

# Self-Management Energy Conservation for Cancer-Related Fatigue in Thai Women With Breast Cancer Receiving Chemotherapy: A Pilot Study

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**OBJECTIVES:** To examine the adherence to and the usefulness, satisfaction, and preliminary efficacy of a 12-week self-management energy conservation and active management intervention on fatigue.

**SAMPLE & SETTING:** A total of 19 Thai women diagnosed with stage I–III breast cancer receiving adjuvant chemotherapy were enrolled from a local hospital in the central region of Thailand.

**METHODS & VARIABLES:** A randomized controlled trial design was used. Fatigue was measured using the Piper Fatigue Scale–Revised and was collected at baseline and 12 weeks. Descriptive statistics and Student's *t* tests were used to analyze the data.

**RESULTS:** Participants completed four interventional sessions. Of participants in the experimental group, nine were satisfied with the intervention, seven were satisfied with its effects on fatigue, and seven were very satisfied with the telephone delivery. Participants in the experimental group reported significantly less fatigue at 12 weeks compared to the attention control group ( $p = 0.008$ ).

**IMPLICATIONS FOR NURSING:** Teaching energy conservation principles and strategies to women with breast cancer undergoing chemotherapy is an intervention oncology nurses can easily deliver.

**KEYWORDS** self-management; energy conservation; cancer-related fatigue; breast cancer; chemotherapy  
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Breast cancer is an important global health issue. It is estimated that by 2030 there will be about 21.7 million cancer cases and 13 million cancer-related deaths (Thun et al., 2010). In 2020, there were about 2.3 million new cases of breast cancer in women worldwide (Sung et al., 2021). In Thailand, cancer is the second most prevalent noncommunicable disease for women and the third most prevalent for men (Pittayapan, 2016). Breast cancer is the most prevalent cancer in women and is projected to still have the highest incidence rate in 2025, accounting for 42% of all cancer cases in women (Virani et al., 2017).

Cancer is defined as a chronic illness and can be accompanied by long-term morbidity, even when the prognosis is positive and long-term survival is expected. Treatment for breast cancer often involves a combination of surgery, chemotherapy, targeted therapy, radiation therapy, extended oral endocrine therapy with tamoxifen or aromatase inhibitors, and sometimes oral molecular-targeted therapies. All these treatments can result in multiple chronic side effects that can negatively affect patients' quality of life (McCorkle et al., 2011), making breast cancer a complex chronic illness (Bodai & Tusso, 2015). One of the most prevalent chronic side effects is cancer-related fatigue (CRF) (Williams et al., 2016).

Throughout the literature, 90% of patients report fatigue at some point during their experience with cancer (Williams et al., 2016), particularly during treatment. In one study, severe fatigue was more prevalent during chemotherapy compared to radiation therapy or combined chemotherapy and radiation therapy (Karthikeyan et al., 2012). In a longitudinal study of women with breast cancer undergoing active chemotherapy treatment, pretreatment fatigue and