Teens and Sleep Deprivation

According to Michael J. Breus, Ph.D., a Clinical Psychologist and both a Diplomate of the American Board of Sleep Medicine and a Fellow of The American Academy of Sleep Medicine, “Sleep deprivation is extremely detrimental at all stages of life but during the teen years the sleep deprivation effects on the brain and body development are significant.”

The National Institute of Health estimates that teenagers need at least nine hours of sleep per night and only nine percent of high school students are actually meeting these recommendations. Furthermore, 20 percent are getting by on less than five hours per night.

Late bedtimes, increased technology dependence and high stress levels, coupled with early school start times, lead to chronic sleep deprivation and related health risks. Dr. Breus goes on to say that teens are biologically predisposed to stay up later at night and sleep later in the morning. This makes a 9 or 10pm bedtime difficult.

Over time, the late-to-bed, early-to-rise sleep schedule can lead to a number of health risks. The following are some of the mental and physical health risks associated with sleep loss during the teen years.

Mental Health Issues

A study published in 2015 in the Journal of Youth and Adolescence, found that each hour of lost sleep is associated with a 38 percent increased risk of feeling sad. Teens who only sleep an average of six hours a night are more likely to suffer from depression.

Mahmood Siddique a sleep medicine specialist at the Robert Wood Johnson Medical School found that sleep deprivation and depression are connected in teens. He goes on to say, that instead of giving depressed teens medication, he would rather see them sleep more hours.

Issues With Learning and Behavior

Dr. Breus says that one in four teens are going to bed after 11:30pm on weeknights. He says that those students perform worse at school and have greater emotional distress. Younger teens who don’t get enough sleep “are more likely to be inattentive, impulsive, hyperactive and oppositional.” He goes also says that sleep deprivation makes teens more
emotional and they perform worse on cognitive tests and other testing.

The explanation for this is that sleep supports brain processes that are critical to learning, memory and emotion regulation. During sleep the brain reviews and consolidates information that is acquired during the day so that it is easier to retrieve.

Shashank Joshi, MD, associate professor of psychiatry and behavioral sciences at Stanford University who is involved with the Stanford Children’s Health Sleep Center says “Sleep, especially deep sleep, is like a balm for the brain. The better you sleep, the more clearly you can think while awake and it may enable you to seek help when a problem arises.”

Rafael Palayo, MD with the Stanford Sleep Disorders Clinic makes the point that most teen’s sleep is compressed and many need to wake up before they are mentally or physically ready to wake up. This disturbs their natural sleep rhythm and they miss out on the “dream-rich,” rapid-eye-movement stage of sleep, some of the deepest, most productive sleep time.” He goes on to say, “When teens wake up earlier, we’re not giving them a chance to dream.”

Substance Use and Abuse
Dr Breus also reports that in 2015, scientists at Idaho State University investigated the relationship between sleep and substance problems among a group of 6,504 teenagers, using both interviews and questionnaires.

Researchers collected data in a series of waves over several years. To determine whether sleep problems might predict alcohol and drug problems, researchers analyzed sleep data collected from earlier waves in relation to substance abuse data in later waves. They determined that among teens, sleep issues are a significant predictor of several alcohol-and-drug-related problems, including:

- Alcohol-related interpersonal problems
- Binge drinking
- Getting drunk or high
- Driving under the influence
- Using illicit drugs
- Being involved in sexual situations they later regretted

The problems with sleep that predicted substance issues included difficulty falling asleep and staying asleep, as well as insufficient time spent sleeping.

The relationship between sleep and substance issues in teenagers is complex, and influence can run in both directions. Sleep problems increase the likelihood of substance use and abuse. In turn, use of drugs and alcohol can negatively affect sleep, diminishing sleep quality and quantity, as well as undermining the consistency of a sleep routine.

What’s more, the influence of sleep over substance use may be set in motion at an early age, before the teenage years even arrive. One study found that sleep problems in children ages 3-8 predict alcohol, cigarette, and marijuana use in adolescence.

