

Breast and Colon Cancer Survivors' Expectations About Physical Activity for Improving Survival

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Physical activity has become increasingly recognized for its role in improving health-related quality-of-life concerns (e.g., fatigue, pain, mood and sleep disturbances, cancer-specific issues) in cancer survivors, as well as improving fatigue and physical, role, and social functioning in on-treatment survivors (Garcia & Thomson, 2014; Mishra, Scherer, Geigle, et al., 2012; Mishra, Scherer, Snyder, et al., 2012). The potential supportive care role that physical activity may play in the lives of cancer survivors has led to the development of physical activity guidelines and recommendations by the American Cancer Society (ACS) (Rock et al., 2012) and the American College of Sports Medicine (ACSM) (Schmitz et al., 2010); such guidelines and recommendations indicate that physical activity is safe for cancer survivors and that survivors should regularly engage in physical activity to maximize benefits to their quality of life and health.

Research has suggested that regular physical activity after cancer diagnosis may also be significant in improving survival outcomes in survivors of breast and colon cancer (Lemanne, Cassileth, & Gubili, 2013). For example, epidemiologic evidence from large-scale cohort studies has shown that participation in regular physical activity after diagnosis can result in as much as a 50% reduction in the risk of cancer mortality in breast and colon cancer survivors (Ballard-Barbash et al., 2012; Clague & Bernstein, 2012). Specifically, walking the equivalent of three and six hours per week after diagnosis has been found to be associated with a significant decrease in the risk of breast and colon cancer mortality, respectively (Lemanne et al., 2013). In addition, several randomized, controlled trials have provided evidence of potential mechanisms that link physical activity to reduced cancer mortality, including improving circulating levels of insulin, insulin-like growth factor 1 (IGF-1), IGF-1 binding proteins, and C-reactive protein and increasing natural killer cell cytotoxicity (Ballard-Barbash et al., 2012). Therefore, although not conclusive, the research to date suggests

Purpose/Objectives: To compare physical activity outcome expectations related to cancer survival with traditional physical activity outcome expectations in breast and colon cancer survivors.

Design: Cross-sectional survey.

Setting: Canada and the United States.

Sample: 146 participants.

Methods: Self-reported survey instruments and height and weight measurement. The online survey was completed once by each participant.

Main Research Variables: Godin Leisure-Time Exercise Questionnaire, Multidimensional Outcome Expectations for Exercise Scale (MOEES), and an item assessing physical activity outcome expectations related to cancer survival.

Findings: Paired sample t tests indicated that the mean score for the physical subscale of the MOEES was significantly higher than the mean score on the physical activity outcome expectations related to cancer survival variable ($p < 0.001$). Multiple regression analyses indicated that physical activity outcome expectations related to cancer survival explained 4.8% of the variance in physical activity ($p = 0.011$).

Conclusions: Findings from the current study suggest that, among breast and colon cancer survivors, outcome expectations related to cancer survival may influence physical activity levels and may not be as realized as traditional outcome expectations.

Implications for Nursing: Oncology nurses should familiarize themselves with the guidelines and benefits of physical activity for survivors so they can provide guidance and support to patients.

Key Words: outcome expectations; breast cancer; colon cancer; physical activity

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that physical activity after breast or colon cancer diagnosis could substantially improve cancer-specific survival outcomes.

Given the many possible benefits associated with physical activity among cancer survivors, researchers have attempted to understand motivational factors