

A Guide to Behavioral Sleep Intervention

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Sleep issues are common in children diagnosed with autism spectrum disorder (ASD). In fact, there is a prevalence rate of sleep difficulties in children on the spectrum that ranges from 50 to 80 percent compared to 9 to 50 percent in neurotypical peers.¹ This means many children diagnosed with ASD are not getting the restorative sleep they need for their development and their overall health and well-being.

Difficulties Experienced by Children

Children may have difficulty falling asleep quickly or going to bed without crying, arguing, or having a tantrum. They may also struggle to fall asleep alone in their own bed or to stay asleep overnight. Unfortunately, some children experience a combination of these difficulties. Sleep disruptions significantly affect the lives of children and their families, and can impact everything from waking up in a timely fashion to tolerating frustrations and learning new things. In fact, sleep problems are associated with decreased attention and social communicative skills, as well as increased aggression and self-injury.²

Why Sleep Difficulties Occur

Sleep difficulties are often due to a variety of causes, including neurobiological, medical, behavioural and cultural factors. For example, some children may be more likely to react to environmental triggers that disrupt sleep, such as sound or light. Others may prefer to sleep in their parents' bed or to have their parents sleep in their bed. Still others may want to sleep with their tablet or watch their favourite videos before falling asleep. Such behavioural factors are the most common causes of sleep disturbance in children.

Improving Sleep Patterns

While sleep disturbances can be caused by a variety of factors, research supports the effectiveness of behavioural interventions in improving many children's sleep. Such interventions have been found to reduce both sleep onset delay and the occurrence of sleep-interfering behaviour, and to increase sleep duration.³ Studies also show that parents find these interventions to be beneficial. They are also the first measures recommended by many regulated health care professionals to address sleep difficulties.

Behavioural Sleep Interventions

A key step in addressing sleep difficulties is to rule out any medical issues that may affect your child's sleep, such as respiratory or breathing difficulties. That's why children should visit their doctor before starting a sleep intervention. If no medical issues are identified, then a behavioural sleep intervention may be appropriate. This will occur in three phases: assessment, treatment, and monitoring.

An initial assessment is useful in figuring out what is going well in terms of your child's sleep and what isn't going well. During the assessment, the amount of sleep your child is getting should be determined, as well as the quality of this sleep. Initial assessments should also explore a variety of environmental and social factors that might impact sleep. Such factors could include the presence of sounds or lights that disturb, whether the activities of other family members disrupt your child's sleep, and if an established bedtime routine is calming or stimulating. Additional factors include when and where your child goes to bed, how long it takes to fall asleep and when your child wakes up. An assessment would also be made of how you and other family members respond when your child doesn't go to bed or fall asleep.

This information helps determine your child's current sleep patterns, and identifies environmental and social factors that might contribute to sleep difficulties. During the assessment, families should identify their sleep preferences and goals with regard to an ideal bedtime and wake-up time, as well as a preferred bedtime routine. They should also specify a preferred sleeping arrangement, such as having children sleep alone in their own bed in their own room, alone in their own bed in a shared room, or sharing a bed in a shared room.

As sleep patterns are unique, families should design sleeping arrangements that meet their personal and cultural preferences, that consider their children's long-term requirements for independence and autonomy, and that ensure current and long-term personal boundaries are respected. Parents should also consider how much sleep their children require. Although the amount varies by age, in general, toddlers, preschoolers, and school-age children require between 9 and 14 hours per day. Specific recommendations on the amount of sleep children require by age can be found at https://www.cdc.gov/sleep/about_sleep/how_much_sleep.html.

The information gathered in the assessment, including your family's goals and preferences, is used to create a treatment plan. This plan should be designed to start with your child's current situation and support the development of new sleeping habits in a positive manner. The following are some of the basic strategies that form the foundation for most sleep interventions.



Set a consistent bedtime and stick to it. When establishing new sleep patterns, consistency is key. Ideally there should be less than 15 minutes variation in the time your child is settled into bed nightly.



Establish and maintain a consistent bedtime routine. Again, consistency is very important when creating new patterns of behaviour. A consistent routine helps your child associate these activities with settling down and going to sleep.



Reduce stimulating activities prior to bed. Activities that stimulate or increase your child's energy level should not be a part of a bedtime routine. For example, if your child appears to be stimulated by watching videos, playing video games, interacting with siblings in a rambunctious manner, or roughhousing with a caregiver, then these activities should occur earlier in the day. Integrate bedtime routine activities that have a calming effect. While these will vary by child, they may include looking at books, listening to lullabies or quiet music, or cuddling with a parent.



Remove stimulating items from the sleep environment. Your child should associate the bedroom with sleep. For this reason, stimulating items or activities should be removed. For example, various screens, such as tablets and gaming computers, should be removed, as should toys that appear to be intensely engaging for your child.



Set consistent expectations for your child. Some children benefit from clear rules and expectations. You could use a picture schedule or checklist of bedtime activities such as the following: 1-snack, 2-brush teeth, 3-toilet, 4-py-jamas, 5-lullabies, 6-good night, 7-sleep in own bed, 8-wake-up/reward.



