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## Social Support and Physical Activity Engagement by Cancer Survivors

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Less than 20% of adult cancer survivors participate in physical activity and, as a result of such inactivity, cancer survivors are at increased risk for developing chronic diseases. Studies have linked social support as a predictor of physical activity participation in healthy adults. The primary goal of this systematic review is to examine the relationship between social support and physical activity engagement in adult cancer survivors and determine whether additional research is needed in this area. Several databases were searched and articles were systematically extracted according to the inclusion and exclusion criteria. That search yielded 69 articles, 22 of which were identified and included in this review. Fifty percent of the studies showed a significant relationship between social support and physical activity engagement; however, 59% of the participants were breast cancer

survivors. The findings suggest that additional research is needed to develop social support strategies that will increase physical activity engagement in adult survivors of cancers other than breast cancer.

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he Centers for Disease Control and Prevention ([CDC], 2011) estimated that more than 11.7 million cancer survivors are living in the United States today. About 64% of adults with cancer today will be alive five years after their diagnosis, and about 75% of those who had childhood cancer will be alive after 10 years (National Cancer Institute, 2009). Although that is encouraging, long-term cancer survivors, compared with the general population, are at increased risk for developing several chronic physiologic and psychological problems secondary to their cancer treatment (Eakin et al., 2006). Many cancer survivors suffer from cancer-related fatigue, diabetes, osteoporosis, obesity, cardiovascular disease, chronic pain, impaired immune function, and poor quality of life (QOL) (Schmitz et al., 2005).

Studies have identified physical activity as a nonpharmacologic intervention to help alleviate some of the chronic conditions that cancer survivors may develop during their lifetime (Schmitz et al., 2005; Warburton, Nicol, & Bredin, 2006). For example, physical activity such as low-intensity aerobic walking or cycling can result in significant improvement in cancerrelated fatigue, emotional distress, and overall QOL (Courneya, 2003). Visovsky and Dvorak (2005) found that physical activity plays a significant role in decreasing blood pressure, as well as shortening the duration of neutropenia, thrombocytopenia, and pain. The American Cancer Society (n.d.) has recommended that cancer survivors participate in at least 30 minutes of moderate physical activity that is safe, effective, and enjoyable at least five times a week. However, evidence reveals that less than 20% of adult cancer survivors are meeting the recommended physical activity guidelines, which may increase risk of developing a chronic illness, secondary cancer, or disease recurrence (Branchard, Courneya, & Stein, 2008; Hamer, Stamatakis, & Saxton, 2009).

Social support has been identified as a positive determinant of physical activity in healthy adults and people with other chronic diseases (Anderson-Bill, Winett, & Wojcik, 2011; McNeill, Wyrwich, Brownson, Clark, & Kreuter, 2006; Molloy, Dixon, Hamer, & Sniehotta, 2010; Peterson, Yates, & Hertzog, 2008; Ravenek & Schneider, 2009; Wilcox et al., 2009). Although extensive research exists on the topic of social support and physical activity, little is known regarding the role of social support as a facilitator of physical activity engagement in adult cancer survivors. Therefore, the primary goal of this review is to examine social support interventions that have been successful in motivating adult cancer survivors to engage in physical activity.

Social support is behavior that assists individuals in achieving desired goals and outcomes (Duncan, Duncan, & Strycker, 2005). Several types of social support exist, including social networks (e.g., friends, family, coworkers, neighbors, healthcare