

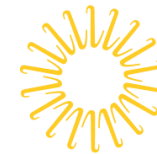
Children's Sleep Problems: Opportunities and Challenges During a Pandemic

Julie Boergers, PhD

Professor of Psychiatry & Human Behavior and Pediatrics, Clinician Educator
Warren Alpert Medical School – Brown University
Bradley Hasbro Children's Research Center
Co-Director, Pediatric Sleep Program – Hasbro Children's Hospital



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Alpert Medical School



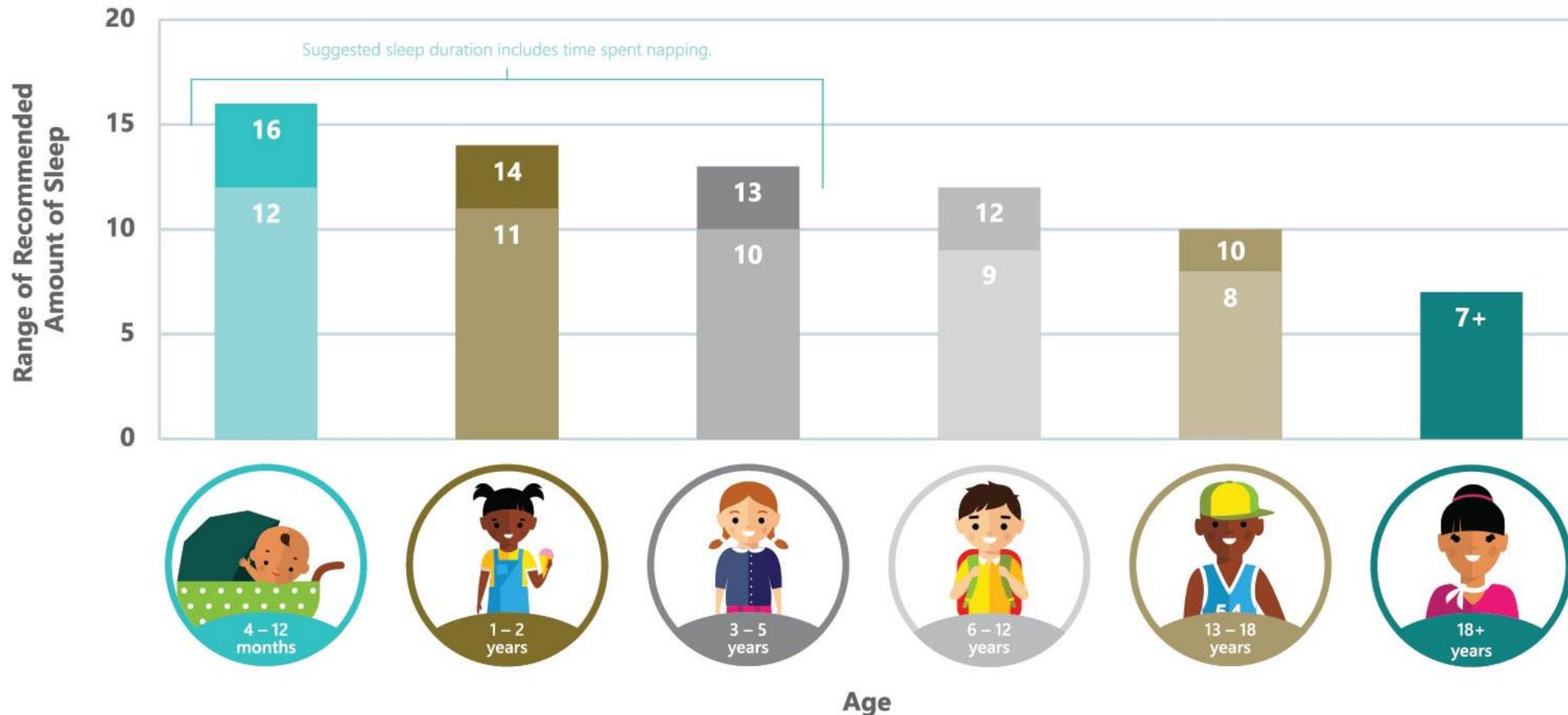
Hasbro Children's Hospital
The Pediatric Division of Rhode Island Hospital
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Objectives

- Describe changes in child and adolescent sleep patterns and sleep hygiene during the COVID-19 pandemic
- Identify ways for clinicians to integrate sleep interventions into treatment when sleep is not the primary focus of treatment
- List strategies to help children and families to mitigate COVID-19-related challenges to sleep patterns and sleep hygiene

Healthy Sleep Duration

The American Academy of Sleep Medicine recommends that you get the following hours of sleep on a regular basis for optimal health at each stage of life.



