Sleep and Aging with a Disability

Many people with physical disabilities suffer from sleep disturbances, and sleep tends to become more disrupted as we get older.

Not sleeping well can negatively impact your sense of well-being and make other conditions worse including:

- Depression and anxiety
- Pain
- Fatigue
- Irritability

Sleep difficulties can also lead to poor work performance and traffic or workplace accidents.

How common are sleep problems in older adults with disabilities?

Research shows:

- 40% of people with disabilities report long-term difficulties with sleep.
- Sleep problems are almost 3 times more common in people with chronic conditions such as traumatic brain injury, spinal cord injury, multiple sclerosis, post-traumatic stress disorder and Parkinson's Disease than in the general population.

Types of sleep problems

Sleep is a complex process that involves many parts of the brain. For this reason, and depending on a person's specific disability as well as their general sleep habits, many different kinds of sleep disturbances can occur in persons aging with a disability.

Common sleep disorders include:

- Insomnia: Difficulty with falling asleep or staying asleep; or sleep that does not make you feel rested. Insomnia makes it harder to learn new things.
- Excessive Daytime Sleepiness: Extreme drowsiness.
- Delayed Sleep Phase Syndrome: Mixed-up sleep patterns.
- Narcolepsy: Falling asleep suddenly and uncontrollably during the day.

Common sleep syndromes include:

- Restless Leg Syndrome (RLS): Urge to move the legs because they feel uncomfortable, especially at night or when lying down. RLS is not due to spasticity.
- Bruxism: Grinding or clenching teeth.

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- Sleep Apnea: Brief pauses in breathing during sleep, resulting in reduced oxygen flow to the brain and causing loud snoring and frequent awakening.
- Periodic limb movement disorder (PLMD): Involuntary movement of legs and arms during sleep.
- Sleepwalking: Walking or performing other activities while sleeping and not being aware of it.
- Post-Traumatic Hypersomnia: Sleeping many hours more than normal.

What causes sleep problems?

Sleep problems can be caused by many different factors, including physical and chemical changes associated with disabilities and the aging process.

Physical and chemical changes associated with injury and aging: The "internal clock" in the brain controls when people sleep and wake every day. For individuals who have a disability associated with a brain injury or ongoing nervous system lesions like multiple sclerosis, their brain may be less able to tell the body to fall asleep or wake up. Injuries to the brain can also affect the chemicals in our body that help us to sleep, and brain mechanisms for starting and stopping sleep.

Changes in breathing control: Sometimes the brain's ability to control breathing during sleep becomes altered after an injury, or because of weight gain associated with inactivity, resulting in sleep apnea.

Daytime sleeping (napping) and physical inactivity: Napping during the day is likely to disturb sleep at night. Inactivity or lack of exercise can also worsen sleep.

Pain: Many people with physical disabilities also experience chronic pain. This discomfort may disturb sleep. Medications taken to relieve pain may also affect sleep.

Depression and anxiety: Depression is more common in persons with disabilities than in the general population. Also, we know that signs of distress and depression tend to increase as people with disabilities age from young adulthood (18 to 44 years old) into middle age (45 to 64 years old), although we also often see improvement in depression as people age from middle age into older ages (65 years and older). Sleep problems such as difficulty falling asleep and early morning waking are common symptoms of depression, anxiety, and other mood problems.

Alcohol: While alcohol may help bring on sleep, drinking alcohol before bedtime is likely to interfere with normal sleep rather than improve it. As a result, people who drink alcohol to help them get to sleep are at greater risk to wake up in the middle of the night, and to not feel rested in the morning.

Caffeine and nicotine: Nicotine from tobacco may cause sleep disturbances and is often overlooked. Caffeine can disturb sleep when consumed in the afternoon or evening. Many soft drinks contain excessive amounts of caffeine.

Medications: A number of medications taken to treat other conditions, such as pain or anxiety, can also alter a person's ability to get to sleep or stay asleep. Other medications can make people sleepy during the day and unable to participate in activities.

If you have concerns about how your medication is affecting your sleep, consult your health care provider to discuss alternatives.

- Prescription drugs for treating asthma and depression may cause insomnia.
- Some prescribed stimulants that are meant to treat daytime sleepiness can cause insomnia if taken too close to bedtime. This can often be avoided by adjusting the timing of the medication
- Most over-the-counter sleep aid medications contain an antihistamine (commonly diphenhydramine) and are not recommended for people with brain-related disabilities (e.g., traumatic brain injury, multiple sclerosis) because they may cause disturbances in memory and new learning.
- Many prescription "sleep medications" are recommended to be used only for the short term (about two weeks at most) to help someone sleep during a stressful time, such as while in the hospital. Sleep medications are not approved for use by the FDA for long-term management of sleep because they can actually worsen sleep problems over time.

How can sleep medications cause long-term sleep problems?

Although sleep medications can help you to get to sleep at night, they disrupt the sleeping cycle and interfere with the body's ability to achieve deep and restful sleep.

