





Information Sheet for Behavioral Health Providers in Primary Care

Cognitive Behavioral Therapy for Insomnia

What is Cognitive Behavioral Therapy for Insomnia?

Cognitive Behavioral Therapy for Insomnia (CBT-I) is a non-pharmacological, evidence-based therapeutic technique for treating insomnia. The following information is offered here not for your use with your primary care patients (unless you have had specific training in CBT-I), but as an informational tool so that you can better help your patients who might be seeking such treatment. The various sections can be used as "scripts" or as talking points to discuss the problem of insomnia, the reason for a referral to a provider who is trained to deliver CBT-I., and what patients can expect from this treatment.

What is Insomnia?

Insomnia is an experience of inadequate or poor quality sleep characterized by one or more of the following sleep complaints:

- difficulty getting to sleep;
- difficulty staying asleep;
- waking up too early in the morning; or
- having sleep that is non-restorative.

When one ore more of the above are combined with one or more daytime consequences caused by the sleep disturbance (e.g., fatigue, irritability, diminished concentration, etc.), the basic diagnostic criteria for insomnia are satisfied.

Insomnia is quite common. Indeed, most of us will experience a bout of insomnia at some point in our lives. For most of us, this resolves itself in a reasonable amount of time.

However, for approximately 1 in 10 adults the problem will persist for months and even years.

Acute versus Chronic Insomnia

Acute, or short-term insomnia, is often due to temporary stressors like changes in jobs, relationships, or other life circumstances. When the stress dissipates, normal sleep tends to return.

In contrast, chronic, or long-term, insomnia lasts for a month or longer. It may begin in response to a stressor, but the insomnia persists even though the stressor or event is no longer present. It is concerning because once it becomes chronic, insomnia does not typically resolve on its own.

Other Variations of Insomnia

Insomnia may present on its own, which we call "primary" insomnia or may be caused by or worsened by another condition, which we call "co-morbid" insomnia. The number of possible co-morbid insomnia types is large and may include insomnia related to an ongoing medical condition, like chronic pain, or an ongoing psychological condition, like anxiety or depression. It is estimated that primary insomnia represents only about 10-20% of all insomnias.

Whether it is acute or chronic, primary or co-morbid, insomnia may also present as a specific subtype. These subtypes are based on the nature of the sleep complaint in term of whether the difficulty is in going to sleep, staying asleep or waking up to early. The problem of simply having poor quality or nonrefreshing sleep is a fourth subtype. Some people of course may have more than one of these presentations. In chronic insomnia, the subtype may change from one to another over time.

The person who consistently takes 30, 45, 60 or more minutes to fall asleep on most nights, but generally sleeps o.k. after they have initiated sleep has sleep initiation or sleep onset insomnia. Although not always the case, such patients tend to report that either their mind and/or body remain rather active once their head hits the pillow.

Difficulty staying asleep is also called middle-of-the night or sleep maintenance insomnia. For some people there may be one long extended wake period and for others it may be several shorter, but still excessive periods of wakefulness. It can be frustrating to fall asleep in a reasonable amount of time, but to repeatedly wake around 2:00 a.m. most nights and then to keep waking at various intervals for protracted periods of time. Some people who have difficulty staying asleep may have the kind of additional worried thoughts that are present at sleep onset, though this seems to vary widely. Many people

however, do have the experience of feeling as though they are just not sleepy enough after they have achieved 3-5 hours of sleep and awaken in the middle of the night.

Waking early most mornings, often two or more hours before the desired wake time, and being unable to fall back asleep at all is the early morning awakening insomnia subtype. Often this is grouped with the difficulty staying asleep subtype as sleep maintenance insomnia. Although it is the least common of the subtypes, it comes with its own set of frustrations. If the desired wake time is 7:00 a.m., 4:30 is an awfully long time away from the time to get up. Staying in bed for two or more hours knowing you are unlikely to sleep is disheartening at best. Some people will choose to get out of bed and start their day. Others find this to be problematic as it is still dark out or they do not want to disturb others who may be sleeping or miss the unlikely possibility that they will return to sleep before the alarm goes off. This subtype of insomnia, seems to occur more often in older adults. This insomnia subtype may be the closest to another form of sleep disorder called circadian rhythm disorder, which has implications for the best treatment approach.

