

Adolescence: No Time to Sleep

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The sight of an infant enjoying blissful sleep is universally accepted as the ultimate symbol of peace, contentment and happiness. Each of us will have passed through this phase of life only to find ourselves struggling with sleep throughout the latter parts of our lives. How often do we wonder: "I wish I could sleep like that now!" For a wide variety of reasons, sleep quality declines as we age. This begins to show up as early as in adolescence, with teenagers missing sleep while loving to describe themselves as 'nigh owl's. All this, only to spend the entire weekend oversleeping lazily. Parents often overlook this issue, attributing it to teenage fancy, little realizing that this can have a lifelong impact.

So what exactly happens during teenage that makes adolescents behave this way? The triggering mechanisms for change in sleep habits may be biological in nature. Children experience a natural shift in circadian rhythm with age [1]. This makes it more difficult for them to fall asleep before 11 PM [1]. At this stage of life, several environmental and biological factors may affect both the circadian and homeostatic regulation of sleep. During the teen years, the body's internal sleep clock is reset to fall asleep later at night and wake up later in the morning. This happens as teen brains make melatonin later at night than younger children or adults. Sometimes, this delay in the sleep-wake cycle is severe enough to affect the routine daily activities [2].

THE NEED FOR SLEEP

Sleep is an essential part of everyone's routine and an indispensable part of a healthy lifestyle. It helps us to recharge and regain our energy for the day after. Humans have adapted to a system of sleeping at night and remaining active during the daytime. Disturbance in this pattern not only affects our performance potential but also makes us misfits in the performance-driven world that we live in. Sleep is a physiological necessity that we cannot afford to overlook. Lack of adequate sleep in the general population is a frequent complaint that we come across in social life.

Sleep plays a crucial role in the development of young

minds. In addition to having a direct effect on happiness, research shows that sleep impacts alertness and attention, cognitive performance, mood, resiliency, vocabulary acquisition, and learning and memory. Sleep also has important effects on growth, especially in early infancy. In toddlers, napping appears to be necessary for memory consolidation, executive attention, and motor skill development [3].

While common childhood sleep disorders like night terrors and nightmares, somnambulism and bruxism, snoring, sleep apnea, and restless legs syndrome are well documented, adolescent sleep disorders have not received their due. Sleep deprivation is associated with a variety of health problems, including physical health conditions such as high blood pressure and obesity, and mental health conditions such as anxiety and depression. Among teenagers, sleep deprivation is associated with poor academic performance and increased emotional and behavioral issues. Adolescence being a particularly important period of neural development and brain maturation, insufficient sleep during this developmental period can lead to long-lasting difficulties such as cardiovascular risks.

The American Academy of Pediatrics recommends the following duration of sleep for different age groups [4]. Children 1-2 years : 11-14 hours; children 3-5 years : 10-13 hours; children 6-12 years : 9-12 hours; and teenagers 13-18 years old: 8-10 hours. Sleep problems are estimated to affect 25 to 50 percent of children and 40 percent of adolescents.

WHAT NEEDS TO BE DONE?

Sleep disorders in children, especially adolescents, may rarely get referred to the practicing pediatricians and may seem clinically irrelevant. There are also no clinical tools to address such issues. However, behavioral problems may serve as pointers to the backdrop of sleep deprivation looming behind adolescence. When confronted with such cases, the best way for the clinician to be of help would be to provide informed advice regarding the importance of sleep and provide useful suggestions to achieve the

required sleep. Some tips to recommend for better sleep:

- Keep the bedroom dark, cool, and quiet to create the ideal setting for sleep.
- Do not keep a TV or video game system in the bedroom to avoid distraction.
- About an hour before bedtime, put away homework and turn off all screens (TV, computers, and handheld devices). Turn off or silence cellphones.
- Try a relaxing bedtime routine like reading, listening to music, or meditating before going to sleep.
- Avoid caffeine (found in coffee, tea, soda, energy drinks, and chocolate) in the late afternoon and evening.
- Get regular exercise (but not too close to bedtime).
- If very tired during the day, take a short nap (less than an hour) in the early afternoon. Longer or later naps make it harder to fall asleep at night.
- Relate good sleep to benefits such as a calm mind, improved academic performance, active participation in sports and hobbies, and avoiding errors at work or accidents while driving or playing sports.
- Encourage early morning activities like breakfast, sports or being ahead of others in work or studies.

The issue of sleep is also one of the highly relevant topics that pediatricians can pick for advocacy. Pediatricians in positions of leadership or in the mass media can highlight the importance of sleep in public speeches, talks and TV discussions. The topic is simple and easy to relate for the general public, and solutions can be applied at homes by parents and children.

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