Good Sleep Health: Challenging in the Best of Times

- > 1/3 of adults get <7 hrs of sleep and > 2/3 of high school students get < 8 hrs on school nights (BRFSS, YRBS)
- Acute insomnia is common (~25% both adults and children), usually resolves itself, though recurring bouts may persist (Perlis et al., 2019)
- ~ 10% of adults have chronic insomnia with daytime impairment
- Smart phone use in bed is common, especially in teens, linked with > insomnia (Bhat et al, 2018) and < sleep duration (Schweizer et al., 2017)

Importance of Routine Sleep Screening

- Sleep Problems Co-occur with:
 - Psychiatric Problems (> in a clinical sample compared to controls)
 - E.g. 25-50% of children with ADHD have sleep problems, esp DIMS
 - Pediatric Health Conditions
 - Effects of symptoms (e.g. pain), medication on sleep
 - Parental concerns about medically fragile children can impact response to bedtime behaviors
 - Neurodevelopmental Disorders
 - 44-83% of children with autism and/or ID have sleep problems

Differentiating Symptoms

- Effects of inadequate sleep on children include symptoms commonly seen in clinical practice:
 - Mood swings, irritability
 - Behavior and attention problems
 - Difficulties with memory, learning, academics
 - Family disruption
- E.g., OSA, RLS can be misdiagnosed as ADHD
 - T&A for OSA leads to improvements in behavior, neurocognitive functioning. Pts. less likely to meet criteria for ADHD following T&A

High Yield from Addressing Sleep

- Early success with concrete goals improves alliance and establishes provider as a helper
- Well-rested children and parents have greater ability to manage stress and conflict and engage with other therapeutic and medical recommendations

Special Challenges to Sleep During COVID-19

- > Inadequate daily structure
 - Loss of circadian entrainment
- Less physical exertion
- Inconsistent eating patterns



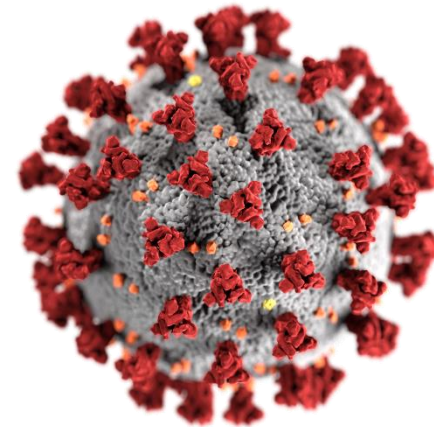
Sleep is Especially Challenging During COVID-19

