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Navigating Self-Objectification with Social Support and Relationship Authenticity in Mastectomy Survivors

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Abstract **Original Research Article**

Background: Sexist media tropes objectify the female body, and nonconformists to the ideal beauty standards are isolated as dissenters. Mastectomy causes major changes to a woman's body, and due to the widespread consumption of body-objectifying media, women undergoing mastectomy without reconstruction are vulnerable to body-dissatisfaction, which may lead to mental health issues. ***Objectives*:** This study aims to explore the influence of relationship authenticity, social support from spouse, family and friends in reducing body consciousness and enhancing self-esteem for improved psycho-oncological prognosis in mastectomy patients. ***Method*:** Participants (N=30) recruited to the study, were involved in a heterosexual marital relationship, with a monthly per head income of roughly 2000 INR and had undergone mastectomy without reconstruction, in admitted observation or out-patient follow-up observation, ranging from a period of 6-12 months post-surgery. ***Result*:** Statistical analyses revealed significant association in body consciousness, relationship authenticity and self-esteem in mastectomy patients. The study also found lower self-objectification and higher self-esteem among those who were successfully rehabilitated to their family setting in comparison to patients immediately after surgery. ***Conclusion*:** Perceived support from family and body consciousness are predictive of self-esteem in the sample studied.

Keywords*:* Body consciousness; mastectomy; perceived social support; relationship authenticity; self-esteem.

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INTRODUCTION

Women undergoing mastectomy experience immense anxiety, distress and uncertainty post surgery. According to Berterö (2002), after completion of treatment, "psychological effects of the treatment experience becomes a reality" (p.1) The loss of breast tissue is seen as a loss of feminine identity, and aesthetic concerns, as well as, concerns regarding the depart from wholeness of the body emerges (Yiimazer, Aydincr, Ozkau, Aslay and Blige, 1994; Olasehinde, Arije, Wuraola, Samson, Olajide, Alabi,... and Kingham, 2019). Moreover, due to the widespread consumption of body-objectifying media, women undergoing mastectomy are vulnerable to body dissatisfaction which may lead to serious mental health issues. Due to internalization of cultural standards, which portray the feminine body as an object to cater to the male gaze (Spitzack, 1990), females start viewing their bodies as external onlookers, and attempt at achieving irrational beauty standards, therefore, their body image, becomes a 'mirrored' body image, in that an individual has to be constantly surveillant, for maintaining compliance with the external onlooker's expectations (McKinley and Hyde, 1996).

Additionally, patients experience of a lack of options for the fear of recurrence, is a major reason for patients' choice of mastectomy over breast conserving surgery, which, besides the psychological and physical burden, also implicates the financial concerns of patients belonging to lower economic background (Nold, Beamer, Helmer and McBoyle 2000). Breast reconstruction surgeries, as a means to cope with mastectomy, is expensive. Women of economically disadvantaged background are more prone to sexual dissatisfaction and heightened body-consciousness.

Dissatisfaction resulting from breast reconstruction or breast conservation is evidenced in mastectomy patients globally. For instance among Turkish women, breast conserving therapy is found to be effective in producing positive body image in comparison to women who undergo total mastectomy (Yiimazer *et al*., 1994), and among Americans, women who chose mastectomy with or without reconstruction

are more likely to report a negative impact on their sex life than women undergoing breast conservation therapy (Rowland, Desmond, Meyerowitz, Belin, Wyatt and Ganz, 2000) Likewise, Indian women, given a chance, would opt for breast-conserving therapy over mastectomy (Narendra and Ray, 2011).

