

THE PARENT LETTER



About Our Kids:
A Letter for Parents by the
NYU Child Study Center

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SLEEP DISORDERS IN CHILDREN AND ADOLESCENTS

Approximately 25 percent of children will suffer from a sleep problem at some point during childhood. The types of problems affecting children vary greatly in their frequency and severity, ranging from the more common bedtime resistance and anxiety to the occasional primary sleep disorders, such as narcolepsy and obstructive sleep apnea. Regardless of the primary complaint, parents frequently report sleep difficulties amongst their children, and these reports are remarkably consistent with most researchers identifying up to 50 percent of preschool children, roughly 30 percent of school-aged children, and approximately 40 percent of adolescents as having sleep difficulties. Self-report studies among adolescents reveal that up to one-third will report at least occasional sleep problems, including frequent or extended nighttime awakenings, excessive daytime sleepiness, unrefreshing sleep, difficulty falling asleep, and a subjective need for more sleep. While sometimes transient, these difficulties generally tend to wax and wane and show significant stability throughout childhood. Despite a high overall prevalence, however, sleep problems are not often discussed during visits with primary care practitioners and are therefore left undiagnosed and untreated.

Neurocognitive Effects of Sleep Problems

It has now been clearly established that both sleep loss and disrupted sleep, or “sleep fragmentation”, have a detrimental effect on children’s neurocognitive development. Academic deficits and learning and memory problems have been reported in numerous studies of children suffering from Obstructive Sleep Apnea Syndrome (OSAS), for example, which is characterized by multiple awakenings and disruption in ventilation following episodes of complete or partial airway obstruction during sleep. Hyperactive, inattentive, and disruptive behaviors resembling those found in Attention-Deficit/Hyperactivity Disorder (ADHD) have also been increasingly reported in children with snoring and OSAS. Similar behavioral changes are seen in some children with Periodic Limb Movement Disorder (PLMD) and Restless Legs Syndrome (RLS). These disorders are known to cause sleep fragmentation due to arousals caused by limb movements and events of respiratory disturbance. It has also been suggested that children with more frequent arousals in response to limb movements present with more severe symptoms of ADHD than those without associated arousals.

Common Sleep Disorders

Some of the more common sleep disorders affecting children and adolescents include:

- *Sleep Disordered Breathing.* It is generally estimated that 1 – 2 percent of all children may be affected by OSAS, and 7 – 12 percent of children may suffer from primary snoring. The most common treatment for severe sleep disordered breathing is adenotonsillectomy, which cures the problem in 80 percent of affected children. The procedure removes the barrier to oxygenation and promotes smooth and effective breathing while asleep.
- *Insomnia.* The prevalence of pediatric insomnia is estimated at about 1 – 6 percent among general pediatric populations with a much higher prevalence in children with neurodevelopmental, chronic medical, and psychiatric conditions. When bedtime resistance and disruptive nighttime awakenings are included, the prevalence of sleep disrupted behavior approaches 25 percent to 50 percent in preschool-aged children. For most cases of insomnia, proper sleep hygiene provides adequate treatment, although behavioral approaches and medications are sometimes warranted.
- *Narcolepsy.* Although relatively rare in the United States, where narcolepsy affects only about one in 2,000 Americans, the frequency varies in different cultures. In Israel, for example, the prevalence is reported at about one per 500,000, whereas in Japan the prevalence is approximately one in 600. This variation is

likely due to genetic vulnerabilities and patterns of disease transmission. Treatment typically involves the use of various behavioral strategies and medication.

- *Non-REM Parasomnias.* Parasomnias are disruptive physical acts that occur during non-REM sleep and include somnambulism (sleep walking), night terrors, somniloquy (sleep talking), enuresis (bed wetting), bruxism (jaw grinding), and rhythmic movement disorders. The likelihood of suffering at least one parasomnia at some point during childhood is remarkably high, approximating 80 percent. Treatments vary depending upon the type and cause of the parasomnia but generally include behavioral interventions and sometimes medication.

What Can Parents Do?

Some sleep problems facing children will require active therapeutic interventions, such as behavioral therapy and medications. If you are concerned about your child's sleep, consult your primary care physician or a child and adolescent psychiatrist. The good news, however, is that mostly every sleep disorder will substantially improve, and some will completely vanish, once good sleep hygiene is employed. Sleep hygiene is a general term which encompasses a variety of straight-forward, common sense practices that can be utilized by nearly every child and adult and which virtually always result in improved sleep and restfulness. Typical recommendations include:

- Establish a regular bedtime and wake up time for your child, and stick to it even on the weekends.
- Encourage daily exercise (but not within four hours of bedtime).
- Strongly discourage use of caffeine, cigarettes, and alcohol, all of which deprive a person of sleep or particular stages of the sleep cycle.
- Create a relaxing bedtime ritual that you do every night before putting your child to bed, such as taking a hot bath and reading a book.
- Wake up to the sun and expose your child to the early sunshine, not necessarily by going outside, but by opening curtains or shades and letting the sun come into your home. The sun helps trigger and reset your biological clock, the part of your brain that tells you when you are sleepy and when it is time to wake up.
- Make sure that the room where your child sleeps is not too hot or too cold.
- Use the bed for sleep and nothing else so that it becomes associated with only sleep. Do not use the bed for reading, and do not allow your child a television in his/her room.

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ABOUT THE NYU CHILD STUDY CENTER

The NYU Child Study Center is dedicated to the research, prevention, and treatment of child and adolescent psychiatric issues. The Center offers evaluation and treatment for children and teenagers with mental health problems including anxiety, depression, learning or attention difficulties, and trauma and stress-related symptoms.

We offer a limited number of clinical studies at no cost for specific disorders and age groups. To see if your child would be appropriate for one of these studies, please call (212) 263-8916.

The NYU Child Study Center also offers workshops and lectures for parents, educators and mental health professionals on a variety of mental health and parenting topics. The Family Education Series consists of 13 informative workshops focused on child behavioral and attentional difficulties. To learn more or to request a speaker, please call (212) 263-8861.

For further information, guidelines and practical suggestions on child mental health and parenting issues, please visit the NYU Child Study Center's website, AboutOurKids.org.

AboutOurKids.org

**Giving Children Back Their Childhood
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