

How Do You Sleep At Night?

What Causes Sleep Problems
and How to Fix Them

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Disclosures

I have no conflicts of interest or financial relationships to disclose

I volunteer with ATTH in the following ways:

- Speaking engagements
- Facilitator for Navigating Brain Fog Class
- Training facilitators for the Navigating Brain Fog Class
- Participate in research activities w/ ATTH and UNMC
- As-needed consultation
- Member of the Board of Directors



Objectives

Discuss common causes of sleep difficulties.

Explain how short-term sleep disruptions can progress into long-term insomnia.

Identify strategies to improve sleep through good sleep hygiene, stress-management skills, and managing sleep-related thoughts and worries.



Insomnia

Difficulty getting to sleep (sleep onset)

Difficulty staying asleep (sleep maintenance)

Difficulty getting back to sleep after waking

Insomnia disorder – any of the above, plus:

- Impairment in daily life
- Distress about poor sleep



What Can Cause Insomnia?

- Unknown or mixed causes (25%)
- Family stressors / family life (20-23%) – separation, grief, sleeping with partner, children
- Health stressors (20-23%) – pain, illness, restless legs
- Distress (22-33%) – depression, anxiety, substance use
- Work / school (15-17%) – stress, night shifts
- Environmental (3%) – sounds / disruptions



What Can Cause Insomnia?

- Biological risk factors:
 - Older age, female sex, genetic history, overactive stress system, hormonal changes
- Situational:
 - New life stressors
 - Medical / health changes (pain, medication side effect, discomfort, frequent waking d/t health issue, OSA)



What Can Cause Insomnia?

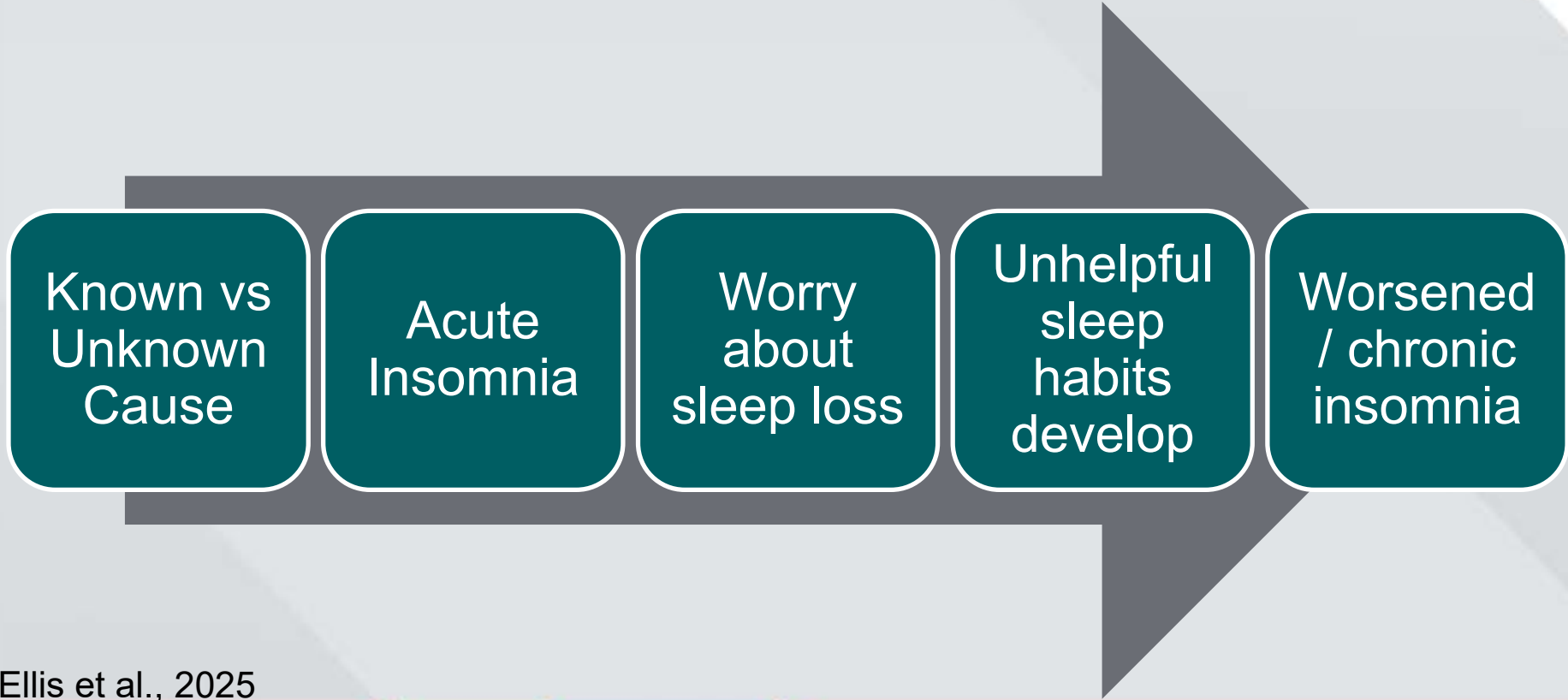
Most acute episodes of insomnia seem to be related to threat (real or perceived) to one's well-being