Couples undergo drastic changes in their relationship roles, especially husbands undergo distinct changes to their hegemonic masculine roles in caring for their spouse (Neris, Zago, Ribeiro, Porto and Anjos, 2018). Communication pattern among couples is also affected which leads them to feel disconnected thus, making counseling for relationship maintenance crucial for rehabilitation (Keesing, Rosenwax and McNamara, 2016). It has been found that husbands' adjustment to breast cancer and opportunities in seeking mental healthcare to cope with wife's illness and accompanying changes brought about by the illness aids the successful psychosocial adjustment to the illness throughout lifetime (Northouse, 1989). It also creates positive self-transformation and better prognosis of the breast cancer survivor by making adjustments to demands placed on the couple's relationship (Carpenter, Brockopp, and Andrykowski, 1999). Patients in a satisfactory marital relationship experiencing financial burdens and somatic pain of the illness report that their relationship act as a positive impact on both their and their partner's quality of life along with mediating the stressor and pain (Morgan, Small, Donovan, Overcash and McMillan, 2011). Dyadic coping and communication have been found to be effective for patients dealing with cancer (Zimmermann, 2015).

In the context of positive relationship outcomes, authenticity has been widely researched as an important predictor of relationship satisfaction and wellbeing (Neff and Harter, 2002; Brunell, Kernis, Goldman, Heppner, Davis, Cascio and Webster, 2010; Wickham, 2013; Sutton, 2020). Relationship authenticity and self-esteem also have significant positive association (Impett, Tracy, Michael and Tolman, 2006) and self-esteem has been found to have a predictive value on depressive symptoms in cancer patients (Schroevers, Ranchor and Sanderman, 2003). It is important to note that the most common psychiatric morbidity among Indian female breast cancer patients is depression (Thakur, Gupta, Kumar, Mishra, Gupta and Kar, 2019). Relationship authenticity has also been reported to be predictive of attachment to one's romantic partner and the likelihood of caregiving to a partner (Gouveia, Schulz, and Costa, 2016).

Another important aspect of satisfying marital life, sexual intimacy has been the focus of research in context of breast cancer survivors. Patients and their spouses undergo a drastic change in their sexual lives post mastectomy, (due to fatigue, lack of sexual interest, menopausal symptoms (Wang, Chen, Huo, Xu, Wu, Wang and Lu, 2013), lack of communication between partners (Masjoudi, Keshavarz, Akbari, Kashani, Nasiri, and Mirzaei, 2019) and enhanced consciousness (Zahlis and Lewis, 2010) about the body on the part of the patient, which in turn affects patients' self-esteem (Markopoulos, Tsaroucha, Kouskos, Mantas, Antonopoulou and Karvelis, 2009). Cultural context, prevalent taboos and patriarchal structures also exacerbate the breakdown of sexual function (Fouladi, Pourfarzi, Dolattorkpour, Alimohammadi and Mehrara, 2018).

Breast conservation therapy has been reported to have a negative impact on sexual functioning of Indian women, when compared to patients undergoing mastectomy (Dubashi, Vidhubala, Cyriac, and Sagar, 2010). It is also important to note that, contrary to literature available on this topic, breast disfigurement and sexuality have not been reported to be important concerns in rehabilitation of the patients in India (Khan, Bahadur, Agarwal, Sehgal and Das, 2010). Even though patients from underprivileged and low socioeconomic backgrounds in India feel that the financial burden of cancer treatment is an important cause of anxiety and depression, social support from marriage and family help the survivors overcome the psychological reactions to the treatment (Khan *et al.*, 2010). However, globally, a significant gap exists in the due focus on social support from patients' family and spouse in the context of breast cancer diagnosis, treatment and prognosis (Neris and Anjos, 2014).

Literature available on Indian breast cancer survivors who undergo mastectomy without the choice of financially burdensome reconstruction procedure, in conjunction with variables of body consciousness, perceived social support and self-esteem is very limited. It is indeed crucial to discuss body objectification in the relationship context among breast cancer patients to understand their adjustment to life post-mastectomy. The current study has attempted to understand the role of relationship authenticity and social support in mitigating the impact of body consciousness post-mastectomy and enhancing self-esteem.

