International Journal of Health Sciences and Research
www.ijhsr.org ISSN: 2249-9571

*Original Research Article*

# Are You Stressed with Breast Cancer? Get Emotional Support to Scale down Stress and Improve Quality of Life- a Pilot Study

Sampoornam W

PhD (N) Scholar, Saveetha University, Chennai and Lecturer, Mental Health Nursing Department, Dhanvantri College of Nursing, Pallakkapalayam, Namakkal.

Correspondence Email: sampoornamwebster@yahoo.in

*Received: 02/10//2013* *Revised: 02/11/2013* *Accepted: 11/11/2013*

## ABSTRACT

Breast cancer is the most commonly occurring female cancer in the world. Research gap exists with emotional support for breast cancer patients. Emotional support could help out the breast cancer patients to reduce stress and improve quality of life. **Objective:** The objective of this study was to compare the efficiency of Emotional Support- Focused Nurse directed Intervention on stress and quality of life among arm I, II and III in breast cancer patients. **Methods:** Breast cancer patients in experimental arm I the participants were made to ventilate their feelings and thoughts through face to face confrontation, in experimental arm II through writing down their feelings and in experimental arm III through telephone followed by an informational support for all the three experimental arms by the researcher. **Results:** Emotional support was effective in reducing stress and also in improving quality of life among breast cancer patients. **Conclusion:** The intervention shows the feasibility by providing psychological support and helps the breast cancer patients for better prognosis.

***Key words:*** Emotional support, Stress, Quality of life, Breast cancer patients

## INTRODUCTION

Breast cancer is the most common cancer in women, but it can also appear in men. [1] In India the growing epidemic of breast cancer presents a major challenge to the global public health especially given the failure to cope with the current situation. [2] Breast cancer cases have doubled in India in the last two decades. As against an estimated 48,170 women who died of breast cancer in 2007, the number breached the 50,000 mark in 2010. [3]

Breast cancer patients had the highest stress levels. The probability of correctly predicting increase in stress (sensitivity) was 78% and the specificity 67%.[4] Diagnosis with breast cancer recurrence often brings high levels of stress. Successful coping to alleviate stress could improve patients' quality of life (QoL). [5]

The goal of psychosocial support in cancer is to provide patients the opportunity to verbalize their feelings and concerns, to increase their ability to cope with treatment stresses, to improve their quality of life, to

increase their adaptation to their new condition and emotional investment. [6] The emotional support given to patients helps them overcome anxiety when they face stressful events, gives them courage and encourages to accept them. [7]

Psychiatric nurses can provide emotional support for the purpose of helping breast cancer patients find meaning in their lives, decrease their complaints and increase their coping skills. [8]

Nurses play an important role in not only educating patients and managing their symptoms but in providing emotional support. The nurse can help the patient identify coping strategies and set priorities to optimize quality of life. [9]

## MATERIALS AND METHODS

This pilot study on emotional Support- Focused Nurse directed Intervention on stress and quality of life among arm I, II and III was approved by Institutional review board, Saveetha University at Chennai. After obtaining written informed consent, in-patient breast cancer patients who fulfilled the inclusion criteria like tumour in the clinical stage of 0-IV, who can able to write and who were having telephone access were recruited and enrolled in the study between January 2013 and March 2013. True experimental complex factorial study design was used in this study. Participants were randomly allocated by using Sequentially Numbered Opaque Sealed Envelope- SNOSE method based on one to one 7 sessions for 30-45 minutes twice in a week for one month. 30 breast cancer patients in which 10 in each experimental arm were interviewed by using P.Herschbach Questionnaire on Stress in Cancer Patients (QSC-R23) to assess the stress and the quality of life was assessed by using QOL instrument -Breast Cancer Patient Version. After the pretest the participants received the following treatment.

The participants received one to one 7 sessions which consisted of the following

Session I- Introduction
Session II- Psychosomatic complaints
Session III- Fear
Session IV- Information deficits
Session V- Everyday life restrictions
Session VI- Social strains
Session VII- Spiritual well being

In experimental arm I the participants were made to verbalize their feelings and thoughts through face to face confrontation. In experimental arm II the participants were made to write down their feelings and thoughts and in experimental arm III participants were made to ventilate their feelings and thoughts through telephone

## RESULTS

***Study Aim 1: Analyze the level of stress and quality of life among breast cancer patients.***

Frequency and Percentage distribution of pre and posttest stress scores of experimental arm I depicts that in pretest (10%) were with mild stress and (60%) were with moderate stress and (30%) were with severe stress. In posttest (10%) were with mild stress and (80%) were with moderate stress and (10%) were with severe stress. Experimental arm II depicts that in pretest none of breast cancer patients were with mild stress and (80%) were with moderate stress and (20%) were with severe stress. In posttest (10%) were with mild stress and (80%) were with moderate stress and (10%) were with severe stress. Experimental arm III depicts that in pretest none of breast cancer patients were with mild stress and (70%) were with moderate stress and (30%) were with severe stress. In posttest none of the breast cancer patients were with mild stress and (80%) were with moderate stress and (20%) were with severe stress.

