

## **It's a Third of Your Life: Getting the Most out of a Night's Sleep**

As busy students, it may be tempting to give up sleep when trying to fit all of one's competing priorities into a twenty-four-hour day. In our society as a whole, this is a very common practice that continually becomes more problematic as businesses remain open later, and seemingly unlimited entertainment options are available around the clock. Over the past century, total sleep time in America has gone down by approximately one hour a night. It appears that actual sleep time may continue to decline until a clear marker of physiological need is identified. Currently, however, most professionals agree that humans need six to eight hours of sleep each night to function at their optimum capacity.

As future healthcare professionals, many of you will work long shifts and/or overnight schedules in a stressful environment. It may be difficult to "wind down" once all of the excitement is over and it is time to sleep. Re-playing the day's events, or ruminating, when trying to go to sleep is not uncommon while the sympathetic branch of your autonomic nervous system remains in overdrive. When unable to sleep for twenty or more minutes it is a good idea to get up and write down what you are thinking about, or take care of the task that you keep re-playing in your mind. But, be sure to avoid stimulating activities that will worsen your sleep-onset insomnia. Instead, participate in a passive activity until you become drowsy.

Regardless of one's particular circumstances, it is crucial that each of us set aside six to eight hours of protected sleep time each day to ensure we do not carry the burden of a sleep debt. A sleep debt is an accumulation of sleep need that can only be satisfied when "paid back" with additional sleep time. Those living with a chronic sleep debt have difficulty recalling existing memories as well as learning new information. They complain of increased musculoskeletal pain, and the body's ability to restore and repair itself is impaired.

Individuals who get less than an optimal amount of sleep, regardless of the cause, are referred to as being sleep deprived. Sleep deprivation reduces both cognitive and psychomotor abilities and reduces overall quality of life. In fact, short-term sleep deprivation has been shown to diminish psychomotor vigilance as much as alcohol intoxication. When it comes to learning new information, there is truth to the adage "just sleep on it". Although much about rapid eye movement (REM) sleep is still unknown, modern research has clearly linked REM sleep to the consolidation of new memories. Learners need both adequate sleep time and the right type of sleep to link newly learned information to what they already know. Inadequate sleep time will clearly affect this ability, but so will anything that disrupts, or fragments, an individual's sleep period.

The majority of patients coming to the sleep center for an initial evaluation arrive with the complaint of excessive daytime sleepiness (EDS). These individuals have difficulty remaining alert and/or awake in passive situations such as watching television, sitting at a stop light, and even while driving. They may also have the complaint of difficulty initiating and/or maintaining sleep consistent with insomnia. While primary insomnia is

a real, treatable, disorder, most individuals with related complaints actually have insomnia secondary to some other disorder. Insomnia can be secondary to obstructive sleep apnea, periodic limb movements in sleep, environmental noise, or anything else that fragments sleep. The complaint of EDS may also be the result of failing to protect adequate sleep time, or when adequate sleep time exists the problem may be due to poor sleep hygiene.

Sleep hygiene refers to practices that should be performed, and some that should be avoided, in the hours leading up to bedtime and throughout the sleep period. These practices should be followed by everyone to maximize the quality and benefit of sleep. When there is a complaint of EDS or insomnia, proper sleep hygiene must first be determined or a patient-specific plan established prior to further evaluation of the sleep complaint. In some cases, establishing proper sleep hygiene practices resolves the sleep-related issue. In others improved sleep hygiene along with the treatment of a primary sleep disorder will improve the individual's quality, and possibly his or her quantity, of life. The following list contains some of the most important sleep hygiene practices:

- Protect six to eight hours for sleep each 24-hour period.
- Avoid alcohol around bedtime, since it fragments sleep.
- Exercise regularly (especially late in the afternoon or early evening).
- Allow at least a one-hour period to wind down before bedtime.
- Maintain a regular sleep schedule, and especially a regular wake time.
- Keep the bedroom environment quiet, dark, and comfortable.
- Avoid stimulants (e.g. caffeine, nicotine) for several hours prior to bedtime.
- If no sleep after > 20 minutes get up and engage in passive activity until sleepy.
- Resolve concerns or write down thoughts when your mind is racing.
- Only use the bedroom for, and associate it with, sleep and sexual intercourse.
- Do not eat, work, use the computer, listen to the radio, plan, problem solve, or watch TV in the bed (or bedroom if possible).