Pediatric Collaborative Care Behavioral Health Conference 2023-2024

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Sleep and Anxiety in Children and Teens

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Pediatric Collaborative Care and Behavioral Health Conference

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Conflict of Interest

The planner and speaker of this CE activity has no relevant financial relationships with ineligible companies to disclose.

The speaker does not intend to discuss any unlabeled or unapproved use of drugs or devices.

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Please take a moment at the end of the session to complete your evaluation.

Thank you!

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Learning Objectives

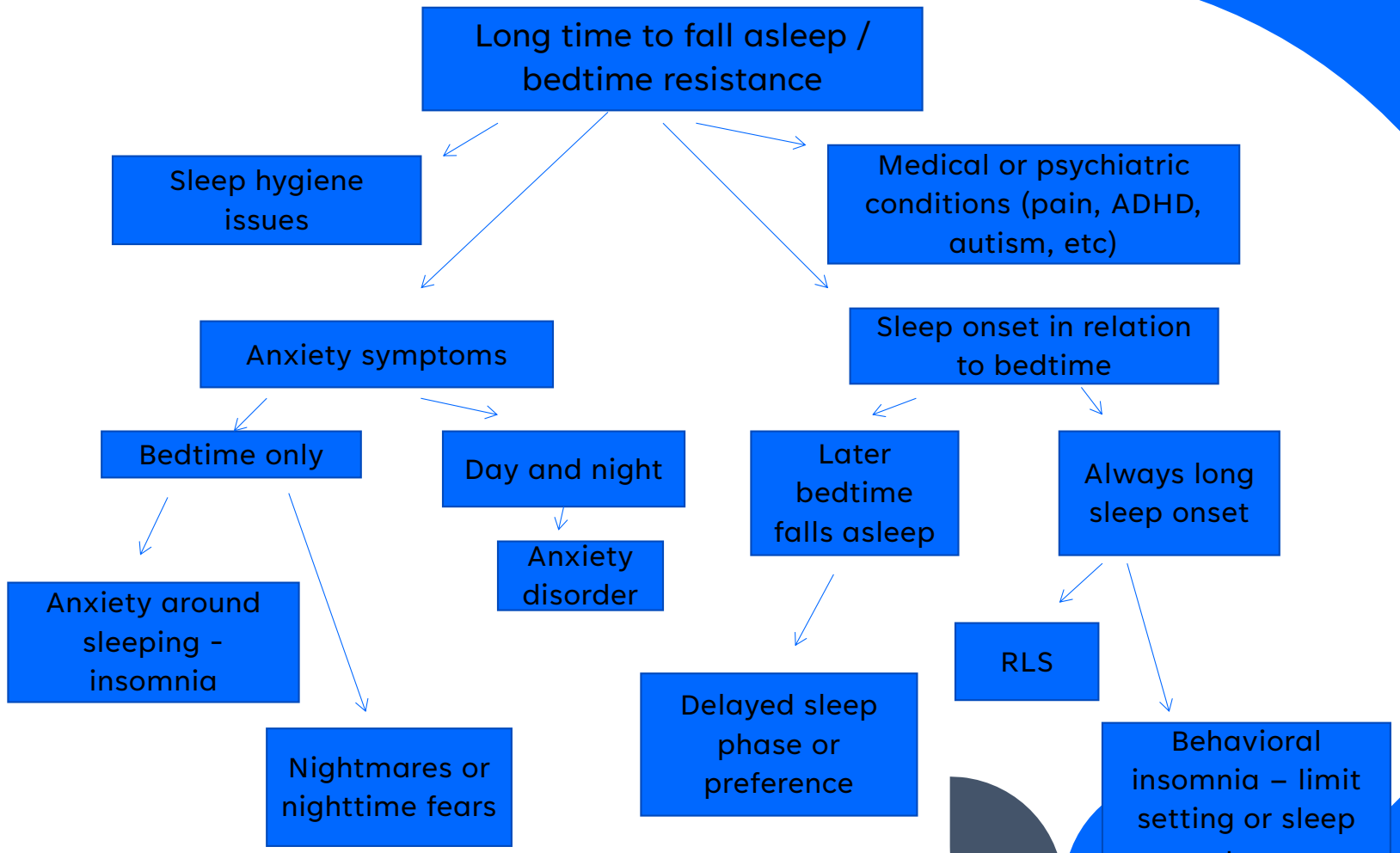
- Discuss how to differentiate symptoms of anxiety at bedtime and during the night from other sleep symptoms
- Explain principles of cognitive behavioral therapy for insomnia
- Identify behavioral interventions targeted to common nighttime sleep concerns in an anxious child
- Describe possible medication interventions to improve sleep

Why treat the sleep symptoms in anxiety?