In addition, research done by Sara Mednick, PhD, an assistant adjunct professor of psychiatry at University of California, San Diego and by Nicholas A. Christakis who wrote, Connected: The Surprising Power of Our Social Network and How They Shape Our Lives discuss the same interesting finding.

The researchers found “clusters” of poor sleep behavior and drug use that extended out to four degrees of separation of friendship groups. So if your child’s best friend is not sleeping a lot, or using drugs, your child is more likely to have the same behavior.

This influence determines many behaviors, not only in teens, but in adults as well. No matter what the behavior, whether positive or negative, we are all likely to emulate the behaviors of our closest friends. For instance, if our friends are exercising and leading a healthily lifestyle, we are likely to do the same. However, if friends are overweight and sedentary, we are more likely to be too.

This is why it is so important that parents are aware of what is going on with their teen’s friends. It is likely that their behaviors are influencing your child’s behavior.

Higher Risk Of Obesity
Harvard School of Public Health suggests that sleep deprivation may contribute to obesity in several ways. One is that tired people may not have the energy to exercise, reducing the amount of calories they burn each day. Those who struggle with sleep deprivation may also eat more than other people, as they are awake for a longer period each
day. Finally, the sleep cycle plays a role in regulating the hormones responsible for controlling appetite. People who do not get enough sleep may have an imbalance of these hormones, causing them to feel hungry and consume more calories than normal.

**Dependence of Sleep and Anxiety Medications**

Dr. Breus cautions that “sleeping pills are generally not a good idea for teens.” Prescription sleep medications are not approved for use for people under 18, as the long term effects are unknown. Also there is also a risk these medications can be abused.

**What Parents Can Do**

The mark of an adolescent is someone trying to have more autonomy to make their own decisions and one of those decisions would be when to go to sleep. However a report from 2015 Stanford University Children’s Sleep Center suggests that teens do better in terms of mood and fatigue levels if parents set the bedtime.

There are many challenges to getting your teen to go to bed earlier. Extracurricular commitments after school cuts down on the amount of time left once the teen arrives home to get their school work done. Many schools start the school day very early which also impacts sleep early in the day. Also, parents will need to monitor cell phones and computers to make sure that when their teen goes into their room to sleep they are not on their gadgets but actually going to sleep. Having a cell phone in the bedroom can awaken a teen and interrupt important sleep cycles.

Setting bedtime for a teen can be tricky. Sharing research with your teen about the benefits of getting more sleep combined with some very good parental skills of negotiation and compromise may get your teen to agree to an earlier bedtime. One suggestion is that a teen would agree to follow the parent’s recommendation for a set number of days so that the teen would experience the benefits of more sleep first hand.
Holidays

There is always great anticipation about the holiday season as this is a special time for many families. It is a special time with special events, parties when relatives and friends are more likely to gather together to celebrate this time of year. However, this time of year can also be a very challenging for many reasons.

The holidays can also be difficult when there has been the loss of a loved one or there is an ill or absent family member. The gaiety of the holidays can accentuate feelings of loss and pain. The holidays can be very emotional and can create stressful situations where there is the potential for someone to drink too much, relapse, misuse drugs, get overwhelmed, work too hard to have a nice celebration, spend too much money or have unrealistic expectations about the holidays.

In addition, during the holidays, teens and adults have more access to alcohol at intergenerational parties where alcohol is available but not necessarily monitored. Another issue is that students returning home after being at college may “invite” younger siblings to parties where alcohol and or other drugs are available. During this past year there is a great concern about the use of marijuana, prescription drugs, and a significant increase in the number of teens vaping nicotine or marijuana. Also, adults may be so busy, that there is less supervision of their teens and what they are doing.

Talking to teens about these issues can be a very positive way to deal with these concerns. It gives a parent the opportunity to restate expectations, set boundaries, and state what the consequences will be if a teen uses alcohol and other drugs. A conversation with your teen can provide a chance to share both their and your concerns and expectations in regards to the holidays. Fears of parent or sibling relapse, car crashes, arrest or other alcohol related behavior can make the holiday season very stressful for teens. A conversation about these concerns can provide an opportunity to explore some strategies to help your teen reduce stress and remain alcohol and drug free.