## Cancer-Related Fatigue: Scientific Progress Has Been Made in 40 Years

Ashley Leak Bryant, PhD, RN-BC, OCN®, AnnMarie Lee Walton, MPH, RN, OCN®, CHES, and Brett Phillips, MA

Cancer-related fatigue (CRF) is a persistent symptom experienced by survivors throughout their cancer journey. Although the etiology of CRF is unclear, evidence supports improvements in fitness and quality of life. Survivors could benefit from appropriate identification and treatment from oncology nurses.



## At a Glance

- Health care has shifted from disease-focused care to wellness care.
- The Oncology Nursing Society's Putting Evidence Into Practice resource on fatigue provides synthesized information about strategies to reduce CRF.
- Oncology nurses play a significant role in increasing awareness about the appropriate identification, recognition, and treatment of CRF.

Ashley Leak Bryant, PhD, RN-BC, OCN®, is an assistant professor in the School of Nursing at the University of North Carolina (UNC)—Chapel Hill; AnnMarie Lee Walton, MPH, RN, OCN®, CHES, is a PhD candidate in the School of Nursing at the University of Utah in Salt Lake City; and Brett Phillips, MA, is a clinical research coordinator at the UNC Lineberger Comprehensive Cancer Center in Chapel Hill. The authors take full responsibility for the content of the article. This work is supported, in part, by the UNC Oncology Clinical Translational Research Training Program (NCI 5K12CA120780-07) to Bryant, as well as a fellowship in cancer, aging, and end-of-life care (No. T32 NR013456) offered by the National Institute of Nursing Research at the University of Utah College of Nursing and a Doctoral Scholarship in Cancer Nursing (renewal DSCNR-13-276-03) offered by the American Cancer Society, both to Walton. Bryant can be reached at ashley\_bryant@unc.edu, with copy to editor at CJONEditor@ons.org.

Key words: cancer-related fatigue; exercise; nutrition; Putting Evidence Into Practice Digital Object Identifier: 10.1188/15.CJON.137-139

ancer-related fatigue (CRF) is a distressing, persistent symptom that is experienced by survivors during and after treatment. Unsurprisingly, many early CRF studies were conducted by nurses. These studies included a look at patients receiving localized radiation treatment (Haylock & Hart, 1979); an exploration of fatigue as a conceptual approach to a clinical problem (Aistars, 1987); the development of a nursing theory focused on fatigue mechanisms (Piper, Lindsey, & Dodd, 1987); an examination of fatigue mechanisms (St Pierre, Kasper, & Lindsey, 1992), as well as of fatigue in advanced cancer (Bruera & MacDonald, 1988) and in non-small cell lung cancer

(Sarna, 1993); and a description of fatigue and potential nursing interventions (Nail & King, 1987). Winningham et al. (1994) wrote a state-of-the-science article about fatigue in the cancer experience for the *Oncology Nursing Forum*, and Mock et al. (1997) was one of the first to conduct an exercise study regarding the effects of exercise on fatigue, physical functioning, and emotional distress during radiation therapy for breast cancer. Nurse scholars from the 1970s–2000s were pivotal in advancing the science of fatigue in various cancers and have provided a scientific foundation for those four decades.

During the past 40 years, clinicians, patients, and caregivers have increased their

awareness about the appropriate identification, recognition, and treatment of CRF. In addition, objective measures of fatigue (e.g., validation surveys) have increased in number. The Oncology Nursing Society has developed the Putting Evidence Into Practice (PEP) resource, in which teams of nurse scientists, advanced practice nurses, and staff nurses summarize and synthesize information available on a patient-centered topic of interest, such as fatigue. A classification schema that includes the following categories is used to determine the effectiveness of various interventions in addressing the topic of interest: recommended for practice, likely to be effective, benefits balanced with harm, effectiveness not established (these should be carefully considered by the patient and practitioner), effectiveness unlikely, not recommended for practice (these should be avoided), and expert opinion. In the area of fatigue, the PEP resource only suggests exercise as the intervention recommended for practice. Mitchell et al. (2014) published an updated PEP resource for CRF during and following treatment. This article highlights the most recent evidence-based practices for CRF and is a valuable resource for researchers, clinicians, and students.

## Shifts in Care

Health care has shifted in the past 40 years and continues to shift from disease-focused care to wellness care. Consequently, increased attention should be paid to healthy lifestyle behaviors, an essential element of treatment in the survivorship continuum (Jacobs et al., 2009). Data invalidating the historic consensus that fatigue is best managed by rest continues to emerge. Increasing physical activity levels during and after treatment has