METHOD

Participants

To study the influence of mastectomy per se and exclude the psychological impact of chemotherapy induced hair fall on body image of the patient, the data was collected from 30 breast cancer patients who received mastectomy with adjuvant hormone therapy, and did not undergo reconstruction of breast, adjuvant chemotherapy and/or radiation. They were from either of the two statuses of observation, namely, 'received treatment – currently in admitted observation' or 'discharged after treatment – periodic follow-up'. The participants were selected using purposive sampling method from Chittaranjan National Cancer Institute, Kolkata, India. The participants recruited were involved

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in a heterosexual marital relationship and had a monthly per head income of roughly 2000 INR. The age range of participants were between 29 to 52 years. Participants were tested on response time, cognitive functioning and attention span to eliminate individuals with serious mental health issues.

Measures

All the standardized scales presented were translated from English to Bengali, according to the standard guidelines, by native Bengali speakers with English as a second language (Beaton, Bombardier, Guillemin, and Ferraz, 2000). To control for order effects, the items were presented in randomized order within each survey.

1. Demographic details –Participants' name, age, relationship status, duration of marriage, treatment type and status of observation was noted.
2. Authenticity in Relationships (Lopez and Rice, 2006): This 9-point rating scale comprises 24 items that attempts to measure the nature of relationship authenticity. Participants rate the items from1 (not at all descriptive) to 9 (very descriptive). The two factors are Unacceptability of Deception (UoD) and Intimate Risk Taking (IRT). It has a Cronbach's alpha of .87 and .86 for UoD and IRT respectively, followed by Cronbach's alpha of .90 for both the factors after a period of 3 months for test-retest reliability and it has been tested for concurrent validity.
3. Objectified body consciousness scale (McKinley and Hyde, 1996): This 7-point rating scale comprises 24 items, divided into three factors namely surveillance, body shame and control. Participants rate the items on 1 (strongly disagree) to 7 (strongly agree). The internal consistency scores of the three factors are .89 for surveillance, .75 for body shame and .72 for control. The scale has qualified on both tests of convergent and discriminant validity.
4. Self-esteem scale (Rosenberg, 1965): This scale comprises 10 items on a 4-point rating scale with participant ratings ranging from 1 (strongly agree) to 4 (strongly disagree). It shows excellent test-retest reliability and has a correlation value of .85 and .88 when retaken after two weeks and demonstrates good construct, concurrent and predictive validity.
5. Multidimensional perceived social support scale (Zimet, Dahlem, Zimet and Farley, 1988): This multidimensional scale comprises 12 items that assess perceived social support from significant other, friends and family, on a 7-point scale ranging from very strongly disagree to very strongly agree. It shows internal consistency of .88 and yields a Cronbach alpha score of .85 when retested after a period of 3 months and possesses adequate construct validity.

Procedure

Data from 30 participants was collected. The participants were informed of the purpose of the study and its benefits to scientific knowledge. Informed consent was sought before the administration of the scales. The instructions to the respondents was explained in a coherent manner. They were asked to respond to the scales weighing in the illness and its impact on their relationship. They were also requested to provide an optional feedback on their experiences to help identify their information and rehabilitation needs. Further discussions were done with palliative-care team keeping in mind the feedbacks for effective patient-practitioner interaction. Patients were provided with contact information of the investigator for further interaction, if the participants deemed that necessary.

Ethical Consideration

The study was approved by the Institutional Academic Committee and the Ethics Committee of Chittaranjan National Cancer Institute, Kolkata, West Bengal. Written consent was taken from the participants before administering the scales. The participants were also requested to write a feedback to help identify their rehabilitation needs. Further discussion was done with palliative-care team after taking informed consent from research participants, for better psycho-onco-surgical prognosis.

RESULT

A Shapiro-Wilk test and inspection of histogram, kurtosis and skewness were undertaken which suggested that the variables were normally distributed.

Independent t test was calculated to see the difference in the variables between the groups based on the status of observation namely, in-ward observation and discharged with periodic observation. The t test result shows that there is a significant difference in authenticity in relationship, objectified body consciousness and self-esteem between the 2 groups (Table-1).

