Purpose/Objectives: To compare changes in frequency, duration, and intensity of exercise behaviors over time in women with breast cancer between those who started their exercise intervention at the beginning of chemotherapy (EE) and those who started at the completion of chemotherapy (CE).

Design: A secondary data analysis of a randomized, controlled trial for exercise intervention.

Setting: Five cancer centers in the San Francisco Bay Area in California.

Sample: 66 outpatient women with breast cancer who were receiving chemotherapy.

Methods: Piecewise linear mixed models analysis was used to study changes in exercise behaviors over time in the EE group during and after treatment. In addition, linear mixed models analysis was used to examine changes between the EE and CE groups after treatment. Participants were in the trial for various length of time (EE group: 19–86 weeks; CE group: 6–43 weeks).

Main Research Variables: Exercise frequency, intensity, and duration.

Findings: In the EE group, weekly exercise duration increased significantly during treatment (p = 0.02). In addition, weekly exercise intensity increased significantly during treatment (p = 0.02) and decreased significantly after treatment (p = 0.003). After treatment, initial weekly exercise duration was significantly lower in the CE group than in the EE group (p = 0.01). No significant differences existed in frequency and intensity over time between the EE and CE groups.

Conclusions: Women with breast cancer can sustain exercise behaviors when they start an exercise intervention in the beginning of chemotherapy treatment.

Implications for Nursing: Strategies to support patients in maintaining their exercise habit may be needed during the post-treatment period.

Methods

The data used in this analysis were part of a single-blind, randomized clinical trial (Dodd et al., 2010) to test the effectiveness of an exercise intervention, the

Timing and Sustainability of an Exercise Intervention in Women With Breast Cancer During and After Cancer Treatment

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