Cognitive Behavioral Therapy for Insomnia Outcomes in Women After Primary Breast Cancer Treatment: A Randomized, Controlled Trial

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About 30%–50% of women with breast cancer experience insomnia (Savard, Villa, Ivers, Simard, & Morin, 2009), which is twice the rate than in the general population (Berger, 2009). Compared to other cancers, insomnia is more prevalent in women with breast cancer (Palesh et al., 2010; Savard, Ivers, Villa, Caplette-Gingras, & Morin, 2011). For those with cancer, insomnia can affect treatment recovery and quality of survivorship. Women with breast cancer are thrust into early menopause from chemotherapy or endocrine treatments, and report new or worsening insomnia with frequent nocturnal awakenings (Berger, Kuhn, Farr, Von Essen, et al., 2009b). Disrupted sleep has been documented in all phases of the cancer trajectory, including long-term survivorship.

Insomnia is characterized by complaints of difficulty initiating or maintaining sleep, or nonrestorative sleep, lasting for at least one month and causing significant distress or impairment in functioning (Buysse, 2013). Some women are predisposed to insomnia; others report that insomnia was precipitated by the stress of a breast cancer diagnosis and/or treatment. Evidence suggests that insomnia has a consistent negative impact on immune functioning (Blask et al., 2011; Payne, Piper, Rabinowitz, & Zimmerman, 2006) and may even have implications for tumor progression (Filipski et al., 2002, 2003) and survival after a cancer diagnosis (Innominato et al., 2009; Mormont et al., 2000). Breast cancer-related insomnia has been shown to have a profound effect on quality of life (QOL) and daily functioning (Ancoli-Israel et al., 2006; Arndt, Merx, Stegmaier, Ziegler, & Brenner, 2005).

In a population-based sample of patients with differing cancers (N = 991), 31% of the total sample reported insomnia symptoms at the perioperative period, a rate

Purpose/Objectives: To examine the effect of cognitive-behavioral therapy for insomnia (CBTI) on sleep improvement, daytime symptoms, and quality of life (QOL) in breast cancer survivors (BCSs) after cancer treatment.

Design: A prospective, longitudinal, randomized, controlled trial.

Setting: Oncology clinics, breast cancer support groups, and communities in Colorado.

Sample: 56 middle-aged BCSs with chronic insomnia.

Methods: Women were randomly assigned to CBTI or behavioral placebo treatment (BPT) and completed measures of sleep, QOL, functioning, fatigue, and mood at baseline, postintervention, and at three- and six-month follow-ups.

Main Research Variables: Sleep outcomes (e.g., sleep efficiency, sleep latency, total sleep time, wake after sleep onset, number of nightly awakenings); secondary variables included sleep medication use, insomnia severity, QOL, physical function, cognitive function, fatigue, depression, anxiety, and sleep attitudes or knowledge.

Findings: Sleep efficiency and latency improved more in the CBTI group than the BPT group; this difference was maintained during follow-up. Women in the CBTI group had less subjective insomnia, greater improvements in physical and cognitive functioning, positive sleep attitudes, and increased sleep hygiene knowledge. No group differences in improvement were noted relative to QOL, fatigue, or mood.

Conclusions: Nurse-delivered CBTI appears to be beneficial for BCSs' sleep latency/efficiency, insomnia severity, functioning, sleep knowledge, and attitudes more than active placebo, with sustained benefit over time.

Implications for Nursing: Oncology nurses are in a unique position to identify insomnia in cancer survivors. When sleep disturbances become chronic, nurses need to make recommendations and referrals.

Key Words: breast cancer; fatigue; outcomes research; survivorship; late effects of cancer treatment

ONF, 41(3), 241–253. doi:10.1188/14.ONF.41-03AP