

THE EFFECTS OF INDIVIDUALIZED HOME-BASED EXERCISE IN WOMEN WITH BREAST CANCER IN TAIWAN

Hsiao-Fang Hu, MSN, RN, NP, Department of Medicine, China Medical University Hospital, Taiwan(R.O.C)

Li-Yuan Bai, PhD, Division of Hematology and Oncology, Department of Internal Medicine, China Medical University Hospital, Taiwan(R.O.C)

Ya-Jung Wang, PhD, Assistant Professor, School of Nursing, National Yang-Ming University, Taiwan(R.O.C)

1. AIMS

The purpose of this study was to explore the impact of an individualized home-based, moderate-intensity exercise program on fatigue, quality of life, and exercise capacity in women who received breast cancer surgery.

2. METHODS

A total of 66 patients with newly diagnosed breast cancer (carcinoma in situ or stage I to III carcinoma) were enrolled into the two-arm, randomized, control trial within 24 hour postoperatively. Patients were eligible if they were aged more than 20 years and with adequate hepatic, renal and cardiopulmonary function. They were randomized to either the exercise group (n=33) or the control group (n=33). The assessment tools included Functional Assessment for Chronic Treatment-Fatigue, Functional Assessment for Cancer Treatment- Breast, and six minutes walking test. The outcome measurements were fatigue, quality of life, and exercise capacity, with each obtained 3 times in a 5 weeks interval. Chi-square, t test, and generalized estimating equations were used in the statistical analyses.

3. RESULTS

Patients in the experimental group experienced more exercise activity compared with patients in the control group. However, this program could not improve the degree of fatigue ($P= 0.122$), quality of life ($P = 0.292$), and exercise capacity ($P = 0.613$). The subgroup analyses of patients who did not receive chemotherapy indicated that women in the walking program (n = 16) had better quality of life compared with whom (n = 17) in the control group ($P = 0.014$). In contrast, this benefit did not exist for patients who received chemotherapy postoperatively ($P = 0.870$).

4. CONCLUSIONS

The individualized home-based, moderate intensity exercise program improved the quality of life for breast cancer women who did not receive chemotherapy. Chemotherapy would offset the benefit.