Managing Sleep for Individuals With Dementia: A Guide for Caregivers

Sleep disturbances are often associated with behavioral and psychological symptoms of dementia, which commonly occur in people experiencing all forms of dementia. Changes in multiple brain structures disrupt the sleep-wake cycle, affecting the individual’s ability to initiate and maintain sleep.

Poor sleep and dementia: what are the consequences?
- Sleep disturbances affect the quality of life of both the individual and their caregivers.
- Poor sleep among individuals with dementia may result in increased daytime irritability, decreased attention and motivation, and decreased cognitive performance.
- These problems can lead to excessive daytime napping, falls, and reduced participation in meaningful activities.
- There is evidence that sleep disturbances at night increase the rate of cognitive decline, disease, and even death.\(^1\)
- Disruptive sleep is associated with increased caregiver burden and stress, which can lead to increased risk for institutional placement.

Evidence-based strategies for caregivers

Sleep hygiene

Sleep hygiene is a general term describing sleep habits that affect the quality of sleep.

What you can do:
- Maintain a consistent schedule or bedtime routine. A bedtime routine signals that it is time to settle down and fall asleep. It can be as simple as dimming the lights, brushing teeth, and engaging in a relaxation technique. Bedtime routines have been shown to support the body’s circadian rhythm, which is the natural process that controls the sleep—wake cycle.\(^1\)
- Avoid or limit napping to 1 nap a day (<30 min) because napping reduces the body’s internal drive to sleep.\(^2\)
- Limit caffeine intake; this includes tea, coffee, soft drinks, and chocolate.\(^3\)
- Reduce smoking, nicotine, and alcohol intake.
- Provide comfortable clothing and consider removing tags to address skin sensitivity or irritation.
- Avoid heavy meals around bedtime, which can contribute to nighttime awakening. If the individual is hungry before bedtime, provide a light snack.

How can I recognize sleep disturbances?
Sleep disturbances may appear as follows:
- Frequent nighttime awakenings
- Frequent movement during sleep
- Decreased rapid eye movement sleep
- Increased daytime sleep

Disclosures: none.
Reduce liquid intake in the evening because the individual may awaken during the night with the need to urinate.

Reduce the use of technology, such as computers, television, and cell phone devices, before bedtime.

**Light therapy**

Light serves as a cue for wakefulness and regulates the body’s melatonin levels. Melatonin is a hormone that is involved in the sleep-wake cycle. The timing and amount of light exposure influence the sleep-wake cycle in individuals with dementia.

**What you can do:**

- Increase exposure to sunlight during the morning, day, or early evening by going outside with the individual or by opening window coverings. This may decrease daytime sleepiness and promote better nighttime sleep.
- Increase exposure to bright light during the day by using a lightbox or overhead lighting. Talk to the individual’s physician for specific recommendations before using a lightbox. When using a lightbox, evidence suggests that you should aim for an exposure of 1000 lux (a measure of the amount of light you receive) or more for at least 2 hours during the day.

**Environmental modifications**

Changing aspects of the environment can help to promote better sleep.

**What you can do:**

- Maintain a comfortable sleep environment by adjusting the temperature and ventilation in the room. In general, a cooler temperature will help individuals fall asleep and stay asleep.
- Use a white noise machine, which provides ambient noise that can help block out disruptive sounds and help individuals stay asleep. Multiple free mobile applications exist that provide white or ambient noise, such as nature sounds.
- Install window coverings, such as opaque shades or curtains, which can help to reduce light from streetlamps and early morning sunlight.
- Reduce disruptive noise by turning off devices such as televisions or radios.
- Adjust the ambient lighting according to the time of day. For example, increase ambient light during the day and reduce it at night.
- Cover devices that may emit light (such as DVD players) with opaque tape.
- Change the sleep surface by changing the mattress type or pillow type. Moderately firm mattresses have been associated with improved sleep in older populations.
- If a nightlight is needed, consider a red light. Blue and white light have been associated with depressed mood and increased difficulty falling and staying asleep.

