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Sleep Hygiene: Promoting Good Sleep Health

Caregiver Webinar Series

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Rachel Kolsky, Ph.D.
Shalinee Khurana, M.D.

The following is intended to be educational but does not constitute medical advice.

Parents should consult with their child's physician before administering any medications, supplements, or other medical/behavioral interventions.

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How much sleep should my child be getting?

How do I help my child get more sleep?

Will sleep training harm my child?

How do I teach my child to fall asleep independently?

What about medication?

When should I talk to my child's doctor or see a specialist?

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Sleep is a biological and a behavioral process

What is Sleep???

- Period of reduced motor activity and decreased interaction with and response to environment
- Biological drive for sleep that is dynamic
- Regulated by the brain, involving many structures, systems, and chemical signals

<u>REM Sleep</u>
Rapid Eye Movement
Dreaming
Atonia – no muscle tone in most of body
Memory consolidation
Brain development

<u>Non-REM Sleep</u>
Relatively low brain activity
Includes deep sleep (Slow wave sleep)
Restoration

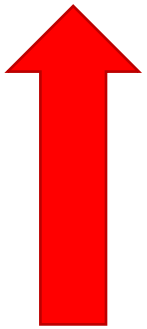
What is enough sleep?

Effects of Chronic sleep loss:

- Mood disturbance
- Fatigue, headache, muscle ache
- Cognitive
- Daytime behavior
- Academic problems
- Attention, Learning, Behavior

Q: What is enough sleep?

A: When the child feels and appears well-rested



Attention
Behavior
Learning and memory
Emotional regulation
Mental and physical health
Quality of life

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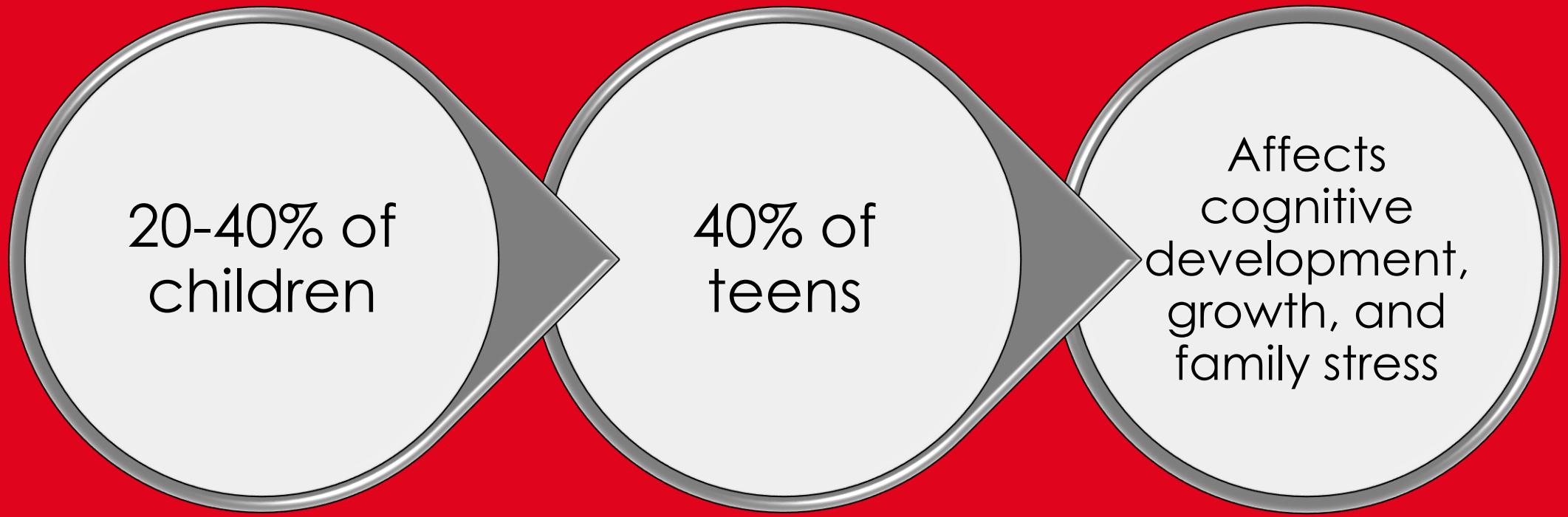
Sleep problems are common.



