

The Healing Power of Sleep

Sleep... what's the big deal?

While we often find ourselves thinking about our health in terms of eating healthier foods, exercising, or managing stress, we may overlook the foundation for a healthy life: quality, restful sleep. The way we sleep changes between infancy and old age. Many of these changes are a natural part of the aging process, and one change, experienced by many as they age, is that they get less sleep. Though common among Elders, a reduction in the amount or quality of sleep can have profound health effects. Not getting enough sleep can increase the likelihood of:

- diabetes;
- obesity;
- and heart disease.

In laboratory studies, lack of some or all sleep cycles was even shown to reduce life expectancy in test animals from 2-3 years to 3-5 weeks! (3) Clearly then, it is important for American Indian/Alaska Native (AI/AN) communities to understand the importance and benefits of getting quality sleep, the risks of not getting enough sleep, and what to do about it. There are simple steps that can help an Elder – or anyone – sleep better and

contribute to better overall health. Knowing the signs of inadequate sleep is also important, because these signs may point to a more serious sleep issue that demands the attention of a doctor.



Sleep changes as we age

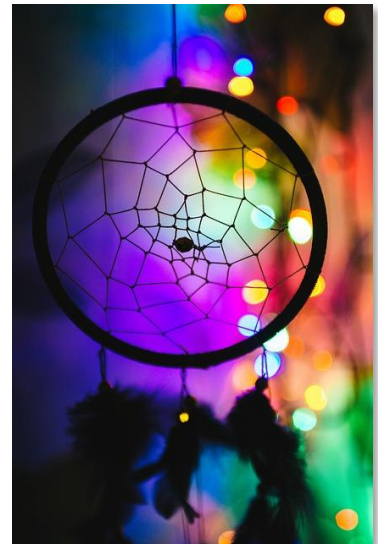
An Elder's sleep changes as he or she ages, but the sleep needs of older adults are about the same as those of younger adults. (7) Adults require 7-8 hours of sleep per night. (3) When compared to younger people, however, an Elder may sleep fewer hours each night. An Elder may also experience more disturbances or awakenings from sleep during the night than a younger person. Older adults frequently spend less time each night in "deep sleep" and the deep sleep they experience may not be as deep as that of a younger person. Some Elders may

also experience a change in their circadian rhythm – the way the body responds to the natural 24-hour cycle of the Earth. This can result in waking up earlier in the morning or going to sleep later at night. (5, 7)

Many of our Elders experience some form of difficulty with sleep. One National Institute on Aging study concluded that 57% of Americans aged 65 or older experienced frequent disruption of sleep, where just 12% reported no sleep disruptions. Of those who did report a sleep complaint:

- 43% said they had trouble falling or staying asleep;
- 30% said they woke up during the night;
- 25% said they napped during the day;
- 19% said they woke up too early in the morning;
- 13% said they woke up unrested. (2)

There are a number of different reasons why Elders experience sleep differently than younger adults. Those reasons are both natural to the aging process and can also result from other factors.



What effects an Elder's sleep?

Diagnosed medical conditions, such as cardiovascular (heart) diseases, gastrointestinal (digestive system) diseases, and pulmonary (lung) diseases can make it more difficult for an Elder to sleep well. Neurological (nervous system) diseases and psychiatric conditions (such as dementia and depression) also may contribute to a reduced quality of sleep for an Elder. Those with a diagnosed sleep disorder, such as sleep apnea or restless legs syndrome, may struggle to get restful sleep as well. (5)

In addition to medical conditions, a number of outside factors can contribute to a low standard of sleep, including:

- Prescription medications;
- Over the counter (OTC) medications;
- Herbal remedies;
- Nicotine (from smoking cigarettes, tobacco products or products that help quit smoking/tobacco);
- Caffeine (from coffee, soda, tea, and other sources);

- Alcohol;
- Poor sleep habits (5)

While some change in sleep is to be expected as a natural part of aging, severe disruptions in sleep are not normal and can have consequences for the health and wellbeing of an Elder.

Sleep impacts health in surprising ways

Recent research has indicated that not getting enough sleep is linked to and can even be considered a risk factor for developing certain diseases. (6) In a study that looked at the links between type 2 diabetes and sleep, researchers studied young, healthy people on a “restricted sleep schedule” of just four



hours in bed per night for six days. This restricted sleep schedule resulted in increased levels of blood sugar after the test subjects ate breakfast compared to their numbers after sleeping normally. Blood sugar reduced 40% more slowly and their natural insulin response to the blood sugar was 30% slower during the restricted sleep schedule. Increased level of insulin in the blood encourages the body to store fat, which promotes weight gain. (10, 11)

