Chemobrain in Underserved African American Breast Cancer Survivors: A Qualitative Study

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Chemobrain is receiving increased attention as an identifiable psychosocial cognitive change that disrupts the lives of breast cancer survivors (Alfano & Rowland, 2006; Boykoff, Moieni, & Subramanian, 2009; Castellon, Silverman, & Ganz, 2005). Defined as a decline in memory or fogginess, chemobrain is recognized in empirical literature, but details about cause and duration are debated (Alfano & Rowland, 2006; Jansen, Cooper, Dodd, & Miaskowski, 2011; Tallibert, Voillery, & Bernard-Marty, 2007). Chemobrain affects 33%–50% of all patients undergoing chemotherapy treatment (Olin, 2001; Staat & Segatore, 2005). Symptoms of chemobrain can be subtle and inconclusive, such as fatigue, mental confusion, forgetfulness, shorter attention span, inability to concentrate, and changes in executive function (Burstein, 2007; Staat & Segatore, 2005; Tallibert et al., 2007). The Oncology Nursing Society (2011) Putting Evidence Into Practice resources further define cognitive impairment as a decline in function in single or multiple domains of brain function, such as attention and concentration, executive function, information processing, language, visuospatial skill, psychomotor ability, learning, and memory.

A specific cause has not been determined for chemobrain (Alfano & Rowland, 2006; Jansen et al., 2011; Tallibert et al., 2007). Empirical support exists of chemotherapy-induced impairment of cognitive function in patients with breast cancer (Brezden, Phillips, Abdolell, Bunston, & Tannock, 2000; Schagen et al., 2002; Schagen, Muller, Boogerd, Mellenbergh, & van Dam, 2006; Tchen et al., 2003; Weinke & Dienst, 1995), in addition to a link to other adjuvant therapies such as tamoxifen (Jenkins, Shilling, Fallowfield, Howell, & Hutton, 2004). Although an association has been found, the mechanisms of impairment require additional study (Falleti, Sanfilippo, Maruff, Wei, & Phillips, 2005; Jansen et al., 2011; Jansen, Miaskowski, Dodd, Dowling, & Kramer, 2005; Raffa et al., 2006). Multiple factors have the possibility of contributing to cognitive dysfunction, such as hormonal changes, supportive medication, psychiatric changes, and biologic vulnerability (Burstein, 2007; Tallibert et al., 2007).