

Sleep Problems: Helping Handout for Home

MICHELLE M. PERFECT & SARA S. FRYE

INTRODUCTION

Sleep disruption causes significant challenges for families. An estimated 20–30% percent of children will experience sleep problems, which often affects parents' sleep as well (Owens, 2017). Sleep problems are even more common in children with diagnoses such as attention deficit hyperactivity disorder (ADHD) or autism spectrum disorder (van der Heijden, Stoffelsen, Popma, & Swaab, 2017). Key findings from the 2014 Sleep in America Poll revealed that over 90% of parents reported sleep to be either very important or extremely important for both their own and their child's emotional and physical well-being (National Sleep Foundation, 2015). Although parents are very interested in healthy sleep, fewer than 50% of appointments with pediatric primary care physicians cover sleep as a topic of discussion. Furthermore, in the same poll, fewer than half of children obtained the recommended amount of sleep per night (9–11 hours), with more than half of older adolescents sleeping 7 or fewer hours. When youth do not get enough sleep, they may experience problems with emotion regulation, mood, behavior, and academic performance (Perfect, Levine-Donnerstein, Archbold, Goodwin, & Quan, 2014). Other factors related to sleep that may also affect youth's daytime functioning include irregular sleep schedules, habitually late bedtimes, difficulty falling and staying asleep, and poor sleep quality. Sleep-disordered breathing (SDB) has been further identified as a risk factor for behavioral and cognitive difficulties in youth, particularly when left untreated (Perfect, Archbold, Goodwin, Levine-Donnerstein, & Quan, 2013).

FACTORS TO CONSIDER WHEN SELECTING INTERVENTIONS

Sleep Recommendation by Age

There are developmental differences in the number of hours of sleep needed. During the first year of life, most infants require 12–16 hours per day, while 1- to 2-year-olds need 11–14 hours per day, including naps. The current recommendations are 10–13 hours for preschool children, 9–12 hours for children ages 6 through 12, and 8–10 hours for adolescents 13 years and older (Paruthi et al., 2016). Many contributing factors may prevent youth from obtaining the recommended amount of sleep. For example, parents often do not know how much sleep their children should be getting. Also, young children often do not have a consistent bedtime, and the average bedtimes of preschoolers are often later than 9 p.m. (McDowall, Galland, Campbell, & Elder, 2017).

Environmental and Family Factors

Youth may not have consistent sleep patterns or sufficient sleep duration for numerous reasons. For example, parents might give in to bedtime tantrums that delay bedtimes to avoid waking other children in the home. Older siblings who stay up later may make it difficult to enforce earlier bedtimes for younger siblings. Parents or caregivers may not agree about setting and maintaining specific sleep schedules, leading to inconsistent bedtimes. For these reasons, it is important to involve the whole family when implementing sleep strategies to increase chances of success. Environmental factors that may affect sleep duration or quality include lighting in the room (e.g., sunlight from windows), pets, noise from neighbors

(e.g., barking dogs), or varying temperatures that are not comfortable to the person trying to sleep.

Cultural Differences

Children's sleep duration and bedtimes vary across geographical locations and within racial and ethnic groups. When parents identify a sleep-related problem with their child and are considering options for addressing it, they should take into consideration cultural factors that are important to the family, such as who the child sleeps with, where the child sleeps, and expectations regarding the importance of sleep.

RECOMMENDATIONS

There are many behavioral strategies that parents can implement at home that have been found to be effective in reducing sleep-related problems. However, parents should also feel comfortable seeking additional support when problems do not subside. Given the number of sleep-related problems that children and adolescents may experience, and all the potential ways of addressing these issues, parents may find the following catchy phrase helpful. While summarizing research support related to a variety of home-based interventions to target sleep problems in youth through age 12, Allen, Howlette, Coulombe, and Corkum (2016) described the ABCs of SLEEPING as follows: “(1) **a**ge appropriate **b**edtimes and wake-times with **c**onsistency, (2) **s**chedules and routines, (3) **l**ocation, (4) **e**xercise and diet, (5) no **e**lectronics in the bedroom or before bed, (6) **p**ositivity, (7) **i**ndependence when falling asleep, and (8) **n**eeds of [the] child met during the day, (9) equal **g**reat sleep” (p. 2).

