

# Predisposing, Precipitating, and Perpetuating Factors of Insomnia in Cancer Survivors

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**OBJECTIVES:** To explore and characterize predisposing, precipitating, and perpetuating factors of subthreshold, moderate, and severe insomnia in cancer survivors.

**SAMPLE & SETTING:** 135 cancer survivors who self-reported symptom severity on the Insomnia Severity Index during the baseline phase of a randomized clinical trial on insomnia treatment.

**METHODS & VARIABLES:** Participants completed measures assessing predisposing factors (age, sex, race and ethnicity, body mass index), precipitating factors (number of years since cancer diagnosis, depression and anxiety symptoms, health-related quality of life), and perpetuating factors (frequency of consuming alcoholic and caffeinated beverages, napping behavior, dysfunctional beliefs about sleep).

**RESULTS:** In the multivariate model, being female was protective against insomnia, and being a person of color, having higher anxiety, having more depression symptoms, and having stronger dysfunctional beliefs about sleep were significantly associated with greater insomnia severity.

**IMPLICATIONS FOR NURSING:** By fostering interprofessional collaboration and implementing evidence-based interventions, nurses can contribute to the well-being of cancer survivors and address their sleep-related challenges. This study underscores the importance of regular insomnia screenings for cancer survivors, with nurses as essential facilitators.

**KEYWORDS** insomnia; sleep; cancer; survivors; assessment; oncology; Spielman model; 3P model  
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Patients with cancer often experience various long-term physical and psychological sequelae even after treatment has been completed. Sleep disturbances, particularly insomnia (i.e., difficulty initiating or maintaining sleep or nonrestorative sleep, with resultant daytime impairment [American Academy of Sleep Medicine, 2014]), are commonly reported among people post-completion of cancer treatment, yet they have been overlooked in the integration of survivorship care plans (Otte et al., 2022; Savard et al., 2011). Results from a longitudinal study with heterogeneous cancer types that looked at a 12-month course of cancer-related insomnia post-treatment found a high prevalence of insomnia symptoms (about 50%) (Schieber et al., 2019). In addition, individuals with insomnia symptoms present during treatment had persistent and even greater symptom severity (64%) during the first year post-treatment (Schieber et al., 2019). Similarly, one in three cancer survivors continued to report symptoms of insomnia during the first two years post-treatment (Chan et al., 2023). The consequences of insomnia not only disrupt cancer survivors' physical, mental, and cognitive health (Davis & Goforth, 2014; Medic et al., 2017), but also affect their health-related quality of life (HRQOL) during and after the completion of active cancer treatment (Reynolds-Cowie & Fleming, 2021).

Spielman's 3P model, a widely accepted behavioral model for insomnia (Spielman et al., 1987), explains the development and maintenance of insomnia by incorporating the impact and different levels of influence of various traits and life stresses. In addition, the model recognizes that chronic insomnia is maintained (unintentionally) by maladaptive coping behaviors. Predisposing factors include the biopsychosocial aspect of insomnia and remain for the entire course of the insomnia disorder (Spielman et al., 1987). They include modifiable and nonmodifiable