Frequency and Percentage distribution of pre and posttest quality of life scores of Experimental arm I showed that in pretest none of the breast cancer patients were with good quality of life and (60%) were with poor quality of life and (40%) were with very poor quality of life. In posttest none of the breast cancer patients were with good quality of life and (70%) were with poor quality of life and (30%) were with very poor quality of life.

Experimental arm II depicts that in pretest none of the breast cancer patients were with good quality of life and (50%) were with poor quality of life and (50%) were with very poor quality of life. In posttest none of the breast cancer patients were with good quality of life and (70%) were with poor quality of life and (30%) were with very poor quality of life. Experimental arm III depicts that in pretest none of the breast cancer patients were with good quality of life and (50%) were with poor quality of life and (50%) were with very poor quality of life. In posttest none of the breast cancer patients were with good quality of life and (60%) were with poor quality of life and (40%) were with very poor quality of life.

***Study Aim 2: Compare the efficiency of different modes of emotional support***.

Comparison of mean and standard deviation of pretest and posttest stress scores among Experimental arm I showed that the pretest mean and standard deviation score was (63.7±14.32) and posttest mean and standard deviation score was (53.8±13.62). Experimental arm II showed that the pretest mean and standard deviation score was (66.8±12.81) whereas posttest mean and standard deviation score was (60.1±12.00). Experimental arm III showed that the pretest mean and standard deviation score was (69.3±12.22) and posttest mean and standard deviation score was (61.3±11.01).

Comparison of mean and standard deviation of pretest and posttest quality of life scores among experimental arm I- Face to face confrontation showed that the pretest mean and standard deviation score was (156±25.44) and posttest mean and standard deviation score was (165.5±26.5) Experimental arm II showed that the pretest mean and standard deviation score was (157±24.24) and posttest mean and standard deviation score was (163.7±24.47). Experimental arm III showed that the pretest mean and standard deviation score was (157±23.97). Whereas posttest mean and standard deviation score was (163.2±24.14).

Table 1. Comparison of paired t test value of pre and posttest stress scores among experimental arm I, II and III. N = 30($n_1$=10, $n_2$= 10, $n_3$= 10)

| Experimental arm | paired t test value | Table value | Level of significance |
|---|---|---|---|
| Arm I- Face to face confrontation | 6.72 | 2.262 | P<0.05 Significant |
| Arm II- Written | 1.24 | 2.262 | P>0.05 Not Significant |
| Arm III- Telephone | 8.83 | 2.262 | P<0.05 Significant |

df=9

Comparison of the paired t test value of stress scores displayed in Table 1 shows that experimental arm I (6.72), arm III (8.83) was effective which indicates the significance p<0.05, Whereas experimental arm II (1.24) indicates the non-significance p>0.05.

Table-2. Comparison of paired t test value of pre and posttest quality of life scores among experimental arm I, II and III. N= 30($n_1$=10, $n_2$= 10, $n_3$= 10).

| Experimental arm | paired t test value | Table value | Level of significance |
|---|---|---|---|
| Arm I- Face to face confrontation | 7.45 | 2.262 | P<0.05 Significant |
| Arm II- Written | 5.11 | 2.262 | P<0.05 Significant |
| Arm III- Telephone | 4.76 | 2.262 | P<0.05 Significant |

df=9

Comparing the paired t test value of quality of life scores presented in Table 2 shows that experimental arm III (4.76), arm II (5.11) was effective and arm I (7.45) was very effective when compared with all the experimental arms which indicate the significance $p<0.05$.

Table- 3. One way Analysis of variance of posttest stress scores among experimental arm I, II and III. N= 30($n_1$=10, $n_2$= 10, $n_3$= 10)

| Experimental arm | F ratio | Table value | Level of significance |
|---|---|---|---|
| Arm I, II and III | 2.77 | 2.54 | P<0.05 Significant |

df=27

As seen in Table 3 the F ratio posttest stress value was (2.77), for experimental arm I, II and III which indicates the significance $p<0.05$.

Table- 4. One way Analysis of variance of posttest quality of life scores among experimental arm I, II and III. N = 30($n_1$=10, $n_2$= 10, $n_3$= 10)

| Experimental arm | F ratio | Table value | Level of significance |
|---|---|---|---|
| Arm I, II and III | 1.005 | 2.54 | P>0.05 Not Significant |

df=27

The quality of life value shown in Table 4 was (1.005) for experimental arm I, II and III which indicates the non-significance $p>0.05$.

***Study Aim 3: Determine association between the posttest stress and quality of life scores and their selected demographic variables of experimental arm I, II and III.***

In experimental arm I Chi square values were calculated and it was found that there was no association between age (0.07), education (2.40), occupation (0.47), work pattern (0.09), family monthly income (0.02), type of family (0.76), religion (0.56), residence (0.05), family history of breast cancer (0.01), history of bad habits (1.07) and stages of breast cancer (2.74) with df=1, $p> 0.05$. Therefore no significant association found between stress and demographic variables.

