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# How a Restless Mind Can Impact Sweet Slumber

Sleep can be elusive for people with ADHD, and the reason is not always easily understood.

BY RENA GOLDMAN

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**SLEEP PROBLEMS ARE COMMON FOR** people with ADHD. In fact, around 40 to 70 percent of adults who live with the condition also experience insomnia. To complicate matters, sleep disorders can themselves cause symptoms that look like ADHD symptoms. Haiyan Wang, psychiatrist and medical director at Neuro Wellness Spa in Crenshaw, California, notes that researchers can become entangled in a chicken-and-egg situation when trying to understand the relationship between the two. Wang says

it can be hard to tell if a sleep issue or disorder is worsening the ADHD or if the ADHD is causing the sleep issue.

Jill RachBeisel, professor and chair of the Department of Psychiatry at the University of Maryland School of Medicine, agrees that the intersection between ADHD and sleep can be complex. In her clinical experience, she commonly sees adults who have been diagnosed with the disorder and have insomnia related to it. "There's an interesting picture to that, and [the insomnia] could be either caused

Create a sleep routine by taking a warm bath, reading, putting away electronics, and going to bed at the same time every night.

by the actual ADHD and the treatment of ADHD, or it could be another symptom of the ADHD, which is thought to be related primarily to the hormonal impact that's going on in the brain," she says.

Generally, studies have shown that adults with ADHD are more likely to go to bed later and take longer to fall asleep. They are also more likely to say they're sleepy during the day. Wang agrees, sharing those common complaints she hears about sleep from adults with ADHD in her clinical practice. Patients report difficulty falling asleep, "which is what we call increased sleep latency," she says. People may push bedtime later,

making it hard to fall asleep. Other complaints are frequent nighttime wake-ups and daytime sleepiness, according to Wang. "When we talk about adult ADHD, many [with] undiagnosed, untreated ADHD [experience] daytime tiredness, fatigue, and stiffness," she says.

### Biological Factors

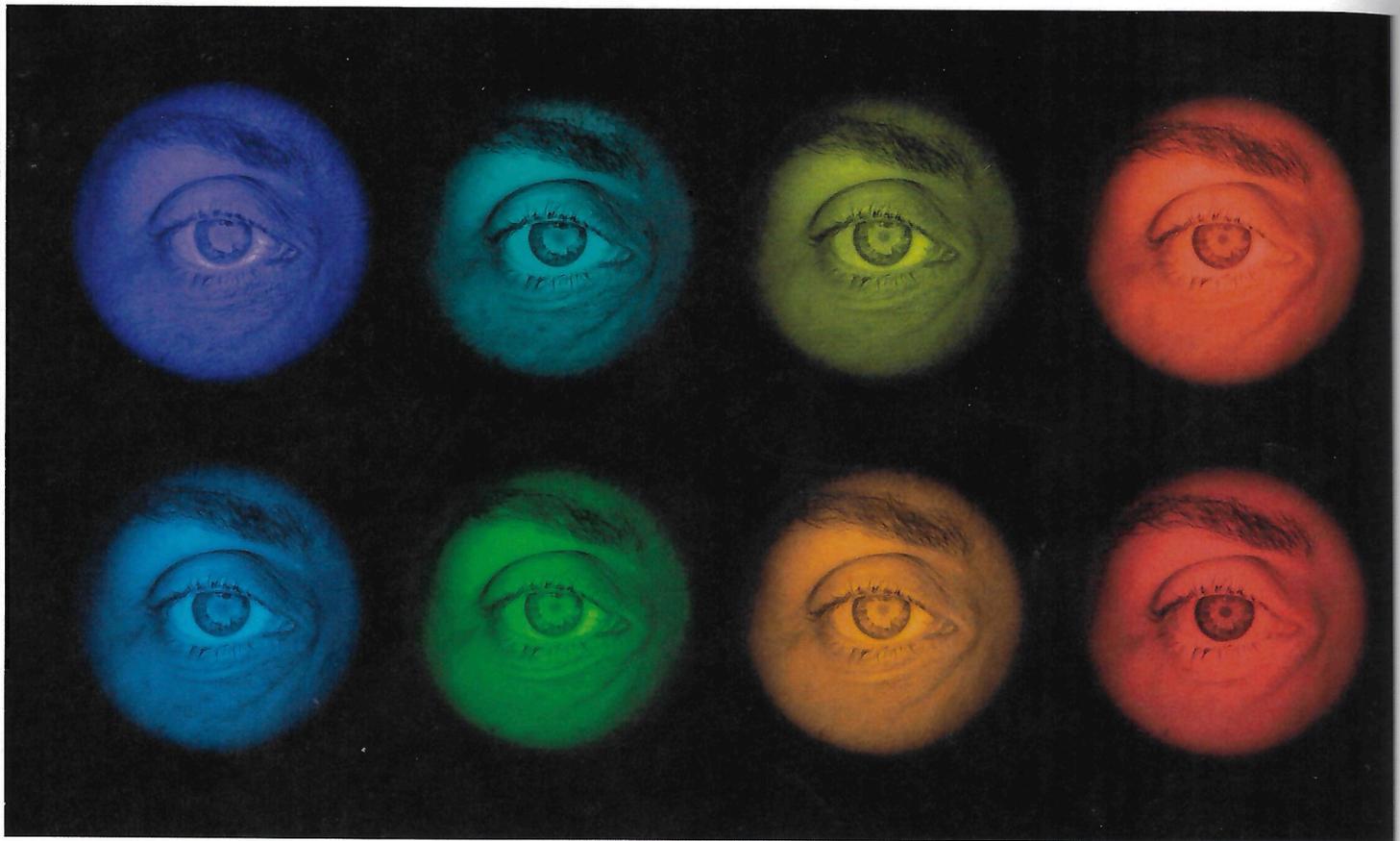
Most of the early research on sleep and ADHD looked at children, but more studies in the past few years have examined adults, as the sleep troubles seem to carry into adulthood. There's reason to believe sleep issues in children and adults with the neurodevelopmental disorder are