- Sleep disturbances persist for approximately 10% of children once the mood symptoms resolve
- Persistence of sleep problems predicts later recurrence of depression and anxiety symptoms (especially if comorbid depression and anxiety)
- Also – overall – chronic sleep loss from any cause increases the risk of depression in both teens and young adults
- Healthy sleep has been identified as a modifiable protective factor for adolescent depression

Do sleep symptoms pre-date anxiety diagnosis?

- Persistent early sleep problems have been a reliable predictor for later development of anxiety disorders
- Difficulty initiating and maintaining sleep can be the initial presenting symptoms of anxious children



Adapted from “A Clinical Guide to Pediatric sleep”, Mindell&Owens, 2010

BEARS Sleep Screening Tool

B = Bedtime problems

E = Excessive daytime sleepiness

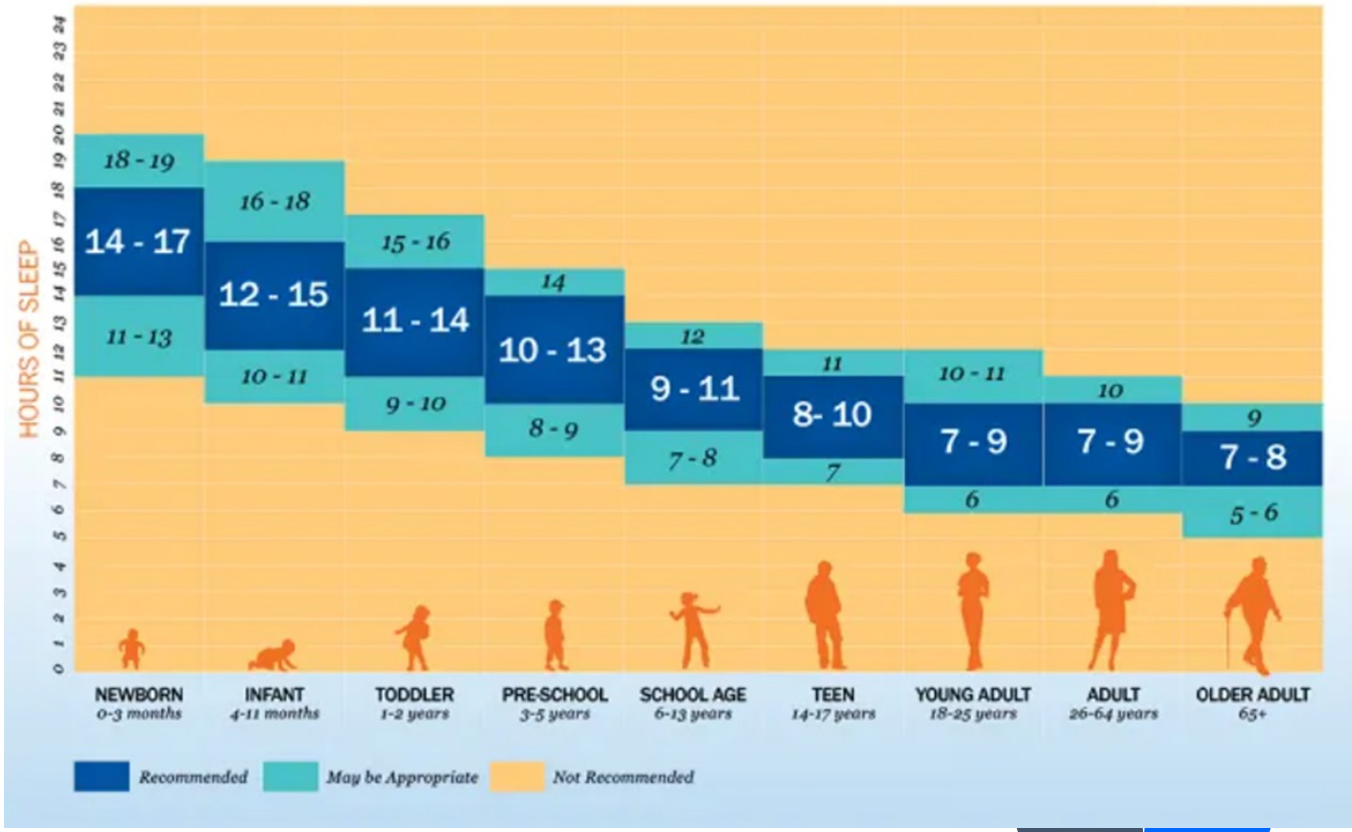
A = Awakenings during the night

R = Regularity and duration of sleep

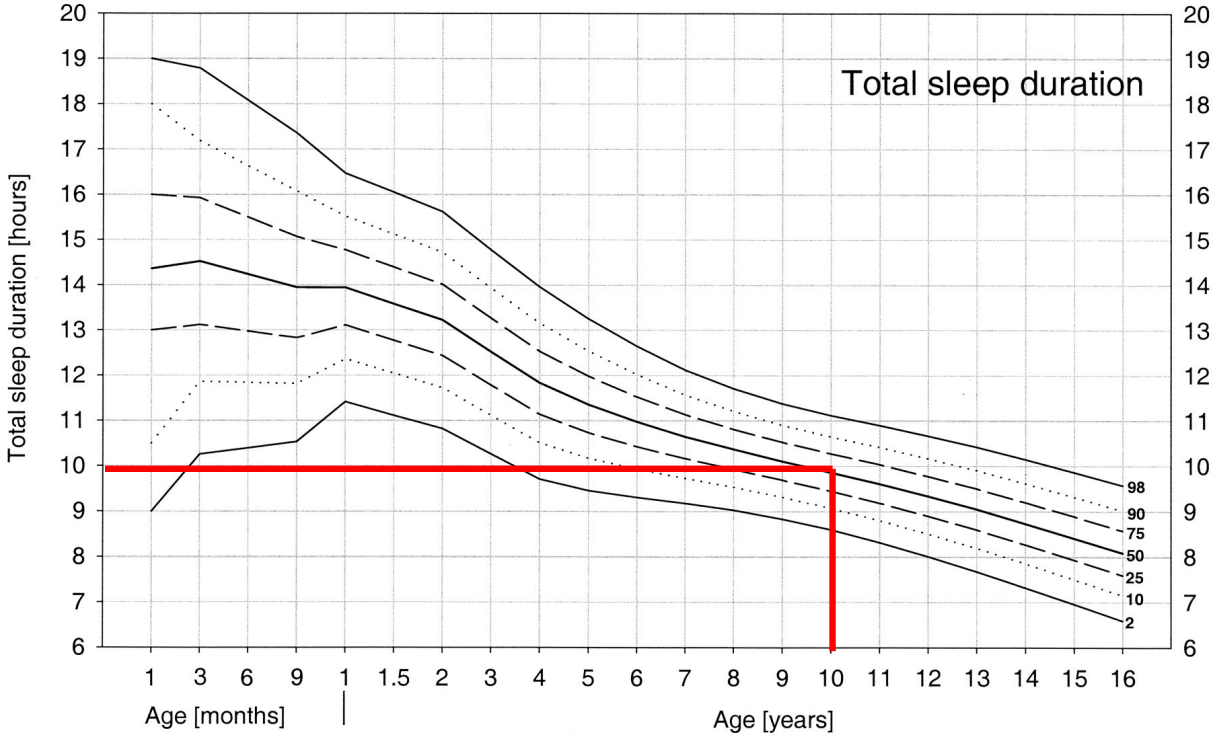
S = Snoring

Owens, JA, Dalzell V. Use of the 'BEARS' screening tool in a pediatric residents' continuity clinic. Sleep Medicine 2005

