**GCCHM Leadership Certification**

**Level IX, Course #6**

**WHY ARE TEENAGERS SO SLEEP-DEPRIVED?**

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**(Presenter’s Notes)**

**Introduction**

A 16-year-old teenager is finally entering the sophomore year, and she has been chronically sleep-deprived since September. Her reasons are multiple but when you add together 45 minutes of homework per class per night, plus a few extra-curricular activities, plus the downtime spent every day watching a John Green video on YouTube or chatting with friends, and a normal amount of procrastination, it adds up to between 5 and 7 hours of sleep on an average school night. Throw in a term paper or heavy exam week and the average can easily drop to 3 or 4 hours.

**What’s Going on Here?**

So, what exactly is keeping teenagers up so late? Unfortunately, biology, technology, and societal expectations together create a perfect storm for the chronic sleep deprivation. The major contributors to adolescent sleep debt come down to these factors.

According to sleep expert Dr. Mary Carskadon, a professor of psychiatry at Brown University and director of chronobiology and sleep research at Bradley Hospital in Providence, Rhode Island, teenagers actually need more sleep than younger kids, not less. Nine and a quarter hour of sleep is what they need to be optimally alert. According to a 2010 large-scale study published in the Journal of Adolescent Health, a scant 8% of US high school students get the recommended amount of sleep. Some 23% get six hours of sleep on an average school night and 10% get only 5 hours.

In studies conducted by Carskadon, half the teens she evaluated were so tired in the morning that they showed the same symptoms as patients with narcolepsy, a major sleep disorder in which the patient nods off and falls directly into REM sleep.

1. **Biology**
* Along with the hormonal changes that transform your child into a teen, are shifts in the production of melatonin, the sleep hormone.
* That is why your teenager actually seems more awake at midnight than at dinner and left alone would probably sleep until ten or eleven.
* It may drive you crazy but, says Dr. Max Van Gilder, a pediatrician in Manhattan, “that is the normal circadian rhythm for 15-22-year-olds." Effectively, they are in a different time zone than the rest of us.
* “It’s a major contributing factor to sleep deprivation which is unique to adolescence,” says Dr. Allison Baker, a child and adolescent psychiatrist.
* “The typical high school student’s natural time to fall asleep is 11pm or later.
* We really need to adjust the environment instead of asking teenagers to adjust their physiology.”
* The problem is compounded when many adolescents try to make up for lost sleep on the weekends, sometimes sleeping upwards of 12 hours on Friday and Saturday nights, which only further disrupts their sleep cycle. But how has the heart to wake them?
1. **Technology**
* It’s not just that Facebook, twitter, Instagram, Tumblr and YouTube are distraction that keep kids up later.
* It’s the actual light coming on all the electronic devices they’re exposed to, especially late at night.

Electronics emit a glow called blue light that has a particular frequency. When it hits receptors in the eye, says Dr. Van gilder, “those receptors send a signal to the brain which suppresses the production of melatonin and keeps kids from feeling tired. And adolescents are low on melatonin and start producing it later to begin with.”

Dr. Van Gilder says he’s seen adolescent bedtimes pushed back an hour to an hour and a half over the years since teens started doing their homework on computers. On average, my teenage patients are going to bed at around 12:30 now.”

Teens who are up late writing papers on computers or chatting with their friends are effectively creating an even more stimulating environment that will only keep them from being able to fall asleep when they want to.

1. **Overscheduling**
* We live in a culture that values activity more than sleep and there is no part of that culture that reinforces that idea more than the college admissions process.
* Teens are constantly being told that they have to be "well-rounded" which, in an age when colleges are becoming ever more selective means that the more they do, the better their applications will look.
* For some kids, being involved in a lot of extracurricular activities may truly be a matter of pursuing a diversity of passion. Either way, the result is an ever-narrowing window for sleep.
1. **Earlier School Times**
* High school start times are getting earlier despite the fact that they run completely counter to the biological needs of adolescents.
* "Multiple studies have shown that high school students aren't functional before 9 am, " says Dr Van Gilder.
* Another reason is that school buses used for the high school are used for the middle and elementary school that have later times.
* Pushing back the start time for the high school would mean either making the younger kids get up earlier or adding more buses which is not in the school budget. There are also concerns that later start times will compromise the practices of sports teams.
* With more than half of American teenagers living with chronic sleep deprivation, parents and teachers tend to overlook the profound effects it has on kids' physical, mental and behavioral health.

