Almost everyone has experienced a sleepless night at one time or another. When under stress or experiencing late-night worries, falling or staying asleep can be difficult. Whether as a result of waking frequently during the night or waking up too early, failing to get the necessary amount of sleep can prevent feeling rested and being able to function well the next day.

An occasional restless night is a common occurrence and usually not cause for undue concern. But sleeplessness that occurs on a regular basis may be a sign of insomnia or another diagnosable sleep disorder.

Whether chronic or acute, primary or secondary to another condition, insomnia can seriously impact a person’s health and quality of life. In fact, chronic insomnia is associated with higher risks for other conditions:

- Heart disease
- Type 2 diabetes
- Obesity
- Depression

Individuals with insomnia or who are otherwise sleep-deprived are also more likely to be involved in auto- or work-related accidents.¹

Admittedly, some may tend to downplay the impact of insomnia and view it as more of an inconvenience than a medical condition with health consequences. One possible reason for such downplaying is considering insomnia as an occasional problem or secondary concern next to a primary clinical focus on other medical issues. Whatever the reason, insomnia is often underreported and undertreated, despite its potential to impair a person’s health and daily functioning.²
Caught in a wake

“We’ve gotten in the habit of asking patients about pain, diet, and exercise. We should also be asking patients about their sleep quality. For those working in primary care, I think it’s also important to identify an accredited sleep center [nearby] ..., so they have a good specialist to refer appropriate patients to for additional evaluation.”

—Jennifer L. Martin, PhD

Sheepish sleep

“A bad night of sleep now and then is perfectly normal,” says Jennifer L. Martin, PhD, a board of directors member and spokesperson for the American Academy of Sleep Medicine (AASM) and professor of medicine at the David Geffen School of Medicine at UCLA. “We are wired to be awake when we’re under a lot of pressure or stress. We don’t think of that as a serious problem. Anyone who has a bad night of sleep a few times a year shouldn’t worry too much about it. On the other hand, insomnia that becomes persistent and chronic is important clinically.”

Unfortunately, the U.S. is a significantly sleep-deprived nation. About 30% of adults have some symptoms of insomnia, according to the AASM.3 In about 10% of cases, the insomnia is severe enough to cause daytime consequences.2 Fortunately, insomnia symptoms are often transient in nature for many people, lasting for only a few days or weeks. Such short-term or acute insomnia is known as adjustment insomnia. Typically, this type of insomnia is related to a source of stress in a person’s life. Adjustment insomnia affects approximately 15% to 20% of American adults every year, most often afflicting older adults and women.3

When clinicians diagnose insomnia as a medical condition, they are usually referring to chronic insomnia. Notably, chronic or long-standing insomnia affects somewhat less than 10% of adults.3 Insomnia can also be characterized as either primary or secondary in nature. Primary insomnia means that a person’s sleeplessness is not the direct result of any known medical, psychiatric, or environmental (e.g., prescription or over-the-counter medications) cause.2 On the other hand, secondary insomnia means that a person’s sleeplessness is a symptom of a primary medical illness, a mental or sleep disorder, or use of certain medications.3

To diagnose insomnia, a clinician considers the duration and far-reaching effects of the patient’s sleeplessness. “Insomnia disorder is diagnosed when a person has poor sleep that lasts for at least three months and happens at least three times a week,” says Dr. Martin.

“In order to diagnose insomnia disorder, we also need evidence that it affects how the person feels or how they’re functioning during the day,” she continues. “So, it’s about poor sleep with daytime consequences, three times a week for at least three months. Now, when we get to that point, we usually start to see negative consequences in terms of health. Some of those consequences are related to mood and well-being. We know having untreated insomnia increases the risk of developing depression. And for people with insomnia who also have depression, [the insomnia] makes it harder to treat their depression. Long-standing insomnia also increases the risk of other health problems. For example, there was a recent study looking at increased risk of cardiovascular disease and stroke, which we think is really an effect of having chronically poor or insufficient sleep that negatively affects health.”

Bedside manners

Once a diagnosis is established, treatment of insomnia can involve both psychological and pharmacological options. As of 2016, the American College of Physicians recommends cognitive behavioral therapy for insomnia (CBT-I) as the first-line treatment for adults with chronic insomnia.4

“For someone who has insomnia disorder, cognitive behavioral therapy approaches are considered the best first treatment,” says Dr. Martin. “There are two reasons for this. One is that cognitive behavioral therapy for insomnia is very effective. It’s an approach that leads to benefits for the vast majority of patients. Secondly, it’s also safe and works pretty quickly. Most people see their sleep improve in the first few weeks. After a course of CBT-I, it’s also not unusual for people to maintain the benefits for years to come. In my own work, we’ve followed people for as long as a year after they’ve finished even a brief five-week CBT-I program, and they’re still sleeping better a year after the end of treatment.”

