that rhythmic sounds may increase the slow waves needed for deep sleep. Treating sleep disorders like sleep apnea [may also increase slow waves](#) during sleep.

How Clare Bridge®, Brookdale's Alzheimer's and dementia care program, can help your patients sleep better

Sleep experts recommend several simple practices that can help with a better night's sleep including the following:

- Stick to a sleep schedule.
- Go to bed, and wake up, at the same time every day, even on the weekends.
- Get some exercise every day. But not close to bedtime.
- Avoid nicotine and caffeine. Both are stimulants that keep you awake.
- Avoid alcohol and large meals before bedtime. Both can prevent deep, restorative sleep.
- Limit electronics before bed.
- Create a good sleeping environment. Keep the temperature cool if possible. Get rid of sound and light distractions. Make it dark.



We encourage these practices within our senior living communities, but for residents living with dementia, we add another layer of support to promote quality sleep.

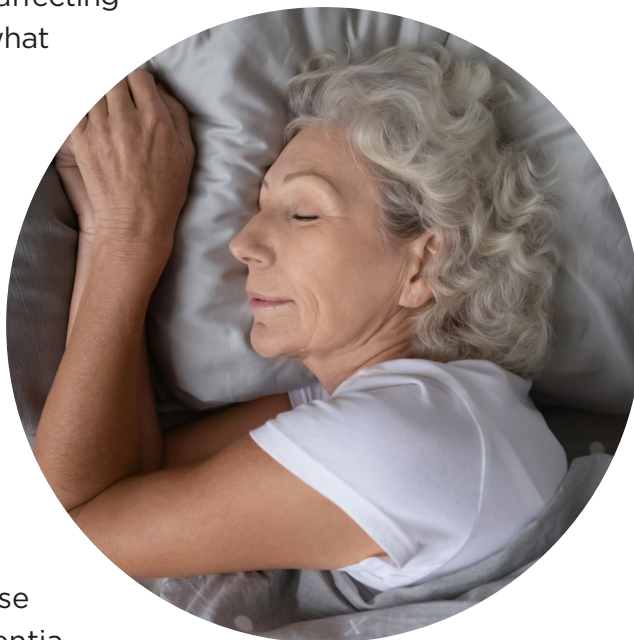
Something as simple as a trip to the bathroom in the middle of the night could create a sleep disturbance. To help our residents get back to sleep after waking to use the restroom, we use **amber spotlights above the toilet** in all memory care residents' bathrooms, just one of many intentional design features within our Brookdale Clare Bridge® communities. [Studies](#) have shown that, unlike white or blue light, amber-colored light has little impact on the circadian rhythms that regulate sleep-wake cycles. That's why we use amber lighting, including amber nightlights, to help our residents return to sleep faster. Residents with dementia may also have difficulty visualizing dimensions, so we've created **contrasting darker walls behind the toilets** to increase our residents' ability to visualize the toilet.

We also use **person-centered care approaches, including our seven-step process** to address behaviors resulting from Alzheimer's and dementia symptoms.

Our Brookdale Clare Bridge® leadership team works with our community associates to address individual residents' issues with sleep-wake disturbances. Our goal is to help minimize nighttime wandering and exit-seeking, an inability to return to sleep after toileting, excessive daytime sleeping and to reduce the use of hypnotics or sedatives.

A key question is whether the sleep-wake cycle is affecting a resident negatively. We need to be clear about what the true problem is. Is it a clinical issue related to contributing medical comorbidities or do we need to review medications to identify those that might disturb sleep? Or perhaps is it an unmet preference or historic habit?

We ask our residents and families about sleep history and habits, sleep difficulties over time, normal routines and rituals and preferences regarding bedding, room temperature and lighting, all of which contribute to good sleep hygiene. We also consider the possibility of untreated pain—another especially common cause of sleep-related issues for those living with dementia.



Care practices and tools to support sound sleep at our communities often include:

- Flexible bedtime and wake times that honor each resident's preferences. We don't wake all residents at 6 a.m., so those who prefer to stay up and sleep in late can choose when to start their day.
- Honoring our resident's historic bedtime routines
- Use of essential oils and aromatherapy to help support healthy sleep patterns
- Herbal tea at bedtime
- Music
- Body pillows in beds

If you have questions about how sleep impacts your patients living with dementia or how to help your patients establish healthier sleep practices, we can help. Reach out to a Brookdale Clare Bridge® community for more information.



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