Welcome to the today's webinar!

- We will begin at 1pm.
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Sleep and the ADHD Brain Why It's Critical and How to Get More





meet today's expert speaker:

Joel Nigg, Ph.D., and Elizabeth Super, M.D.



Dr. Nigg is a professor of Psychiatry and Behavioral Neuroscience at Oregon Health & Science University. He is a leading researcher in the field of ADHD and the author of over 200 scientific papers. He is the author of a recent book for parents that addresses lifestyle and environment approaches to ADHD, Getting Ahead of ADHD: What Next Generation Science Says about Treatments That Work—And How You can Make them Work for Your Child (New York, Guilford Press, 2017).

Dr. Super is an Associate Professor in the Division of Pediatric Pulmonology and Sleep Medicine at Oregon Health & Science University. She has practiced as a board certified sleep medicine specialist since 2009, and enjoys helping children and families get better sleep.

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Sonic Alert: Never sleep past your alarm clock again with this extra loud alarm and powerful bed shaker. This dual alarm clock has been proven to wake up even the heaviest sleepers. sonicalert.com/alarm-clocks

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In this webinar you will learn:

- The importance of sleep
- The recommended sleep amounts
- Common behaviorally related sleep problems
- Simple behavioral guidelines for limiting sleep problems and key tips for addressing problems
- How to decide when it's time for a formal evaluation
- Focus on children and teens—but with a few minor changes, most tips apply to adults too!

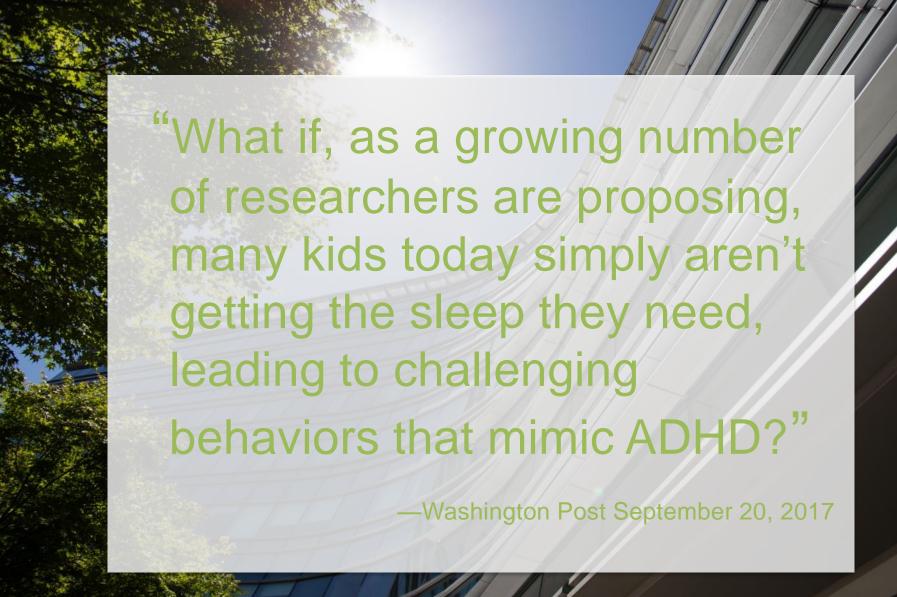


Could ADHD be a type of sleep disorder? That would fundamentally change how we treat it.

By Ariana Eunjung Cha September 20 at 2:30 PM



(iStock)



SLEEP Facts



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- 70% of American kids and adults=insufficient sleep
- ADHD: primary sleep disorders not much elevated
- But: secondary (<u>behavior-related</u>) sleep disruption very common
- Sleep is very important and can interact with ADHD!



SLEEP: From Problem Area to Harnessing its Power





How much sleep do kids need?

Age range	Sleep hours range	Sleep hrs. midpoint -goal	Example target sleep time	Ex. start bedtime routine
Pre- school	10-13	11.5	7:00 pm	6:30 pm
School age	10-12	11	8:00 pm	7:30 pm
Teen 14-17	8-10	9.25	9:00 pm	8:30 pm



Myth: Nothing happens during sleep.

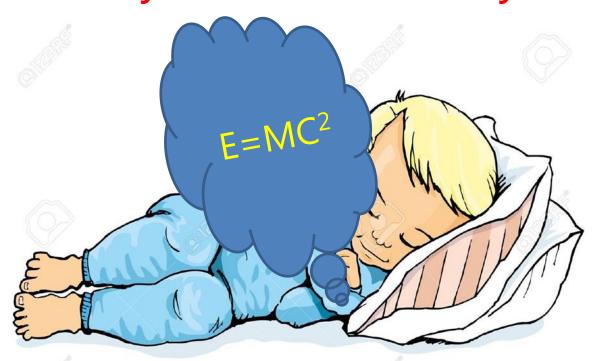


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Myth: Nothing happens during sleep.