Before moving on, it is important to reiterate that someone may have more than one of these insomnia subtypes. Nonetheless, it is worthwhile to identify the types and subtypes of insomnia that may be present in order to provide the optimal treatment strategy.

Is CBT-I an Alternative to Sleeping Pills?

Yes, CBT-I is an alternative to sleeping pills (whether these are prescribed or purchased over the counter without a prescription). It is also the case that CBT-I can sometimes be combined with sleeping pills in the short term. Although, many effective and safe prescription medications can help with acute insomnia and chronic insomnia, it is usually important to address the underlying causes of the insomnia, especially if those causes are not going to resolve themselves in the short term. CBT-I is a broad term to represent a set of safe and effective non-medication treatments for insomnia. They have proven to be equally as effective as medications in the short term and better in the long term.

Is CBT-I the Same Old List of "Sleep Do's and Don'ts" That I Have Read?

No. While those "Do's and Don'ts" may be a starting point and can be helpful, the most effective forms of Cognitive-Behavioral Therapy for Insomnia go far beyond those simple suggestions.

How is CBT-I Different?

This type of therapy requires a high degree of training and specialization to deliver. Physicians are typically not trained in this approach. If you have been referred to a specialist for cognitive behavioral treatment of your insomnia, your health care provider believes that this approach is well-suited for you and that the provider you have been

referred to can deliver this treatment. The approach itself combines a number of strategies specifically designed to address the factors that contribute to chronic insomnia.

Factors That Can Contribute to Insomnia

Personal Factors

Insomnia may be caused by personal factors that people are born with or by situational factors like a stressful event, a physical condition, a psychological condition, or some types of medication.

Physiologic Factors

People with insomnia tend to exhibit hyperarousal (over excitement) in a number of ways. They may feel that either their brains and/or their bodies are difficult to "turn off" at the appropriate times. In addition to this hyperarousal, someone with insomnia may also exhibit a weak sleep drive system. A third physiologic factor that can contribute to insomnia is related to the natural rhythms of sleeping and waking. It may be that an individual's sleep rhythm has become altered and/or that an individual is attempting to sleep during periods in which the body is simply not prepared to sleep. Hyperarousal, sleep-drive systems and sleep-wake rhythms may all play a role in the development or perpetuation of insomnia.

Cognitive Factors

Cognitive factors refer to a person's thoughts and thinking styles. Some thoughts that people have related to sleep can be detrimental to sleep itself. These can include worry and rumination about falling or staying asleep, focusing on the potential daytime effects of poor sleep, selectively attending to noises or conditions in and around the sleep environment, or faulty beliefs about sleep in general. Any combination of these thoughts effectively serves to create cognitive arousal, which is, of course, detrimental to sleep.

Behavioral Factors

People with insomnia may engage in a number of behaviors that may make sense on the surface, but that create problems for sleep. Some of these are, in fact, maladaptive habits that are part of the dos and don'ts of good sleep (like drinking caffeine in the evening or watching T.V. in bed). Other maladaptive habits are attempts to deal with insomnia such as going to bed much earlier, staying in bed longer, or trying to nap during the day in hopes of increasing the opportunity for sleep. While this may work some of the time, on most nights it merely results in longer times awake in bed. These kinds of behaviors may actually lead to conditioned insomnia, wherein the bed and bedroom become paired with wakefulness, frustration and worry so often that the act of trying to sleep becomes a cue for the brain and body to become 'wide awake.'

How are these Factors addressed by CBT for Insomnia?

CBT-I is based on two premises: that some of the personal and physiologic factors interfering with sleep can be altered and that maladaptive thoughts (cognitions) and behaviors (habits), which perpetuate insomnia, are learned and need to be "unlearned."

