

A close-up photograph of a woman with short, wavy blonde hair sleeping peacefully in a bed. Her eyes are closed, and her expression is serene. She is resting her head on a white, fluffy pillow. In the background, another person is partially visible, also appearing to be asleep. The lighting is soft and natural, creating a calm and restful atmosphere.

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

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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.

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 fuel 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% 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, late-day agitation and excessive daytime sleepiness are [common and often debilitating features](#) of dementia, including Alzheimer's disease.

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?



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, may help your patients sleep better

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

- 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 that lasts for hours. To help our residents get back to sleep after waking to use the restroom, we use **amber-colored nightlights or spotlights above the toilet** in all memory care residents' bathrooms, just one of many intentional design features within our 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 and promote a faster return to sleep. Residents with dementia may also have difficulty visualizing dimensions, so we've also created contrasting darker walls behind the toilets to increase our residents' ability to visualize the toilet at night.

We also use **person-centered care approaches, including our seven-step problem-solving process** to address behavioral expressions resulting from dementia symptoms.

Our 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 ultimately to reduce or eliminate 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? Some resident may simply be night owls or former nightshift workers.

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 older adults.





Person-centered practices and non-pharmacologic interventions to support sound sleep at our communities often include:

- Flexible bedtime and wake times that honor each resident's preferences. Night owls should continue to be able to be night owls, so we don't wake all residents at 6 a.m. for the sake of convenience.
- 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 to replace the loss of a longtime sleeping companion

As we are evolving our sleep promotion programming, we are exploring new bedding upgrades, mattresses, aromatherapy pillow sprays and the use of massage, and we have begun to pilot the use of circadian lighting systems to better regulate day/night orientation. Finally, we are making sleep health a more important focus of our Personal Service Assessments as we develop and evolve customized care plans for each resident

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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