## Assessing Efficacy of Cognitive Behavioral Therapy for Insomnia in the Oncology Population

Eugenie Spiguel, MSN, HNP, ANP-BC

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**BACKGROUND:** Insomnia is highly prevalent among the oncology population, and it can affect quality of life for patients with cancer and survivors. Medications are a common treatment for insomnia. However, other treatment options, such as cognitive behavioral therapy, may also be effective.

**OBJECTIVES:** This review analyzes the effectiveness of cognitive behavioral therapy for insomnia (CBT-I) to treat insomnia comorbid with cancer or during survivorship.

**METHODS:** Based on a literature search, 19 articles identified CBT-I as a treatment for individuals diagnosed with cancer.

**FINDINGS:** Studies confirm that CBT-I is an effective treatment for insomnia experienced by cancer survivors. A variety of treatment models have been studied, such as group-based, web-based, and video formats, as well as telemedicine delivery. Treatment effectiveness varies depending on the CBT-I treatment model used.

## **KEYWORDS**

cognitive behavioral therapy for insomnia; CBT-I; cancer; insomnia

**DIGITAL OBJECT IDENTIFIER** 10.1188/22.CJON.399-405 **INSOMNIA IS A COMMON SIDE EFFECT** in people diagnosed with cancer, and the oncology population experiences insomnia at rates two to three times higher than in the general population (Davidson et al., 2002). The prevalence of insomnia ranges from 30% to 50% in people who are newly diagnosed with cancer or who have undergone recent treatment for cancer (Savard & Morin, 2001). Insomnia can occur before and during treatment, and it can last for several months after treatment has ended (Savard et al., 2011). Insomnia can negatively affect quality of life in individuals with cancer (Lis et al., 2008), and it is associated with increased incidence of fatigue and depression (Palesh et al., 2010). Patients with insomnia comorbid with cancer report more pain and inability to cope with additional stress (Dahiya et al., 2013). Chronic insomnia may also affect survival outcomes for patients with advanced cancer (Palesh et al., 2014). Despite the high prevalence and detrimental effects of insomnia among the oncology population, it is frequently overlooked and subsequently undertreated (Zhou, Partridge, et al., 2017).

## Background

Chronic insomnia is defined as difficulty falling asleep, difficulty staying asleep, or waking too early for three or more nights a week for at least three months (American Psychiatric Association, 2013). The sleep disturbance must cause clinically significant functional impairment, and it must occur despite adequate sleep opportunity. Chronic insomnia affects energy levels, mood, concentration, and quality of life. Sleep medications have historically been the standard treatment for insomnia. However, these medications have several potential side effects, including complex sleep behaviors such as sleep walking, sleep eating, and sleep violence, which can endanger the patient and others around them (Asnis et al., 2015).

Cognitive behavioral therapy for insomnia (CBT-I) was developed as a nonpharmaceutical treatment. It is based on Spielman's 3P model, which posits that insomnia occurs within the context of predispositions (genetic or certain lifestyle factors), is initiated by a precipitating event (such as a cancer diagnosis), and persists because of behavioral factors (such as extending time in bed or engaging in poor sleep hygiene) (Spielman et al., 1987). CBT-I entails specific interventions, such as stimulus control (e.g., keeping the bed only for sleep), sleep restriction, and cognitive restructuring (Perlis et al., 2008). It has historically been administered over the course of six to eight weeks. Each session is designed to build on the previous one. The concepts of sleep hygiene, stimulus control, sleep restriction, and cognitive restructuring