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# BODY IMAGE ISSUES RELATED TO POST-OPERATIVE BREAST CANCER

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#### **ABSTRACT**

**Background:** Studies have concluded that altered body image is one of the main problems faced by women with BC survivors(S) due to reduced self-esteem, increased anxiety, sexuality complexes and decreased QoL. **Aim:** To evaluate & discusses coping strategies for post-operative women. **Materials & Methods:** A total of 10 patients were assessed with the help of 10 questionnaire-based questions with an explanatory longitudinal type of study at 0 to 3 months, 3 to 6 months and 6 to 12 months post mastectomy with the help of the H-BIS questionnaire. **Result:** Maximum number of the patients responded for scale 4 in all the 3 groups for all the 10 questions. In addition to that, the inter-month comparison difference was statistically non-significant as all the patients' responses were almost same throughout the research. **Conclusion:** We conclude that healthcare professionals should train post mastectomy BCS women to help improve their QoL.

**Keywords:** BC, altered body, H-BIS, scale, QoL, survivor, anxiety, sexuality, coping strategies, post-operative.

# **INTRODUCTION**

Studies have been concluding that breast cancer (BC) is one of the major causes of increased mortality rates among women.[1,2] Therefore, according to studies, its treatment awareness is increasing among people residing in both urban and rural areas of India as well, which includes various external & internal bodily alterations.[3,4] Moreover, studies have also come to concluded that these physical changes due to treatment lead to psychosocial concerns & affect

sexuality & body image of a women by decreasing her self-esteem, increasing stress, anxiety and other related disorders that have an impact on the overall quality of life (QoL) of a woman. [5,6] Therefore, failure to address these issues can create a significant void in a woman's femininity.[7] As per our literature research, currently no studies have evaluated post-mastectomy women for altered body image & helped them to cope with the same in Indian hospitals.

Henceforth, in our study we have evaluated & assessed women in their follow-ups to help them to increase their QoL.

**AIM** = To evaluate the coping strategies used by post-mastectomy patients for body image related issues.

#### **INCLUSION CRITERIA**

- 1. Post-mastectomy patients
- 2. Female breast cancer survivors (stage in-situ, 1, 2 & 3)
- 3. Indian origin women

### **EXCLUSION CRITERIA**

- 1. Women patients with stage 4 breast cancer
- 2. Any type of mental disorder
- 3. Unable to understand English or Hindi
- 4. Male patients with BC

### **MATERIAL & METHODS**

A questionnaire-type longitudinal study was performed with a total of 10 patients who had all undergone mastectomy procedures with a total of 10 questions. These patients were recalled and evaluated for their psychosocial mental health due to their altered appearance after the treatment in respective follow-ups, i.e., 0 to 3 months, 3 to 6 months, and 6 to 12 months post their mastectomy procedure. In our study, we have used Hopwood body image scale (H-BIS) to assess the same on scale 1 (not at all) to 4 (very much). After the ethical approval, patients were asked for their approval to participate in the study. Those who all fulfilled all the inclusion criteria and completed all the required study follow-ups were included in our present research.

# STASTISTICAL ANALYSIS

Using exploratory statistics, we analyzed qualitative gross morphological data. A 95% confidence interval-paired t-test was also done in SPSS software.

# Below Are The Following List Of The 10 Questions That Were Asked At Respective Follow-Ups Is As Follows:-

Que	tion no.1)	Have you	been feelin	g self-conscious	about you	r appearance?
-----	------------	----------	-------------	------------------	-----------	---------------

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no. 2) Have you felt less physically attractive as a result of your disease or treatment?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no. 3) Have you been dissatisfied with your appearance when dressed?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no. 4) Have you been feeling less feminine/masculine as result of your disease or treatment?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no. 5) Did you find it difficult to look at yourself naked?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no. 6) Have you been feeling less sexually attractive as a result of your disease or treatment?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no.7) Did you avoid people because of the way you felt about your appearance?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no. 8) Have you been feeling the treatment has left your body less whole?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no. 9) Have you felt dissatisfied with your body?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

Question no. 10) Have you been dissatisfied with the appearance of your scar?