SLEEP DURATION RECOMMENDATIONS



Total Sleep Duration in 24 hour period



Sleep duration for 493 children age birth to 16 years old

Iglowstein, I. et al. Pediatrics 2003;111:302-307

Typical Sleep Pattern

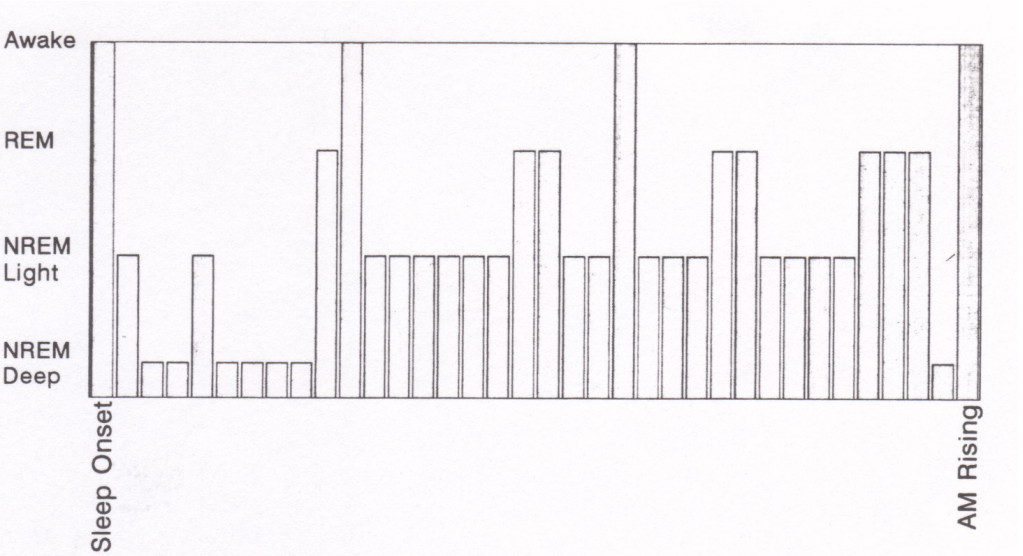


FIGURE 1
Schema of typical night sleep pattern of sleep states and stages.

Adair RH, Bauchner H. Sleep problems in childhood. Current Problems in Pediatrics, April 1993.

General healthy sleep practices

- Developmentally appropriate bedtime (too early / too late)
- Consistent sleep schedule
- Avoidance of naps (at least for age 4 and older)
- Avoidance of caffeine
- Removal of electronics from room
- Cool, dark, quiet room (nightlight is okay)
- Bedtime routine (even important for teens)
- CONSISTENT MORNING WAKE UP

Seven “Rules” for Beating Insomnia

- Choose a set wake up time
- Choose a bedtime
- Go to bed when you are sleepy, but not before your chosen bedtime
- Get out of bed when you can’t sleep
- Don’t worry or plan in bed
- Only use your bed for sleep
- Avoid naps

Timing of sleep onset in relation to bedtime

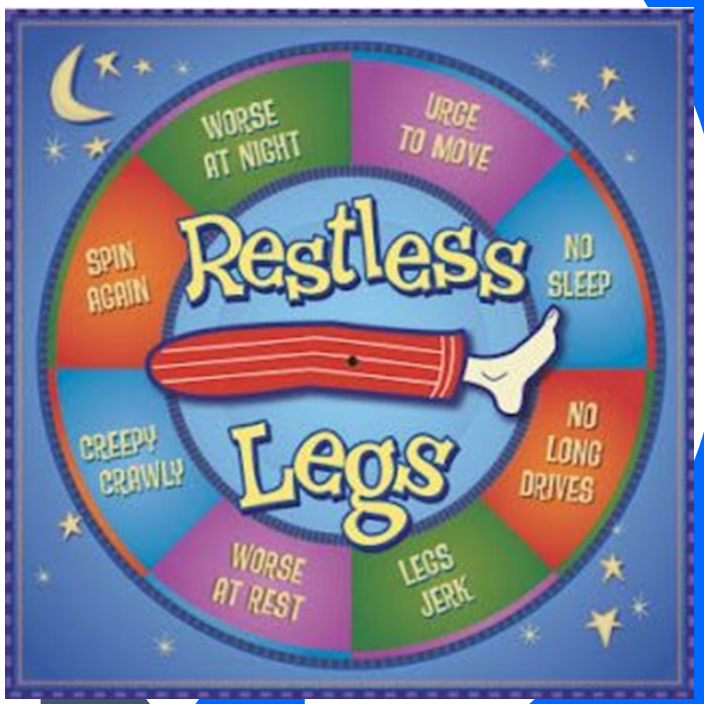
Consistently prolonged sleep onset

- Sensory symptoms like Restless leg symptoms
- Sensory integration challenges
- Consider Behavioral insomnia with parental presence
- Parent/ child conflict – assess day & night symptoms
  - If only at night, bedtime refusal issues with no night wakings
  - If day and night, if severe consider oppositional behaviors

