

THE EFFECTS OF EXERCISE ON STRESS AND DEPRESSION AND ASSOCIATED QUALITY OF LIFE CHANGES IN CANCER SURVIVORS

Purpose. The purpose of this study was to investigate the effects of adherence to an exercise program on participant depressive and perceived stress ratings, and how changes in these ratings effect QoL.

Background. Exercise programs are increasing as adjunct to medicinal therapies for cancer survivors. Research suggests that exercise reduces symptoms of stress and depression in cancer survivors. Cancer survivors have shown QoL improvement when participating in exercise, though the effects of adherence to exercise on stress and depression and how those changes affect overall quality of life during a program are not known.

Methods. The BfitBwell Program is a 3-month exercise program for cancer survivors. Measures of stress, depression and quality of life collected pre-and post-program, adherence as measured by the total number of days attended, and participant characteristics including cancer diagnosis, age, and gender were extracted from the BfitBwell Research Database. Correlation coefficients were calculated between change scores for depressive and stress symptoms and adherence, and between change scores and changes in QoL.

Results. Change in depression was calculated in 179 participants and was not correlated with adherence. Change in perceived stress was calculated in 86 participants and was not correlated with adherence to the exercise program. Changes in stress and depression were significantly correlated with changes in QoL (N=92 and 201, respectively).

Implications. Attendance to an exercise program is not correlated with changes in stress and depression. There is a significant correlation between changes in stress and depression and changes in quality of life in cancer survivors. Further research is warranted to determine how exercise can improve cancer treatments and survivor QoL.