AAP 2011

How much sleep should my child get?

- American Academy of Pediatrics (AAP) recommends the following total sleep time per 24-hour day (including naps):
  - 4-12 months: 12-16 hours
  - 1-2 years: 11-14 hours
  - 2-5 years: 10-13 hours
  - 6-12 years: 9-12 hours
  - 13-18 years: 8-10 hours

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Common Sleep Problems in Children and Teens

Where do I start?

Children & Adults **wake up** 3-5 times per night

Sleep Association – whatever we need to fall asleep at bedtime, we need to stay asleep throughout the night

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General Guidelines

- Consistent **sleep schedule**
  - Bedtime before 9 PM
  - No more than 1-2 hour shift on weekends, holidays, etc.
- Consistent **bedtime routine**
  - 2-5 calm activities
  - 20-30 minutes
  - Move in the "direction" of bed
- **Teach child to fall asleep independently**
  - Select your approach based on your child's needs and your comfort
  - Developmentally appropriate skill

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How do I teach my child to fall asleep independently?

Standard Extinction (aka "cry it out")

- Place child in crib/bed awake and ignore cries/protests
- Expect extinction burst (45 mins → 60 mins → 20 mins)
- Typically works within 1 week

Graduated Extinction

- Place child in crib/bed awake and then "check" as frequently as desired
- Checks = Brief/Boring Interactions with standard script
- Progressively longer intervals between checks

Fading of Parental Presence

- Gradually move farther away from child every 3-7 nights OR
- Take progressively longer breaks from laying with child

Limit-setting at bedtime

- **Positive reinforcement**
  - Labeled praise for positive behaviors (e.g. "I like the way you tucked yourself in.")
  - "If, then" statements (e.g. "If you stay in bed for 5 minutes, I'll come check on you.")
  - Sticker chart for bedtime routine
  - Sleep fairy
  - Bedtime passes: 2-3 passes for any requests after bedtime; unused passes traded in for a small reward in the morning
  - Good morning light
- **Ignoring negative/unwanted behaviors**
- **Forced choices**

Sleep Hygiene Recommendations

- Consistent schedule for bedtime and wake time
- No naps after kindergarten
- Consistent bedtime routine
- Cool, dark, and quiet
- Say “good night” to electronics - no screen time 1 hour before bed
- Morning light exposure
- White noise machine (on throughout duration of night)
- Avoid caffeine
- Use the crib/bed only for sleep and sleep only in the crib/bed
- Adequate exercise/activity throughout the day

