Cognitive Behavioral Therapy for Chronic Insomnia: Confronting the Challenges to Implementation

In this week’s *Annals*, systematic reviews on pharmacotherapy (1) and psychological therapies (2) accompany new clinical practice guidelines for treatment of chronic insomnia from the American College of Physicians (ACP) (3). The ACP recommends cognitive behavioral therapy for insomnia (CBT-I) as first-line treatment. Although the evidence clearly supports this recommendation, it raises several challenges for implementation.

First, some clinicians do not recognize insomnia as a health problem, often considering it merely a symptom secondary to another condition. Second, many clinicians and their patients harbor biases against and are reluctant to consider “psychological” interventions (4). Third, the number of practitioners trained to deliver CBT-I in the United States is limited, and most of these practitioners are not located in medical settings. Here, we discuss strategies for physicians to overcome these challenges so that they can routinely offer CBT-I as first-line treatment for patients with chronic insomnia. We also urge policymakers and those who provide CBT-I to take steps to improve reimbursement and delivery of evidence-based behavioral health services, such as CBT-I, within medical settings.

CBT-I is a relatively brief, highly effective, and safe behavioral health intervention for patients with chronic insomnia, regardless of whether it occurs along with other health conditions. It typically involves 6 to 8 customized sessions in which patients are encouraged to change sleep and daytime habits, alter nonproductive sleep schedules, and modify beliefs about insomnia. By engaging patients to be active participants in their sleep health, CBT-I therapists teach cognitive and behavioral skills that resolve or attenuate chronic insomnia in 70% to 80% of treated persons, often without supplemental medication.

Although CBT-I requires substantial effort and can be uncomfortable for patients during the early stages, with persistence this nonpharmacologic treatment leads not only to better-quality sleep but also to improved daytime functioning. Further, patients develop mastery of effective sleep behaviors that they can call on if insomnia recurs. This benefit contrasts with pharmacologic interventions, in which increased doses and/or new preparations are required. Although medications may transiently be used with CBT-I, they are not a mainstay.

The first step in implementing the new ACP guideline is for physicians to recognize that a psychological alternative to pharmacologic therapy will accomplish better and safer patient outcomes. Physicians should share this information with patients and encourage them to engage in CBT-I. Brief, patient-completed instruments, such as the Insomnia Severity Index (Appendix Figure, available at www.annals.org), can be integrated into medical practices, to identify appropriate candidates for CBT-I and to evaluate treatment response (5). Studies in primary care settings indicate that a score of 14 or greater identifies appropriate candidates for CBT-I referral (6).

CBT-I requires more active patient engagement than taking medication, thus patients need ongoing instruction and support. Patient education should emphasize that CBT-I involves learning new approaches to thoughts and behaviors that affect sleep, that persistent effort is critical, and that symptoms may initially worsen before sleep improves. Once CBT-I is prescribed, patients need regular follow-up, particularly early in treatment. Support and encouragement to continue, despite initial adversity, can be the difference between CBT-I success and failure.

It is frustrating that an intervention as effective as CBT-I is difficult for many patients to access. The current method of health care reimbursement for behavioral health services necessitates that most CBT-I professionals practice in settings that are segregated from medical providers. As a result, few behavioral health practitioners have acquired the specialized sleep medicine training to deliver evidence-based CBT-I. Studies have shown that nonspecialists in sleep medicine can be trained to deliver CBT-I effectively; however, these models fall short of providing a sufficient number of practitioners to meet patient demands (7). Thus, inadequate access to well-trained CBT-I practitioners contributes to the broader finding that only 1 in 9 patients treated in the general medical sector receives minimally effective behavioral health treatment (8).

This conundrum is partially alleviated by the emergence of “virtual” CBT-I or “eCBT-I,” using computers or mobile devices (9). However, eCBT-I still requires time and patient engagement and is not reimbursed by most health insurance plans. Further, which insomnia patients are most appropriate to refer for eCBT-I is unclear. Whether CBT-I is done in person or virtually, it is most likely to be maximally effective if physician team members provide knowledgeable shoulders for patients to lean on during treatment.

Availability of eCBT-I, however, is not a solution. A face-to-face intervention has the greatest evidence of efficacy and should be available in medical settings for those who need it. Unfortunately, that is not the world in which we live (10). Workarounds include subsidizing CBT-I therapists to work in medical clinics, providing services via telemedicine, or improving referral access in behavioral health settings. Stepped-care models to manage patient demand for CBT-I have been proposed, but mechanisms for funding and disseminating such models are poorly developed. The ideal solution...
A long-term solution requires a team effort by policymakers, physicians, health care administrators, sleep medicine specialists, and CBT-I therapists. The evidence behind the ACP recommendations should motivate all stakeholders to move in unison to advocate for CBT-I payment in medical settings as part of medical insurance benefits. Such endorsement of CBT-I therapist practice and payment on par with other treating providers in the medical setting is best coupled with similar initiatives for value-added behavioral services in other medical settings (10).

Unless access to and unencumbered payment for value-based behavioral interventions, such as CBT-I, in medical settings become a reality, patients with chronic insomnia will continue to receive suboptimal treatment and experience suboptimal outcomes. Patients, the health system, and society will also bear the cost burden of increased health care use by and reduced productivity of these ineffectively treated patients.

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References
Appendix Figure. Insomnia Severity Index.

The Insomnia Severity Index has 7 questions. The 7 answers are added up to get a total score. When you have your total score, look at the “Guidelines for Scoring/Interpretation” below to see where your sleep difficulty fits.

For each question, please CIRCLE the number that best describes your answer.

**Please rate the CURRENT (i.e., LAST 2 WEEKS) SEVERITY of your insomnia problem(s).**

<table>
<thead>
<tr>
<th>Insomnia Problem</th>
<th>None</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Very Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Difficulty falling asleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Difficulty staying asleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Problems waking up too early</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. How SATISFIED/DISSATISFIED are you with your CURRENT sleep pattern?</td>
<td>Very Satisfied</td>
<td>Satisfied</td>
<td>Moderately Satisfied</td>
<td>Dissatisfied</td>
<td>Very Dissatisfied</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. How NOTICEABLE to others do you think your sleep problem is in terms of impairing the quality of your life?</td>
<td>Not at All Noticeable</td>
<td>A Little</td>
<td>Somewhat</td>
<td>Much</td>
<td>Very Much Noticeable</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. How WORRIED/DISTRESSED are you about your current sleep problem?</td>
<td>Not at All Worried</td>
<td>A Little</td>
<td>Somewhat</td>
<td>Much</td>
<td>Very Much Worried</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. To what extent do you consider your sleep problem to INTERFERE with your daily functioning (e.g., daytime fatigue, mood, ability to function at work/daily chores, concentration, memory, mood) CURRENTLY?</td>
<td>Not at All Interfering</td>
<td>A Little</td>
<td>Somewhat</td>
<td>Much</td>
<td>Very Much Interfering</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</table>

Guidelines for Scoring/Interpretation:

Add the scores for all 7 items (questions 1 + 2 + 3 + 4 + 5 + 6 + 7) = _______ your total score

Total score categories:
0–7 = No clinically significant insomnia
8–14 = Subthreshold insomnia
15–21 = Clinical insomnia (moderate severity)
22–28 = Clinical insomnia (severe)