\*\*The sleep deficit is not in fact, a normal part of being a teenager. It's part of an invisible epidemic that we need to start addressing.

**How to Help Our Teenagers Get More Sleep**

From the time they hit puberty until the age of 22, adolescents need about 9 hours of sleep a night to function optimally—to be physically, mentally and cognitively healthy. Tell this to nine out of ten teenagers (or their parents for that matter and they will laugh. What teenager has time

to sleep for 9 hours a night during the school year. Very few. In fact, only about 8 percent of American teenagers get the sleep they need, according to a recent study in the Journal of Adolescent Health. Some live with chronic sleep deprivation—some mild to moderate, but more than half (59%) with severe sleep deprivation, meaning they sleep on average six hours or less most school nights.

In fact, the nation’s pediatricians have declared insufficient sleep for adolescents “an important public health issue.” In a report, the American Academy of Pediatrics noted that lack of sleep not only undermines our teenagers’ safety and their academic performance but puts them at higher risk for depression and obesity. The AAP report supports later start times for high schools and middle schools. Sweeping policy changes may eventually help our kids stay awake in geometry—and behind the wheel on the way to school—but in the short term we need to do as much as we can to get our kids to build more sleep into their lives. There are lifestyle changes that middle- and high-schoolers can make, and even several small changes can have a big effect on their well-being.

1. **Be Consistent with Teenage Sleeping Habits**
* “Consistency is really, really crucial in terms of building healthy sleep habits,” says Dr. Alison Baker, a child and adolescent psychiatrist at the Child Mind Institute.
* It’s important for your teen to go to bed as close as possible to the same time every night and get as close to 8 hours of sleep as possible. But it’s also important for him to stick to the same schedule—within reason—on the weekends.
* If a kid’s sleep schedule shifts dramatically on the weekends—staying up most of the night and sleeping until midafternoon Saturday and Sunday—the chances of getting back to normal Sunday night are slim.
* It’s not easy for kids to resist—no one wants to be the first to leave the party—but the academic, athletic, and social demands of the week have no time for the weekend.
1. **Screens Off an Hour Before Bed**
* Most clinicians, and everyone we talked to, emphasize the importance of turning off all electronic devices a minimum of an hour before the time young people are trying to go to sleep. And it’s more than just excitement.
* Plan ahead so that homework that needs to be done on a screen is completed by early evening and “off-screen” work is saved for later at night. That also means no “unwinding” by going on Facebook or YouTube.
* Download the f.lux program from the computer. It automatically removes the stimulating blue light from your computer screen at night so that you’re able to sleep better even if you’ve been up late working on a paper.
* The family can help, too, by altering the home environment.
* Start gradually dimming lights around the house to signal when it’s time to quiet down and start moving towards sleep.
1. **Watch the Snacking**
* Adolescents, many of whom control over their diet for the first time, are prone to eating

and drinking on a tight schedule, as a means to self-regulate, or to stay awake.

* A bag of chips, or the cookies at 1 am, or caffeine any time after dinner—whether or not

 they help get the essay written—can postpone sleep, and harmfully.

1. **Boost the Biological Clock**
* One of the most significant physiological changes to occur in adolescence is a shift in the production of melatonin, the sleep hormone.
* Effectively, teens are living in a different time zone than the rest of us. “That is the normal circadian rhythm for 15-22-year-olds,” says Dr. Van Gilder, a pediatrician in practice for 40 years.
* Teens who have trouble sleeping can try to take a low dose (2-3mg) of melatonin (a non-prescription vitamin which can be purchased at the drugstore) one to two hours before it’s time to go to bed to help jumpstart melatonin production.
1. **Set a Good Example**
* Parents need to model good sleep habits for their teens.
* Staying up all night with your kid to edit his paper or pulling an all-nightery for work yourself isn’t really sending the right message.
* Parents who make sleep a priority for themselves show their kids that it’s part of a healthy lifestyle—like eating right and exercising regularly.

**References**

* Juliann Garey. “Why Are Teenagers So Sleep-Deprived,” *Child Mind Institute,* childmind.org
* Juliann Garey. “How to Help Teenagers Get More Sleep,” *Child Mind Institute,* childmind.org