- Some type of change / stressor

“No matter how important sleep may be, it was adaptively deferred when the mountain lion entered the cave” (Spielman, 1986)

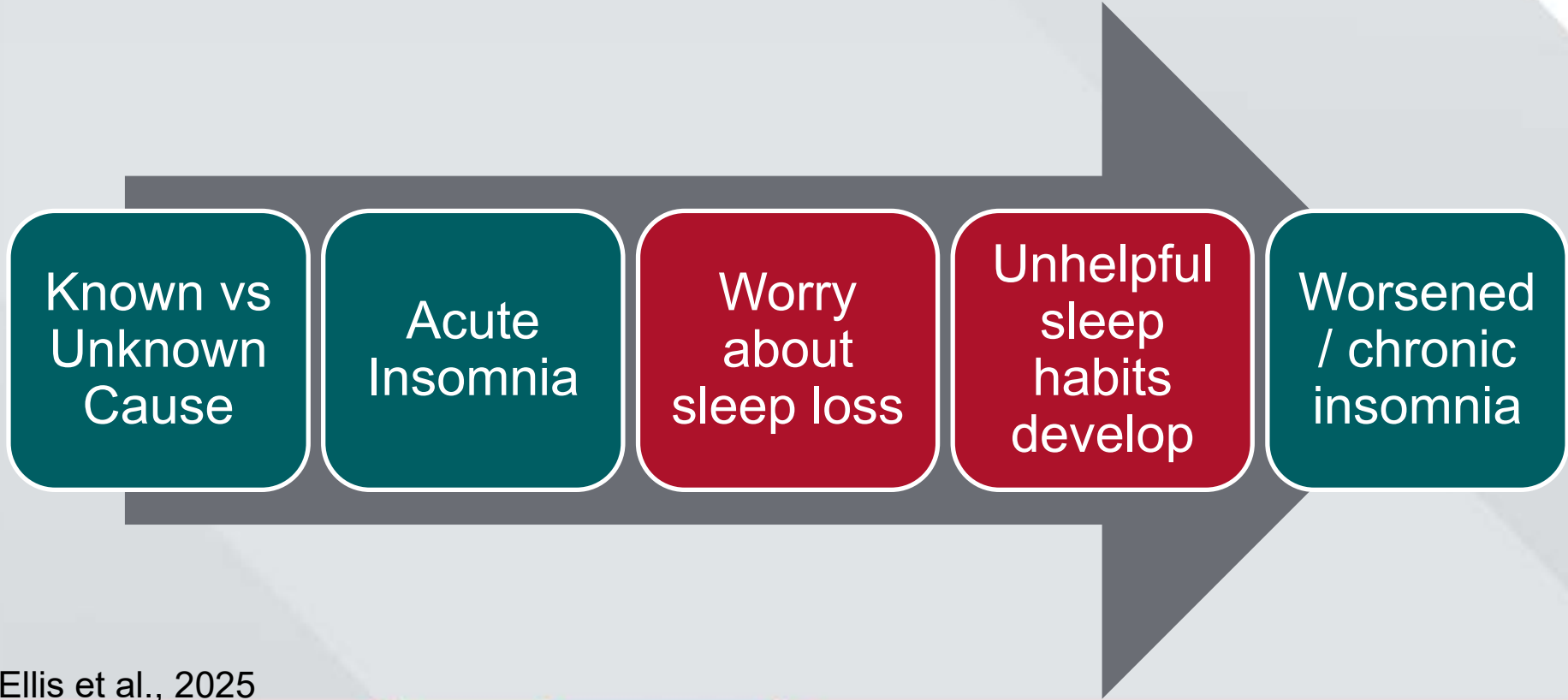


Development of Insomnia





Development of Insomnia





Worry About Sleep

- “Tonight is going to be awful”
- “If I’m not sleeping well, I could get sick, and then...”
- “I won’t be able to function tomorrow”
- “I only slept four hours, so I’m going to feel miserable”



Worry About Other Stuff

- “How am I going to afford this?”
- “Why do my kids never call?”
- “What if I lose my job?”
- “What if the backyard tree falls during this storm?”



Worry Keeps You Awake

- Worry / stress / anxiety result in activation of the “fight or flight” (survival) system
- Brain literally believes you are in danger at the current moment
- Sleeping is ill-advised when you are in danger



Improving Stress At Nighttime

- Triage worries – save them for tomorrow, make a to-do list, fix what you can before bed
- Practice neutralizing negative thoughts
- Engage in relaxation
- Give yourself something to listen to

Examples of Neutral Sleep Thoughts



- “The more I focus on calming myself, the better chance I will sleep”
- “I may be tired tomorrow, but I will be okay”
- “It takes time for sleep to improve”
- “Even if I have a bad night, it can teach me what works and what doesn’t”



Insomnia and Daytime Functioning

- The effects of sleep loss are often subtle & inconsistent
- It's possible that changes attributed to sleep loss are related to **stress** instead
- **In other words, stress could be just as disruptive to health and performance than sleep loss**