Notably, CBT-I has been found to be effective for both primary insomnia and insomnia with comorbidities. Some studies indicate four to eight sessions of CBT-I can cut in half the time it takes people to fall asleep or go back to sleep after they have woken up. Successfully treating insomnia may also help improve existing comorbid conditions, according to the American Psychological Association.5

The nature of this approach contributes to its effectiveness; CBT-I is less of a specific technique or treatment procedure and more of a combination of treatments.5 As such, CBT-I may utilize a range of interventions:

- **Sleep restriction.** This involves temporarily reducing the amount of time spent in bed, thus causing the person to be more tired on subsequent nights. As sleep improves, the amount of time in bed is then increased.6
- **Stimulus control strategies.** In an example of this technique, patients may be encouraged to establish a consistent sleep schedule by going to bed and getting up at the same times every day. To accomplish this, they might be asked to avoid excessive
napping. In some cases, individuals might need to first establish a regular morning wake time to help strengthen the body’s circadian clock, which regulates sleep and wakefulness. Then, as patients progress, a more consistent sleep schedule for both morning and evening can be established. Patients might also be advised to leave the bedroom if they cannot fall asleep within 20 minutes, returning only when they feel sleepy. The idea is to recondition the mind to associate the bed with only falling asleep, not struggling to sleep.

• **Relaxation training.** A cognitive behavioral therapist might introduce meditation practices to the client, using guided meditation or progressive muscle relaxation programs designed to induce a calmer and more grounded mental and physical state.

• **Sleep environment improvement.** A comfortable sleep environment plays an essential role in quality sleep. A patient might be instructed to ensure their place of sleep has certain qualities (e.g., dark, cool, quiet) and remove or hide certain elements (e.g., clocks, televisions).

• **Biofeedback.** By monitoring biological feedback (e.g., heart rate, muscle tension), a sleep therapist can identify patterns and make recommendations. To receive feedback, patients may be directed to use a biofeedback device at home.

• **Sleep hygiene education.** This practice involves taking stock of such issues as exercising too infrequently, having caffeine late in the day, or smoking or drinking habits that might exacerbate sleep issues.

By working with a sleep therapist, the patient learns to recognize conditioned beliefs and thoughts that may be contributing to their inability to sleep. In turn, the therapist helps the patient acquire better sleep habits or address lifestyle issues that might be making sleep more difficult. Treatment is also invariably customized to the patient’s unique clinical presentation.

“Cognitive behavioral therapy for insomnia is an approach [in which] a plan is developed with each person to implement strategies to improve sleep,” explains Dr. Martin. “The core set of strategies used in CBT-I focuses on the behaviors that are perpetuating the insomnia problem. We also focus on some of the stress and anxiety around sleep loss itself—that’s the cognitive part. Sometimes a big part of the issue is not just what people are doing but how they’re thinking about their sleep. Basically, CBT-I is designed to help the person come up with a behavioral plan specific to their individual needs and then take steps to reduce the anxiety that goes with not sleeping.”

CBT-I is usually a relatively short treatment, often involving between four and eight meetings with a trained therapist, says Dr. Martin. She adds that those who cannot access a qualified sleep psychologist in their area may benefit from alternatives:

- Internet-based CBT-I programs
- Telemedicine options
- Self-help workbooks designed for treating insomnia

**Pillow talk**

While the importance of sleep has become common knowledge, the healthiest amount of sleep is less well known. On average, adults should get at least seven hours of sleep per night in order to maintain their health.

Sleeping for more than nine hours per night may provide benefits for certain populations, such as young adults and individuals who are ill or recovering from lack of sleep. Less is known about how an excessive amount of sleep may affect others. On the other hand, lack of sleep has been associated with a vast array of adverse health outcomes:

- Weight gain and obesity
- Diabetes
- Hypertension
- Heart disease and stroke
- Depression
- Increased risk of death
- Impaired immune function
- Increased pain and errors
- Greater risk of accidents

Let patients know if they have concerns about how much they are sleeping, they should address potential issues by speaking with their health care provider.