“Kid Friendly” description of RLS

Pain
Wiggling
Need to move
Weird
Pins and needles
Itchy
Tight
Growing pains

Got to kick
Ants
Bugs
Tingling
Bubbly



Timing of sleep onset in relation to bedtime

Falls asleep easily at later bedtime

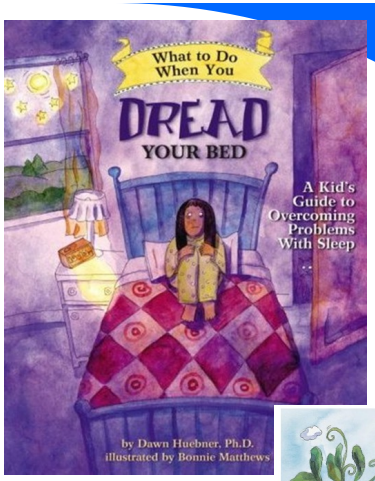
- Developmentally inappropriate bedtime
- Circadian preference
- Delayed sleep phase syndrome
  - If significant delay in bedtime and wake up time, often comorbid with mental health issues / school avoidance or social anxiety

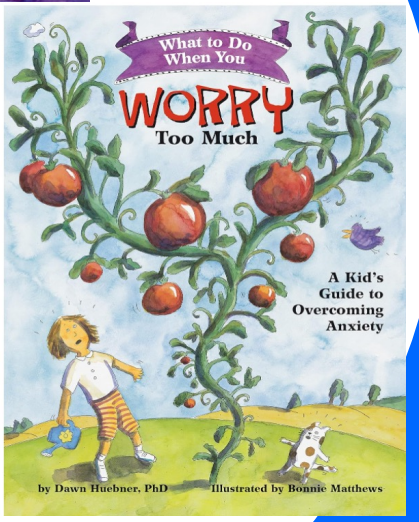
Cognitive Behavioral therapy for Sleep

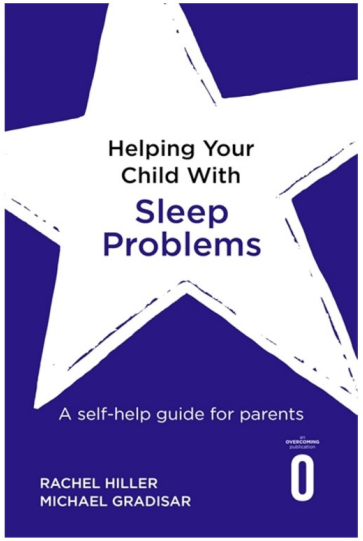
- Stimulus Control – bed and ideally bedroom is for sleep only
- Sleep restriction – restriction of time in bed to estimated sleep need – e.g., amount of time in bed to match the amount of time of sleep per night (no less than 6-7 hours)
- Cognitive restructuring – e.g., changing “I can’t sleep”

Resources

- What to do when you Dread your Bed
- What to do when you Worry too Much
- Helping Your Child with Sleep Problems
  - A self-help guide for parents







Behavioral approaches

- Reducing reliance on parental presence for falling asleep
  - Sleep onset associations – whatever conditions are present at bedtime are needed to “go back to sleep” during the night
  - Two way “baby monitors” to talk to child, moving chair, checking method
- Bedtime fading – setting a temporary bedtime that coincides more closely with actual sleep onset time
- Bedtime pass
- Exposures
- Worry time
- Nightmares

Bedtime Fading

- Used for bedtime protests and stalling
- Monitor current sleep patterns using a sleep log or sleep history initially
- Move bedtime to match when they are currently falling asleep (helps them fall asleep faster)
- After about one week (or when kid is falling asleep in less than 30 minutes), move bedtime up by 15 minutes
- Continue with this process until they are at the desired bedtime

Note: May also need to adjust wake-up time (e.g., if kid sleeps in on the weekends)

Always consider typical sleep need for each kid and age group

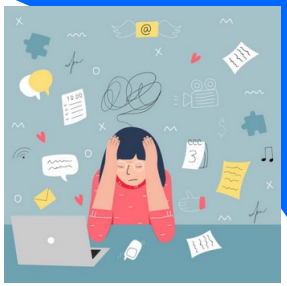
Bedtime pass

- Used for bedtime stalling (e.g., asking for one more drink, saying they are too hot)
- Gives kids control at bedtime (avoiding a power struggle)
- Each night they get one “pass” for an additional request (e.g., hug, drink, etc.)
- If they don’t use the pass, it can be exchanged for a small prize in the morning (stickers, tokens for a bigger prize)
- May start with multiple passes, and work toward only one

