

**Proceedings of IBEC 2018, Beijing, China, October 23-25** OR-052

## Effects of Exercise Intervention on Cancer-Related Fatigue in Breast Cancer Survivors

Zhiling Xie,Weibing Ye Zhejiang Normal University

**Objective** cancer-related fatigue(CRF) is the most commonly reported and most distressing symptom in cancer patient. The purpose of this study was to review the effect of exercise intervention on cancer-related fatigue in breast cancer survivors.

**Methods** From 1998 to 2018 in Chinese and English literature of Wanfang Database, Pubmed, SportDiscus and Springer databases, picked out the randomized controlled trials which up to standard. Keywords cancer, exercise, fatigue, etc. were used for systematic search and tracking. 12 experiments were reviewed to analyze the effect differences between exercise intervention and exercise-related fatigue.

**Results** Most interventions use aerobic exercise as the primary form of exercise. Generally, exercise interventions are effective for cancer-related fatigue, but some findings are not. Many studies have shown that moderate intensity aerobic exercise has a significant effect on cancer-related fatigue, with 50-70% heart rate reserve and 3-5 times of exercise per week for at least 30 minutes each time. Exercise methods mainly include walking, yoga, cycling and tai chi. Firstly, Supervised aerobic exercise was statistically more effective than conventional care in improving CRF among breast cancer survivors. It has been shown that group-based, supervised exercise produces positive psychosocial'side-effects' due to social interactions, improved self-efficacy, and attention from a trainer. Secondly, Cancer fatigue is divided into acute and chronic fatigue, 18 weeks of exercise intervention can reduce the short-term fatigue, at 36 weeks, baseline levels of fatigue index responses and contrast on the issue of the multivariate statistics. Thirdly, usual-care group were reported that they had been actively engaged in regular exercise before study enrollment. During the exercise intervention, most studies on the control ways are according to the daily life or to take care of, but studies have reported, before intervention, to a high level of 40% in the control group often exercise, exercise also as usual during the intervention, which causes the control to the baseline level is higher, but the intervention group and control group will be difference, no significant difference, lead to the result is invalid.

**Conclusions** First, the exercise intervention of cancer-related fatigue needs to be supervised; second, the exercise intervention is effective for short-term cancer-related fatigue; third, the daily exercise level of the control group will affect the intervention effect.