META-ANALYSIS THE EFFECT OF AEROBIC EXERCISE ON THE SOCIAL WELL-BEING IN BREAST CANCER SURVIVOR

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ABSTRACT

Background: Exercise is associated with decreased recurrence risk, improved survival and quality of life for breast cancer survivors. This is remarkable in light of empirical work supporting breast cancer survivors as generally motivated to make healthy lifestyle changes, including exercise. This study aimed to investigate the effect of aerobic exercise on the social well-being in breast cancer survivor.

Subjects and Method: A systematic literature search was conducted in multiple databases including PubMed, Science Direct, and Google Scholar. The following search terms were used: “breast cancer” OR “ca mammae” OR “carcinoma mammae” OR “mammae cancer” AND aerobic OR “aerobic exercise” AND “quality of life” OR “QOL” AND “RCT” OR “randomized control trial” OR “cluster-randomized control trial”. The articles were filtered using PICO model, including: (1) Population= breast cancer survivor, (2) intervention= aerobic exercise, (3) comparison= none intervention, and (4) outcome= quality of life. The inclusion criteria were full-text, randomized controlled trial, and reported mean and standard deviation. The systematic review was carried out according to the PRISMA flow diagram. The data were quantitatively examined by meta-analysis using RevMan 5.3.

Results: 9 studies from California, Brazil, Kosovo, Spain, United Kingdom, Canada, Germany, and Netherlands were involved for meta-analysis. The results of this study showed that aerobic exercise improved quality of life in breast cancer survivor (Standardized Mean Difference= 0.24; 95% CI= -0.01 to 0.48), and it was statistically marginally significant ($p= 0.060$).

Conclusion: Aerobic exercise improves quality of life in breast cancer survivor.

Keywords: aerobic exercise, breast cancer survivor, social well-being, quality of life

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