Establishing Healthy Sleep Habits

The first six strategies presented in this section have been scientifically supported, with evidence of efficacy. Recommendations 7–9 are also considered important for promoting good sleep but have less research support. As with all recommendations, parents should consider whether these recommendations fit with their families (Allen et al., 2016).

1. **Talk to your children.** The first step in addressing a sleep problem is for parents to talk with their children about their sleep. Open communication can help determine what is keeping them from sleeping and uncover ways to address the problems, such as changing nightly routines

(e.g., homework is done immediately after school instead of after dinner) or removing distractions (e.g., providing a nightlight to replace the overhead light or keeping pets out of the bedroom).

2. **Stay involved in monitoring your children's sleep.** Parents' involvement in their children's sleep schedule is critical for establishing healthy sleep habits. Parents often become less involved as their children get older and may be unaware of what time a child is actually falling asleep, particularly on nonschool nights. Parents are encouraged to take an active role in their children's sleep routines and schedule.
3. **Make sure there is enough time for sleep.** Parents should set bed and wake times that allow for sufficient sleep duration based on the child's age. Once school start times are known for the year, the best approach is to determine what time the child needs to wake up and subtract from that time the appropriate number of hours for sleep, accounting for the time it may take the child to fall asleep (e.g., 30 minutes). So, for example, if the child needs to get up at 6:00 a.m. and 10 hours of sleep are recommended, bedtime would be 7:30 p.m. (including 30 minutes for falling asleep).
4. **Keep consistent bedtimes.** Bedtimes should be consistent across the week. Bedtimes across weekdays and weekends should not vary by more than an hour.
5. **Establish bedtime routines.** Families should establish a bedtime routine that may include activities such as story reading, bath time, or relaxation activities. In addition, bedtime routines should reflect the following elements:
 - Maintain a positive home climate to support the child's emotional well-being.
 - Encourage children to fall asleep independently.
 - Have children use their beds only for sleep. Allowing other activities to take place in bed creates a connection between the bed and being awake, which can make it difficult to fall asleep (Owens, 2017).
6. **Eliminate technology from the bedroom** (Allen et al., 2016). This objective is twofold. First, using technology (e.g., phone, computer) is distracting and can keep children awake. Second, the blue light from electronics can affect the hormones responsible for making children feel sleepy.

7. **Wake up at the same time each day.** Although wake-time routines and consistent daily schedules have not been researched as much as the importance of a consistent bedtime routine, waking up at the same time each day is helpful for establishing a sleep-wake cycle.
8. **Adjust the bedroom environment as needed.** Parents should gauge a child's need for darkness versus the need for some light. Children also differ in the amount of noise they find helpful for encouraging sleep. Families can experiment by trying different lighting and noise conditions to see what works best for their child (e.g., using a nightlight instead of room lights or replacing television with music or a white noise machine).
9. **Pay attention to eating and drinking habits.** In general, the use of caffeine, large meals eaten close to bedtime (particularly those high in carbs and sugar), and intense exercise before bed should be avoided. Parents should track and modify these factors to reduce sleep disruption and promote good sleep quality.

Managing Insomnia: Difficulty Falling and Staying Asleep

Insomnia is the technical term for problems with falling sleep or awakenings that result in difficulty falling back asleep. There is strong scientific evidence that parent-led interventions can help to reduce these difficulties. Parents may encounter two primary types of insomnia: One type is when the child requires certain conditions in order to fall asleep, which can include problematic behaviors such as needing a parent to be present to fall asleep or only being able to sleep in the parents' room. The goal for these children is to learn to self-soothe and fall asleep independently. The second type involves children who refuse to go to bed or use stalling tactics to delay bedtime (e.g., tantrums or requests for water). The goal is to not reinforce these behaviors and make bedtime an enjoyable routine. The following strategies have research support that has shown improved sleep in children (Meltzer, 2010; Owens, 2017).