In experimental arm II it was found that there was an association between the posttest stress scores and education (4.5), occupation (4.09), work pattern (5.57), family monthly income (5.69) and stages of breast cancer (5.83) with df=1 $p< 0.05$, whereas no association was found with other demographic variables such as age (0.72), type of family (1.25), religion (1.67), residence (1.05), family history of breast cancer (2.5) and history of bad habits (2.55) with df=1, $p> 0.05$ and the posttest stress scores.

In experimental arm III it was found that there was an association between the posttest stress scores and education (4.36), stages of breast cancer (5.15) with df=1, $p< 0.05$, whereas no association was found with posttest stress scores and other demographic variables such as age (1.74), occupation (0.63), work pattern (2.38), family monthly income (2.72), type of family (0.76), religion (0.49), residence(0.56), family history of breast cancer (1.01) and history of bad habits (3.01) with df=1, $p> 0.05$ among breast cancer patients.

In experimental arm I it was found that there was no association between age (0.58), education (1.96), occupation (2.47), work pattern (0.58), family monthly income (0.73), type of family (1.44), religion (2.0), residence (2.67), family history of breast cancer (0.35), history of bad habits (1.35) and stages of breast cancer (2.83) with df=1, $p> 0.05$ for all the demographic variables. Therefore no significant association found between posttest quality of life scores and demographic variables.

In experimental arm II it was found that there was no association between age (0.78), education (1.09), occupation (2.39), work pattern (0.48), family monthly income (1.66), type of family (1.65), religion (0.83),

residence (0.98), family history of breast cancer (0.45), history of bad habits (2.38) and stages of breast cancer (3.03) with df=1, p> 0.05 for all the demographic variables. Therefore no significant association found between posttest quality of life scores and demographic variables.

In experimental arm III it was found that there was an association between the posttest quality of life scores and education (4.37), occupation (4.09), history of bad habits (3.92) and stages of breast cancer (5.44) with df=1, p< 0.05, whereas no association was found with posttest quality of life scores and other demographic variables such as age (1.69), work pattern (2.33), family monthly income (1.31), type of family (0.23), religion (2.94), residence ( 2.55) and family history of breast cancer(1.66) with df=1, p> 0.05 among breast cancer patients.

## DISCUSSION

The results of this pilot study elicit the evidence of emotional support on scaling down stress and improvement in quality of life among breast cancer patients. Comparison of the paired t test value of stress scores for experimental arm I (6.72), arm III (8.83) was effective which indicates the significance p<0.05, however experimental arm II (1.24) indicates the non-significance p>0.05. Comparison of the paired t test value of quality of life scores for experimental arm III (4.76), arm II (5.11) was effective and arm I (7.45) was very effective when compared with all the experimental arms which indicates the significance p<0.05.

The F ratio posttest stress value was (2.77), for experimental arm I, II and III which indicates the significance p<0.05 and the quality of life value was (1.005), for experimental arm I, II and III which indicates the non-significance p>0.05.

## CONCLUSION

Trail run version of this study suggests the feasibility of conducting the main study with large sample size calculated based on the parent study. The stress reduction intervention through face to face confrontation, writing down feelings and telephone could be effective for the early stages of breast cancer and ineffective in case of advanced stages of breast cancer. Intervention for improving quality of life among breast cancer patients reveals that the telephonic mode of emotional support could be of least effective when compared with the other mode of emotional support. Psychiatric nurses play an important role in conducting clinical research in the area of women and mental health especially for breast cancer patients by examining and replicating emotional support.


## ACKNOWLEDGMENTS

The author expresses hearty gratitude for the exuberant guidance and support rendered by Dr. C. Susila, Principal, Billroth College of Nursing, Chennai and also appreciates the obligation by the Erode Cancer Centre.


## REFERENCES


1. Pam Stephan. What is Breast Cancer? Breast cancer- About.com Guide. 2011.
2. Khane R.S. Genetic Basis of Breast Cancer. Journal of Clinical and Diagnostic Research. 2012; 6:3,498
3. Kounteya Sinha. Breast cancer cases on the rise. The Times of India.2011.
4. Sehlen S, Hollenhorst H, et,al. Psychosocial stress in cancer patients during and after radiotherapy. Strahlenther Onkol Journal article.2003; 179: 3, 175-80.
5. Hae-Chung Yang, Brittany M, Brothers, and Barbara L, Andersen. Stress and Quality of Life in Breast

Cancer Recurrence: Moderation or Mediation of Coping? Annals of Behavioral Medicine. 2008; 35: 2, 188–197.
6. Ozkan S. Psychological approach to breast cancer patients. 2005; 21-24
7. McCloskey JC, Bulechek GM. Nursing Interventions Classification (NIC), Third Edition, Mosby.2000.
8. Aysun Babacan Gumus, Olcay Cam. Effects of emotional support-focused nursing interventions on the psychosocial adjustment of breast cancer patients. Asian Pacific Journal of Cancer Prevention. 2008; 9: 691-699.
9. Brunner and Suddarth's. Medical Surgical Nursing. (10th ed). Philadelphia: Lippincott Publisher. 2004; 1710-1712.

How to cite this article: Sampoornam W. Are you stressed with breast cancer? Get emotional support to scale down stress and improve quality of life- A pilot study. Int J Health Sci Res. 2013;3(12):146-151.

**********