### Opposite:

To diagnose insomnia, a clinic specializing in sleep pattern measurement can administer diagnostic testing.

### Below:

Avoid blue wavelengths from items such as smart devices. They promote alertness, while redder lights are less likely to do so.





tied to dopamine and disruptions in the circadian rhythm.

“What we understand is that the dopamine system in the brain is impacted, so you have decreased dopamine and synapses of the neurons, leading to both symptoms of ADHD,” RachBeisel says. “It impacts the sleep, the quality of sleep, and the duration of the sleep.”

Lower dopamine levels seen in ADHD may also play a role in disrupting the circadian rhythm, the body’s natural sleep-wake cycle. Wang says people with ADHD have a delayed circadian rhythm, “likely because the melatonin release is delayed as well.” When melatonin (a hormone

that helps regulate the sleep cycle) is released later, the body doesn’t start to relax and prepare for sleep until later.

### **Mental Fatigue**

An individual with ADHD who is undiagnosed or untreated is also likely to deal with the added fatigue of trying to fit into spaces that aren’t designed for the way their brain works. They might engage in something called masking, which is when the person with ADHD finds ways to change their behaviors to compensate for their ADHD symptoms.

Wang notes that people with ADHD who are high achievers or who really want to meet societal expectations

will push themselves extra hard to try and stay focused or perform at work. She says she's heard patients say things like, "I know I can do this, and somehow I just have to really push it really far for me to do that." The result, she explains, is "mental and physical exhaustion, and that also contributes to the fatigue during the daytime."

The symptoms of ADHD, such as attention problems, memory deficits, and impulsivity, can also lead to anxiety and depression. "Depression and anxiety are very common and are known in adult ADHD," says RachBeisel. She also points out that insomnia is a symptom of depression, and anxiety interferes with sleep.

#### **Other Causes**

Along with trouble falling asleep and poor-quality sleep, someone with the condition may also be more likely to have a sleep disorder. "Twenty-five to 50 percent of individuals with ADHD have sleep disorders," RachBeisel says. Sleep disorders are not only associated with ADHD but also can create similar symptoms. She explains that primary sleep disorders, such as restless leg syndrome (RLS), narcolepsy, and obstructive sleep apnea, can lead to symptoms that look like the neurodevelopmental disorder.

"What commonly happens with primary sleep disorders is that you get cognitive impairment during the day because people don't get good sleep at night, or they get interrupted sleep, and they're not [getting] REM sleep that they need to have," she says. So, while symptoms such as excessive daytime sleepiness, memory problems, attention issues, and increased irritability appear to

**Adults with ADHD are more likely to go to bed later, take longer to fall asleep, and say they're sleepy during the day.**

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be ADHD, they might not be, or at least not exclusively. "The flip side to that, and what I more commonly deal with, is adults [who] come in diagnosed with clear ADHD, and they have sleep insomnia related to that."

Researchers have found a strong association between ADHD and RLS, a sleep disorder that causes tingling and an urge to move the legs. One thing RLS and ADHD have in common is dopamine abnormalities. "When you look at restless leg syndrome, evidence suggests that up to 34 percent of individuals with ADHD have restless leg syndrome, or restless leg syndrome-like symptoms," says RachBeisel.

#### **Getting Your Z's**

Regulating dopamine levels with stimulant medication as part of ADHD treatment can actually have a positive impact on sleep. "If you use the stimulant [to treat ADHD], it increases the concentration of dopamine and norepinephrine within the synapses, and [ADHD] symptoms get better, and sleep gets better," says RachBeisel. She says treating ADHD reduces insomnia in people who have both. "If you use medications to treat ADHD, you have to help the individual retrain themselves to change their circadian rhythm back

*Opposite:*  
Tart cherry juice is often touted as a sleep-promoting aid; however, its effectiveness in promoting sleep is mixed.

to normal intervals, and you do a lot of sleep hygiene work,” RachBeisel explains. Of course, achieving a restful night’s sleep isn’t as simple as taking ADHD meds; dose and timing must be tailored to the person, and other sleep disorders, like obstructive

sleep apnea, should be screened for and treated. Wang also recommends working to improve sleep hygiene by “targeting the delayed phase of the circadian rhythm,” which can be done by dimming lights and avoiding eating two or three hours before bedtime.

