

Sleep Disorders, Poor Health and the Rest of the Story

By Bonnie Ward | May 06, 2015



If your lack of sleep is keeping you awake, there's good reason to be concerned.

The list of maladies associated with too little slumber goes far beyond feeling cranky or having trouble concentrating. People who suffer from chronic sleep deprivation face an increased risk of high blood pressure, heart attack, stroke, depression, obesity, and diabetes, according to research at University of California, San Diego School of Medicine and elsewhere.

And if that's not bad enough, inadequate sleep also affects memory, learning, judgment, creativity, mood and numerous other mental functions and [has been implicated](#) as a significant factor in traffic accidents. The National Highway Traffic Safety Administration conservatively estimates that 100,000 police-reported crashes are the direct result of driver fatigue each year.

[Atul Malhotra, MD](#), chief of the division of pulmonary and critical care medicine in the UC San Diego School Health System, is well aware of the problems associated with too little sleep. He has been treating and researching sleep disorders for nearly two decades and is leading UC San Diego's newly opened Sleep Medicine Center. Lisa Shives, MD, is the clinical director of this center.

"Sleep is an essential function of life," said Malhotra. "It affects us both mentally and physically. "Without adequate amounts of sleep, our brain dysfunctions and our physical performance deteriorates."

The causes of sleep loss are multi-faceted, said Malhotra, but generally fall into two major,

somewhat overlapping categories: lifestyle/occupational (shift work, prolonged working hours, irregular sleep schedules) and sleep disorders, which include 84 different varieties affecting an estimated 50 to 70 million Americans. The most common types are [insomnia](#), a hard time falling or staying asleep; [sleep apnea](#), breathing difficulties that interrupt sleep; [restless legs syndrome](#), tingling, unpleasant sensations and movement in the legs that disrupts sleep; and narcolepsy, poor control of sleep-wake cycles that results in bouts of extreme sleepiness that can strike at any time.



Malhotra is currently studying the link between chronic sleep problems and various illnesses, particularly cardiovascular disease. "Chronic sleep deprivation has been shown to increase adrenaline, a stress hormone, which may contribute to cardiovascular disease," he said. "There's also some evidence that sleep loss may cause inflammation, which plays an important role in heart disease." Obesity and sleep, meanwhile, have been linked through research

showing sleep restriction hijacks appetite-controlling hormones.

Despite its essential importance to our health, adequate sleep is often undervalued or considered to be a luxury. "Societal recognition of the seriousness of sleep problems is beginning to improve, but it still has a ways to go," said Malhotra. "When I started working in sleep medicine 17 years ago, it wasn't a field people took very seriously. We didn't learn about it in medical school."

In the last few years, he said, "there's been a lot more discussion in the lay press. More physicians have also become aware. However, there is still not a clear societal understanding that being sleep deprived is a major problem."

It's also widespread. "It's thought that about half the population will, at some point, have a sleep issue," said Malhotra.

At the [Sleep Medicine Center](#), part of the UC San Diego Health, Malhotra and a multi-disciplinary team of specialists treat the full range of sleep disorders. The center includes a state-of-the-art patient evaluation center for overnight sleep studies. At-home diagnostic testing is also available for individuals who prefer and can be monitored remotely.

Malhotra said the first step in treating a sleep disorder is trying to understand its cause, which can vary considerably from one individual to the next. “In sleep apnea, for instance, people can have the same set of symptoms, but with completely different causes. Jaw structure, dilatory airway muscle issues, obesity and control of breathing problems can all be factors in sleep apnea. The treatment plan must be specific to the individual. This is another example of personalized or precision medicine.”

One of the most common treatments for sleep apnea is the use of a [Continuous Positive Airway Pressure](#) (CPAP) machine that gently blows air down a patient’s throat to help keep their airway open while sleeping. For other disorders, a variety of treatments are available, said Malhotra.

The good news is that most people with sleep disorders can be helped. Malhotra has seen firsthand the difference it can make in people’s lives. He recalls one patient – a teenage girl suffering from narcolepsy. “Before she came to see me, she had not been properly diagnosed. She and her mother had no idea what was wrong with her. People thought she was crazy.”

He treated her for narcolepsy and her illness was successfully controlled.

“I later got a note from her mother thanking me for helping her daughter,” Malhotra recalled. “She said her daughter finally ‘got her sparkle back.’”

How Much Shut-Eye is Enough?

While sleep requirements may vary, experts say most healthy adults need 7-8 hours of sleep per night. School-aged children should get at least 10 hours a day and teens 9–10 hours a day, according to the National Institutes of Health.

Snooze News You Can Use

Here are a few tips that can help improve your chances of getting enough sleep if you have insomnia:

- → Limit or avoid alcohol
- → Limit or avoid caffeine
- → Restrict time in bed to sleeping (don’t watch TV there or use it as your office)
- → Use relaxation methods, such as deep breathing techniques
- → Wear earplugs
- → Eliminate unnecessary light
- → Establish a regular sleep schedule

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