**Sleep on it**

When psychological therapy fails to adequately treat insomnia, clinicians may consider pharmacological therapy, either by itself or in combination with continued CBT-I. The American College of Physician’s 2016 clinical practice guideline encourages physicians to use shared decision-making when considering this option, making sure patients understand the benefits, harms, and costs involved in short-term medication use.

As Dr. Martin observes, sleep medicine specialists are more cautious now about the use of prescription medications for insomnia than in the past. “This is an area where our thinking has shifted a lot over time,” she says. “If we look back a couple of decades, the assumption was that prescription medications for insomnia were safe, effective approaches, but, as time has gone on, it has become increasingly clear that there are some significant [adverse] effect risks. Today, there are newer generation medications that are FDA [U.S. Food and Drug Administration] approved for the treatment of insomnia. However, there was a recent warning from
The therapeutic approach described by Polan Orzech is called guided mindfulness with acceptance treatment for insomnia (GMATI). The therapy is like CBT-I but offers a perhaps more indirect approach to treating insomnia.

“Mindfulness training for insomnia is compatible with CBT-I but offers a slightly different emphasis,” says Polan Orzech. “Like CBT-I, mindfulness involves the active use of the mind and teaching people how to shift responses to sleeplessness away from anxiety. But we’re not looking to replace those thoughts around sleep. That’s one of the key differences of mindfulness-based cognitive therapy versus straight cognitive therapy. We’re looking more to cultivate awareness of those thoughts. But we are cultivating awareness with what I would describe as a tone of affectionate interest and compassion, as opposed to relating to ourselves in a more critical and judgmental way. The idea is that by not fighting the insomnia, some of the client’s anxiety or worry over being unable to sleep can start to resolve.”

What can a patient expect working with the GMATI approach? “First, mindfulness is about teaching practices that facilitate being in the present moment and out of the autopilot of discursive thought and rumination that is the byproduct of the default mode network we use to operate in the world,” says Polan Orzech. “This present-moment awareness is something we have to practice and cultivate. So that’s where we start with people.”

From this vantage point, mindfulness training uses practices and exercises, many of which are done in the daytime, to help the client gently dissolve the power of mental habits or patterns of thought associated with resistance to sleep. Accordingly, individuals learn to pay attention to internal body cues, or sensory inputs in the present moment, using this awareness to reframe or let go of the automatic build-up of stress that happens when people cannot sleep, explains Polan Orzech.
A stab in the dark?
In the U.S., sleep deprivation, in general, is a growing public health concern. A study analyzing data from the National Health Interview Survey on sleep habits among working American adults reported the prevalence of inadequate sleep, which was defined as seven hours or less, had increased from 31% to 36% between 2010 and 2018.9

“We found people are sleeping less over the nine-year period of our study, no matter how much we adjusted for changes in … age or composition of the population,” says Jagdish Khubchandani, PhD, MPH, MBBS, coauthor of the study and a Ball State University professor and associate chair of health science.

Notably, multiple factors may contribute to rising sleeplessness. “Stress in the American workforce has increased over the past decade,” says Dr. Khubchandani, citing studies performed by the American Psychological Association. “That’s one part of the explanation. … There’s also greater use of technology, creating a kind of 24/7 culture where it’s possible to have an almost constant connection to work. … There are also more people living now with chronic diseases who take prescription medications that may cause insomnia as a side effect. Many of these people are also working, [which] could contribute to the sleep issues we identified in our study.”

Sleeplessness, in general, is widespread, yet sleep deprivation itself differs from insomnia. Sleep deprivation is distinguished by the lack of opportunity to get adequate sleep. By contrast, insomnia occurs despite the opportunity to get a full night’s sleep.

“The approach to insufficient sleep is different from the approach to insomnia,” says Dr. Martin. “But they sometimes look like the same thing. A person might say, ‘I’m tired; I sleep only three or four hours.’ That’s when a specialist referral might be a good idea to try to tease out whether this is insomnia or not. Where I live in Los Angeles, for example, there are people who get up at 4 o’clock in the morning to commute from the outlying communities into Los Angeles. If they go to bed at midnight and have to get up at 4 a.m., sometimes they will show up at our clinic and say, ‘I can’t fall asleep until midnight.’ I’ll ask, ‘when did this become a problem?’ They might say, ‘Well, it became a problem when I moved to the suburbs, and now I have to get up at 4 a.m.’ That’s not really insomnia; that’s not spending enough time in bed.”