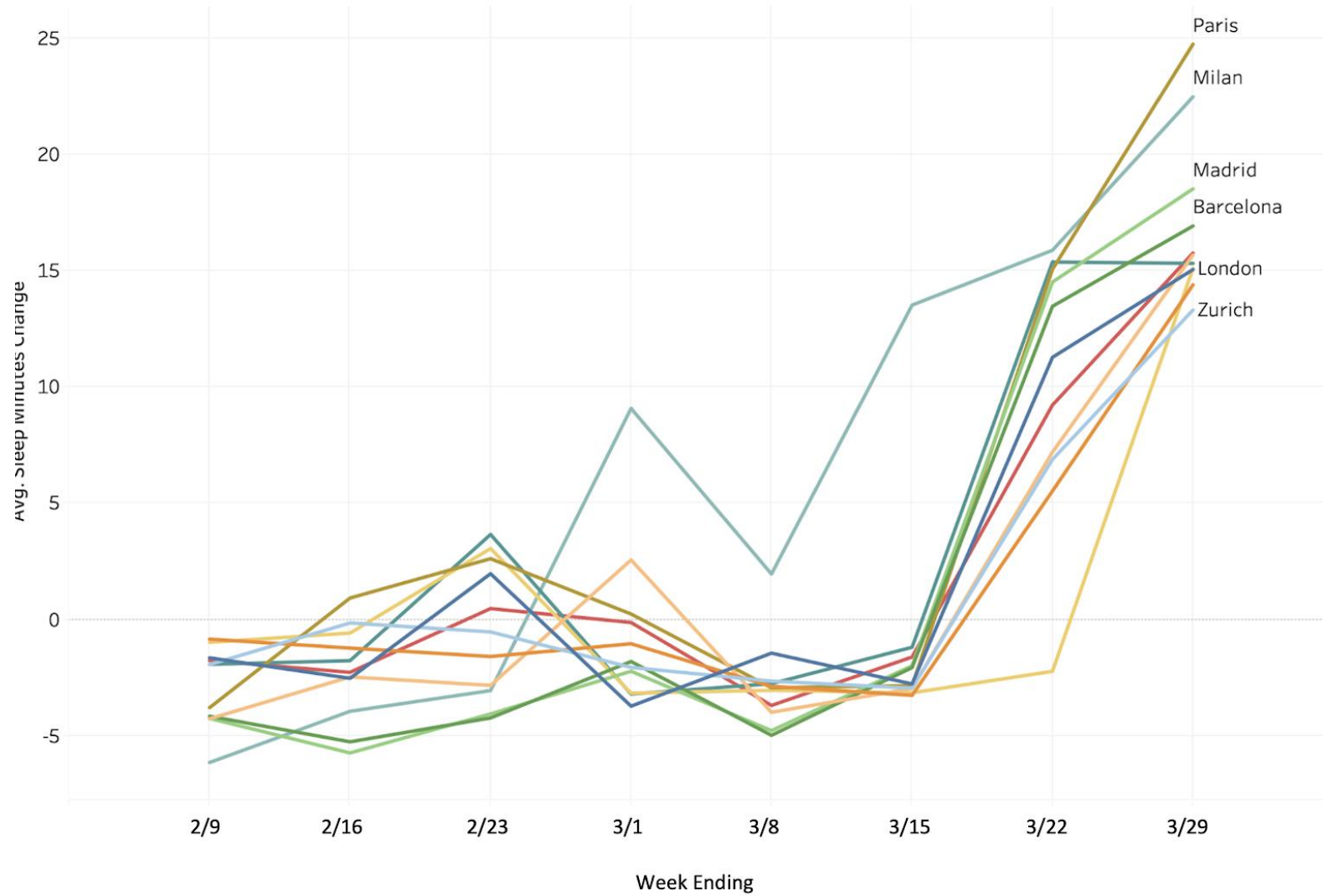
- Uncertainty about school, work, health, relationships, finances
- Anxiety & stress (bidirectional)
- Increased electronic use and media consumption
- Bed is being used for many non-sleep activities



Why is Good Sleep So Important During a Pandemic?

- Emotional and behavioral regulation, mood, coping
- Cognitive functioning (memory, learning, focus, productivity, accuracy)
- Relationships with others (irritability)
- Lower risk of accidents and injuries
- Immune function





**Sleep
Duration:
Global
Fitbit Data**

COVID-19 and Sleep – What We Know So Far

- Certain populations more vulnerable to insomnia d/t COVID (healthcare workers, women, urban dwellers, those with pre-existing depression, anxiety or loneliness) (Huang et al., 2020; Xiao et al., 2020; Voitsidis et al., 2020)
- Preschoolers in Italy during lockdown – decreased sleep duration and sleep quality, increased bedtime resistance, then stabilization of patterns (Dellagiulia et al., 2020)

Sleep Duration/Timing during COVID-19

- Fitbit aggregate US data, April 2020 vs January 2020
 - Later bedtime and wakeup time
 - Modest increase ($X=17$ min) in sleep duration
- Remote work and schooling may make it easier for some people to get more sleep
 - Those with long commutes
 - Adolescents and young adults



Where to Begin?