Sleep Behaviors / Sleep “Hygiene”



Unhelpful Sleep Behaviors

Any changes you make to your routine or behaviors to *make up for last night* will only make it harder for you to sleep *tonight*

“After a bad night, **do nothing new...this may well be the hardest ‘nothing’ one ever does.” (Perlis et al., 2015)**



Unhelpful Sleep Behaviors

Tonight:

- Tossing and turning indefinitely
- “Clock watching” and mental math
- Thinking about how miserable tomorrow will be
- Thinking about stressors or things you have to do



Unhelpful Sleep Behaviors

Tomorrow:

- Sleeping in
 - Increasing caffeine or using substances to try to sleep (ie alcohol)
 - Taking naps*
 - Going to bed early
-
- *Take naps if they will improve your daily QOL



Helpful Sleep Behaviors

Tonight:

- Tossing and turning indefinitely
 - Instead – get out of bed if you are not feeling sleepy
- “Clock watching” and mental math
 - Instead – Turn clock away if you can’t help it
- Thinking about how miserable tomorrow will be
 - Instead – Remind yourself you will be okay
- Thinking about stressors or things you have to do
 - Instead – Write that stuff down and promise to do it soon



Helpful Sleep Behaviors

Only use your bed for sleep or restful activities

Try to avoid TV / screens, heavy exercise, heavy meals before bed

- Exercise earlier, light snacks are okay

Engage in relaxation or listen to audiobook, podcast, etc

- Helps keep your mind off of worries



Helpful Sleep Behaviors

Wait until you feel “sleepy” before trying to sleep

Immediately before bed:

- Get ready in dark
- Go slowly, keep heart rate down
- Don't re-check phone / email / news