10. **Avoid providing attention to behaviors that delay bedtime.** Children often try to delay bedtime through avoidance behaviors such as asking for water, requesting additional bedtime stories, or throwing tantrums. When parents give in to these behaviors, even occasionally, the behavior becomes

more difficult to change. Alternative responses to these behaviors can be (a) to have a bedtime checklist to make sure children have everything they may need before going to bed (e.g., water bottle, stuffed animal) or (b) to allow children to earn time for a preferred activity by completing bedtime routines. It is critical for parents to stick with the bedtime routine despite the child's protests. Parents should be prepared for the child to escalate behavior in response to no longer getting attention for it. Over time, when the delay tactics no longer work, the behaviors will decrease.

11. **Focus on positive sleep habits.** Praise children's specific behaviors, such as putting on pajamas without being prompted or brushing their teeth. Parents can provide stickers or small prizes to reinforce completion of bedtime behaviors.
12. **Develop a system so that children have a way to get their needs met.** Parents may use a "bedtime pass" system by providing one to two passes per night that can be used for requests such as getting more water or 5 more minutes of story time. Once these passes have been redeemed, no additional requests can be made. Children can save up these passes and exchange them for prizes.
13. **Adjust bedtime gradually.** Parents can address difficulty falling asleep by setting their children's bedtime to when they typically fall asleep, and then gradually move the bedtime earlier until the desired time is reached.
14. **Remind the child when bedtime is coming.** Provide notice 30 minutes to an hour prior to beginning the bedtime routine, and give multiple reminders to allow time for the child to prepare and not be surprised by bedtime.
15. **Use comfort items.** Although it is ideal for children to be able to fall asleep under different conditions, allowing them to have a comforting item such as a special blanket, stuffed animal, or another favorite object may be needed.
16. **Help the child develop independence.** Parents who must be present in the room for their child to fall asleep should develop a plan to gradually remove themselves. This can involve sitting in a chair next to the bed holding the child's hand, as opposed to being in the bed with the child. Next, the parent sits next to the bed with no physical contact. The distance should be gradually increased (e.g., moving the chair to the doorway) until the parent is no longer needed in the child's room at all.

17. **Practice a routine.** Create a checklist of bedtime routine activities to help the child develop independence. Children can actively check off the activities as they complete them to feel successful at preparing for bed. Parents can also use the checklist to provide visual cues to their child as to what activity comes next.
18. **Pair preferred activities with bedtime.** Allow children to select one or two preferred activities as part of their nighttime routine so they look forward to bedtime. If the child acts out, parents should immediately stop the activity. Parents should have the child continue with the rest of the routine rather than returning to the preferred activity.
19. **Be cautious about medications.** Parents should not use sleep medications without first consulting a medical provider. Over-the-counter medications, such as melatonin, can be helpful for sleep, but only if used in very specific ways. Medications that children take for other conditions (e.g., stimulant medication to treat ADHD) can contribute to difficulty falling asleep. Parents are encouraged to discuss these concerns with their pediatricians. It should be noted that not all pediatricians are experts in sleep, and thus parents are encouraged to seek consultation with a sleep specialist if concerns persist.
20. **Seek professional help as needed.** Although many sleep-related concerns in children and adolescents can be addressed with behavioral interventions, the following are some situations in which professional help may be required (Owens, 2017):
 - *If your child is chronically fatigued, despite sufficient sleep.* Excessive daytime sleepiness can be indicative of an untreated medical condition or related to a sleep disorder such as SDB, hypersomnia, or narcolepsy.
 - *Sleep-related respiratory issues.* Symptoms such as loud snoring, observed breathing pauses, dry mouth, and headaches upon awakening may indicate that your child has SDB or other difficulties that warrant a discussion with a physician.
 - *Consistent difficulty falling sleep before midnight.* Biological changes around puberty can contribute to the development of a circadian rhythm disorder, particularly delayed sleep phase, in which the sleep schedule shifts later. If an adolescent has difficulty falling asleep until after midnight and a desire to

sleep into the late afternoon, a referral to a sleep specialist might be warranted.

- *Extremely restless sleep.* Restless sleep (e.g., being in constant motion, waking up in odd positions, kicking off or being tangled up in bed sheets) and abnormal leg movements (e.g., observed leg jerks while asleep, or kicking others) could be potential indicators of periodic limb movement disorder (PLMD), which has been associated with sleep disruption and daytime impairment such as fatigue, impulsivity, and inattention.
- *Sleep problems that persist after you have tried everything.* Although many behavioral interventions have been shown to be effective, problems with sleep can persist. Parents should seek help from their pediatrician or a sleep specialist for support and guidance regarding sleep-related issues.

