

ABSTRACT

Background: Among cancer of different organs in the body, the carcinoma of the breast is highest in occurrence worldwide, after lung cancer. The treatment of cancer and cancer itself cause many side effects and complications, which affect the quality of life (QOL) and cause a considerable consequence on Health Related QOL (HR-QOL) in common. While going through cycles of chemotherapy, breast cancer patients experience many side effects such as nausea, vomiting, weakness, anemia, and alopecia. Supportive or complementary therapies such as yoga, are easy to administer, economical, and useful in reducing the adverse effects of cancer treatment and helpful in enhancing the quality of life of patients with cancer.

Objectives: To determine the effectiveness of yoga on the stress level & quality of life of breast cancer patients undergoing chemotherapy

Materials and Methods: Quantitative Research approach with Randomized Clinical Controlled Trial & Time series design was adopted in this study. The consecutive sampling technique was used to recruit 100 breast cancer patients fulfilling the eligibility criteria and undergoing chemotherapy in Cancer Research Institute, Swami Rama Himalayan University. The recruited patients were randomized to control (N=52) and experiment (N=48) group by concealed randomization. The informed written consent was taken from each participant. The baseline data was collected during first cycle of chemotherapy with Anxiety, Depression, Stress Scale and EORTC QLQ-C30 (version 3) & BR23. The participants in experimental group were taught diaphragmatic breathing, systematic relaxation and alternate nostril breathing, joints and glands exercises of neck and shoulder. They were instructed to practice twice daily at home. They were supervised in practicing these when they were receiving second, third, fourth, fifth and sixth cycles of chemotherapy. The participants in the control group received routine care. The data was again collected during second, third, fourth, fifth and sixth cycles of chemotherapy.

Results: The sample in both groups had similar demographic and clinical characteristics. They had similar anxiety, depression & stress and quality of life scores during first cycle of chemotherapy. The mean depression scores of breast carcinoma patients belonging to the control group remained almost the same over a period of six cycles. However the depression scores of the experimental group decreased significantly from the baseline in all six cycles. The mean

scores of the physical function for the control group decreased significantly from the baseline score in the second through the sixth cycle, whereas, scores of the experimental group decreased only in the fourth cycle. The mean scores of the emotional function of both experimental and control groups decreased significantly from the baseline score in the 3rd, 4th, 5th and the 6th cycles. However, the control group had a greater decrease in scores compared to the experimental group. The fatigue scores increased more in control group compared to the experimental group. The mean scores of body image of the experimental and the control group decreased significantly from the baseline score in the second through the sixth cycle. However, the experimental group revealed statistically significant variation from the control group in the third and fifth cycles. The mean scores of future perspectives of patients in the control group decreased in the second through the sixth cycle from the baseline score. In the experimental group the mean scores increased significantly in the second through the sixth cycle from the baseline score.

Conclusion: The yoga was effective in decreasing symptoms of depression, improving the quality of life of breast cancer patients in the experimental group in the areas of global health status, physical function, role function and emotional function, perception of body image and future perspectives and decreasing the symptoms of fatigue, insomnia, loss of appetite, constipation, during the period of chemotherapy.

Key word: breast cancer patients, yoga, stress level, quality of life.