If you fall asleep in front of TV:

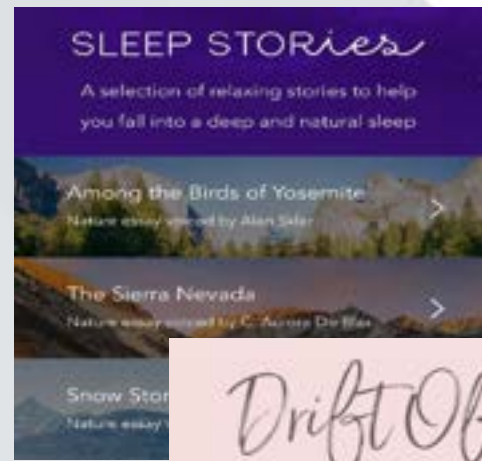
- Get mostly ready beforehand
- Again, take things slowly
- Consider changing bed time

Mobile App Resources

Sleep stories (long stories with calming audio)?

Sleep podcasts (pleasant ramblings on mildly interesting topics)?

Not enough research to know...yet



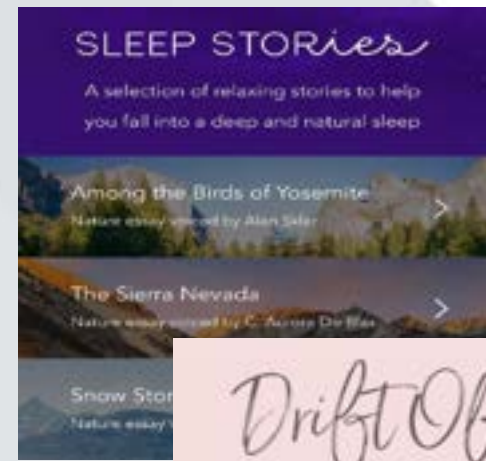
Mobile App Resources

Music?

- Seems helpful, but maybe by accident (Dickson & Schubert, 2020)

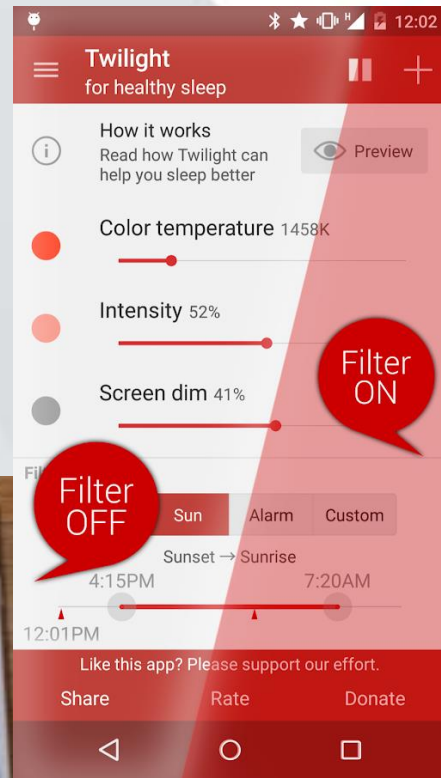
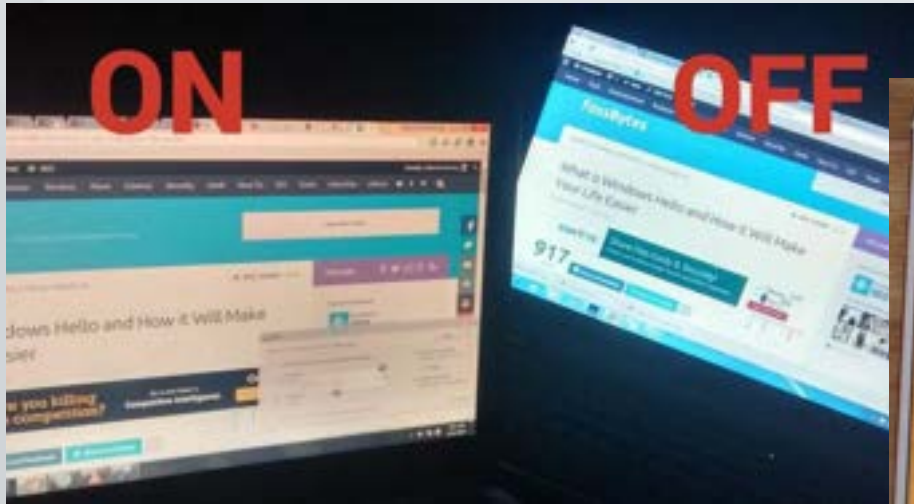
White / pink / etc noise?