To determine the association level in variables, Pearson product moment correlation was computed and the groups were tallied. The result (Table-2) revealed that in discharged patients coming for follow up and patients in observation period post mastectomy, age and duration of marriage is significantly correlated with duration of marriage. Unacceptability of deception is positively correlated with intimate risk taking, control and self-esteem in both the groups. Intimate risk taking also has a positive relationship with control, self-esteem and perceived social support from family in patients of both groups. The two groups also showed a positive correlation among control, self-esteem and perceived social support from significant other.

Since a significant difference was found in the mean of age between the two groups, which correlates with duration of marriage in the two groups, further analysis needed to be undertaken. Thus, to compare the two groups on the basis of age, marriage duration and the other variables, a 2 (age) * 2 (duration of marriage) * 2 (groups) * $\overline{9}$ (unacceptability of deception-UoD, intimate risk taking-IRT, surveillance, body shame, control, self-esteem and significant other, family, friend) mixed model factorial ANOVA with repeated measures was computed. The main effect and interaction effect of independent variables on dependent variables have shown in table 3. A significant main effect was found for the variables: authenticity in relationship, objectified body consciousness, self-esteem and perceived social support on the ratings reported. Factor 1 * group interaction is also significant, indicating that the variables differed between the 2 observation types.

Finally, multiple regression analysis (step-wise) was calculated to predict self-esteem for the two groups based on the 9 predictors (Table-4). The multiple regression result for group 1, shows that the final model (model 3) was a significant predictor of self-esteem $F(3,11) = 108.877$, $p < .000$ with an R^2 of .967. Participants' predicted self-esteem is equal to 4.987 + .444 (control) + .263 (family) –.219 (surveillance). The result for group 2, shows that there was a significant regression equation $F(1,13) = 19.678$, $p < .001$with an R^2 of .602. Participants' predicted self-esteem is equal to 6.681 + .665 (control).

Table 1 shows descriptive and independent t statistics of the groups (Group 1: Received treatment – in admitted observation, Group 2: Discharged – Periodic follow-up in outpatient facility) for age, duration of marriage-DoM), relationship authenticity dimensions: unacceptability of deception-UoD, intimate risk taking-IRT, body consciousness dimensions: surveillance, body shame, control, self-esteem and perceived social support dimensions: significant other, family, friend.

Table-1

	Group 1		Group 2			
Variables	**Mean**	**S.D.**	**Mean**	**S.D.**	**t Value**	**p Value**
Age	39.53	7.249	46.53	3.623	2.04	0.00**
DoM	17.47	8.999	22.60	6.874	2.04	0.09**
UoD	61.40	22.894	78.87	15.362	2.06	0.02**
IRT	68.93	25.001	83.60	12.391	2.08	0.05*
Surveillance	33.53	16.453	21.80	7.360	2.09	0.02**
Body Shame	35.00	10.770	30.47	7.140	2.06	0.18
Control	17.27	3.826	19.93	8.916	2.01	0.25
Self-Esteem	10.47	5.235	19.93	7.639	2.05	0.00**
Significant Other	23.60	4.306	24.47	4.138	2.04	0.57
Family	19.60	8.708	19.67	6.137	2.05	0.98
Friend	10.93	10.194	9.13	7.549	2.05	0.58

** Significant at 0.01 level * Significant at 0.05 level

Table 2 Correlation matrices for both groups with demographic variables- age and DoM, UoD, IRT, Surveillance, Body shame, Control, Self-esteem-SE and perceived social support from significant other, family and friend.

Table 2

		DoM	**UoD**	**IRT**	**Surveillance**	**Body shame**	**Control**	**SE**	**Significant Other**	**Family**	**Friend**
Group 1	Age	.882**	.106	.-.028	-.018	-.209	.193	-.009	.145	.338	.113
	DoM		.227	.240	-.027	-.116	.297	.177	.287	-.009	.003
	UoD			.869**	-.340	-.143	.809**	.655*	.091	.412	.366
	IRT				-.105	.193	.746**	.620*	.232	.688**	.358
	Surveillance					.871**	-.116	-.761**	.081	-.080	.320
	Body Shame						-.102	-.524*	-.086	.244	.518*
	Control							.553*	.584*	.340	.191
	SE								.183	.603*	-.086
	Significant Other									.060	-.394
	Family										.046
	Friend										

