

THE TOTAL PATIENT



Nondrug interventions can effectively improve time to fall asleep and total sleep time

Bette Weinstein Kaplan

Sleep disturbance and insomnia, often associated with cancer treatment, affect 36% to 59% of patients.¹ Researchers at the Perelman School of Medicine at the University of Pennsylvania sought to determine whether interventions used to treat insomnia could be more beneficial if they were also effective at reducing the distress of living with cancer. They evaluated two therapeutic interventions commonly used to manage sleep disturbance and insomnia: cognitive behavioral therapy for insomnia (CBT-I) and mindfulness-based stress reduction (MBSR).²

Insomnia and disturbed sleep are significant problems that affect approximately half of all cancer patients, reports Sheila N. Garland, PhD, lead author of the study and a clinical psychology post-doctoral fellow in Integrative Oncology and Behavioral Sleep Medicine at Penn Medicine's Abramson Cancer Center. If not properly addressed, sleep disturbances can negatively influence therapeutic and supportive care measures for these patients. Many patients with cancer do not want to take medications for their sleep problems; they feel they are taking enough drugs. They also worry about side effects and the possibility of developing drug dependence. Therefore, clinicians need to consider what effective, reliable, and nonpharmaceutical interventions can be tailored to this patient population.²

In their study, the investigators recruited 111 cancer patients from a tertiary cancer center in Calgary, Alberta, Canada. The participants were assigned to two groups: one group (47 patients) used CBT-I to manage their sleep disturbance issues, and the other group (64 patients) used MBSR. The authors noted that this is the first study to directly compare MBSR and CBT-I for insomnia in patients with cancer.²

A study evaluated two commonly used interventions: CBT-I and MBSR.

COGNITIVE BEHAVIORAL THERAPY FOR INSOMNIA

CBT-I is deemed the treatment of choice by the American Academy of Sleep Medicine for nonpharmaceutical management of sleep disturbance.² The method consists of four strategies: stimulus control, sleep restriction, cognitive therapy, and relaxation training. The study authors explained that the combination targets and reduces sleep-related physiologic and cognitive arousal to reestablish restorative sleep function. The participants assigned to the CBT-I group attended eight

weekly 90-minute sessions of CBT-I in groups of six to ten patients.

MINDFULNESS-BASED STRESS REDUCTION

Studies have shown that MBSR can reduce distress and improve psychological well-being in patients with cancer.³⁻⁵ "Within the MBSR program, participants are guided in the development of *mindfulness*, defined as nonjudgmental awareness of the present moment, to modify appraisals of stressful situations and reduce overall levels of psychophysiological arousal," explained the study authors.²

Participants in the MBSR group attended eight weekly 90-minute sessions of MBSR in groups of 15 to 20 patients. They also attended an additional 6-hour weekend intensive silent retreat. "The program provides patients with psychoeducation on the relationship between stress and health, while meditation techniques and gentle yoga are practiced to support the development of mindful awareness and responding to stress," said the authors.²

RESULTS SHOW MANY POSITIVES

The study results demonstrated that insomnia severity was reduced across both groups. However, participants in the CBT-I group achieved positive results faster, whereas participants using MBSR exhibited more gradual improvement

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over a longer period of time. Both groups experienced a number of positive results, such as increased total sleep time as well as a decrease in the amount of time it took to fall asleep. This held true for participants returning to sleep during the night as well. Mood and stress-related symptoms were improved among all participants at the end of the study, no matter which intervention group they were in.

The researchers concluded that although MBSR produced a clinically significant change in sleep and psychological outcomes, CBT-I produced a more rapid and durable improvement. Thus, CBT-I remains the better choice for treating insomnia without medication.² ■

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REFERENCES

1. Savard J, Ivers H, Villa J, et al. Natural course of insomnia comorbid with cancer: An 18-month longitudinal study. *J Clin Oncol*. 2011;29(26):3580-3586.
2. Garland SN, Carlson LE, Stephens AJ, et al. Mindfulness-based stress reduction compared with cognitive behavioral therapy for the treatment of insomnia comorbid with cancer: A randomized, partially blinded, noninferiority trial [published online ahead of print January 6, 2014]. *J Clin Oncol*. 2014.
3. Hoffman CJ, Ersner SJ, Hopkinson JB, et al. Effectiveness of mindfulness-based stress reduction in mood, breast- and endocrine-related quality of life, and well-being in stage 0 to III breast cancer: A randomized, controlled trial. *J Clin Oncol*. 2012;30(12):1335-1342.
4. Henderson VP, Clemow L, Massion AO, et al. The effects of mindfulness-based stress reduction on psychosocial outcomes and quality of life in early-stage breast cancer patients: A randomized trial. *Breast Cancer Res Treat*. 2012;131(1):99-109.
5. Bränström R, Kvillemo P, Moskowitz JT. A randomized study of the effects of mindfulness training on psychological well-being and symptoms of stress in patients treated for cancer at 6-month follow-up. *Int J Behav Med*. 2012;19(4):535-542.