

BODY IMAGE SATISFACTION, DISTRESS AND RESILIENCE IN WOMEN WITH BREAST CANCER SURGERY: A WITHIN GROUP STUDY

Mamoona Mushtaq¹, Fauzia Naz²

¹ Department of Psychology, Govt. MAO College, Lahore - Pakistan.

² Department of Psychology, Govt. College Township, Lahore - Pakistan.

Address for correspondence:

Dr. Mamoona Mushtaq

Professor of Psychology, Department of psychology, Govt. MAO College, Lahore - Pakistan.

Email: mamoonaushtaq@gmail.com

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ABSTRACT

Objectives: To explore the relationship among body shape satisfaction, distress and resilience in women with breast surgery and to explore the predictors of resilience in women with breast surgery.

Methodology: The study was conducted in Shaukat Khanum Memorial Cancer Hospital and Research Center, Lahore and Inmol Cancer Hospital, Lahore. The current research was carried out by using within-subject research design. Sample comprised of 100 indoor patients admitted for general surgery. Age range of the sample was from 40 to 65 years. Body Image Satisfaction Scale (Cash, 2000), was used for assessing body image satisfaction, Depression, Anxiety, Stress Scale (Lovibond & Lovibond, 1995) for measuring distress and Hiew's State-Trait Resilience Checklist (2000) was used to measure resilience of the research participants.

Results: In pre assessment, the mean scores of body image satisfaction were higher than post assessment. Similarly, scores were higher on distress and resilience on pre-testing as compared to post-testing. Scores on body image satisfaction and resilience in women with lumpectomy were higher than women with mastectomy.

Conclusion: There were significant differences on body image satisfaction, distress and resilience in pre and post assessment of women with breast cancer surgery.

Key Words: Body image satisfaction, Distress, Resilience, Breast cancer surgery

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INTRODUCTION

In every year, more than 250000 women are diagnosed with breast cancer which does not mean mastectomy in all cases¹. These women are advised different treatments like chemotherapy, hormonal therapy and radiation treatment etc. to prevent the recurrence of disease. Unfortunately, about 25% of women with breast cancer will expire because cancer has spread outside the breast and lymph nodes².

A major topic of interest for psychologists and researchers is body shape satisfaction in women passing through breast surgery. The concept embodies by the combination of body reality, body ideal and body presentation². Generally beautiful individuals are taken as more intelligent, happier, more socialized and more competent³. Breast surgery can critically affect the body shape satisfaction which ultimately deteriorates the quality of life of those women. Breast is a unique part of body for women because it is related with sexual-

ly attractiveness for men, reproduction and nurturing practices. Women with this type of cancer suffer from the trauma of disfigurement and the fear of rejection from their husbands along with loss of femininity^{4,5}. The breast cancer survivors' pass through negative perceptions of their body shape such as dissatisfaction with present body shape, reluctance to see their nude body, surgical scars and feelings of reduced sexual attractiveness⁶⁻⁸. Research has established that women with lumpectomy have more positive body shape satisfaction than women who underwent mastectomy for breast cancer⁹.

Women diagnosed with breast cancer experience psychological distress and the fear of recurrence and of dying with disease¹⁰. Distress is the experience of unpleasant emotional condition that might be social, psychological and spiritual in nature. Distress happens with the feelings of fear, sadness and vulnerability to survive against cancer during and after the treatment. These feelings may become more severe and can be convert-

ed to major depression which impedes the social relationships. It may also result from after effect of fear and threat to life. Although all cancer-survivors suffer from distress but it multiplies in case of breast cancer.

There is research evidence that maximum distress exists in all transitory phases of cancer like diagnosis, waiting for treatment, during or on completion of treatment, follow-up visits to doctors, recurrence and success or failure of treatment in breast cancer patients. There is also evidence that distress in patients increases where their family members are also passing through distress. Other areas of distress range from cancer related anxiety like fear of recurrence, worry, fear of future and death to the physical problems like fatigue, sleep problems, and problems in concentration.

Researchers have defined resilience as a process of getting back from a trauma or an adversary¹¹. This is a process how an individual adapts successfully into the environment after facing trauma¹¹. Researchers view it in the form of improved psychological health, meaningful relationship, inclination towards religion and decrease in the feeling of distress^{12,13}. Still some others view it the process of rapid environmental adaptation, fulfill commitment, optimism, positive self-concept, self-efficacy and self-control^{14,15}. These people are goal-oriented and take stress as an opportunity and challenge and try positively to avoid stress^{16,17}.

There is research evidence that resilience decreases in patients with diagnosis of breast cancer which is perhaps due to their personality characteristics and fear of outcome¹⁸. There is also evidence that sudden diagnosis lays the foundation of reduction in resilience in women with breast surgery¹⁹. It is again found in a research that stressful life events like breast cancer surgery has a significant relationship with depression and low body image satisfaction and less resilience²⁰.

