Sleep Habits: More Important Than You Think
Chronic Sleep Deprivation May Harm Health
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WebMD Feature

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Not sleeping enough and not sleeping well is not OK. As a matter of fact, there is quite a price to pay. It may surprise you to learn that chronic sleep deprivation, for whatever reason, significantly affects your health, performance, safety, and pocketbook.

There are many causes of sleep deprivation. The stresses of daily life may intrude upon our ability to sleep well, or perhaps we trade sleep for more work or play. We may have medical or mental-health conditions that disrupt our sleep, and be well aware that we are sleep-deprived.

However, it is critically important to realize that sleep deprivation is very often due to unrecognized sleep disorders. After a typical night's sleep, you may not feel restored and refreshed and be sleepy during the day, but be totally unaware that you are sleep-deprived or have a sleep disorder. You might think, "It's just the stress of work or the kids," or you might have "always felt this way" and had no idea that you should feel differently. This lack of awareness compounds the consequences, because so many people remain undiagnosed for years.

That said, let's look at the consequences of sleep deprivation.

In the short term:

- **Decreased Performance and Alertness**: Sleep deprivation induces significant reductions in performance and alertness. Reducing your nighttime sleep by as little as one and a half hours for just one night could result in a reduction of daytime alertness by as much as 32%.
- **Memory and Cognitive Impairment**: Decreased alertness and excessive daytime sleepiness impair your memory and your cognitive ability -- your ability to think and process information.
- **Stress Relationships**: Disruption of a bed partner's sleep due to a sleep disorder may cause significant problems for the relationship (for example, separate bedrooms, conflicts, moodiness, etc.).
- **Poor Quality of Life**: You might, for example, be unable to participate in certain activities that require sustained attention, like going to the movies, seeing your child in a school play, or watching a favorite TV show.
- **Occupational Injury**: Excessive sleepiness also contributes to a greater than twofold higher risk of sustaining an occupational injury.
- **Automobile Injury**: The National Highway Traffic Safety Administration (NHTSA) estimates conservatively that each year drowsy driving is responsible for at least 100,000 automobile crashes, 71,000 injuries, and 1,550 fatalities.
The good news for many of the disorders that cause sleep deprivation is that after risk assessment, education, and treatment, memory and cognitive deficits improve and the number of injuries decreases.

In the long term, the clinical consequences of untreated sleep disorders are large indeed. They are associated with numerous, serious medical illnesses, including:

- High blood pressure
- Heart attack
- Heart failure
- Stroke
- Obesity
- Psychiatric problems, including depression and other mood disorders
- Attention Deficit Disorder (ADD)
- Mental impairment
- Fetal and childhood growth retardation
- Injury from accidents
- Disruption of bed partner's sleep quality
- Poor quality of life

Studies show an increased mortality risk for those reporting less than either six or seven hours per night. One study found that reduced sleep time is a greater mortality risk than smoking, high blood pressure, and heart disease. Sleep disturbance is also one of the leading predictors of institutionalization in the elderly, and severe insomnia triples the mortality risk in elderly men.

Remarkably, sleep loss may also be a contributing factor to obesity. John Winkelman, MD, PhD, medical director of the Sleep Health Center at Brigham and Women's Hospital and assistant professor of psychiatry at Harvard Medical School sums up this finding up nicely: "What most people do not realize is that better sleep habits may be instrumental to the success of any weight management plan." And Michael Thorpy, MD, director of the Sleep-Wake Disorders Center at Montefiore Medical Center in New York adds, "Any American making a resolution to lose weight ... should probably consider a parallel commitment for getting more sleep."

It is also important to realize the huge scope and prevalence of these disorders; more than 85 sleep disorders are recognized by the American Sleep Disorders Association, affecting more than 70 million Americans. Up to one-third of Americans have symptoms of insomnia; however, less than 10% of those are identified by primary-care doctors. Sleep-related breathing disorders represent a spectrum of abnormalities that range from simple snoring to sleep apnea (repeated episodes of cessation of breathing during sleep). As highly prevalent as they are, most cases remain undiagnosed and untreated.

- Chronic snoring, for example, is associated with an increased incidence of heart and brain-related diseases. It is present in about 45% of the U.S. population; up to half of those have sleep apnea.
- The prevalence of sleep apnea is on par with diabetes and asthma. More than 20 million Americans -- 24% of adult men and 9% of adult women -- are estimated to have some degree of obstructive sleep apnea. Only a fraction have been diagnosed and treated.
- Sleep apnea is a primary risk factor for high blood pressure; as many as 40% of those people are undiagnosed and untreated for high blood pressure. Effective treatment of sleep apnea in patients with high blood pressure leads to a substantial reduction in stroke risk.
- Patients with moderate to severe sleep apnea perform as poorly as drunk drivers and have up to a 15-fold increased risk of motor vehicle accidents.
With the wealth of information and treatment options available for sleep deprivation, much of the suffering, illness from the many related diseases, increase in accident rates, and effects on productivity, performance, concentration, and memory can be avoided. Increased awareness is the first step, for us individually and the health care community. Some researchers suggest that sleep deprivation should be recognized with the same seriousness that has been associated with the societal impact of alcohol.