Taking a Brief Sleep History: “BEARS” (*Owens & Dalzell, 2005*)

- **B**edtime problems
- **E**xcessive daytime sleepiness
- **A**wakenings during the night
- **R**egularity and duration of sleep
- **S**nororing

First, Maximize Sleep Hygiene

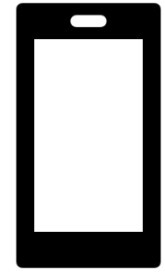
- No caffeine
- Regular timing of bedtime, waketime, meals
- Regular physical activity (but not too late)
- Quiet, dark room, comfortable temperature
- Avoid using bed/bedroom for punishment or for other activities
- No electronics within 1 hr of bed (and no electronics in bedroom)
- Presence of a bedtime routine!



Other High-Yield Strategies for Treating Children's Sleep Problems

- Assist parents with limit setting and reward systems
- Relaxation training
- Stimulus control (e.g. go to bed only when sleepy; get out of bed if unable to sleep; use bed only for sleep)
- Sleep restriction (e.g. limit time in bed, no naps)
- Cognitive restructuring/avoiding “sleep effort”

Sleep Hygiene Recommendation: **Limit Electronics Before Bed**



Pandemic Challenges:

- Dramatic increase in time spent on screens
- Remote schooling
- Remote work
- Virtual socialization and entertainment

Strategies:

- Blue light blockers/glasses
- Keep phone out of bedroom (use alarm clock!)
- Choose TV over close-up screens
- Set alarm/use app to shut phone down 30-60 min before bed
- Apps to track electronics usage
- Rewards/consequences

Sleep Hygiene Recommendation: Use Bed Only for Sleep



Pandemic Challenges:

- Using bed for work, school, eating, “hanging out”
- May be the only private place, especially if space constraints
- Teenagers unaccustomed to spending their days cooped up with family rather than friends

Strategies:

- Do non-sleep activities out of bed, even if in bedroom – e.g. chair/desk, beanbag chair, pillow on floor
- Separate spaces for different activities – be creative
- Get out of bed if can’t sleep

Sleep Hygiene Recommendation: **Reduce Stress**



Pandemic Challenges:

- Steady diet of bad news, hospital updates, social media posts
- Blurred boundary between home life and work life can undermine work productivity and efficiency, increasing stress

Strategies:

- Set a timer for news/social media and avoid right before bed
- Limit children's exposure
- Regular bedtime routine (eg stretching, light reading, meditation)
- Clear time and place for school/work vs. home activities

Sleep Hygiene Recommendation: **Manage Anxiety**



Pandemic Challenges:

- Unprecedented times, uncertain course
- For both children and adults, worries may be more prominent at bedtime
- Children may ask to sleep with parents, or keep calling parent back for extra requests

Strategies:

- Scheduled worry time
- Relax body (breathing, PMR, imagery) and quiet mind (distraction, boring podcasts, notepad by bed)
- Provide comfort/support while encouraging more independent settling (e.g. extra snuggle time, transitional objects, sit by door)

Sleep Hygiene Recommendations:

Daytime Behaviors that Affect Sleep



Pandemic Challenges:

- Increased substance use
- Increased nighttime snacking
- Decreased physical activity
- Being at home more can make naps tempting

Strategies:

- Limit caffeine and alcohol
- Avoid late meals
- Exercise daily but not within 5-7 hrs of bedtime
- Commit to eating meals at scheduled times
- Avoid naps

Sleep Hygiene Recommendation: **Consistent Sleep-Wake Schedule**



Pandemic Challenges:

- Few things to anchor schedule
- College students may be taking classes across time zones
- Redeployed workers may have changed or variable shifts
- Some may see sleep as a luxury

Strategies:

- Set a daily schedule (even if shifted)
- Wake time most important - set alarm, avoid snooze
- Shower and get dressed each day, get morning sunlight
- Impose AM structure (e.g. timing of meetings or facetimes)
- Don't try to compensate for poor night of sleep by waking up later

Resources

- **CBT-i Coach is a free mobile app** from VA's National Center for PTSD, designed for use alongside CBT-I with a health provider, but can be used on its own https://www.ptsd.va.gov/appvid/mobile/cbticoach_app_public.asp
- **Practical recommendations from a task force of the European CBT-I Academy for managing sleep during home confinement**
<https://onlinelibrary.wiley.com/doi/full/10.1111/jsr.13052>
- **Sleep education resources for children and adults from American Academy of Sleep Medicine:** <http://sleepeducation.org/>
- **Hasbro Pediatric Sleep Disorders Clinic:** 401-444-1614