**Redirecting techniques**

- Use a calm tone when speaking.
- Provide assurances and focus on what matters.
- Avoid explanations or reasoning.
- Give the individual a simple and familiar task.
- Provide a light snack.
- Use a gentle touch to help calm the individual.
- Initiate the established bedtime routine.

**Promoting relaxation**

Promoting relaxation can help to reduce stress and anxiety, which can help the individual fall asleep.

**What you can do:**

- Guide the individual through progressive muscle relaxation, which involves tensing and relaxing different groups of muscles in the body.
- Provide a gentle back massage using slow strokes as a part of the bedtime routine.
Help the individual engage in stress management by discussing stressful events and worries earlier in the evening before beginning the bedtime routine.

Aromatherapy has been shown to help promote relaxation. The most common fragrance used is lavender. Consider the individual's preferences and keep the fragrance light. Too strong of a scent may have an alerting effect.

**Controlling stimulus**

This refers to the strategy of reducing sleep-incompatible activities, because certain activities serve as cues for the individual to stay awake.

What you can do:

- Begin the individual's bedtime routine when they display signs of being sleepy.
- If possible, reserve the bed and bedroom only for sleep and sexual activity.
- If the individual must be in the bedroom, encourage them to sit in a chair. This helps prevent wakeful activities from being associated with their bed. For example, try to avoid reading or watching television in bed.
- Transition the individual out of bed and if possible, out of the bedroom when they cannot sleep or are unable to return to sleep after lying down for approximately 15-20 minutes. If the individual cannot leave the bedroom, go to a different area of the room or sit on a different surface, such as a couch or a chair.
- Maintain a regular wake time, even if the individual's sleep duration is inconsistent.

**Physical activity and exercise**

Daily physical and social activities have been shown to promote and increase sleep and improve cognitive functioning. Exercise may help to correct the impaired circadian rhythm.

What you can do:

- Keep a regular exercise routine by choosing a specific time for exercise during the day.
- Increase daytime activity and participation in meaningful activities. Encourage participation in hobbies or leisure activities by having materials readily available.
- Increase the amount of time spent outdoors, such as by gardening or taking a walk outside.
- Increase daily social activity. This can be done with in-person conversations, phone calls, video calls, simple games, community activities, and so on.

**Other considerations:**

- Individuals with dementia may experience delirium, which is a disturbance in mental abilities resulting in confusion, uncontrolled emotions, and reduced awareness of surroundings. These factors can negatively affect the individual's ability to sleep.
- You can address delirium by using reorientation techniques such as maintaining a regular schedule and using clocks and calendars.
- Keeping the lights on during the day and off during the night can also help reduce anxiety and maintain sleep-wake cycles.
- Side effects of many medications are associated with disrupted sleep and may affect an individual's ability to fall asleep, remain asleep, or wake up.
- Discuss these medications and concerns with the individual's physician before making any changes.
- If sleep disturbances continue, talk to the individual's physician to rule out underlying conditions, such as sleep apnea or restless leg syndrome. You may also consider seeking an additional evaluation by a health care practitioner specializing in sleep hygiene among individuals with dementia, such as an occupational therapist.
- Avoid arguments or activities that may increase agitation and confusion right before bedtime. Instead, use redirecting techniques that can help the individual shift their attention away from whatever is bothering them.

**Reactive strategies to address nighttime waking**

Despite your best efforts, the individual with dementia may still wake up during the night. Reactive strategies are ways to help the individual get back to sleep after waking.
To help the individual get back to sleep:

- Keep the lights dimmed while making sure that all needs are met.
- Use redirecting techniques to guide the individual back to bed and/or sleep.
- Restart the bedtime routine, for example, the individual could brush their teeth again.
- Keep conversations to a minimum while using a calm, soothing tone.
- If the individual cannot return to sleep within approximately 15-20 minutes, get the individual out of bed, and restart the bedtime routine when the individual shows signs of being sleepy.

**Authorship**

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**References**