Researchers also looked at the impact of a restricted sleep schedule on appetite. They found that the hormones which control our appetite are greatly influenced by sleep. While on the restricted sleep schedule, subjects' hormones indicated that they were starving, despite having plenty of food. This means that not getting enough sleep could increase appetite and hunger, particularly for foods high in carbohydrates (sugars). The researchers concluded that not getting enough sleep “could be a risk factor for major chronic diseases, including obesity and diabetes.” (10)

Insufficient sleep for even a single night has been shown to increase blood pressure the following day in people with existing high blood pressure. (11) In one study, researchers found that people who did not sleep enough or slept too much also had more arterial calcium than those sleeping a healthy amount. This is a risk factor for heart disease. Research has also shown that not getting

enough sleep can be particularly harmful to women Elders. In a study of 700 Americans over five years, researchers found that women who did not get enough sleep showed more inflammation (a risk factor for heart disease and stroke) than men who had the same amount of sleep. (12, 13)

Clearly, sleep is important for maintaining the health of Elders and all in our communities. Whether or not a person has existing health issues, not getting enough sleep may place one at risk for developing disease. Learning to identify the signs of poor sleep is the first step toward wellbeing.

Signs of poor sleep

Someone who is not sleeping well may show a number of different symptoms. Any of the following can be a sign that someone is experiencing a poor standard of sleep:

- trouble falling asleep;
- trouble telling if it's day or night;
- waking up early in the morning;
- waking up often during the night; (14)
- feeling sleepy during daylight hours;
- trouble remembering or concentrating;
- feeling annoyed, confused, or depressed. (7)

Signs of poor sleep can also be indicators of more serious health problems and if there is any doubt about a symptom, consult a doctor. Taking the time to identify the signs of poor sleep is the first step toward improving wellbeing in our communities and homes. Better sleep has a number of benefits that impact our bodies and minds.

Tips for better sleep

Experts have many recommendations and tips to help attain restful sleep. Consider:

- Going to sleep and getting out of bed in the morning at the same time each day.
 - An Elder who stays on a regular daily sleep schedule helps supports the body's natural circadian rhythm and can have a higher quality of sleep.



- Doing the same things every night to help the mind and body get ready for sleep.
 - Dimming the lights in the house, and doing activities like reading, listening to music, or bathing can help an Elder relax and become ready for sleep.
 - While certain activities like watching TV or using the internet might also be relaxing, research suggests that these activities can interfere with sleep.
- Getting out of bed after 15 to 20 minutes if having difficulty falling asleep at night.
 - Reading a book or listening to music until feeling tired can actually aid in helping one fall asleep.
- Reducing discomfort that can make falling or staying asleep difficult.
 - Avoid going to bed too hungry or too full.
 - Drink less liquid before bed to help prevent late-night bathroom visits and disruptions to sleep.
 - Avoid caffeine and nicotine for 3-4 hours before bedtime, as both are powerful stimulants that can delay sleep.
 - Alcohol should also be avoided, as the sedative effect in alcohol that can help one fall asleep wears off and can contribute to disruptions of sleep later in the night.
- Taking fewer, shorter naps.
 - Naps should not exceed 30 minutes and should be taken during the afternoon hours.
 - Note that taking naps may make it more difficult to fall asleep at night.
- Exercising during the day, every day.
 - Exercise helps reinforce circadian rhythms, which can promote better sleep.
 - Daily exercise has many other health benefits important for the physical and mental wellbeing of Elders.
- Creating a comfortable space to sleep.
 - The bedroom itself can contribute to making it easier to get quality, restful sleep.
 - Use a fan to create background noise that can help block out sounds from traffic, dogs, or others inside the home.
 - Use “blackout” shades or curtains to block outside light.
 - Choose a bed and bedding that are comfortable.

- Set the temperature to a comfortable level. Some find that a cooler room, between 60-67 degrees Fahrenheit, is better for sleep.
- Seeking the help of a doctor if sleep is not restful.
 - Because sleep is crucial for wellbeing, any concern related to sleep should be communicated to a doctor. (1, 8, 9, 14)

Learn more

Sleep is crucial to the overall health of all people in the AI/AN community. Though research is ongoing, it is clear that our Elders may not sleep as deeply as they once did, may not sleep through the night, and may not feel rested in the morning. Many different factors, such as existing medical conditions, medication, and personal choices have an effect on the sleep of our Elders. Anyone who does not sleep well may be at increased risk for diabetes, obesity, heart disease, or other diseases. There are simple steps anyone can take to help improve their sleep and feel better.

One of NICOA's objectives is to support the wellbeing of the Elders in AI/AN communities and help our Elders age well. To learn more about NICOA and our work in support of AI/AN Elders and communities, please visit nicoa.org.

To learn more about the effects of sleep on health and how to sleep better, visit the National Sleep Foundation's easy-to-navigate sleep.org for a variety of sleep-related articles and interactive materials. To learn more about the content of this article, please refer to the sources below.

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