

A photograph of a young child with reddish-brown hair sleeping peacefully in a bed. The child is wearing a grey long-sleeved shirt and is lying on their side, facing away from the camera. A white pillow is visible in the foreground. In the background, a lamp with a white shade and a dark base is lit, casting a warm glow. The room is dimly lit, with soft light coming from the lamp and possibly a window in the background.

# How Can We Help Children with ADHD Get **A BETTER NIGHT'S SLEEP?**

by Emma Sciberras, DPsych



**D**ID YOU KNOW that up to 70 percent of children with ADHD have difficulty falling asleep? Well, if you're a parent of a child with ADHD, you probably aren't surprised—but perhaps you didn't realize that the percentage was so high.

About half of parents of children with ADHD say that their child's sleep difficulty is moderate to severe in nature. The sleep problems experienced by children with ADHD really vary. Here are some sleep problems that parents commonly report:

- **Difficulty getting child into bed.** The child may stall and resist going to bed. They may come in and out of the bedroom for hours on end.
- **Worries and anxiety at bedtime.** The child might be feeling worried or anxious about specific nighttime fears (such as the dark or being alone in bed), or they may be worrying about stressful things that have happened during the day.

- **Insomnia.** This is a pattern of sleep where a child is having difficulty falling asleep and/or staying asleep overnight. Children with insomnia may also wake early. Insomnia can be connected to worries and anxiety. Other parents describe that their child's mind seems to be racing at night and that the child can't switch their mind off to fall asleep.
- **Delayed sleep phase.** This is where the sleep-wake cycle has shifted and the child isn't sleepy until quite late at night and then wants to sleep in the next day. It's kind of similar to jetlag and is more common in adolescence.
- **Sleep associations.** Some children need a particular thing to be able to fall asleep at night. This might be needing to watch the television, for example, or needing a parent present in order to fall asleep at night. Children will then often wake during the night if the thing they needed to fall asleep is no longer present.



There are many other types of sleep problems that children with ADHD may also experience, such as medical sleep problems like obstructive sleep apnea (snoring and breathing difficulties overnight) and restless legs syndrome (unpleasant feelings in the legs).

### **Why do children with ADHD have sleep problems?**

There is no one cause of sleep problems in children with ADHD. Stimulant medication may result in some short-term insomnia; however, even children with ADHD who are not taking stimulant medication experience higher rates of sleep problems compared to children without ADHD.

Some research shows that the co-occurrence of anxiety and behavioral difficulties in children with ADHD increases sleep problems. Biological factors may also play a role; for example, similar pathways in the brain are responsible for attention, arousal, and regulation. There also may be differences in the production of melatonin (a hormone that makes us feel sleepy in the night) between children with and without ADHD.

### **What is the impact of sleep in children with ADHD?**

There is now a lot of research that shows that having sleep difficulties on top of ADHD makes life harder for children with ADHD and their families. Children with both ADHD and sleep difficulties have worse ADHD symptom severity, poorer quality of life, and increased mental health difficulties.

Some research has shown that being sleepy during the day can also impact the academic performance of children with ADHD. Given that sleep problems affect functioning for children with ADHD, improving sleep may help to improve some aspects of child functioning. Getting children off to sleep also gives parents some much needed time to themselves in the evening, too.

### **What can I do to help my child's sleep?**

There are lots of different things you can try to help your child get a better night's sleep. The good news is that there is a growing evidence base for these strategies in children with ADHD. One brief two-session sleep program has been shown to have lasting benefits for children with ADHD up to twelve months later (Sciberras et al. in *Psychological Medicine*, 2019).

### **Check your child's bedtime routine**

- Ensure that your child is going to bed at a time appropriate for their age. If children are sent to bed too early, they won't be tired enough to fall asleep. But if they go

to bed too late, then they could get overtired. Be consistent with the bedtime. It's easiest to start with the time the child needs to wake and then work backwards.

- Try to aim for a calm, relaxing, and consistent bedtime routine between thirty to sixty minutes before bed. This could involve a bath, cleaning teeth, books, kiss good-night, and then lights out.
- Other relaxing activities include deep breathing and visual imagery exercises.
- It can be very challenging to avoid screens before bed. If your child tends to use screens right up until bedtime, you could first start by limiting screen time (including computers, phones, TV, gaming) ten minutes before bed and then gradually stretch this out longer. Give it a try and see where you get to.
- Assess your child's bedroom environment. Is it cool, comfortable, and dark enough for sleep? Dim night lights are fine. Aim to avoid having any electronic media in the bedroom.

Once you have worked on your child's bedtime routine, you might like to try some more specific strategies for your child's specific sleep problem, such as those in the "Specific Sleep Strategies" sidebar. A quick note about rewards, should you decide to try them: Make rewards fun and family-based (examples include going to the park, playing a board game, choosing dinner, etc.). Only set a reward around a goal you think your child can achieve.

### **Adolescents with ADHD and some final words**

Adolescents with ADHD are also at high risk of sleep problems, particularly insomnia and delayed sleep phase. There are many biological (onset of puberty) and environmental (such as transition to high school, starting part-time work) factors, which may contribute to changes in sleep for adolescents with ADHD.

Sleep treatment studies have yet to be conducted in adolescents with ADHD specifically, although there are some studies underway. Some of the strategies listed in the sidebar under delayed sleep phase and insomnia may be helpful for adolescents, as well engaging in healthy sleep habits such as reducing caffeine, getting plenty of light exposure, and regular exercise (but not too close to bedtime).