Exposures

- Used for bedtime fears (e.g., dark)
- If kids are afraid of the dark, do exposures at increasing intervals (30 seconds, 1 minute)
- For younger kids, have them do a “treasure hunt” in the dark with a flashlight (e.g., hide toys and tell them what to find, start out easy and make it harder)
- Encourage coping skills, including positive self-talk, deep breathing, and PMR (progressive muscle relaxation)
- Use rewards!

Worry Time



- Used for bedtime anxiety
- Have a set time (15-30 minutes per day) for child to worry
- Can do with parents/caregivers or on their own (e.g., writing in a notebook)
- Express worries and explore how to use cognitive restructuring (“thinking like a detective”) and/or problem solve
- Worries feel a lot bigger at night than they do during the day!
- At night:

  Tell kid to “set aside worries” to talk about tomorrow

  DON’T reassure – this can teach them that they need parent reassurance to fall asleep

  Use distractions: Books, audiobooks, podcasts

Nightmares

- If nightmares seem trauma-related, engage child in trauma treatment
- Have kid describe the nightmare in detail, using all five senses
  - Optional: Kid can draw, then destroy/rip up the nightmare
- Kid then changes the content of the nightmares (e.g., positive ending, being powerful in the dream)
- Rehearse the new dream verbally or through drawing (do this during the day)
- Parent can assist in practicing this rehearsal when nightmare comes up
  - IMPORTANT: Do not reassure, direct kid to think about the different ending
- Use security/transitional objects
- PMR/deep breathing when activated at night

Seven “Rules” for Beating Insomnia

- Choose a set wake up time
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- Don’t worry or plan in bed
- Only use your bed for sleep
- Avoid naps

Tips for using medications for Sleep

- Not the first line treatment NOR the sole treatment strategy for insomnia
  - Always best when paired with behavioral interventions particularly focused on SLEEP
- Psychoeducation of the family is key – interdisciplinary approach
  - Circadian, homeostatic sleep drive (no napping), internal factors (hunger, GERD, boredom), external (noise, light)
- Appropriate and healthy sleep practices is CRITICAL
  - Sleep environment, sleep-wake schedule, bedtime routine, physiologic practices (caffeine, exercise, light)

Tips for using medications for Sleep

- Assess for both medically based and behaviorally based sleep disorders
  - OSA, RLS, seizures (sedating medications not for OSA, SSRI's can worsen RLS)
- Plan an "exit strategy" if initiating a medication trial
- Avoid abrupt discontinuation of short and intermediate half life drugs
- Initiate dosing at lowest level likely to be effective

Tips for using medications for Sleep

- Timing of drug administration (very important)
  - Discuss “second wind” effect and circadian effects
  - If you give the medication too early (ie 2 hours before routine sleep onset) it is less likely to be effective but may cause disinhibition or even induce dissociative phenomenon
  - Melatonin – small dose 0.5 mg 5-7 hours prior to habitual sleep time (ie not BEDTIME) versus larger dose 30 minutes prior to bedtime
- Monitor for side effects
- Discuss modifications of dosing and timing – more is not always better
- Drug-drug interactions as well as concurrent use of OTC medications