Reward your child for healthy sleep patterns. Offer favourite activities, toys or food and drink items as a reward for meeting sleep goals. Children may be more motivated to sleep in their own bed if they can have their favourite cereal or watch five minutes of their favourite cartoon in the morning. While these rewards won't be given every day for the rest of your child's life, this reinforcement may help your child be more successful in meeting sleep goals.

Although these approaches can be helpful, many children and families require more specific strategies to improve sleep patterns. For this reason, professionals may recommend some of the following approaches.

Bedtime Fading. This strategy is designed to work with your child's current sleep patterns. For example, if your child is put to bed at 8:00 p.m. but does not fall asleep until 9:30 p.m., this may result in 1½ hours of sleep-interfering behaviour. This can be exhausting for all family members, and is a very unhealthy sleep pattern. Rather than learning to associate the bed with sleep, your child may be learning to engage in a variety of different behaviours to avoid sleep or to avoid sleeping alone. Your child may call out to you, ask repeated questions, ask for one more drink, leave the room repeatedly and cry or protest. Inevitably, you must respond to your child, and this creates an unhealthy pattern that actually maintains sleep difficulties. Bedtime fading may improve this situation. When using bedtime fading, parents temporarily put their child to bed at the time he/she naturally falls asleep. In this example, that would be at 9:30 p.m. Hopefully this delay to bedtime increases your child's motivation to sleep and reduces the occurrence of sleep-interfering behaviour. Once your child reliably falls asleep within 15 minutes of being put to bed, the bedtime is "faded back" to 9:15. Once your child falls asleep reliably within 15 minutes of being put to bed at 9:15, bedtime is "faded back" to 9:00. This process continues until your child has achieved the bedtime you want.

Parental Presence Fading. Many children prefer to sleep in the bed of a parent or sibling, or to have the parent or sibling sleep in their bed. If your family's preferred sleeping arrangement is for your child to sleep in his/her own bed without you, then fading parental presence may be helpful. This strategy is also designed to work with your child's current sleeping arrangement. It aims to avoid unhelpful sleep patterns, such as when your child leaves the bed repeatedly until you sleep with him/her or your child enters your room repeatedly until you allow your child to sleep with you. Such patterns are understandable given how hard it is to manage sleep difficulties! Parental presence fading generally starts by settling your child into bed at the established bedtime and then staying in the room at a predetermined location, such as in the bed beside your child, on a chair beside your child's bed or on a mattress on the floor beside your child's bed, until your child falls asleep. Once your child is reliably falling asleep with you at this location, you begin to slowly reduce your presence in the room. You may move a few feet further away for a night or two, then a few more feet, then into the doorway, then into the hallway, and then into your own room. This process continues until you are sleeping in your own bed, and your child is sleeping in his/her own bed.



Bedtime fading and parental presence fading may be used together to improve sleep patterns with very little child distress. These strategies may be particularly suited for children who get upset when put to bed alone, who leave the bedroom frequently to retrieve a parent or to sleep with a parent, or who have long sleep onset delays. Although these strategies might not be intuitive, they may reverse the unhelpful sleep patterns that have been established.

My Child is Having a Hard Time

Even with these proactive strategies, there will be times when your child has difficulty adapting to the new sleep routines and expectations. This is normal as change is hard for all of us. It is important that you have a plan to respond to any sleep-interfering behaviour your child may engage in, such as yelling, leaving the bed, or having a tantrum. Your response should be calm and support your child's long-term sleep success. It is generally recommended that you respond to sleep-interfering behaviour in a neutral manner. Try not to bring attention to the behaviour in the form of reprimands or soothing statements. Simply restate the bedtime expectations or bid your child good night, and return your child to bed if necessary.

Once all the intervention components are in place, the final step of a behavioural sleep intervention is to monitor your child's response. If things progress smoothly, celebrate your child's success! If things aren't going as smoothly as you had hoped, don't give up! Consider what small adaptations might be required to get things on track. You may have to move at a slower pace to give your child more time to adapt to the changes, or you may need to try one of the other approaches described above. Adaptations are often required as you and your child adjust to the new sleep expectations.

I Need More Help

Some families may be able to improve their child's sleep patterns by consistently using the strategies described above. However, it can be very difficult and tiring to improve sleep patterns. For this reason, other families may benefit from the support of a professional with expertise in treating sleep difficulties. If you feel you might benefit from professional guidance, reach out to a behaviour analyst who has expertise in this area. Many behavior analysts are able to provide services remotely via telehealth.

In seeking to address sleep difficulties, be flexible, use strategies that work for your family, seek professional help if needed, and celebrate your successes.

Resources

How to get your child to go to sleep and stay asleep: A practical guide for parents to sleep train young children. Dr. Kirsten Wirth (Author)

<https://marybarbera.com/autism-sleep-how-improve-sleep-children-autism/#>

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