Keeping in view the literature review the following hypotheses were generated:

Pre-surgery assessment scores will be higher as compared to post-assessment scores on body image satisfaction, distress and resilience in women with breast cancer surgery.

There will be differences on body image satisfaction, distress and resilience between lumpectomy type and mastectomy type of breast cancer surgery.

Body image satisfaction would positively predict resilience while distress would negatively predict resilience in women with breast cancer surgery.

METHODOLOGY

Within-subject research design was used in the present study. The sample was collected by using purposive sampling technique. The sample was recruited from Shaukat Khanum Memorial Cancer Hospital and Research Center, Lahore and Inmol Cancer Hospital, Lahore. Sample comprised of 100 indoor women patients admitted for breast cancer surgery. Mean monthly income of patients was ($M=31000$, $SD= 9.69$). The study was conducted from March 1st, 2013 to December 26th, 2014.

The following inclusion criteria were adapted while recruiting the sample: All the patients with age from 40 years to 65 years were to be admitted in hospital for breast cancer surgery. The sample was collected only from 2 hospitals which are mentioned above. Pre-assessment was carried out 15 days before the surgery. Post assessment was conducted 1 month after the surgery in the hospital setting.

A demographic information form was structured regarding the age, type of disease for which surgery was recommended, period of illness in months, marital status, nature of their job, number of children and dependents and monthly income of the research participants.

In order to evaluate one's own body perception, body image satisfaction (BIS) level, the six-item Body Image State Scale (BISS), developed by Cash, was used²⁰. In the current study depression, anxiety and stress scale (DASS) was used to measure the 3 relatively negative states of depression, anxiety and stress of a person with combine effect of distress²¹.

Resilience of the research participants was assessed by using dispositional resiliency Scale DRS-15v-v²². The 15 items scale includes both positively and negatively keyed items covering three conceptually important hardiness facets of commitment, control and hardiness. Combine score on the scale forms resilience.

The data was obtained from indoor patients of 2 cancer hospitals. The women admitted for surgery were approached and were asked for participation. Initially informed consent was obtained from the research participants and afterwards all scales were presented to them to be filled out with the help of the researchers. The hypotheses were analyzed by using paired samples t-tests to see differences in mean scores, correlations to explore relationships and multiple regression analysis to find out predictors of resilience in pre and post study in women with breast cancer surgery.

RESULTS

Table 1 depicts significant mean differences in patients' pre/post-surgery with respect of their body im-

age satisfaction, distress and resilience. Mean scores of post-surgery were significantly higher than pre-surgery which show that patients feel better body image satisfaction before surgery. Whereas, the patients scored higher on distress and resilience after post-surgery which indicates that they felt less distressed and better resilience after surgery. Further, table 1 indicates that the women with lumpectomy scored higher on body image satisfaction and resilience as compared to mastectomy. However, the women with mastectomy scored greater on distress than women with lumpectomy. As shown by Cohen's d values, all study variables contribute high effect size which means that there is significant difference on study variables between pre and post assessment and between women with lumpectomy and mastectomy.

Table 2 shows that resilience is significantly and positively correlated with body image satisfaction ($r = .43$, $p < .001$). It means when resilience will increase body image satisfaction will also increase. Similarly, results show a significant negative correlation of distress with

resilience ($r = -.37$, $p < .001$) and body image satisfaction ($r = -.39$, $p < .001$) in women with breast surgery.

Results given in table 3 revealed that age accounted for 23% variance (45 years) and mastectomy accounted for 19% variance in resilience. Similarly monthly expenditures accounted for 14% variance, body image satisfaction accounted for 10% and distress accounted for 13% variance in resilience. The value of R^2 indicates that model is fit as predictors are contributing 28% variance in predicting resilience.

DISCUSSION

The result of the first hypothesis showed that there is a significant difference on body image satisfaction, distress and resilience between pre and post assessment in women with breast cancer surgery. The findings of the present study are consistent with the findings of previously conducted research work which has concluded that body image satisfaction is greater before surgery than after surgery^{2,3}. Breast is considered a unique part of body which adds the beauty of women. With the par-

Table 1a: Pre and post breast surgery wise mean differences of women with breast surgery on body image satisfaction (n = 100)

| Variables | Pre-Surgery | | Post-Surgery | | Scores | | |
|-------------------------|-------------|-------|--------------|-------|----------|-------|---------|
| | M | SD | M | SD | t(df=29) | p | Cohen'd |
| Body Image Satisfaction | 73.34 | 12.28 | 42.72 | 8.46 | 5.41 | 0.001 | 5.61 |
| Distress | 59.32 | 7.22 | 71.42 | 9.27 | 7.86 | 0.001 | 4.36 |
| Commitment | 34.54 | 5.70 | 45.71 | 8.59 | 3.52 | 0.001 | 3.02 |
| Control | 37.87 | 10.47 | 52.80 | 9.37 | 4.81 | 0.001 | 4.29 |
| Hardiness | 24.18 | 4.27 | 41.97 | 8.58 | 5.28 | 0.001 | 4.98 |
| Overall Resilience | 58.51 | 8.20 | 97.17 | 11.43 | 5.40 | 0.001 | 3.51 |