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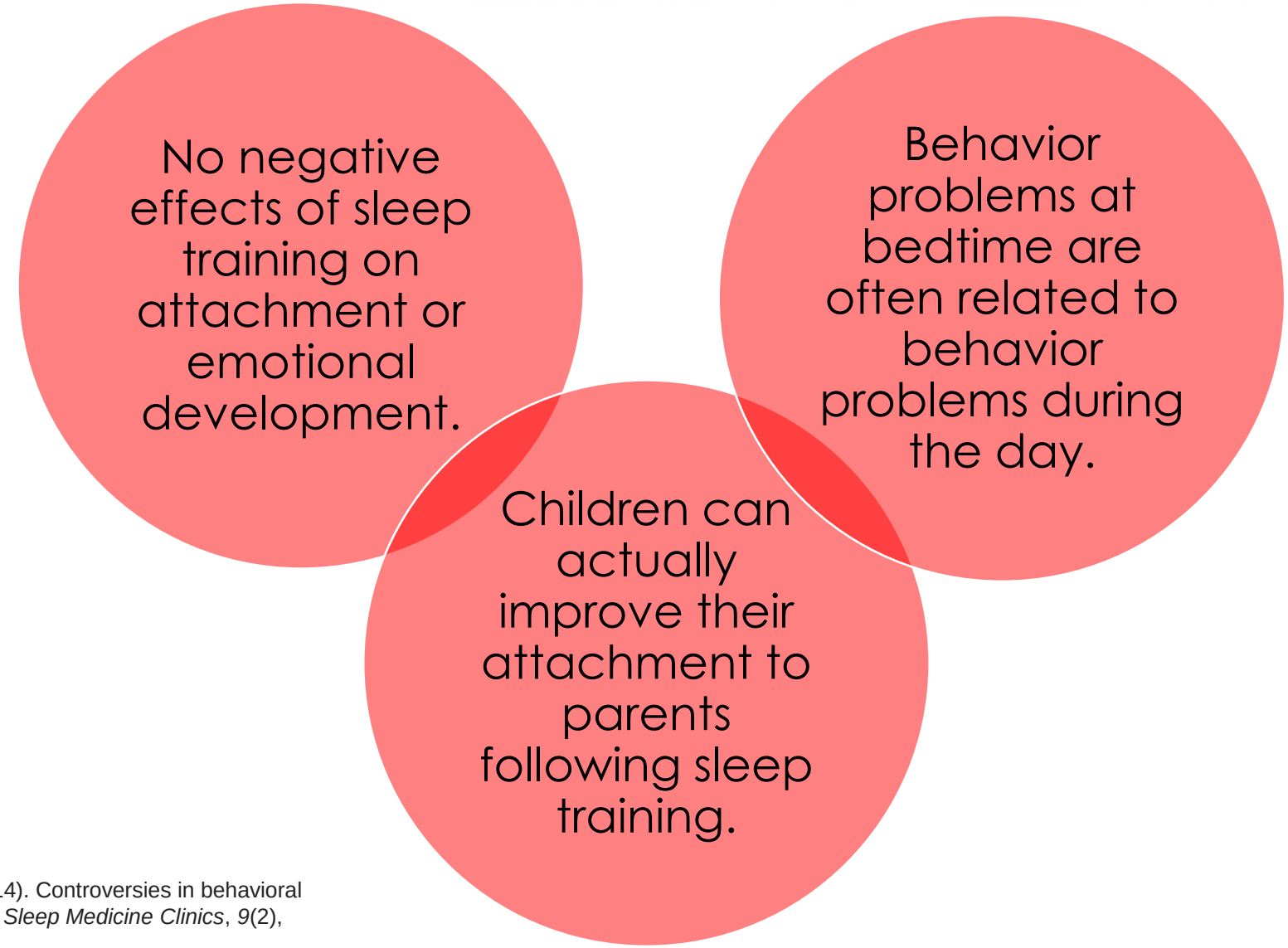

Thomas, J. H., Moore, M., & Mindell, J. A. (2014). Controversies in behavioral treatment of sleep problems in young children. *Sleep Medicine Clinics*, *9*(2), 251-259.

Moore, M., & Mindell, J. A. (2013). The impact of behavioral interventions for sleep problems on secondary outcomes in young children and their families. In *The Oxford handbook of infant, child, and adolescent sleep and behavior* (pp. 547–558). Oxford University Press.

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Focus on bedtime first.

Sleep disturbance in Neurodevelopmental Disorders

- EXTREMELY common
- Considerable stress for families
- Compared to typically developing children:
  - More common
  - More severe
  - More complex – genetic/neurologic differences, multiple types
  - Chronic
  - Resistant to treatment

Contributing Factors

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Variable but nonspecific

- Shortened sleep duration
- Irregular sleep patterns
- Delayed sleep onset
- Frequent nightwakings
- Early morning waking

Good News!

Generally same types of sleep problems seen in typically developing children

Sleep problems in Autism

- Core features of ASD that may impede sound bedtime behaviors/routines
• Self-regulation, transitioning, communication/understanding expectations
• Preference for sameness and routine may help

- Altered melatonin/neurotransmitter metabolism, coexisting medical conditions

- Most common cause: **BEHAVIORAL**
- Screen time
- Evening and bedtime routine
- Environment in household
- Response to night-waking

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Sleep counseling in Autism

- Comfortable setting (cool, dark, quiet, **textures/weight**)

- **Regular evening (meal times) and bedtime routine – use visuals**
- Motivation and predictability
    - **Preference for sameness and routine may help**

- Daytime sunlight
- Exercise
- **Timing – consider total sleep need, some need less, consider delaying bedtime if >1hr latency**

