This material is protected by U.S. copyright law. Unauthorized reproduction is prohibited. To purchase quantity reprints, please e-mail reprints@ons.org or to request permission to reproduce multiple copies, please e-mail pubpermissions@ons.org.

## Nonpharmacologic Supportive Strategies to Promote Quality of Life in Patients Experiencing Cancer-Related Fatigue: A Systematic Review

Ausanee Wanchai, RN, MSN, Jane M. Armer, RN, PhD, FAAN, and Bob R. Stewart, EdD

Cancer-related fatigue (CRF) is a distressing symptom that affects the quality of life (QOL) of patients with breast cancer and their families. The effectiveness of pharmacologic therapies alone has not been sufficient in the management of CRF; therefore, a combination of pharmacologic and nonpharmacologic approaches is justified. The purpose of this article is to critically review the literature related to nonpharmacologic supportive strategies in enhancing QOL among patients with breast cancer experiencing CRF. The results show that exercises (e.g., home-based exercise, supervised exercise), education and counseling, sleep therapy, and complementary therapy are feasible as effective nonpharmacologic supportive interventions to improve QOL in patients with breast cancer suffering from CRF. Therefore, nurses may consider these nonpharmacologic supportive strategies as adjunctive interventions to pharmacologic interventions in enhancing QOL for patients with breast cancer experiencing CRF. However, because previous studies had some methodologic limitations, such as small sample size, lack of objective measures, or predominantly Caucasian sample, future research to further explore nonpharmacologic interventions in this area is warranted.

ith advances in early detection and treatment, the five-year relative survival rate for women with breast cancer has improved from 63% in the early 1960s to 90% in 2010 (American Cancer Society, 2010). However, side effects of cancer treatments, such as chemotherapy, radiation therapy, surgery, and hormone therapy, may contribute to symptoms that affect quality of life (QOL) for these patients (Mustian et al., 2007; Stone, Richards, A'Hern, & Hardy, 2001). Among potential side effects, cancer-related fatigue (CRF) was considered to be the most distressing cancer symptom and side effect of treatment, and it may persist for months or years after completion of breast cancer treatment (Bower et al., 2000; Patrick et al., 2004). Byar, Berger, Bakken, and Cetak (2006) asserted that CRF experience is a subjective and multidimensional concept that cannot be explained by only the physiologic aspect; physical, psychological, social, and spiritual aspects all are associated with CRF. From

## At a Glance

- About 26%–90% of patients with breast cancer suffer from cancer-related fatigue (CRF) during cancer treatment and they can experience CRF up to 10 years after treatment ends.
- The majority of studies have reported that exercise was a feasible and effective intervention to ameliorate CRF for patients with breast cancer.
- Oncology nurses must be aware of CRF and use an appropriate instrument to assess this symptom in patients with breast cancer.

patients' perspectives, fatigue is more than just being tired in a way that they had not expected (Wu & McSweeney, 2007). Compared with typical fatigue, CRF is more rapid in onset, more

Ausanee Wanchai, RN, MSN, is a nursing instructor at Boromarajonani College of Nursing, Buddhachinaraj, in Phitsanulok, Thailand, and a doctoral student in the Sinclair School of Nursing at the University of Missouri in Columbia; and Jane M. Armer, RN, PhD, FAAN, is a professor and Bob R. Stewart, EdD, is emeritus of education and adjunct clinical professor, both in the Sinclair School of Nursing at the University of Missouri. The authors take full responsibility for the content of the article. The authors did not receive honoraria for this work. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the authors, planners, independent peer reviewers, or editorial staff. (Submitted June 2010. Revision submitted July 2010. Accepted for publication July 26, 2010.)

Digital Object Identifier: 10.1188/11.CJON.203-214