Table 1b: Lumpectomy and mastectomy wise mean differences of women with breast surgery on body image satisfaction (n = 100)

| Variables | Lumpectomy | | Mastectomy | | Scores | | |
|-------------------------|------------|-------|------------|-------|----------|-------|-----------|
| | M | SD | M | SD | t(df=29) | P | Cohen's d |
| Body Image Satisfaction | 72.61 | 8.21 | 41.21 | 8.74 | 7.20 | 0.001 | 4.86 |
| Distress | 82.15 | 11.41 | 103.21 | 21.50 | 9.42 | 0.001 | 5.02 |
| Commitment | 23.31 | 4.40 | 10.62 | 3.87 | 2.82 | 0.001 | 2.87 |
| Control | 23.43 | 3.21 | 11.54 | 2.43 | 4.55 | 0.001 | 3.13 |
| Hardiness | 31.48 | 5.36 | 20.52 | 4.51 | 5.29 | 0.001 | 1.26 |
| Overall Resilience | 81.42 | 12.43 | 45.10 | 8.23 | 4.23 | 0.001 | 3.63 |

Note: M = mean scores, SD = standard deviation, t = t values, Cohen's d = values

Table 2: Correlation of resilience with body-image satisfaction and distress in women with breast surgery

| Variables | 1 | 2 | 3 | M | SD | α |
|-------------------------|---|-----|------|--------|-------|----------|
| Resilience | - | .43 | -.37 | 85.31 | 9.81 | .82 |
| Body Image Satisfaction | | - | -.39 | 48.69 | 5.65 | .84 |
| Distress | | | - | 120.92 | 11.72 | .83 |

Note: α = reliability alpha

Table 3: Body image satisfaction and distress as predictors of resilience in women with breast cancer surgery

| Predictors | β | SE | t | ΔR^2 |
|-------------------------|---------|------|------|--------------|
| Constant | .42 | 7.32 | 7.90 | .21 |
| Age | .47 | 7.93 | 8.29 | .23 |
| Mastectomy | -.31*** | 6.21 | 5.63 | .19 |
| Monthly Expenditures | -.32 | 6.30 | 5.81 | .14 |
| Body Image Satisfaction | .25 | 4.74 | 4.92 | .10 |
| Distress | -.19 | 3.21 | 5.39 | .13 |

Note: R^2 = .27, β = Beta coefficients, ΔR^2 = Adjusted R square

tial treatment or removal of breast is thought to reduction in body image. A great body of literature supports this fact that women are more sensitive towards their body parts than men⁵.

Additionally distress and resilience were increased after performing surgery. After being deprived from a vital part of body is a natural consequence of surgery¹⁵. There are further apprehensions of more complications after surgery which leads the patients to more distress²⁰. Research supports the role of environment, close friends, parental and family support help the patients to adjust in the environment and increase their resilience²¹.

Next finding of the study that women with lumpectomy have more body image satisfaction than women with mastectomy is supported by previous researches conducted on same population²². The women with lumpectomy are used to retain perceptions of their physical attractiveness and femininity^{6,22}. The women with mastectomy suffer from chronic distress due to the loss of an attractive organ of their body. They develop fears regarding their beauty, femininity, recurrence and fear of death in near future⁷.

The current research also explored the role of demographic variables in predicting resilience in cancer survivors. Age and body image satisfaction appeared as significant positive predictor of resilience while monthly expenditures, mastectomy and distress emerged as negative predictors of resilience in women with breast cancer surgery. The findings of the present research

corroborate with the findings of the previous literature^{10, 15,19, 21}.

LIMITATIONS

The sample was limited in size and obtained only from two hospitals which must have reduced its external validity.

CONCLUSION

There was significant difference on body image satisfaction, distress and resilience in women before and after their breast surgery. The patients obtained more scores on distress and resilience after the surgery was performed. Similarly, women with lumpectomy scored higher on body image satisfaction and resilience as compared to mastectomy.

IMPLICATIONS

The research has its implications regarding the counseling of the women suffering from breast cancer. The women with breast cancer may be given counseling sessions to accept the reality of the disease and to increase their resilience against breast surgery.

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CONTRIBUTORS

MM Conceived, designed, and collected data, statistical analysis, prepared manuscript. FN Collected data, conducted data analysis, edited manuscript. All authors contributed significantly to the submitted manuscript.