

Group Exercise for Breast Cancer

Group exercise may have functional and psychological benefits for women suffering from breast cancer, a new study reports.

Researchers at the Department of Sport, Culture and the Arts, Strathclyde University in Glasgow, Scotland investigated the functional and psychological benefits of a 12-week supervised group exercise program during treatment for early stage breast cancer, with six month follow-up.

In the pragmatic randomized controlled prospective open trial, researchers recruited 203 women from three National Health Service oncology clinics in Scotland and community exercise facilities; 177 of the women completed the six month follow-up.

Participants engaged in a supervised 12-week group exercise program in addition to usual care. The study used a functional assessment of cancer therapy (FACT) questionnaire, Beck depression inventory, positive and negative affect scale, body mass index, seven day recall of physical activity, 12-minute walk test and assessment of shoulder mobility to measure the outcome.

While no significant effect was seen for general quality of life (FACT-G), which was the primary outcome after the initial three months, at the six month follow-up, most of the effects were maintained and an intervention effect for breast cancer specific quality of life emerged. No adverse effects were noted.

Researchers concluded that supervised group exercise provided functional and psychological benefit after a 12-week intervention and six months later.

Reference: 1) Mutrie N, Campbell AM, Whyte F, et al. Benefits of supervised group exercise programme for women being treated for early stage breast cancer: pragmatic randomised controlled trial. *BMJ*. 2007 Feb 16. [Epub ahead of print]

Benefits of supervised group exercise programme for women being treated for early stage breast cancer: pragmatic randomised controlled trial.

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OBJECTIVES: To determine functional and psychological benefits of a 12 week supervised group exercise programme during treatment for early stage breast cancer, with six month follow-up. **DESIGN:** Pragmatic randomised controlled prospective open trial. **SETTING:** Three National Health Service oncology clinics in Scotland and community exercise facilities. **PARTICIPANTS:** 203 women entered the study; 177 completed the six month follow-up. **INTERVENTIONS:** Supervised 12 week group exercise programme in addition to usual care, compared with usual care. **MAIN OUTCOME MEASURES:** Functional assessment of cancer therapy (FACT) questionnaire, Beck depression inventory, positive and negative affect scale, body mass index, seven day recall of physical activity, 12 minute walk test, and assessment of shoulder mobility. **RESULTS:** Mixed effects models with adjustment for baseline values, study site, treatment at baseline, and age gave intervention effect estimates (intervention minus control) at 12 weeks of 129 (95% confidence interval 83 to 176) for metres walked in 12 minutes, 182 (75 to 289) for minutes of moderate intensity activity reported in a week, 2.6 (1.6 to 3.7) for shoulder mobility, 2.5 (1.0 to 3.9) for breast cancer specific subscale of quality of life, and 4.0 (1.8 to 6.3) for positive mood. No significant effect was seen for general quality of life (FACT-G), which was the primary outcome. At the six month follow-up, most of these effects were maintained and an intervention effect for breast cancer specific quality of life emerged. No adverse effects were noted. **CONCLUSION:** Supervised group exercise provided functional and psychological benefit after a 12 week intervention and six months later. Clinicians should encourage activity for their patients. Policy makers should consider the inclusion of exercise opportunities in cancer rehabilitation services. Trial registration Current controlled trials ISRCTN12587864.

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