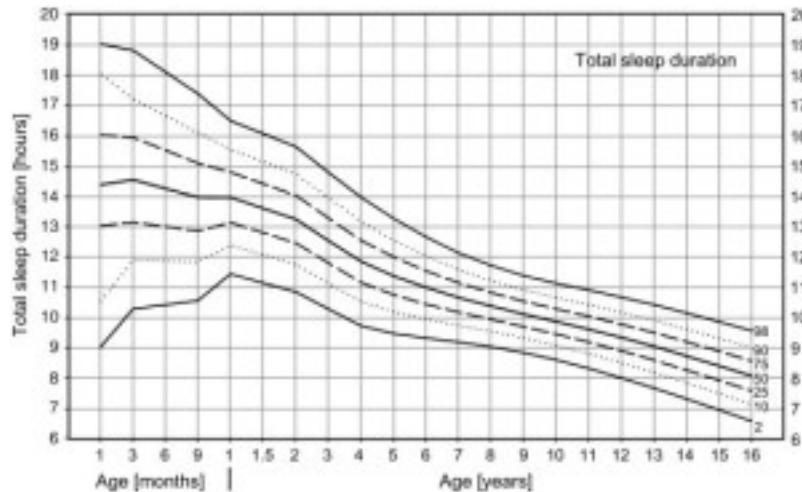




## Sleep Across the Lifespan: Adolescents

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As mentioned in the last blog entry, we are charging right into adolescence. I like to view the middle school years as almost a “sweet spot” where sleep is concerned- many of our elements of behavioral insomnia and parasomnias are outgrown, and many of the psychological factors affecting adolescent sleep have only started to appear. That being said, children in middle childhood can still experience sleep disorders, and often some maladaptive habits from childhood tend to perpetuate if they have not been properly addressed. In the graphic below, we see that total sleep duration changes significantly through childhood, and we start to get closer to adult sleep need as we enter later adolescence.



At age 16, however, most adolescents still need more than 8 hours of sleep, and many are finding that it is hard to establish a healthy sleep pattern. What gets in the way? For most, it is a combination of the challenges with an active social life, the need to be consistently available, homework, and a variety of other activities that engage the brain. For many of my adolescent clients, it can be very difficult to try to shut out activity in the brain and calm themselves enough to be able to achieve sleep. Furthermore, we tend to see increasingly irregular sleep-wake patterns through adolescence and early adulthood, with greater discrepancies between weekday and weekend schedules. Many of the high schools in this area start at 7:15 AM, and many parents feel that it can be essential to allow teens to sleep in on weekends to try to make up for the sleep debt accrued during the week. From a chronobiological perspective, the drive to a later circadian phase (late bedtime and sleeping late in the morning) is also significantly

common in adolescence. So, just like in other stages of development, there are social, emotional, physical, developmental, and psychological factors that all play essential roles in adolescent sleep.

The presentation of disturbed or inadequate sleep also changes significantly during this period of development. For many younger children, sleep deprivation manifests as inattention and hyperactivity during the day. As children move into adolescence, we will start to see more fatigue and sleepiness during the day. I consulted on a case a few years ago, in which the parent reported that their child could not stay awake in the classroom, no matter what interventions they had tried. The parent said that the teachers were having him chew gum to stay awake, and this was not making much of a difference. Mom stated, "It's like he has narcolepsy or something." Truth is, narcolepsy does start to appear in late adolescence to early adulthood, so this could actually be the case. We agreed that he should see a sleep physician (I was suspecting he had sleep apnea based on some other issues) and he was diagnosed with obstructive sleep apnea. Once his sleep apnea was treated, it was amazing to see this kid rise to his potential!

For other kids, it can be circadian cues that are causing much of the sleep disruption, and sleep will improve tremendously when we reduce light exposures to help allow for a normal circadian rhythm. Because adolescents have a tendency to be night owls, evening light exposure must be limited as much as possible, particularly immediately prior to desired sleep onset. In a 2013 article in Science News, there was a significant positive effect of a week of camping on circadian cues. As much as we can mimic the wilderness, the more our sleep will benefit. One family with whom I worked put their router on a timer so that all internet was eliminated at 9 PM. This method kept mom and dad from having to be the "bad guy" every night, and also meant that the whole family disconnected at a reasonable hour. I often hear that homework is a major factor causing teens to miss sleep, and it is essential to work on the study skills and time management needed to get homework completed in reasonable time. Keeping a schedule packed with activities and demanding school assignments does not work for every teen. Additionally, make sure that they are not skipping morning light exposure or breakfast, as these are strong cues to establishing a wake time each day. Sleeping in on weekends also increases tendency to experience circadian rhythm problems, so do not let your teen sleep in more than an extra hour on weekend days.

Another major sleep disrupter for adolescents is related to their shift from family being of primary importance toward the higher impact of peer relationships. No, I don't mean that peer pressure makes kids stay up late. The influence of peer relationships is that some kids may start to dedicate a lot of time thinking about how their peers will react to different events, and may develop increased mental effort and energy toward managing their social impressions. This attention can be manifested as waking really early each day to plan the perfect outfit, laying awake until 3 AM worrying that Kate really is mad at me, or checking social media around the clock to see if everyone else is having fun without me. It can be hard to differentiate thoughts from fact, and there is a large amount of brain complexity that develops during adolescence. This developing complexity involves learning to read emotions in others, and creating more

complex views of themselves in the world. These thoughts can result in a lot of worrying, but can also just be a flood of high intensity thoughts. To me, journaling about thoughts and relationships can be an excellent intervention to make room for the fact that these thoughts exist, but also limiting them so they do not intrude in unwanted ways. It is best to have journaling occur anytime that is convenient, but not right before bed. Journaling right at bedtime may cause an increase in worries that can make it hard to settle into sleep. Guided journal activities can also take the pressure off of trying to figure out what should be said, and may be a desirable option as well.

An additional shift during this developmental phase can be movement from open relationships with family- being willing to spend a lot of time in common areas, toward spending much more time isolated in their room. If they spend too much wake time in bed, then they will start to lose some of the entrainment that helps the body to know that the bed is where sleeping occurs. If the desire is to remain in the bed environment, it can be essential to establish places that one can sit that are not the bed. I normally push my clients to do much of their work or social interactions in chairs so that they can reserve the bed for sleep. It is additionally helpful to encourage them to maintain their presence within the family, because family support can assist with some of their emotional processing.

In summary, make certain that enough time for sleep is guarded in their schedule, and eliminate circadian factors that would interfere with sleep. Utilize tools to work through emotional processing, and encourage that they should not spend wake time in their bed. I always take this for granted, but do not allow electronics in the bed environment during their designated sleep time. There is absolutely no need for them to be available for emergencies around the clock! If guarding sleep time has been a major challenge, it may be important to look at the daily schedule and figure out where essential cuts can be made.