Of course, insomnia is one of several medical sleep disorders. Narcolepsy, sleep apnea, and restless leg syndrome are other medical conditions associated with sleep loss. Additionally, insomnia can be secondary to a diagnosis of other diseases or conditions, such as clinical depression or chronic pain conditions. Therefore, an accurate diagnosis of an individual’s sleep problems is essential in determining the right treatment course.

Dream team
Despite effective treatments for insomnia, the condition remains undertreated in primary care. While “sleep disorders such as sleep apnea and narcolepsy are typically referred for treatment by sleep medicine specialists, insomnia is often neglected or dealt with in the context of primary care,” according to the Journal of Clinical Sleep Medicine.10 The report notes that primary care clinicians “often lack training regarding the importance, screening, assessment, and management of insomnia.”10

Another contributing factor to under-treatment may be patient reluctance to discuss sleep problems, suggests Dr. Martin. “In some of our work, we find that patients often don’t tell their primary care doctor that they’re struggling with sleep until they’re really suffering,” she says. “The primary care doctor then has a hard time knowing exactly what to do. Something like sleep apnea is a little different because usually people have symptoms that are present for a long time.
Maybe they have health consequences that the primary care doctor is already paying attention to.”

The best course for a patient with longstanding insomnia is a referral to a sleep specialist, advises Dr. Martin. Sleep medicine specialists may include physicians, psychologists, psychiatrists, and other clinicians. In turn, physicians with special training in sleep medicine may come from backgrounds in internal medicine, neurology, pediatrics, and other areas.

“A sleep specialist is actually the right home for a patient with chronic insomnia,” asserts Dr. Martin. “It’s good to get that comprehensive evaluation. … We also know that insomnia sometimes masquerades as other clinical sleep disorders. As I said, I think insomnia is a challenge for primary care providers, in part, because patients often don’t talk about how they’re sleeping. On the other hand, primary care doctors should be [regularly] asking people how they’re sleeping so that they can make appropriate referrals when the person is struggling for a long time.”

For example, one sleep disorder that individuals may confuse with insomnia is undiagnosed sleep apnea, a condition in which a person’s breathing repeatedly stops and starts during sleep. There are different types of sleep apnea, which can be diagnosed by sleep medicine specialists with at-home or on-site sleep tests.11

“It’s important for those with insomnia symptoms to have an evaluation with a sleep specialist,” says Cheri McPherson, CMA (AAMA), a medical assistant at Harrison HealthPartners Pulmonary and Sleep Medicine Poulsbo, an affiliate of CHI Franciscan in Poulsbo, Washington. “It’s not unusual for some of our patients to think they can’t sleep because they have insomnia, but it’s really because they have sleep apnea.”

Lisa Singleton, CMA (AAMA), a medical assistant at Lakeland Sleep Medicine in St. Joseph, Michigan, offers a similar report: “If someone comes in complaining of insomnia, most of the time our providers will want to first rule out sleep apnea, because they often go hand in hand. As part of my job, I will go over [with patients] the new patient questionnaire that [they] fill out. This questionnaire includes many questions asking about apnea and insomnia symptoms. I verify what they’ve written down on their questionnaire, since sometimes their answers will change.

“Once sleep apnea is ruled out, the clinic will refer quite a few insomnia patients to a psychologist for cognitive behavioral therapy, along with prescribing a hypnotic medication as necessary,” adds Singleton. “Depending on whether the patient has sleep initiation problems or sleep maintenance problems, the doctor might prescribe different medications.”

Whether a patient has insomnia, sleep apnea, or some other sleep disorder, McPherson says seeing patients get treatment and feel better over time is gratifying. “We have patients who come in kind of grumpy or irritated,” she observes. “This is because they just don’t feel good. But we treat them with respect and care, and we take the time to ask the right questions and get to know them. It’s important to their care that we do so.”

**Snooze or lose**

While the causes of insomnia can vary, one conclusion is unavoidable—quality sleep is essential to good health. Insomnia is certainly one of the most common—and treatable—sleep disorders. As such, a larger challenge in sleep medicine today is better identification of those who would benefit from available treatments for insomnia.

“The more we learn about how insomnia impacts health and well-being, the more we’re realizing how important it is to treat it, even if it occurs in the context of another condition,” concludes Dr. Martin. “For example, it’s not true that if you have depression and insomnia, treating the depression will make the insomnia go away. We used to think it would. In fact, that’s how I was trained. But we’ve learned that insomnia is a clinical condition that requires its own separate treatment for [most] patients.”

**References**