1. Not at all

2. A little

3. Quite a bit

4. Very much

5. Not applicable

# RESULTS

S. No	Have you been feeling self- consciou s about your appeara nce?	Have you felt less physically attractive as a result of your disease or treatment?	Have you been dissatisfied with your appearanc e when dressed?	Have you been feeling less feminine/masculin e as result of your disease or treatment?	Did you find it difficul t to look at yoursel f naked?	Have you been feeling less sexually attractive as a result of your disease or treatment?	Did you avoid people because of the way you felt about your appearance ?	Have you been feeling the treatmen t has left your body less whole?	Have you felt dissatisfie d with your body?	Have you been dissatisfied with the appearanc e of your scar?
0-3					L	<u> </u>	l		L	
1	1	1	0	1	1	1	3	0	0	0
2	1	1	2	0	1	1	2	2	1	2
3	2	3	2	3	2	3	0	2	4	2
4	6	5	6	6	6	5	5	6	5	6
5	0	0	0	0	0	0	0	0	0	0
3-6										
1	0	0	0	0	1	1	2	0	0	0
2	1	1	1	2	2	2	2	2	2	2
3	2	2	3	2	2	1	3	2	2	2
4	7	7	6	6	5	6	3	6	6	6
5	0	0	0	0	0	0	0	0	0	0
6-12			<b>,</b>		1					
1	0	0	0	0	2	1	3	0	1	0
2	2	1	1	2	1	2	2	2	1	2
3	5	4	3	3	3	2	3	3	3	4
4	3	5	6	5	4	5	2	5	5	4

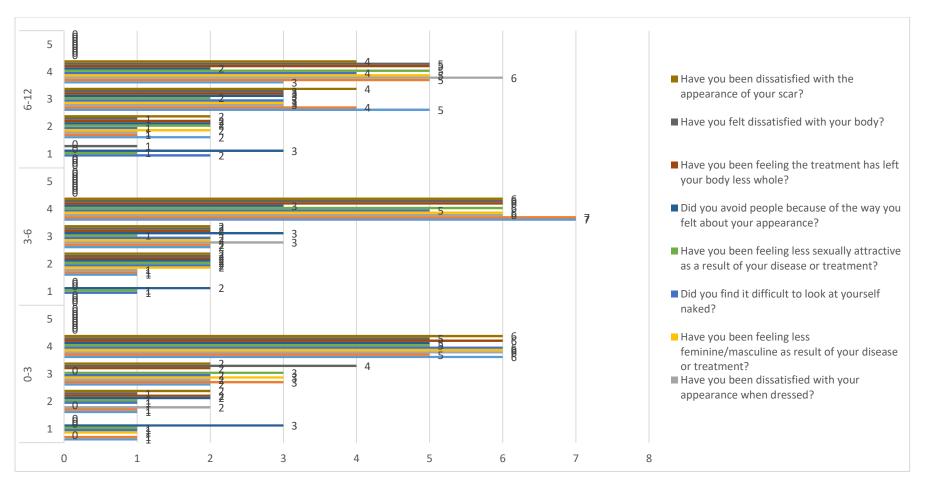
5	0	0	0	0	0	0	0	0	0	0

TABLE1: DIFFERENT QUESTIONS AT 3 FOLLOW –UPS

In our present study, table 1 showed that at 0 to 3 months, the maximum number of patients responded to scale no. 4, i.e., 6 patients for the 1st, 3rd, 4th, 5th, 8th, and 10th question while 5 patients for the 2nd, 6th, 7th, and 9th questions, respectively, which was followed by scales no. 3, 2, and 1 with 2, 1 and 1 patients for the 1st and 5th questions, 3, 1, 1 patients for the 2nd and 6th question, 0, 2, 2 patients for the 3rd, 8th, and 10th question, 1,0, 3 patients for the 4th question, and 4, 1,0 patients for the 9th question. On the other hand, only the 7th question showed more responders for scale 1, then 2 and 3 with 3, 2, and 0 patients, respectively. Throughout the follow-up, none of the patients responded on scale 5, respectively.

At 3 to 6 months, the maximum number of patients responded to scale no. 4, i.e., 7 patients for the 1st and 2nd questions, 6 patients for the 3rd, 4th, 6th, 9th and 10th questions, 5 patients for the 5th question, and finally, 3 patients for the 7th question, respectively, which was followed by scales no. 3, 2, and 1 with 2, 1 and 0 patients for the 1st and 2nd questions, 3, 1 and 0 patients for the 3rd question, 0, 2, 2 patients for the 4th, 8th, 9th, and 10th question, 2, 2 patients for the 5th question, and 3, 2 patients for the 7th question, respectively. Throughout the follow-up, none of the patients responded on scale 5, respectively.

6 to 12 months, the maximum number of patients responded to scale no. 4, i.e., 6 patients for the 3rd question, 5 patients for the 2nd, 4th, 6th, 8th, and 9th questions, respectively, 4 patients for the 5th and 10th questions, 3 patients for the 1st question, and finally, 2 patients for the 7th question, respectively, which was followed by scale no. 3, 2, and 1 with 5, 2 and 0 patients for the 1st question, 4, 1, 0 patients for the 2nd question, 3, 1,0 patients for the 3rd question, 3, 2,0 patients for the 4th and 8th question, 3, 1, 2 patients for the 5th question, 2, 2, 1 patients for the 6th question, 3, 2, 3 for the 7th question, 3, 1, 1 for the 9th question, and 4, 2, 0 for the 10th question, respectively. Throughout the follow-up, none of the patients responded on scale 5, respectively.