Medications

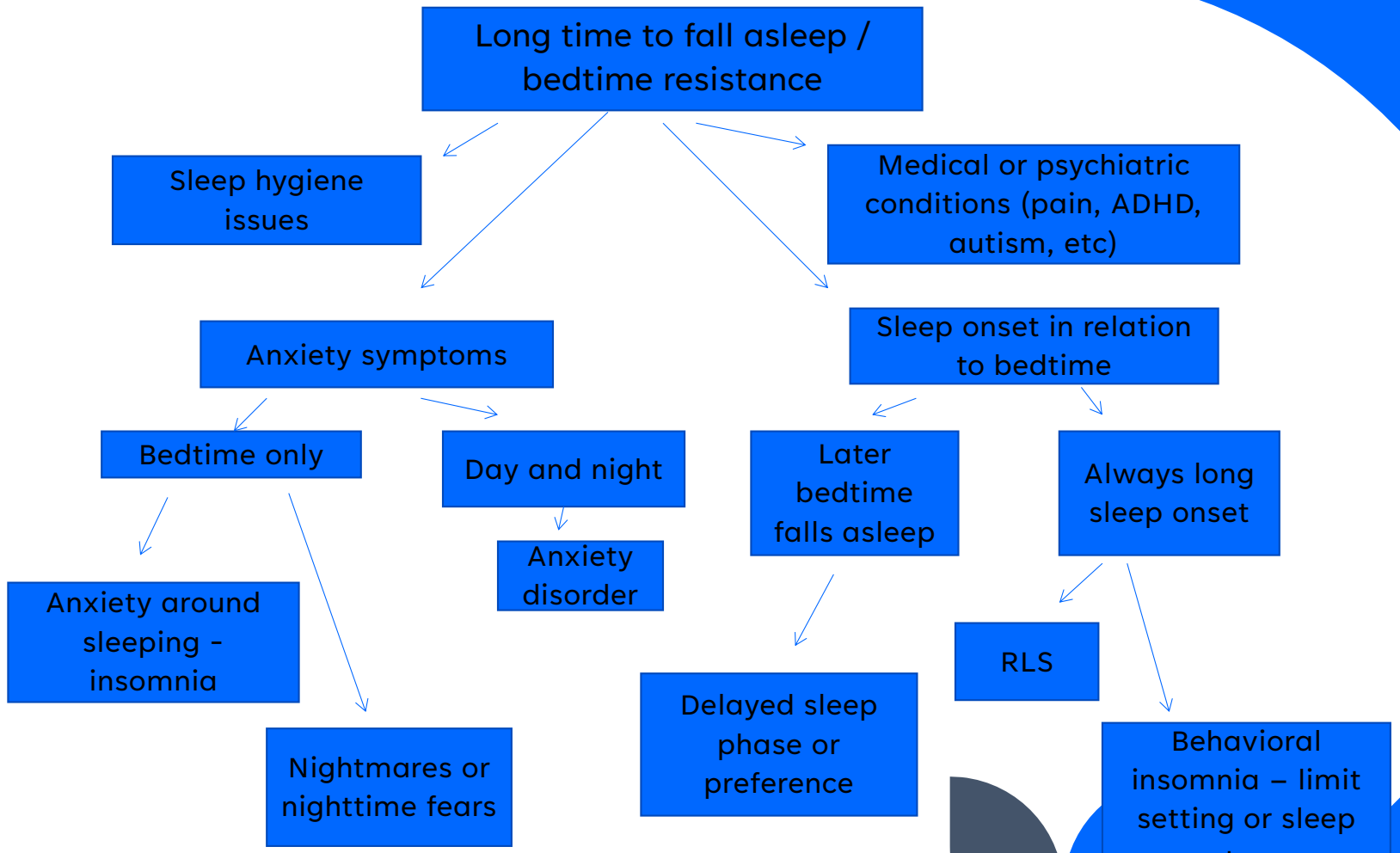
- Melatonin – not weight based dosing, more is not always better
  - 1-5 mg is my range of dosing
  - Taking a melatonin “holiday” may help
  - Watch for worsening night terrors or nightmares
- Clonidine – half life of 4-6 hours
- Gabapentin – 5-15 mg/kg/dose
- Hydroxyzine
- Trazodone

Complementary / alternative options

- Magnesium
- Weighted blanket
- Lycra / compression sheet
- Occupational therapy
- Regular exercise
- Morning light exposure

When is sleep referral indicated?

- If OSA is suspected (snoring, loud breathing, risk factors)
- Restless leg symptoms
  - Check ferritin, iron studies, vitamin D levels
  - SSRI's, stimulants, and atypical antipsychotics often worsen sx's
- Excessive sleepiness (ie narcolepsy)
- Maybe for insomnia? BUT a sleep STUDY is not recommended
  - PCP / Behavioral health clinicians initially
  - Andrew Schultz (Deming Way and East Terrace) and Hannah Koerten, PhD (Wispic) with more specific training



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Conclusion

- Insomnia has a bidirectional relationship to anxiety so important to treat both
- Less likely that “just treating sleep issues” will be the ultimate answer
- Ideally a combination of behavioral strategies including both sleep hygiene but “more” targeted options
- Therapy – both behavioral as well as pharmacologic – can be beneficial

Thank you & Questions

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