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CORRESPONDENCE

Black-White disparities in fatigue and comorbidity among breast cancer survivors

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Cancer-related fatigue is a distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that interferes with usual functioning [1]. A common side effect of cancer treatment with chemotherapy or radiation therapy, fatigue has an adverse effect on several areas of functioning including mood, physical function, cognitive performance, work performance, and social interaction [1].

Among breast cancer survivors, fatigue is one of the most frequently reported and distressing symptoms [2]. Breast cancer survivors have reported more intense and more frequent fatigue than their counterparts without a history of cancer [2–4]. Cancer-related fatigue impairs the quality-of-life of cancer survivors and their ability to return to work [2, 5, 6]. Fatigue generally improves after therapy is completed, but some level of fatigue may persist for months or years following treatment [1]. In a subset of patients, fatigue may be a significant issue long into survivorship [7, 8]. Cancer-related fatigue is common in long-term survivors who no longer suffer from cancer itself [5]. Longitudinal studies are needed to understand the course of cancer-related fatigue over time [2].

The mechanisms responsible for cancer-related fatigue are only partially understood. In addition to cancer treatment, multiple psychological distress, sleep disturbance, cardiac problems, and immunological factors may have a role [1]. Factors that contribute to fatigue include cancer treatment, anemia, hormonal therapy, psychological distress, depression, sleep disturbances, smoking, and concomitant medical illness (e.g., congestive heart failure, diabetes, or obesity) [1, 2]. Younger breast cancer survivors have been reported to be more likely to have cancer-related fatigue than older women [2]. Aromatase inhibitors, which are used as adjuvant endocrine therapy in postmenopausal women with hormone receptor-positive breast cancer, have been associated with cancer-related fatigue [1].

Fatigue is a common finding among diabetic patients [9]. Diabetes has been associated with worse fatigue among both breast cancer patients and women without a history of breast cancer [10]. In breast cancer patients, diabetes has been thought to exacerbate cancer-related general and mental fatigue during chemotherapy and into survivorship [10]. A higher BMI, as with obesity, has also been associated with greater self-reported fatigue [11]. Obese breast cancer patients have been found to have significantly higher cancer-related fatigue at baseline and at 6 months post-chemotherapy as compared to non-obese breast cancer patients [12].

Black-White disparities in fatigue and comorbidity among breast cancer survivors are also important to consider. In general, Black adults have significantly higher rates of diabetes and obesity than other racial groups [13, 14]. As compared to White breast cancer patients, Black breast cancer patients have also been found to have higher rates of diabetes and obesity, as well as obesity-related comorbidities, hypertension, and hyperlipidemia [14, 15]. Further, Black patients are more likely than white patients to gain weight and shift to a higher BMI during chemotherapy for breast cancer [16]. Black breast cancer survivors are also less likely to engage in physical activity, which is a risk factor for cancer-related fatigue [17].

Cancer-related fatigue presents with considerable variability among patients that is not explained by factors related to the disease or treatment, suggesting that there

may be biological, behavioral, or psychosocial factors that affect its trajectory [18]. Black breast cancer survivors have been found to have worse mental, general, and physical fatigue ratings than White breast cancer survivors [19]. While White survivors demonstrate improved emotional and general fatigue from diagnosis to 6 months post-treatment, Black survivors do not display this trend [19].

This variability in cancer-related fatigue among Black and White breast cancer survivors may be partly due to the increased rates of obesity and diabetes among Black patients since both factors can exacerbate cancer-related fatigue. It is important to understand the role of these factors in cancer-related fatigue because cancer-related fatigue strongly predicts the quality of life of breast cancer survivors [2]. To reduce the burden of diabetes and obesity on cancer-related fatigue, recommendations for glycemic control and weight loss should be made to breast cancer survivors with underlying diabetes or obesity, respectively [10, 12].

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