Associations Between Multiple Chronic Conditions and Cancer-Related Fatigue: An Integrative Review

Fay Wright, MS, RN, APRN-BC, Marilyn J. Hammer, PhD, DC, RN, and Gail D’Eramo Melkus, EdD, C-NP, FAAN

Cancer-related fatigue (CRF) is a persistent symptom present at diagnosis, during treatment, and for months or years post-treatment (Berger et al., 2013). Although CRF may occur in combination with other cancer-related symptoms, patients identify it as the most disturbing (Curt et al., 2000; Hoffman, Given, von Eye, Giff, & Given, 2007; Ryan et al., 2007). During chemotherapy treatments, more than 30% of patients experience CRF so severe that it affects treatment decisions (Barsevick, Frost, Zwinderman, Hall, & Halyard, 2010; Ceeeland, 2007; Curt et al., 2000; Donovan, McGinty, & Jacobsen, 2013; Portenoy & Itri, 1999). Patients consistently report feelings of uselessness and frustration caused by CRF that affect quality of life (QOL) and limit their perceptions of their ability to participate in symptom management strategies (Curt et al., 2000; Goldstein et al., 2012; Gupta, Lis, & Grutsch, 2007; Minton et al., 2013). The pathogenesis of CRF is not fully understood (Mustian et al., 2007; Ryan et al., 2007). One of the many factors could be the interaction between the mechanisms of CRF and the pathogenesis of other chronic comorbidities.

Eighty-one percent of patients with cancer report at least one comorbidity (Rothrock et al., 2010), and 32% have more than two comorbidities (Ogle, Swanson, Woods, & Azzouz, 2000). Multiple chronic conditions (MCCs) are defined as “the existence of two or more concurrent chronic conditions in one person” (U.S. Department of Health and Human Services [USDHHS], 2010, p. 2). Chronic conditions are defined as those that “last a year or more and require ongoing medical attention and/or limit activities of daily living” (USDHHS, 2010, p. 2). The wide range of chronic conditions (e.g., arthritis, diabetes, heart disease, hypertension, lung disease) may have a synergistic effect that increases fatigue severity and decreases QOL (Institute of Medicine [IOM], 2012).

Effective management of a coexisting cancer diagnosis with other chronic illnesses is a challenge (Tinetti et al., 2011). Symptoms associated with MCCs can overlap and confound the healthcare provider’s evaluation of a patient’s health status, QOL, and symptom management abilities (IOM, 2012). MCCs present a potential for increased symptom severity, increased symptom burden, and decreased QOL (IOM, 2012). The current