Treatment is tailored to the current sleep patterns and specific factors presented by the patient. Typically, the patient will meet individually (and sometimes in groups) with the insomnia specialist for anywhere from 2-3 sessions to 6-8 sessions. These sessions begin with a thorough history of the sleep problem. Sessions last from 30-90 minutes and occur weekly or bi-weekly. Once factors are identified, each one is systematically addressed with targeted interventions. Adjustments are made on a week-to-week basis, based on the response to these interventions. Although individual factors are targeted with individual approaches, these factors are often so inter-related that addressing one factor may provide benefit in other areas.

Addressing Personal Factors

Some personal factors simply cannot be changed and some life events may no longer be an issue, but it is possible that other personal factors may be the focus of treatment. For instance, ongoing stress may be a specific focus of treatment, or the CBT-I therapist may work with a physician or other specialists to explore alternative medications or to address a psychological or medical condition that may not be fully treated.

Addressing Physiologic Factors

Hyperarousal is addressed with a structured relaxation technique to calm the alerting system such as progressive muscle relaxation, breathing relaxation, mindfulness meditation, hypnosis or biofeedback. The sleep drive system is addressed by closely regulating sleep schedules and the amount of time devoted to sleep. This focused treatment is sometimes called 'sleep restriction' or 'sleep compression.' Sleep rhythm factors can also be addressed by re-regulating sleep schedules and by timing exposure to natural light. Bright light therapy may be used as well.

Addressing Cognitive Factors

The cognitive part of CBT-I focuses on identifying and restructuring negative or disturbing thoughts that interfere with sleep. This is known as cognitive restructuring. It is a structured approach that requires practice and repeated use, but that is very effective in removing the overactive mind from the sleep equation at night and limiting the negative or stressful cognitions associated with functioning during the day.

Addressing Behavioral Factors

Addressing the do's and don'ts of sleep is known as "Sleep Hygiene;" these are are methodically assessed by the therapist and those that are identified as problematic are targeted for change. In addition to Sleep Hygiene and appropriate sleep scheduling, an intervention known as "Stimulus Control" focuses on strategies to limit the amount of awake time in the sleep environment and specific instructions for how to spend that

awake time. Practicing stimulus control addresses conditioning factors. Behavioral changes may also be suggested for the pre-bedtime routine to help properly set the stage for sleep to occur.

Taken together, some or all of these approaches comprise cognitive-behavioral therapy for insomnia. Many people will have tried some of these approaches for some amounts of time, but that the success of CBT-I relies heavily on the consistent application of all the suggested approaches as a structured package over a reasonable amount of time.

What is My Role in the Treatment?

Patients in CBT-I are asked to take a very active role in their care and essentially become students of their own sleep. Besides keeping very close track of their sleep patterns on a daily basis, patients may be asked to monitor things like mood, fatigue, stress, and physical symptoms, so that these can be addressed if necessary. Consistent application of the various pieces of CBT-I is a cornerstone of a successful outcome, which is the norm for patients who engage in this treatment.

The Sleep Diary

The daily sleep diary (or sleep log) is an valuable and necessary tool in CBT-I. It is used to assess the patient's particular form of insomnia and can be a good initial indicator of the likelihood of patient compliance and motivation. It is also used to structure treatment approaches and to guide how those interventions are modified on a week-to-week basis.

Further Information about Insomnia

No More Sleepless Nights, Revised Edition, by Peter Hauri PhD, and Shirley Linde PhD (John Wiley and Sons, New York, 1996)

Say Goodnight to Insomnia, by G. D. Jacobs and H. Benson (Owl Books, 1999)

The Insomnia Answer, by Paul Glovinsky, PhD and Arthur Spielman, PhD (Penguin Books, 2006)

The Sleep Manual, by Wilfred Pigeon, PhD (Barrons Press, 2010)

American Academy of Sleep Medicine Patient Education Web Site: http://www.sleepeducation.com/Default.aspx

The Center for Integrated Healthcare extends its sincere appreciation to Wilfred Pigeon, PhD, CBSM, Clinical Researcher, Center of Excellence at Canandaigua & Center for Integrated Healthcare; Assistant Professor of Psychiatry & Director, Sleep & Neurophysiology, University of Rochester Medical Center, Rochester, NY, for his invaluable contributions to the preparation of this informational sheet.