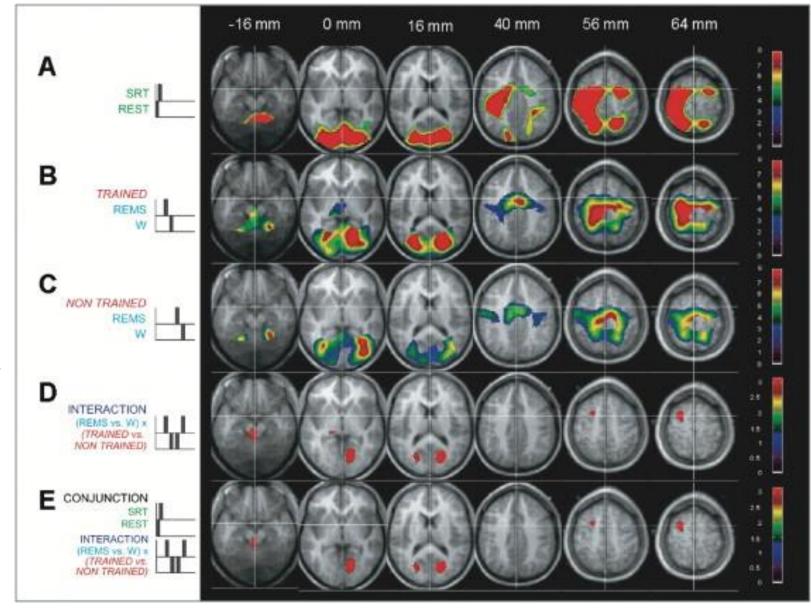
Fact: Sleep is when kids consolidate and remember what they learned that day!



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During sleep brain replays same pattern as during task learning





SonicAlert.com

Reduced sleep CAN cause ADHD-like problems: Recent findings

48 adolescents

- -restricted sleep (6.5 hours) for 1 week, then
- -extended sleep (9.5 hours) for 1 week

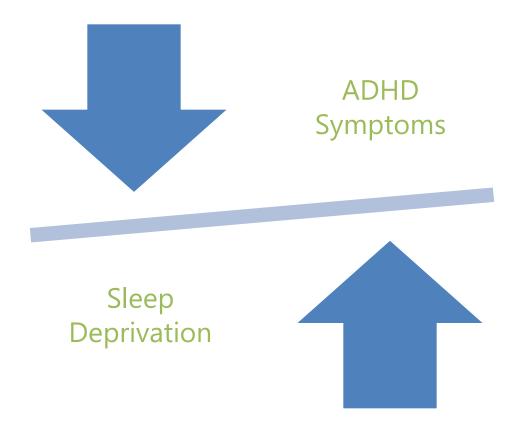
With less sleep:

- INCREASED Sleepiness (Parents and Teens)
- MORE Inattention (Parents)
- MORE Opposition (Parents)
- Sluggish Cognitive Tempo (Parents and Teens)
- Less hyperactivity

Becker, Stephen & N. Epstein, Jeffery & Tamm, Leanne & A. Tilford, Alina & M. Tischner, Clair & Isaacson, Paul & Simon, John & W. Beebe, Dean. (2018). Shortened Sleep Duration Causes Sleepiness, Inattention, and Oppositionality in Adolescents With ADHD: Findings From a Crossover Sleep Restriction/Extension Study. Journal of the American Academy of Child & Adolescent Psychiatry. 10.1016/j.jaac.2018.09.439.



Bidirectional relationship





Most common sleep related child behavioral problems (American Academy of Sleep Medicine)

- Falling asleep is an extended process requiring special conditions
- Sleeping has a negative association—child doesn't like to go to bed or to sleep
- Without special conditions can't sleep
- Waking during the night requiring parental intervention
- Limit setting problems
 - Child can't initiate or stay asleep
 - Stalls bedtime or refuses to go to bed
 - Refuses to return to bed after nighttime awakening



Sleep and Behavior

- Basics of "sleep hygiene"
- Steps when a problem needs work

Sleep and Behavior

- Basics of "sleep hygiene"
- [Steps when a problem needs work]



Behavioral boundaries around sleep

- Time boundary
- Space boundary



Behavioral boundaries around sleep

- Time boundary: for 1 hour before bedtime
 - No blue light (no screens)
 - No heavy meal
 - No exercise
 - Gradually quieting down the activity

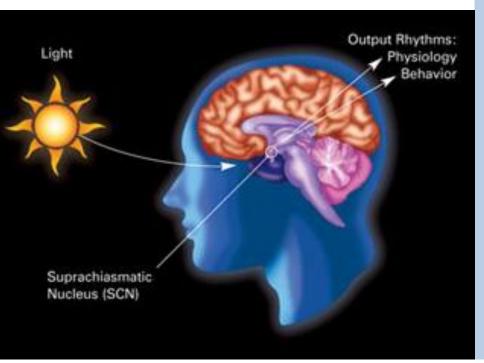


Behavioral boundaries around sleep

- Time boundary
 - No blue light (no screens)
 - No heavy meal
 - No exercise
 - Gradually quieting down the activity
- Space boundary
 - Use bed only for sleeping
 - Study, play, elsewhere in room--not on bed



BLUE LIGHT and SCREENS AND SLEEP



- Brain clock=light dependent
- The science: blue light disrupts the clock, less sleep quality
- Action: no screens < 1
 <p>hr before sleep time
- (orange screen protection in a pinch)