Many sleep medications are also addictive and your body builds a tolerance to them. This is especially true of the benzodiazapines, such as Xanax©, Librium©, Valium© and Ativan©.

If you are taking a strong sedative for sleep, you should talk to your health care provider about tapering it. Getting off these drugs must be done gradually and with medical supervision. Stopping abruptly can be very dangerous.

What can be done to improve sleep?

Changes in behavior and environment are the first step to treating sleep difficulties. If you live with others, you may want to discuss ways that they can help you improve your sleep.

Daytime Suggestions

- Set an alarm to wake up at about the same time every day.
- Include meaningful activities in your daily schedule.
- Get off the couch and limit TV watching.
- Exercise every day. People with disabilities who exercise regularly report fewer sleep problems. This effect may be due, at least in part, to the known benefits of regular exercise

on reducing depression and anxiety. See the factsheet on Exercise for Older Adults with a Disability to learn more.

- Get outdoors for some sunlight during the daytime. If you live in an area with less sun in the wintertime, consider using light box therapy.
- Limit napping to no more than 20 minutes during the day.

Nighttime Suggestions

- Go to bed at about the same time every night.
- Follow a bedtime routine. For example, put out your clothes for morning, brush your teeth and then read or listen to relaxing music for 10 minutes before turning out the light.
- Avoid caffeine, nicotine, alcohol and sugar for at least five hours before bedtime.
- Avoid eating prior to sleep to allow time to digest, but also do not go to bed hungry, as this can also wake you from sleep.
- Do not exercise within two hours of bedtime but stretching, meditation, or a warm bath before bed may help with sleep.
- Do not eat or watch TV while in bed.
- Keep stress out of the bedroom. For example, do not work or pay bills there.
- Create a restful atmosphere in the bedroom, protected from distractions, noise, extreme temperatures and light.
- If you go to bed and don't fall asleep in 20 minutes, get out of bed and do something relaxing or boring until you feel sleepy.

Talk to your health care provider

If your sleep problems persist, talk to your health care provider to explore safe and effective solutions. Evaluation of sleep problems should include a thorough history of such problems, medication review, an assessment of your bedtime routines, and a comprehensive medical evaluation.

Before recommending any action, your health care provider will explore with you a variety of possible causes for your sleep problems, including pain or depression. If necessary, he or she may recommend a sleep test (also known as a polysomnographic evaluation or sleep lab). Based on your symptoms, medical history and specific needs, your health care provider will be able to make a personalized treatment plan to help you achieve restful sleep.

Treatment options

Non-pharmacological therapies

- If mood or emotional issues such as anxiety or depression are causing sleep difficulties, counseling (psychotherapy) may be an appropriate treatment.

- Sleep restriction may improve sleeping patterns by restricting the number of hours spent in bed to the actual number of hours slept.
- For those with anxiety, relaxation therapy and meditation exercises can help create a restful environment both in your bedroom and in your body and mind.
- Use of special bright lights (phototherapy) has been shown in studies to help promote sleep. When exposed to these lights at strategic times in the day, you may be able to sleep more at night. Consult with your doctor first, as these bright lights can sometimes cause eyestrain and headaches.

Medications

Ask your health care provider about medications that can help you sleep through the night or keep you awake during the day.

Special care is necessary when choosing a medication in order to avoid daytime sedation or worsening of cognitive and behavior problems.

Natural remedies

Some consumers have found herbal teas, melatonin and valerian useful for sleep problems, and these are sold in health food and drug stores with no prescription needed. However, these remedies have multiple drug interactions, and you should tell your health care provider if you are using them.

Recommended readings and resources

Brain Basics: Understanding Sleep – NINDS/NIH. http://www.ninds.nih.gov/disorders/brain_basics/understanding_sleep.htm

University of Maryland Sleep Hygiene: Helpful Hints to Help You Sleep. http://www.umm.edu/sleep/sleep_hyg.htm

Disclaimer

This information is not meant to replace the advice from a medical professional. You should consult your health care provider regarding specific medical concerns or treatment.

Authorship

Content is based on research evidence and/or professional consensus of faculty at the University of Washington Aging and Physical Disability Rehabilitation Research and Training Center (AGERRTC). This factsheet was based in large part on a similar fact sheet entitled, Sleep and TBI developed by Brian Greenwald, MD and Kathleen Bell, MD in collaboration with the Model System Knowledge Translation Center, and from two columns about sleep and aging with disabilities developed by Kara McMullen in collaboration with the AGERRTC investigators. This factsheet may be reproduced and distributed freely with the following attribution: Jensen, MP and Terrill, A. (2012). Sleep and Aging with Disabilities [Factsheet]. Aging and Physical Disability Rehabilitation Research and Training Center. NIDRR/U.S. D.O.E. grant #H133B080024. University of Washington. http://agerrtc.washington.edu/

This factsheet was developed under a grant from the Department of Education, NIDRR grant number H133B080024. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.