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

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Although research has been conducted to address specific medical and psychosocial needs of breast cancer survivors, little has been done to address needs along the entire trajectory of care. One such need is chemobrain, a phenomenon recognized as an identifiable psychosocial cognitive change in breast cancer survivors. The purpose of this article is to present the findings of a qualitative study conducted with two focus groups of underserved African American breast cancer survivors. Four themes emerged from the transcribed interviews: the concept of chemobrain, variability among individuals, the stigma of chemobrain, and methods of coping. In addition, findings revealed that health professionals were not used by the participants as

a resource to address the issues of chemobrain, which holds significant implications for practice. That fact highlights the implications for oncology nursing with respect to providing education and support for patients experiencing chemobrain. Nursing professionals are in a position to be a frontline resource for breast cancer survivors, providing information, education, and coping methods to help improve their quality of life.

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hemobrain 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; Weineke & 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, Weih, & 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).