Sleep Behaviors: Action steps (p 110)

- Set up a bedtime routine—lasting 30-45"
- Goal: End positive and child is drowsy.
- During the routine: Keep moving forward. Redirect.
- Conclude with a positive ritual the child enjoys (e.g., read a book, tell a story, sing a song, say prayers, recall best part of day)
- End with goodnight and child in bed alone, drowsy but awake
 - No need to stay until child is asleep (else child may think she needs you there to fall asleep)



Additional tips on routine

- Maintain same routine every night.
- If child calls you back or leaves the room, minimize engagement, redirect to sleep
- Keep it positive-praise and affection
- If needed, add behavioral rewards (e.g., points)
- If needed, write out the schedule for the child
- If needed—counseling help—next up!



Sleep and Behavior

- [Basics of "sleep hygiene"]
- Steps when a problem needs work



When routine doesn't work and you need more help

- The good news: Short term behavioral counseling is effective—even 1-2 sessions can help a lot
- Principles
 - Treating going to sleep as a behavior
 - Creating behavioral system (e.g., points) or gradually modified goals
 - Fading the behavior in
- Technical methods taught by counselors include
 - Positive routines (building toward sleep)
 - Unmodified extinction (tough it out)
 - Graduated extinction (easing out)
 - Extinction with parental presence
 - All about equally effective, targeted to specific problem



Interesting tidbits from recent science

- Sleep related learning can be enhanced
 - Review/rehearse key learning points after dinner (Sleep within 2-3 hr after learning most effective)
 - Preschoolers—let them nap after school
 - Interesting twist—pairing a unique, pleasant smell with important learning and having the smell occur during sleep appears to boost memory even more

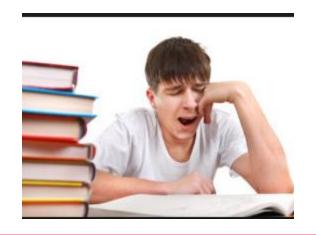


When should I get a formal sleep evaluation?



THE MOST COMMON CAUSE OF SLEEPINESS IN TEENS IS:

NOT ENOUGH SLEEP!



SYMPTOMS OF SLEEP APNEA:



- Snoring more than 3 days per week
- Pauses in breathing (choking, gasping)
- Mouth breathing
- Sweating during sleep
- Adequate sleep time, still sleepy
- Obesity is a significant risk factor



EVALUATION OF SLEEP APNEA

- Referral to a Sleep Medicine Specialist
- Overnight Sleep Study



- Allergy medicines (Mild)
- Surgery (removal of tonsils and adenoids)
- CPAP machine





SYMPTOMS OF RESTLESS LEG SYNDROME:



- Urge to move legs
- Worse at times of rest
- Worse later in the day
- Relieved by movement
- More common in patients with ADHD



EVALUATION FOR RESTLESS LEG SYNDROME:

- Referral to Sleep Medicine Specialist if symptoms disrupt sleep!
- Further questions/symptom rating scales
- Blood test to measure iron storage
- Possibly a sleep study
- Treatments targeted at symptoms (relaxation devices/heating pads) and increasing iron levels.



SYMPTOMS of DELAYED SLEEP PHASE SYNDROME



- Extreme night owl, with difficulties falling asleep prior to 1-3 am
- Significant daytime dysfunction (missing school, mood difficulties, academic decline) if needing to wake prior to 10 am
- Sleep is otherwise restful if on desired schedule (often during summer)





EVALUATION FOR DELAYED SLEEP PHASE

- Further sleep diaries, recordings of sleep
- Maximizing healthy sleep hygiene with routine sleep scheduling
- Slowly moving bedtime earlier with use of low dose melatonin and early morning light



HOW ABOUT MEDICATIONS?



- NO FDA APPROVED MEDICATIONS FOR SLEEP IN CHILDREN OR TEENS
- ALL MEDICATIONS ARE PRESCRIBED OFF LABEL (INCLUDING MELATONIN)

HOW ABOUT MEDICATIONS?



- Evidence to support melatonin use in children with ADHD, but few long-term studies.
- ADHD medications can make sleep worse.
 - But sometimes improve sleep.
- Use medication including melatonin in conjunction with your health care provider



Take Home Messages

- Youth with ADHD DO have sleep problems that can make it worse!
- Occasionally a real sleep disorder can cause apparent ADHD—but most of the time that's not it
- The first line approach is behavioral sleep management.
- Consider primary sleep disorders in children and teenagers presenting with ADHD with primary inattention.
- The last resort is medical intervention after a primary sleep evaluation.



Thank you

- www.joelniggphd.com for ongoing updates
- http://sleepeducation.org/ (by American Academy of Sleep Medicine) for more background





Please enter your questions in the box to your right.

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Upcoming Webinars

Wednesday, December 5th at 1pm ET
 Shout! Stomp! Slam! How to Communicate and Connect with a Child Who Doesn't Want to Talk with Kirk Martin

Visit http://additu.de/webinars to view the webinar replay library.





Thank You!

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