**GRAPH1: INTER-COMPARISON** 

# P value:

0-3 V/S 3-6 = 0.52

0-3 V/S 6-12 = 0.0

3-6 V/S 6-12 =**0.47** 

In the graph 1, on comparing the 3 different follow-up groups among them on the basis of different questions, we found that the women that were traumatized by the cancer survivor journey did not show statistically significant differences in their opinions even after a long period of time., i.e., 0 to 3 months to 3 to 6 months, 0 to 3 months to 6 to 12 months, and 3 to 6 months to 6 to 12 months, respectively as the p value was 0.52, 0.0 and 0.47 respectively.

### **DISCUSSION**

As we know, the breast is associated with motherhood, femininity, and sexuality.[8] Therefore, these characteristics are the foundational and all-encompassing aspects of women's personality.[9] A study showed that women with BCS & body image change (BIC) are 2.5 times more likely to experience issues related to sexual appearance problems. [10] In a study, majority of the young women have reported difficulties in their partner relationships.[11] Guedes et al., 2018 did a cross-sectional study for 103 women and found that 7.8% of the women had dissatisfaction of their body image post-operatively.[12] Another similar study done by De Goumay et al., 2010 in their cross-sectional study for 193 women reported that women with less than 60 years of age who had undergone surgeries but without reconstruction had higher BIC disturbances.[13] Anagnostopoulos et al., 2009 showed in his cross sectional study with 194 women patients that the group that was treated with mastectomy procedure showed more concerns and problems when compared to control group women postoperatively.[14] Hopwood et al., 2007 showed in his cross-sectional study with total of 2208 BCS that BID was related to young age and poor QoL.[15] In addition to this, individuals tend to experience some level of distress, fear and worry upon diagnosis.[16] Thus, different individuals cope differently. Studies have shown that religious beliefs, emotional social support and realistic acceptance are some of the important coping mechanisms which women mostly use.[17]

Sharma D. et al., 2020 conducted a questionnaire study which consisted of 46 items designed to measure 8 different coping strategies with the help of Folkman and Lazarous Scale (FLS) namely, confrontive, distancing, self-controlling, seeking social support, accepting responsibility, escape avoidance, plan full problem solving and positive appraisal. Out of these, they found that distancing and escape avoidance were the only 2 negative coping styles whereas others were positive. Henceforth, the use of coping strategies, that too of the positive type, could help to overcome the stress & fear related to diagnosis & chemotherapy.[18] Whereas,

in our present study, we have used H-BIS and highlighted the importance of coping practices for the patients postoperatively to improve QoL.

But one similar point between Sharma D et al., 2020 and our present study was that both the studies focused their conclusion towards practising a coping technique that could help these women in the long run.

# **CONCLUSION**

We come to conclude that, promoting positive attitude towards appearance & coping skills by trained healthcare professionals are strongly recommended post-operatively, especially in a country like India. Such screening could help women & prepare them to use the same to improve their body image & enhance their QoL. More cross longitudinal studies with increased patient number studies are recommended to validate the results of our present study.

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# **AUTHORS CONTRIBUTIONS**

All authors have contributed equally to conduct our study properly.

### **CONFLICTS OF INTERESTS**

The author declares that there are no conflicts of interest.

### **REFERENCES**

Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, Parkin DM, Forman D, Bray F. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. International journal of cancer. 2015 Mar 1;136(5):E359-86. <a href="https://doi.org/10.1002/ijc.29210">https://doi.org/10.1002/ijc.29210</a>