Group 2	Age	.801**	-.095	.400	.452	.465	.085	.074	-.399	.805**	.514*
	DoM		-.077	.238	.516*	.362	.062	.306	-.211	.453	.245
	UoD			.656**	.206	.002	.908**	.724**	.765**	.137	-.701**
	IRT				.604*	.558*	.831**	.689**	.344	.729**	-.254
	Surveillance					.879**	.379	.354	-.018	.549*	.029
	Body Shame						.415	.214	-.117	.628*	.203
	Control							.776**	.651**	.369	-.559*
	SE								.600*	.131	-.592*
	Significant Other									-.241	-.871**
	Family										.385
	Friend										

** Significant at 0.01 level *Significant at 0.05 level

Table 3 shows the significant repeated-measures effects and significant between subjects effects of 2*2*2*9 mixed model factorial ANOVA.

Table-3

			F	Partial Eta Squared
Within-Subjects-Effects	Main Effect	Factor1	93.789*	.803
	Interaction Effect	Factor1* Group	6.087*	.209
Between-Subjects-Effects	Main Effect	Group	.043*	.166

*p = < 0.05 level of significance

Note:
Between-subjects factors: age, duration of marriage and group.
Age and DoM was divided on the basis of median into upper and lower half and participants were grouped according to observation category.

Within-subjects factors (Factor1): UoD, IRT, surveillance, body shame, control, self-esteem, significant other, family and friend.

Table 4 shows influence of predictors on the dependent variable (self-esteem) for the two groups

Table-4

	Group 1						Group 2
	Model 1[a]	Model 2[b]		Model 3[c]			Model 1[d]
R	.761	. 935		.984			.776
R^2	.579	.875		.967			.602
Adjusted R^2	.547	.854		.959			.572
F	17.890	42.031		108.877			19.678
Significance(0.01 level)	.001**	.000**		.000**			.001**
Standardized Beta Score	Surveillance	Surveillance	Family	Surveillance	Family	Control	Control
	-.761	-.781	.546	-.689	.438	.325	.776

F value to enter <= .050
F value to remove >= .100
Dependent Variable: Self-esteem

Models:
Group 1
a. Predictors: (Constant), Surveillance
b. Predictors: (Constant), Surveillance, Family
c. Predictors: (Constant), Surveillance, Family, Control

Group 2
d. Predictors: (Constant), Control

DISCUSSION

The participants (grouped on the basis of observation status namely, post-operative observation and successful integration into family following surgery) showed significant correlation of relationship authenticity with control, self-esteem and perceived social support from family. Thus, it can be said that self-disclosure to partner and authentic self-expression manifest in feeling of control over one's body and enhances self-esteem. Relationship authenticity and dispositional authenticity are associated with healthy relationship behavior, relationship goals and well-being (Wickham, 2013; Sutton, 2020). However, the strong association of relationship authenticity with perceived social support from family suggests that one needs to have a secure base of attachment, to be explorative in

terms of risk-taking in relationship and for unobstructed operation of core self through intolerance for falsification and deception of one's identity.

Relationship authenticity is of primary importance from husbands of breast cancer patients since directing communication around the illness is extremely important but is also perceived and experienced as challenging (Zahlis and Lewis, 2010). The result showed a higher relationship authenticity score among breast cancer survivors who went back home after surgery as opposed to patients awaiting discharge. This has been supported by the study of Zahlis and Lewis (2010) who reported that breast cancer has been seen to improve relationship among married couples. Breast cancer may thus be studied in conjunction with positive relationship transformation in dyads and post-traumatic growth in future research.