For both children and adolescents with ADHD, some sleep difficulties can be tricky to manage without help. Professional support can be helpful in implementing these kinds of behavioral strategies. If sleep difficulties persist after you try behavioral strategies, you can discuss trying other strategies, including the use of melatonin, with your doctor. 🧠



## Specific Sleep Strategies

<b>Difficulty getting child into bed</b>	<ul style="list-style-type: none"> <li>● Be creative and make up a bedtime pass with your child. This is a little pass that they can put under their pillow. The child then receives a reward the next morning for only using the pass once. You can give a double reward if they don't use the pass at all.</li> <li>● Use the "checking method" and check on your child at very frequent intervals (every two minutes to start with) until they fall asleep. This helps children get used to staying bed with the reassurance that you are there helping them. You can then slowly increase the duration between checks (such as every five, ten, or fifteen minutes).</li> </ul>
<b>Worries and anxiety at bedtime</b>	<ul style="list-style-type: none"> <li>● Try some simple strategies like using a worry book/box.</li> <li>● Reward brave behavior.</li> <li>● Try visual imagery and relaxation exercises.</li> <li>● Try to make time during the day to discuss worries so that these aren't front of mind when your child is trying to fall asleep.</li> </ul>
<b>Insomnia</b>	<ul style="list-style-type: none"> <li>● Try visual imagery and relaxation exercises.</li> <li>● Only use the bed for sleep, not things like homework.</li> <li>● Try getting out of bed within fifteen to twenty minutes if not asleep and do a nonstimulating activity—and then try again.</li> <li>● For older children and adolescents, see whether there are any negative thoughts about sleep that might be making sleep more stressful and try replacing it with a more positive one.</li> </ul>
<b>Delayed sleep phase</b>	<ul style="list-style-type: none"> <li>● Try to shift the internal body clock by setting a regular morning wake time and then using a strategy called "bedtime fading." Bedtime fading involves temporarily setting the bedtime close to when your child is falling asleep and then once they start falling asleep, within about twenty minutes or so, making the bedtime earlier by fifteen minutes.</li> <li>● Ensure your child has no naps and lots of morning light.</li> </ul>
<b>Sleep associations</b>	<ul style="list-style-type: none"> <li>● If your child is used to having you present to fall asleep at night, you could try the "checking method" described above, or you could use a strategy called camping out. Camping out involves sitting on a chair next to your child's bed and then each night gradually moving the chair away from the bed so eventually you are out of the room. This can take a few weeks.</li> <li>● Reward brave behavior.</li> </ul>

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### ADDITIONAL READING

Becker SP. *The Triple Threat of Sleep, Adolescence, and ADHD in ADHD and Sleep* (Ed Hiscock H, Sciberras E). Elsevier, 2019.

Chen M, Wardlaw M, Stein M. *ADHD Medications and Sleep in ADHD and Sleep* (Ed Hiscock H, Sciberras E). Elsevier, US 2019.

Corkum P, et al. Better nights/better days—distance intervention for insomnia in school-aged children with/without ADHD: A randomized controlled trial. *Journal of Pediatric Psychology* 2016;41:701-13.

Cortese S, Brown TE, Corkum P, Gruber R, O'Brien LM, Stein M, Weiss M, Owens J. Assessment and management of sleep problems in youths with attention-deficit/hyperactivity disorder. *Journal of the American Academy of Child & Adolescent Psychiatry* 2013; 52: 784-96.

Hiscock H, Mulraney M, Heussler H, Rinehart N, Gold L, Sciberras E. Impact of a behavioral intervention, delivered by pediatricians or psychologists, on sleep problems in children with ADHD: a cluster-randomized, translational trial. *Journal of Child Psychology and Psychiatry*. In Press.

Hiscock H, Sciberras E. (2019) *ADHD and Sleep: An Evidence-Based Guide to Assessment and Treatment*. Elsevier, US.

Hiscock H, Sciberras E, et al. Impact of a behavioral sleep intervention on ADHD symptoms, child sleep and parent health: A randomized controlled trial. *The BMJ* 2015;350:h68.

Keshavarzi Z, et al. In a randomized case-control trial with 10-year-olds suffering from attention deficit/hyperactivity disorder (ADHD) sleep and psychological functioning improved during a 12-week sleep-training program. *World Journal of Biological Psychiatry* 2014;15:609-19.

Langberg, et al. Clinical implications of daytime sleepiness for the academic performance of middle school age adolescents with ADHD. *Journal of Sleep Research* 2013;22:542-48.

Lunsford-Avery JR, et al. Sleep disturbances in adolescents with ADHD: A systematic review and framework for future research. *Clinical Psychology Review* 2016;50:159-74.

Lycett K, Sciberras E, Mensah F, Hiscock H. Behavioral sleep problems and internalizing and externalizing comorbidities in children with attention-deficit/hyperactivity disorder. *European Child & Adolescent Psychiatry* 2015; 24: 31-40.

Sciberras E, Hiscock H. Sustained impact of a sleep intervention and moderators of treatment outcome for children with ADHD: A randomized controlled trial. *Psychological Medicine* 2019, 1-10.

Silk TJ. *New Frontiers: Neurobiology of Sleep in ADHD in ADHD and Sleep* (Ed Hiscock H, Sciberras E). Elsevier, US 2019.

Sung V, Hiscock H, Sciberras E, Efron D. Sleep problems in children with ADHD: prevalence and the effect on the child and family. *Archives of Pediatric & Adolescent Medicine (JAMA Pediatrics)* 2008;162(4):336-342.