

# Energy Through Motion<sup>®</sup>: An Evidence-Based Exercise Program to Reduce Cancer-Related Fatigue and Improve Quality of Life

Katie Huether, DNP, ARNP, FNP-C, Linda Abbott, DNP, RN, AOCN<sup>®</sup>, CWON, Laura Cullen, DNP, RN, FAAN, Liz Cullen, MSN, ARNP, ANP-C, GNP-C, and Ami Gaarde, RN, BSN, OCN<sup>®</sup>



© Siri Stafford/DigitalVision/Thinkstock

**Background:** Evidence supports addressing cancer-related fatigue (CRF) with activity. Activity promotion is feasible during and following cancer treatment and improves patient outcomes.

**Objectives:** This project provided an evidence-based activity program for adult cancer survivors after treatment to reduce CRF and improve quality of life.

**Methods:** The Iowa Model of Evidence-Based Practice to Promote Quality Care guided development of the activity promotion evidence-based practice project. This included evidence review, creation of an evidence-based activity intervention, and evaluation of the practice change. Two groups participated in the project; one group, the usual care group, provided baseline data and received “usual” instructions for activity, fatigue, and sleep, whereas the Energy Through Motion<sup>®</sup> (ETM) activity group received a three-month activity intervention with prepackaged ETM kits and follow-up phone calls.

**Findings:** Patients in the ETM activity group had increased activity levels, whereas those in the usual care group had decreased activity levels. Fatigue levels in the ETM activity group decreased, and quality of life improved. This project supports nurse-led activity promotion as useful in addressing CRF and feasible for use in a busy clinical setting.

Katie Huether, DNP, ARNP, FNP-C, is a graduate of the College of Nursing at the University of Iowa in Iowa City; and Linda Abbott, DNP, RN, AOCN<sup>®</sup>, CWON, is an advanced practice nurse and Laura Cullen, DNP, RN, FAAN, is an evidence-based practice scientist, both in the Office of Nursing Research, Evidence-Based Practice, and Quality, Liz Cullen, MSN, ARNP, ANP-C, GNP-C, is an advanced registered nurse practitioner in the Department of Radiation Oncology, and Ami Gaarde, RN, BSN, OCN<sup>®</sup>, is director of the Office of the Patient Experience, all at the University of Iowa Hospitals and Clinics in Iowa City. The authors take full responsibility for the content of the article. The study was supported, in part, by a J. Patrick Barnes Grant for Nursing Research and Evidence-Based Practice Projects from the DAISY Foundation. 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 independent peer reviewers or editorial staff. Abbott can be reached at linda-abbott@uiowa.edu, with copy to editor at CJONEditor@ons.org. (Submitted January 2015. Revision submitted July 2015. Accepted for publication July 27, 2015.)

Key words: cancer fatigue; exercise; activity; evidence-based practice

Digital Object Identifier: 10.1188/16.CJON.E60-E70

Fatigue is a significant side effect of cancer, affecting 75%–100% of people living with and after a diagnosis of cancer (Berger, Mooney, et al., 2015; National Cancer Institute, 2014). Fatigue management includes assessing the level of fatigue and impact on the patient (Nail, 2002). Individuals with cancer-related fatigue (CRF) can be affected physically, socially, spiritually, psychologically, and cognitively (Mitchell, Beck, Hood, Moore, & Tanner, 2007), which consequently influences patients’ adherence to cancer treatment, ability to work, and physical and psychosocial functioning (Mitchell et al., 2007). Quality of life (QOL) can decrease, with loss of engagement in meaningful life activities (Dagnelie et al., 2007; Groeneveld, de Boer, & Frings-Dresen,

2013; Gupta, Lis, & Grutsch, 2007; Mustian, Sprod, Janelins, Peppone, & Mohile, 2012; Persoon et al., 2013). CRF is most prevalent during active cancer therapy, but fatigue may be so debilitating that cancer survivors often cannot work or regain their previous lifestyle for years (Berger, Mooney, et al., 2015; Braun, Greenberg, & Pirl, 2008; Jacobsen et al., 2007; Liavaag, Dørum, Fosså, Tropé, & Dahl, 2007; Meeske et al., 2007).

## Background

The Oncology Nursing Society (ONS) and the National Comprehensive Cancer Network (NCCN) synthesize and disseminate evidence with tools designed to support easy application