RECOMMENDED RESOURCES

Websites

<https://www.healthychildren.org/English/healthy-living/sleep/Pages/default.aspx>

This website from the American Academy of Pediatrics provides research-based resources for parents.

<http://kidshealth.org/en/parents/sleep.html>

This website from the Nemours Foundation contains information about specific sleep-related problems.

Books

Owens, J. A., & Mindell, J. A. (2005). *Take charge of your child's sleep: The all-in-one resource for solving sleep problems in kids and teens.* Cambridge, MA: Da Capo Press.

This book provides parents with a comprehensive, accessible resource for understanding and solving their child's sleep problems.

Whiteley, C., & Emsellem, H. A. (2006). *Snooze ... or Lose!: 10 "No-War" Ways to Improve Your Teen's Sleep Habits.* Washington, DC: National Academies Press.

This book, geared to parents, explains why adolescents are tired, ways to assess adolescent sleepiness, factors that affect adolescent

sleep deprivation, and strategies for assisting adolescents in obtaining more sleep.

REFERENCES

- Allen, S. L., Howlett, M. D., Coulombe, J. A., & Corkum, P. V. (2016). ABCs of SLEEPING: A review of the evidence behind pediatric sleep practice recommendations. *Sleep Medicine Reviews, 29*, 1–14.
- National Sleep Foundation (2015). 2014 Sleep in America Poll – Sleep in the Modern Family. *Sleep Health 1*, e13. doi:10.1016/j.sleh.2015.04.013
- McDowall, P. S., Galland, B. C., Campbell, A. J., & Elder, D. E. (2017). Parent knowledge of children's sleep: A systematic review. *Sleep Medicine Reviews, 31*, 39–47.
- Meltzer, L. J. (2010). Clinical management of behavioral insomnia of childhood: Treatment of bedtime problems and night wakings in young children. *Behavioral Sleep Medicine, 8*, 172–189.
- Owens, J. A. (2017, February 23). Behavioral sleep problems in children. In R. D. Chervin & A. G. Hoppin (Eds.), *UpToDate*. Retrieved from <https://www.uptodate.com/contents/behavioral-sleep-problems-in-children/print#H8>
- Paruthi, S., Brooks, L. J., D'Ambrosio, C., Hall, W. A., Kotagal, S., Lloyd, R. M., & Rosen, C. L. (2016). Recommended amount of sleep for pediatric populations: A consensus statement of the American Academy of Sleep Medicine. *Journal of Clinical Sleep Medicine, 12*, 785–786.
- Perfect, M. M., Archbold, K., Goodwin, J. L., Levine-Donnerstein, D., & Quan, S. F. (2013). Risk of behavioral and adaptive functioning difficulties in

youth with previous and current sleep disordered breathing. *Sleep, 36*, 517–525.

- Perfect, M. M., Levine-Donnerstein, D., Archbold, K., Goodwin, J. L., & Quan, S. F. (2014). The contribution of sleep problems to academic and psychosocial functioning. *Psychology in the Schools, 51*, 273–295.
- van der Heijden, K. B., Stoffelsen, R. J., Popma, A., & Swaab, H. (2017). Sleep, chronotype, and sleep hygiene in children with attention-deficit/hyperactivity disorder, autism spectrum disorder, and controls. *European Child & Adolescent Psychiatry, 1–13*.

ABOUT THE AUTHORS

Michelle M. Perfect, PhD, is an associate professor and associate program director of the School Psychology Program at the University of Arizona. She is a licensed psychologist and certified school psychologist. Her research focuses on the effects of multiple sleep disturbances on academic and daytime functioning in youth, interventions to lengthen sleep and improve consistency, and the development of classroom-based sleep curricula.

Sara S. Frye, PhD, is a licensed psychologist, a certified school psychologist, and a graduate of the School Psychology Program at the University of Arizona. She is currently an assistant professor of research at the University of Arizona, College of Education. She has published and presented nationally regarding the influence of sleep and sleep disorders on the behavior and psychological functioning of youth. She also has clinical expertise in behavioral sleep medicine.

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