Surveillance on body is high in patients right after the surgery than in patients who came back for follow-up, and it is negatively correlated with self-esteem in patients who have received treatment but have not been rehabilitated to family setting. Surveillance is also a predictor of self-esteem in the group in observation period and has a negative beta value, thus with every unit increase in surveillance there is a concomitant fall in self-esteem. Self-esteem has been found to be significantly different in the two groups. The tendency to be hyper-vigilant about one's body following mastectomy, and the distress arising out of the perception of a shift in body image in comparison to the previous body image can be deterring for patients. Therefore, adequate care to ensure that social-support to help desensitization of women to their changed self, post-mastectomy is of primary importance to foster positive mental health and self-image for breast cancer survivors. Caregivers need to be psycho-educated about the ways to address body-image issues and the concept of body-positivity needs to be embraced by the patients as well.

Another dimension of body consciousness, control over one's body, is positively correlated in participants of both groups to self-esteem and perceived social support from significant other. It is also found to be a key predictor of self-esteem among patients in both the groups. Therefore, it is of key importance for husbands to be willing and mindful of the way they can help their spouses cope with their illness. It is interesting to note that most scientific literature on breast cancer survivorship has stated that mastectomy causes major changes in sexual life and physical intimacy among couples. However, in a study conducted in India by Khan and his colleagues (2010), it was found that breast disfigurement and sexuality are discounted in the rehabilitation of the patients and social support helps in effective adjustment to breast cancer. Therefore, the cultural aspect of India needs to be appraised in the discussion of role of husbands in mitigation of self-objectification in breast cancer survivors.

Consumption of body objectifying media and partner-and-self-objectification significantly lowers relationship satisfaction and sexual satisfaction among couples (Zurbriggen, Ramsey, and Jaworski, 2011). Therefore, media content regulation and shunning body negativity can help in the abatement of these issues. Health professionals also need to be aware of how to recognize women in distress and in need of counselling, to help them achieve positive body-image and self-esteem.

Perceived social support from family is predictive of self-esteem among patients in post-mastectomy admitted observation. The coherent family structure and tight familial bonding has been previously elicited in thematic analysis in a study to gauge the role of immediate family in breast cancer survivorship in the Indian context (Alexander *et al*., 2019). However, Mishra and Saranath (2019) in their study found that women garnered their social support from their significant other in socioemotional adjustment to breast cancer. Whether the significant other or the closely-knit family structure in the Indian setting is a greater source of social support than the other, is not a matter of contention and the family and the husband must operate in conjunction for the successful rehabilitation of the patient to life after surgery.

Clinical Implication

Breast cancer survivors require adequate social support and desensitization from body-negative media that constantly makes one conscious about one's body. However, the society we live in thrives on objectification of the human body and imposes a constant pressure to conform to arbitrary norms, instead of teaching individuals to embrace their unique bodies, thus, alienating people who do not agree with these standards. This causes immense psychological damage to these individuals through the result of prejudice or by affecting their self-esteem and body-image. Additionally, the media constantly bombards the viewer with body objectifying content which is curated to sell cosmetic procedures. Mastectomy is viewed as a loss of feminine identity and literature suggests that breast cancer and the associated surgical procedures can cause a lot of stress in the individual, as well as, the burden of illness can impact the partners drastically. Sexual relationship and communication become strained and can reduce relationship satisfaction. This requires open discussion addressing the issues of alterations to one's body and partner expectations on each other to cope with the illness.

Study Limitation

The present study had certain limitations, though efforts were made to execute it comprehensively in terms of understanding of the influences of the

communication pattern among couples, self-disclosure, social support, self-objectification and efficacy to self-esteem among breast cancer survivors. The study can be done on a much larger sample and other methodological improvements can be made. Future research may undertake a dyadic analysis of the variables of relationship authenticity, self-and-partner objectification, self-esteem, efficacy, relationship satisfaction within a longitudinal framework using both qualitative and quantitative analyses. Considering all the issues in a single attempt is beyond one's scope; although, these limitations of the present study open the door for future researches.

CONCLUSION

The research infers that body consciousness and social support from family is predictive of self-esteem. However, it may be noted that previous research linking relationship authenticity, objectified body consciousness, social support and self-esteem has not been conducted in the Indian context.

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