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Mindfulness-Based Stress Reduction Among Breast Cancer Survivors: A Literature Review and Discussion

Yaowarat Matchim, PhD, RN, Jane M. Armer, PhD, RN, FAAN, and Bob R. Stewart, EdD

Breast cancer is the second-most common cancer among women in the United States, with an estimated 207,180 new cases of invasive breast cancer diagnosed in 2010 (American Cancer Society, 2010). As advances in medical treatment have led to increases in the number of breast cancer survivors, many are now facing the challenge of long-term coping. A cancer diagnosis is a stressful phenomenon and a life-threatening experience that creates immediate psychosocial distress for the patient and his or her family (Sellick & Edwardson, 2007). Distress is experienced by patients with cancer across diagnoses and across the disease trajectory (Carlson, Angen, et al., 2004). Half of all patients suffer from psychological distress related to the disease itself, side effects, the financial cost of cancer treatment, and the general uncertainty in their lives. Based on gender, women met the criteria of acute stress disorder (ASD) following diagnosis of cancer in greater numbers than men (McGarvey et al., 1998). Predictors for ASD in women with cancer include being of a younger age, having no prior life-threatening illness, perceiving less social support from friends and family members, and reporting less satisfaction with how they were informed about the diagnosis (McGarvey et al., 1998).

Mindfulness-based stress reduction (MBSR), a meditation program widely used in research and clinical settings, has been shown to be beneficial for nonclinical and clinical populations, including patients with cancer (Dobkin, 2008). Application involves coping with stress, distress, pain, and illness, as well as increasing degrees of equanimity, wisdom, and compassion (Reibel, Greeson, Brainard, & Rosenzweig, 2001). This review will focus on the effect of MBSR on breast cancer survivors because breast cancer is a specific clinical condition and the response of survivors to MBSR on some variables may be different from other oncology diagnoses.

Purpose/Objectives: To evaluate and discuss existing studies of mindfulness-based stress reduction (MBSR) among breast cancer survivors.

Data Sources: Articles published from 1987–2009 were retrieved using MEDLINE®, CINAHL®, Ovid, and Scopus. Key words, including *mindfulness-based stress reduction* and *mindfulness meditation*, were combined with *breast cancer*.

Data Synthesis: The search resulted in 26 articles that were narrowed down to 16 by selecting only quantitative studies of MBSR conducted with breast cancer ($n = 7$) or heterogeneous types of cancer in which the predominant cancer was breast cancer ($n = 9$). Most studies were one-group pre- and post-test design and examined the effect of MBSR on psychological outcomes. Overall, the studies had large effect sizes on perceived stress and state anxiety and medium effect sizes on symptoms of stress and mood disturbance. Four studies measured biologic outcomes and had small effect sizes, except cytokine production, which showed a large effect size at 6- and 12-month follow-ups.

Conclusions: Future studies using randomized, control trials and longitudinal, repeated-measures designs are needed. Studies conducted with heterogeneous types of cancer and gender should be analyzed and the results reported separately.

Implications for Nursing: The comprehensive summary and critical discussion of existing studies of MBSR usage among breast cancer survivors provide essential information that can be used by nurses and others working in the healthcare setting.

Breast Cancer and Related Distress

A cancer diagnosis elicits greater distress than any other diagnosis, regardless of the prognosis (Tacon, Caldera, & Ronaghan, 2005). Women with breast cancer experience emotional distress and mood disturbances, such as anxiety, confusion, and depression; worry about recurrence; and have a decreased sense of well-being (Boehmke & Dickerson, 2006). Many potential sources