

Feasibility of a Telemedicine-Delivered Cognitive Behavioral Therapy for Insomnia in Rural Breast Cancer Survivors

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OBJECTIVES: To evaluate a nurse-led, telemedicine-delivered cognitive behavioral therapy for insomnia (CBTI) in rural breast cancer survivors (BCSs).

SAMPLE & SETTING: 18 BCSs diagnosed with stage I-III breast cancer in the rural western United States.

METHODS & VARIABLES: In this prospective, pre-/post-test, quasiexperimental feasibility pilot trial, BCSs attended six weekly sessions of CBTI via Internet videoconference. Feasibility was assessed using recruitment and acceptability of the intervention. Primary outcomes were diary-based sleep efficiency (SE), sleep latency (SL), total sleep time, wake after sleep onset, and number of nightly awakenings; secondary outcomes included quality of life (QOL), mental health, and daily functioning.

RESULTS: Following the intervention, participants reported improvements in sleep outcomes, including SE and SL. QOL and daily functioning improved, but anxiety and depression did not.

IMPLICATIONS FOR NURSING: Nurse-led, telemedicine-delivered CBTI for rural BCSs is feasible and may be effective in managing insomnia. Additional research is needed to determine widespread effectiveness and best practices for dissemination and implementation.

KEYWORDS cognitive behavioral therapy; breast cancer; insomnia; rural; telemedicine

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Insomnia is a complex yet common condition that affects 42%–69% of women after primary treatment for breast cancer (Savard, Ivers, Villa, Caplette-Gingras, & Morin, 2011). Defined as having difficulty with initiating or maintaining sleep and experiencing associated daytime symptoms that can impair daily functioning (e.g., fatigue, sleepiness, cognitive disturbances) (American Psychiatric Association, 2013), insomnia can occur at the time of breast cancer diagnosis and throughout cancer treatment (Palesh et al., 2010). In addition, it often persists for years after the completion of cancer treatment (Fontes, Severo, Gonçalves, Pereira, & Lunet, 2017; Lowery-Allison et al., 2018; Savard et al., 2011). Previous research has shown that sleep disturbances in breast cancer survivors (BCSs) can decrease quality of life (QOL) (Lowery-Allison et al., 2018), depress the immune system, and increase mortality (Trudel-Fitzgerald et al., 2017).

Background

Cognitive behavioral therapy for insomnia (CBTI) is a multicomponent therapy aimed at eliminating a broad range of symptoms and perpetuating factors of insomnia. Components include empirically supported sleep restriction, stimulus control, sleep hygiene education, and cognitive therapy, with or without relaxation techniques. Trained therapists focus on addressing negative thoughts and feelings about sleep and changing behaviors that can perpetuate insomnia (Matthews, Carter, Page, Dean, & Berger, 2018). CBTI is an effective therapy that can lead to an improvement in sleep outcomes and a decrease in associated daytime symptoms among the general population (Aricò, Raggi, & Ferri, 2016; Trauer, Qian, Doyle, Rajaratnam, & Cunnington, 2015; van Straten et al., 2018) and in patients after cancer treatment (Fleming & MacMahon, 2015; Johnson et al., 2016). CBTI