- Fingeret MC, Nipomnick SW, Crosby MA, Reece GP. Developing a theoretical framework to illustrate associations among patient satisfaction, body image and quality of life for women undergoing breast reconstruction. Cancer treatment reviews. 2013 Oct 1;39(6):673-81. https://doi.org/10.1016/j.ctrv.2012.12.010
- 3. Arora S, Gogia A. Recent updates in systemic therapy of breast cancer: A brief narrative review. Cancer Research, Statistics, and Treatment. 2021 Jan 1;4(1):99-109. <a href="https://doi.org/10.4103/crst.crst\_335\_20">10.4103/crst.crst\_335\_20</a>
- 4. Shetty R, Mathew RT, Vijayakumar M. Incidence and pattern of distribution of cancer in India: A secondary data analysis from six population-based cancer registries. Cancer Research, Statistics, and Treatment. 2020 Oct 1;3(4):678-82. 10.4103/crst.crst 290 20
- Cordero MJ, Villar NM, Sánchez MN, Pimentel-Ramírez ML, García-Rillo A, Valverde EG. Breast cancer and body image as a prognostic factor of depression: a case study in México City. Nutricion hospitalaria. 2015;31(1):371-9. https://doi.org/10.3305/nh.2015.31.1.7863
- 6. Helms RL, O'Hea EL, Corso M. Body image issues in women with breast cancer. Psychology, Health and medicine. 2008 May 1;13(3):313-25. https://doi.org/10.1080/13548500701405509
- 7. Thakur M, Sharma R, Mishra AK, Gupta B. Body image disturbances among breast cancer survivors: A narrative review of prevalence and correlates. Cancer Research, Statistics, and Treatment. 2022 Jan 1;5(1):90-6. 10.4103/crst.crst 170 21
- 8. Webb C, Jacox N, Temple-Oberle C. The making of breasts: Navigating the symbolism of breasts in women facing cancer. Plastic surgery. 2019 Feb;27(1):49-53. https://doi.org/10.1177/2292550318800500
- 9. Fogel CI, Woods NF, editors. Women's health care in advanced practice nursing. Springer Publishing Company; 2008 Jun 23. <u>ISBN:9780826103550</u>
- Paterson CL, Lengacher CA, Donovan KA, Kip KE, Tofthagen CS. Body image in younger breast cancer survivors: a systematic review. Cancer nursing. 2016 Jan 1;39(1):E39-58. 10.1097/NCC.000000000000000251
- 11. Befort CA, Klemp J. Sequelae of breast cancer and the influence of menopausal status at diagnosis among rural breast cancer survivors. Journal of women's health. 2011 Sep 1;20(9):1307-13. <a href="https://doi.org/10.1089/jwh.2010.2308">https://doi.org/10.1089/jwh.2010.2308</a>
- 12. Guedes TS, de Oliveira NP, Holanda AM, Reis MA, da Silva CP, e Silva BL, de Camargo Cancela M, de Souza DL. Body image of women submitted to breast cancer treatment.

- Asian Pacific journal of cancer prevention: APJCP. 2018;19(6):1487. https://doi.org/10.22034%2FAPJCP.2018.19.6.1487
- 13. De Gournay E, Bonnetain F, Tixier H, Loustalot C, Dabakuyo S, Cuisenier J. Evaluation of quality of life after breast reconstruction using an autologous latissimus dorsi myocutaneous flap. European Journal of Surgical Oncology (EJSO). 2010 Jun 1;36(6):520-7. https://doi.org/10.1016/j.ejso.2010.04.008
- 14. Anagnostopoulos F, Myrgianni S. Body image of Greek breast cancer patients treated with mastectomy or breast conserving surgery. Journal of clinical psychology in medical settings. 2009 Dec;16:311-21. <a href="https://doi.org/10.1007/s10880-009-9176-5">https://doi.org/10.1007/s10880-009-9176-5</a>
- 15. Hopwood P, Haviland J, Mills J, Sumo G, Bliss JM. The impact of age and clinical factors on quality of life in early breast cancer: an analysis of 2208 women recruited to the UK START Trial (Standardisation of Breast Radiotherapy Trial). The Breast. 2007 Jun 1;16(3):241-51. https://doi.org/10.1016/j.breast.2006.11.003
- 16. Watson M, St James-Roberts I, Ashley S, Tilney C, Brougham B, Edwards L, Baldus C, Romer G. Factors associated with emotional and behavioural problems among school age children of breast cancer patients. British journal of cancer. 2006 Jan;94(1):43-50. <a href="https://doi.org/10.1038/sj.bjc.6602887">https://doi.org/10.1038/sj.bjc.6602887</a>
- 17. Thakur M, Gupta B, Kumar R, Mishra AK, Gupta S, Kar SK. Depression among women diagnosed with breast cancer: a study from North India. Indian Journal of Medical and Paediatric Oncology. 2019 Jul;40(03):347-52. <a href="https://doi.org/10.4103/ijmpo.ijmpo-43\_18">10.4103/ijmpo.ijmpo-43\_18</a>
- 18. Sharma D, Dutta M, Kaur S, Yadav BS, Kumar K, Dahiya D. Coping strategies being practiced by the breast cancer survivors before receiving first cycle of chemotherapy. Asian Pacific Journal of Cancer Care. 2021 May 14;6(2):167-73. <a href="https://doi.org/10.31557/APJCC.2021.6.2.167">10.31557/APJCC.2021.6.2.167</a>