# **INFORMATION SHEET\***

RRCASD: Informing Families and the Community of Autism Spectrum Resources & Services

Sleep Difficulties in Children with ASD\*
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Children with autism spectrum disorders (ASD) often have sleep difficulties. These include decreased total sleep time, difficulty falling asleep, waking during the night, and early morning awakening. Sleep difficulties are reported to be more common in children with ASD than in the general pediatric population. Most research on sleep problems in ASD has been conducted on children, with few studies examining the nature of sleep problems in adults with ASD. Even fewer studies have looked at sleep problems over time to determine if difficulties stay the same or change as the child ages.

Sleep problems can include insomnias and parasomnias/related nocturnal events. Insomnias involve difficulties with going to sleep and/or staying asleep. Parasomnias include a variety of behaviors that occur during different parts of the sleep cycle. Examples of parasomnias include sleepwalking, sleep talking, night terrors, and rhythmic movement disorders such as repetitive movement of body parts.<sup>2</sup> Sleep difficulties may be the result of a medical or physical condition (e.g., epilepsy, sleep apnea, restless legs syndrome), a co-occurring mental health condition (e.g., anxiety), a side effect of medication, behavioral factors (e.g., no set bedtime routine), or symptoms associated with ASD (e.g., sensory sensitivities, difficulty with transitions, different brain chemicals related to sleep). Untreated sleep difficulties or co-morbid disorders may result in daytime behavioral difficulties such as inattention, anxiety, and hyperactivity, and could create additional stress for the child and family.

There are treatments available for sleep problems but first the clinician must assess the cause of the child's sleep problem. The clinician may ask a caregiver to keep a sleep diary or fill out a questionnaire such as the Family Inventory of Sleep Habits<sup>3</sup> or the Children's Sleep Habits Questionnaire<sup>4</sup>. This will provide information on the sleep habits of the child and environmental factors that may affect sleep such as the child's daytime activities, sleep environment, and bedtime routine. In some cases, a clinician may want to measure the quality of a child's sleep and will use an objective sleep measure such as video-EEG polysomnograpy or actigraphy, which records the child's movements and nighttime awakenings. The clinician will also gather data on the child's health status to determine if the cause of the sleep problem may be related to an underlying medical or physical condition, or the result of medication side effects. Information gathered from this sleep assessment is necessary to developing an appropriate intervention plan.

There are a number of different treatment options for children with sleep problems, depending on the cause of the sleep problem. A pharmacological approach may be used to treat sleep problems related to medical or physical conditions. If the child's current medication is causing sleep difficulties, the clinician may decrease or change the medication to eliminate the sleep difficulty side effect. If assessment data indicate that the sleep problem is not due to a medical condition, then treatment typically involves one or more behavioral interventions. Behavioral interventions focus on assisting the caregiver in establishing a consistent bedtime routine for the child, developing visual supports to assist with following the routine, creating an environment that is conducive to sleep, and engaging in practices during the day that encourage better sleep. In some cases, medication may also be used in conjunction with behavioral treatments, if behavioral treatments alone have not been successful.

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# Find Out More

### Websites:

Establishing Positive Sleep Patterns for Children on the Autism Spectrum

http://www.autism-society.org/site/DocServer/LWA\_Sleep.pdf?docID=4184

Good Night, Sleep Tight, and Don't Let the Bed Bugs Bite: Establishing Positive Sleep Patterns for Young Children with Autism Spectrum

http://www.iidc.indiana.edu/irca/Medical/goodnight.html

Sleep Strategies

http://www.permanente.net/homepage/kaiser/pdf/61326.pdf

Helping Your Child with Autism Get a Good Night's Sleep

http://www.webmd.com/brain/autism/helping-your-child-with-autism-get-a-good-nights-sleep

#### Books:

- Durand, V.M. (1998). Sleep better! A guide to improving sleep for children with special needs. Baltimore, MD: Paul H. Brookes Publishing.
- Durand, V.M. (2008). When Children Don't Sleep Well: Interventions for Pediatric Sleep Disorders Parent Workbook. New York; Oxford University Press.
- Stores, G. & Wiggs, L. (2001). Sleep Disturbance in Children and Adolescents with Disorders of Development: Its Significance and Management. Holborn, London High; Holborn House.

## References

- <sup>1</sup> Richadale, A., & Prior, M.R. (1995). The sleep/wake rhythm in children with autism. *European Child and Adolescent Psychiatry, 4*(3), 175-186.
- <sup>2</sup> Malow, B.A., & McGrew, S.G. (2008). Sleep disturbances and Autism. *Sleep Medicine Clinics*, *3*, 479-488.
- Malow B.A., Crowe, C., Henderson, L., McGrew, S.G., Wang, L., Song, Y., & Stone, W. (2009). A sleep habits questionnaire for children with autism spectrum disorders. *Journal of Child Neurology*, 24(1), 19-24.
- <sup>4</sup> Owens, J. A., Spirito, A., & McGuinn, M. (2000). The Children's Sleep Habits Questionnaire (CSHQ): Psychometric properties of a survey instrument for school-aged children. *Sleep*, 23(8), 1-9.

<sup>\*</sup> This resource is provided for informational purposes only. Information should not be used as a substitute for professional assessment and judgment. Although the information is believed to be accurate and reliable, all information is provided "as is" without warranties of any kind, either express or implied, including but not limited to merchantability, non-infringement or fitness for a particular purpose. The University of Rochester shall not be liable for any damages, including direct, indirect, special or consequential damages, which may arise out of the use of the information contained within this resource.