- Mixed evidence (Reidy et al., 2021)



Mobile App Resources

Blue light filter + Dim Screen are helpful
(f.lux, Twilight, Night Light on Androids,
Night Shift on iPhone)



Haghani et al, 2024; Shechter et al., 2020

Mobile App Resources

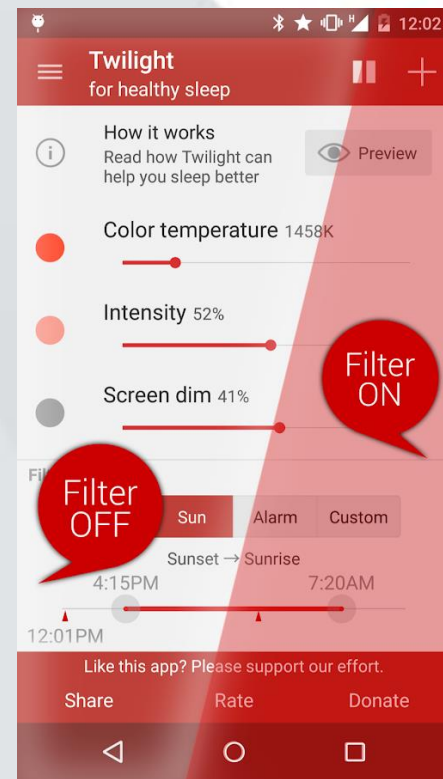
Blue light

- Suppresses melatonin
- Helps with alertness & cognition
- Can help night shift workers w/ sleep and fatigue issues

**People exposed to red light in the early night
OR**

**people who block out the blue light may have better
sleep quality (Shechter et al., 2020)**

Haghani et al, 2024; Shechter et al., 2020





When to Consult A Doctor

Possible sleep apnea

- Snore loudly (others notice)
- Fatigued during day
- Stop breathing during sleep (others notice)
- High blood pressure
- BMI > 35kg/m²
- Age > 50
- Male



When to Consult A Doctor

If none of the above recommendations work

- CBT-I / Sleep Restriction

If you are thinking about trying medications / supplements

If sleep issues are caused by a medical condition or medication (restless legs, pain, diuretics)



Alcohol & Sleep

Do alcohol “Nightcaps” help with sleep?

- Alcohol is a depressant and helps with falling asleep. **HOWEVER:**
 - It disrupts your sleep cycles
 - It results in lighter, more disrupted sleep
 - It causes withdrawal effects (up to 4 hours) → lighter sleep and more awakenings

Recommendation: Limit alcohol use to 1-2 drinks in the evening, ensuring that you do not consume any alcohol at least 2 hours before bedtime.



Sleep Medication / Supplements

Disclaimer:

- I am not a prescriber.
- I am not trained in medications

Sleep prescription (Ambien, trazodone)
Prescription for depression/anxiety



Over the counter / off-label – Check the ingredients!

- Benadryl, Benadryl and more Benadryl (diphenhydramine)
- Melatonin, magnesium glycinate valerian root, nighttime teas
- Unisom / doxylamine succinate



Take Home Points

Try to maintain consistent routines

Neutralize negative thoughts about sleep- it will be okay

Make small changes and stick with them for several days

Engage in relaxation or listen to something distracting

Consider medication support to improve your QOL



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