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ELDER CARE

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Cognitive Behavioral Interventions for Insomnia in Older Adults

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Previous editions of *Elder Care* have reviewed the general problem of sleep disorders in older adults and the approach to drug therapy for insomnia. This edition focuses on behavioral treatments for insomnia.

Cognitive behavior therapy for insomnia (CBT-I) is recognized as the first-line treatment for chronic sleep problems. CBT-I focuses on the compensatory behaviors and hyperarousal or anxiety that disrupt sleep regulation (sleep homeostasis and circadian rhythm) and maintain chronic insomnia. Although CBT-I has been tested primarily as part of a multi-component intervention, one trial compared CBT-I alone to multi-component interventions and found both to be equally effective.

This article describes the most commonly used approaches to CBT-I. They include stimulus control therapy, sleep restriction therapy, cognitive therapy, relaxation training, and sleep education and hygiene.

Stimulus Control Therapy (SCT)

For the person with insomnia, the bed and bedroom become associated with cues for wakefulness, often due to a myriad of wakeful activities done in bed such as watching TV, reading, worrying, and trying to sleep. SCT is a series of instructions focused on re-associating the bed and bedroom with sleep. Patients are encouraged to use internal cues (feeling sleepy) to signal bedtime rather than using external cues (such as a TV program is over). They are also encouraged to get out of bed when feeling frustrated about not falling asleep to decrease arousal and condition the bed for sleepiness and sleep, rather than for wakefulness.

SCT involves giving instructions to patients about sleep habits. It is important to note, however, that SCT is more effective when patients receive explanations about the rationale for these instructions, rather than simply giving them instructions as a handout. The instructions include:

First, one should only lie down in bed when sleepy and intending to go to sleep. The bed should only be used for sleep and for sexual activity. The bed should not be used for reading, watching TV, eating, or worrying.

Second, once in bed the lights should be turned off with the intention of going to sleep. If sleep does not ensue, don't watch the clock. Rather, get out of bed, go to another room, and engage in a quiet activity until drowsiness occurs. Then return to the bed for sleep. If sleep again does not occur, get out of bed again. Repeat these steps as often as needed throughout the night. The purpose is to associate the bed with sleep, rather than with inability to sleep.

Third, set an alarm to wake up at the same time every morning. This should be done no matter how little sleep occurs during the night. The goal is to help the body acquire a consistent sleep rhythm.

Fourth, naps should generally be discouraged to prevent reduction of the sleep drive. However, some older adults, especially those with chronic medical conditions that cause fatigue, may benefit from judicious use of daytime naps. Table 1 gives guidelines for appropriate napping.

Table 1. Nap Guidelines for Older Adults with Insomnia

- Nap only in your bed.
- Nap only once each day.
- Nap for no longer than 30 minutes. Use an alarm or have someone wake you 30 minutes after you lay down to nap.
- Nap 7-9 hours after morning awakening. For example, if you wake up at 6 am, nap between 1-3 pm but no later.

The "Take a Nap" website provides guidance about the best time to nap based on morning wake-up time. It focuses on the optimal combination of deep sleep and rapid eye movement sleep. See http://saramednick.com/htmls/book/napwheel.htm

TIPS FOR DEALING WITH INSOMNIA IN OLDER ADULTS

- Recommend behavioral therapies as the first-line treatment for insomnia.
- Education about sleep and good hygiene are necessary and important, but often not sufficient on their own as treatment for insomnia. Specific behavioral therapies should also be implemented, including stimulus control, sleep restriction, cognitive therapy, and/or relaxation training.
- Daytime napping should generally be discouraged, but if necessary because of chronic medical conditions that cause fatigue, use the nap guidelines shown in Table 1.

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Sleep Restriction Therapy (SRT)

Patients with insomnia spend extended time awake in bed. SRT consolidates sleep by limiting a patient's time in bed to the average reported sleep time across a week or more of sleep diaries.

A regular bedtime and wake time are established. In weekly treatment sessions, bedtime is adjusted 15-30 minutes earlier based on the total sleep time reported from the diaries. Wake time remains constant to help set the circadian clock and build the sleep drive.

There are contraindications to the use of SRT. The most important are seizure disorders, bipolar disorders, and excessive daytime sleepiness.

A milder variant of SRT, called sleep compression, gradually reduces time in bed and is useful for older adults. But both SRT and sleep compression require detailed attention to sleep diaries and skill in prescribing time in bed. They are best suited for implementation in behavioral health specialty settings.

Cognitive Therapy (CT)

In CT, the therapist is on the lookout throughout insomnia treatment for statements which suggest that a patient either has misconceptions about sleep or holds beliefs about sleep that increase arousal and contribute to difficulties falling asleep or maintaining sleep. The therapist addresses these thoughts through education about sleep, gradually challenging and modifying the patient's thoughts, or by setting up "experiments" in which patients can test out their beliefs.

Relaxations Training (RT)

RT uses a variety of relaxation methods to reduce arousal and facilitate sleep. These methods include progressive muscle relaxation, diaphragmatic breathing, guided imagery, and meditation. These should be performed in low-light environments to allow for endogenous regulation of melatonin. Other strategies to support arousal reduction include setting aside 15-30 minutes early in the evening to problem solve, keep a journal, or create to-do lists so worrisome concerns do not emerge at bedtime.

Patients are also instructed to take 30-60 minutes before bedtime to unwind and engage in quiet yet pleasurable activities to establish a relaxing transition to sleep.

Sleep Education and Hygiene

Sleep education involves providing information about sleep that lays a foundation for the active treatment recommendations made in SCT, SRT, and RT. Education focuses on issues such as sleep architecture, sleep regulation, how insomnia develops, and ineffective sleep behaviors.

Sleep hygiene is a set of healthy sleep practices such as avoiding alcohol near bedtime, avoiding caffeine after noon, and not watching the clock when awake during the night. Older adults, who have a tendency towards an advancing phase shift in their circadian rhythm, are encouraged to expose themselves to bright light in the evening.

While education and hygiene are important and necessary for enhancing a patient's understanding about the rationale behind and effectiveness of sleep therapy, they are generally insufficient as a treatment on their own. Some resources for patients are shown below in Table 2.

Table 2. Resources for Patients Who Have Insomnia

- How to find a clinician certified in behavioral sleep medicine: http://www.absm.org/bsmspecialists.aspx
- Websites and computer apps for guided relaxation http://allaboutdepression.com/relax/index.html http://buddhify.com
- Reading about insomnia for patients with depression, anxiety, and chronic pain:
  Carney C, Manber R (2010). Quiet Your Mind and Get to Sleep: Solutions to Insomnia for Those with Depression, Anxiety or Chronic Pain. Oakland, California; New Harbinger.

References and Resources

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