When behavioral intervention is not appropriate

- Educational (behavioral) approach does not seem feasible
- Intensity of symptoms has reached a crisis point

Consider medication

- If not improving with behavioral techniques
- Severe insomnia, causing impairment or putting at risk of harm while awake during the night
- Patient on multiple sleep medications
- Underlying sleep disorders, ie sleep apnea, RLS/PLMD, parasomnias

Consider sleep specialist

Underlying sleep disorders

Seizures:

- Repetitive movements, drooling, tongue-biting, incontinence, multiple episodes, throughout night

Obstructive sleep apnea

- Peak at 2-8 yrs with adenoid/tonsil growth
- Loud, continuous, nightly snoring
- Pauses, choking, gasping, snorting, mouth breathing

} May be worst in last third of night

- Abnormal position
- Daytime mouth breathing, nasal speech, sleepiness/difficult waking, mood, ADHD-like behavior, learning problems

Restless leg syndrome/Periodic limb mvmt disorder

- Uncomfortable sensation and urge to move legs – bedtime resistance and difficulty falling asleep, overnight
- Periodic episodes of brief repetitive limb movement detectable and documented on sleep study
- Frequent overlap
- ADHD
- OSA and PLMD
- Iron supplement for ferritin < 50 ng/mL

Underlying sleep disorders

Teeth grinding/clenching

- Usually resolves when permanent teeth coming in or chronic
- Stress – behavioral health referral
- Dental referral in older children/adolescents if jaw pain or dental damage

Bed wetting

- Involuntary urination ≥ 2 X per week once child is ≥ 5 years old, at least 3 months of symptoms
- Primary vs Secondary
- Developmental maturation process
- More common - neurodevelopmental disorders, family history
- Medical considerations: Constipation, UTI, diabetes, daytime wetting
- Referral if not improving with age, if daytime wetting, genital abnormalities, UTI's, diabetes, seizures, obstructive sleep apnea

Medication management of sleep

★ If behavioral approach not feasible or intensity of symptoms is at crisis point

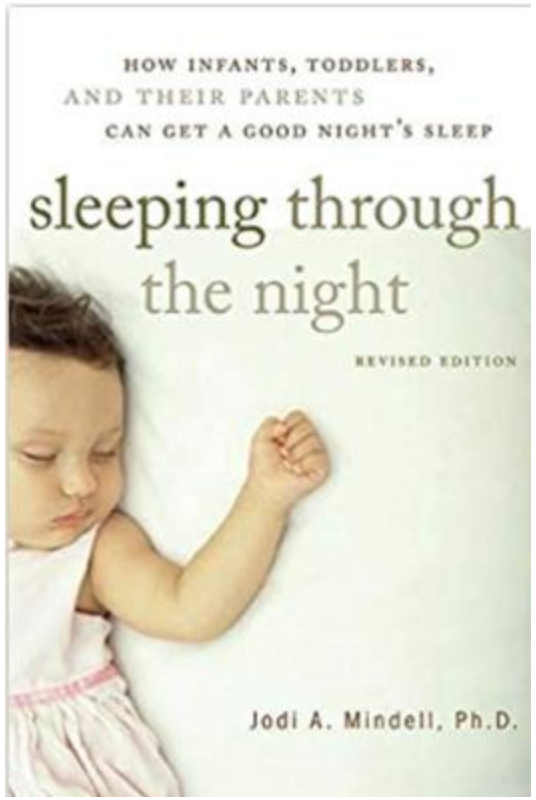
- No FDA approved medication for insomnia in children

<u>Melatonin</u> has most evidence
- HIGH quality evidence for: sleep onset, sleep duration, bedtime resistance
- 1mg-6 mg qHS
  - Start low, go slow
- Long-acting for maintenance
- Studies show good efficacy and tolerability

Resources

www.drcraigcanapari.com

www.babysleep.com



Sleeping Through the Night, by Jodi Mindell

Take Charge of Your Child's Sleep, by Judith Owen and Jodi Mindell

Solving Sleep Problems in Children with Autism Spectrum Disorders, by Terry Katz and Beth Ann Malow

Thank You!

Please consult your pediatrician and your child's medical and developmental support team about specific concerns about your child.

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