

# A Self-Administered Sleep Intervention for Patients With Cancer Experiencing Insomnia

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**Background:** Sleep-wake disturbances are experienced by as many as 75% of patients with cancer and are associated with poor symptom management, lower functionality, and decreased quality of life. Although promising sleep interventions exist, they require extensive resources and time.

**Objectives:** The objectives of this study were to develop a brief, self-administered sleep intervention and to evaluate the feasibility and potential efficacy of its implementation with adult patients with cancer who were about to receive, were receiving, or had received radiation therapy in an ambulatory cancer care setting.

**Methods:** Pre- and postintervention surveys and qualitative interviews were conducted with patients with cancer experiencing insomnia (N = 28) and receiving radiation treatment within the past six months. Patients received instruction on breathing, visualization, and intonation. Adherence and sleep quality were primary study outcomes. Analyses included descriptive statistics and repeated measure regression analysis. Thematic analysis was conducted on qualitative data.

**Findings:** Adherence to the sleep intervention was high (75%), and significant improvement was found in global sleep quality ( $p < 0.0001$ ) regardless of level of adherence. Sleep onset latency ( $p = 0.0005$ ), sleep duration ( $p = 0.0016$ ), and sleep quality ( $p < 0.0001$ ) were significantly improved. Age was significantly correlated with sleep quality ( $p = 0.0094$ ), with older participants reporting greater benefit from the intervention. Participants reported that the intervention was easy to learn and implement and that it “calmed the mind.”

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Sleep-wake disturbances are experienced by as many as 75% of patients with cancer and are twice as common in those patients compared to the general population (Carlson & Garland, 2005; Savard & Morin, 2001). Sleep-wake disturbance is a term used to describe perceived or actual changes in nighttime sleep, resulting in daytime impairment, and it includes sleep-related

breathing disorders, sleep-related movement disorders (e.g., restless leg syndrome), hypersomnia, and insomnia (Page, Berger, & Johnson, 2006). The most prevalent sleep-wake disturbance in patients with cancer is insomnia (Sateia & Lang, 2008), which is defined as “a heterogeneous complaint that may involve difficulties falling asleep (initial or sleep onset insomnia), trouble staying asleep with prolonged