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Analysis of Self-esteem and Social Support in Breast Cancer Patients

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Abstract

Breast cancer is the most prevalent cancer among Indian women. In the present study the self-esteem and social support in breast cancer patients receiving treatment with two treatment modalities i.e.,modified radical mastectomy (MRM) and breast-conserving surgery (BCS) was examined. It was a hospital-based one-time-taken study performed at the radiotherapy Outpatients Department (OPD), Tertiary Care Hospital. A total of 144 participants (133modified radical mastectomy (MRM) patients and 10breast-conserving surgery (BCS) (Mean age 44.38 years) were recruited for the study. Standardized psychological scales of self-esteem and a perceived social support were used. The mean scores for self-esteem and social support were 68.78 and 50.86, respectively. Self-esteem was low in 31 patients with MRM, while none of the patients with BCS had low self-esteem. Social support was low in 20 patients with MRM, while none of the patients with BCS had low social support. A correlation was found between self-esteem and social support (0.49). Overall, the self-esteem and social support were found to be high in breast cancer patients. The reasons may be that they were typically well-educated, from joint families, and from rural areas.

Keywords: Age, Joint family, Modified Radical Mastectomy, Breast Conserving Surgery

Introduction

Cancer is a broad term that refers to a wide range of diseases that can affect any part of the body. One distinguishing feature of cancer is the rapid formation of abnormal cells that grow beyond their normal boundaries and can then invade neighbouring organs and spread to other parts of the body (Bray et al., 2018). Cancer is a dominant reason of death globally. The number of cancer deaths in 2020 was 10 million and 1 out of every 6 people were dying of cancer (World Health Organization, 2020)

The most common cancer in the world is breast cancer.Twenty-three lakh women were treated with breast cancer and six lakh eighty-five thousand deaths were expected in 2020 globally. By the end of 2020, there will be 7.8 million living women who have been diagnosed with breast cancer in the past 5 years. The age-wise incidence rate was 25 % and the mortality rate was 13.3% per 100,000 people globally. In India, breast cancer is the first of all cancers. There will be 1.3 million new cases and (851678) deaths due to breast cancer in 2020.

Baldwin (1997) demonstrated significant zero-order relationships between exercise involvement, physical competency, and physical acceptability and total self-esteem. These three factors were discovered to be responsible for 46% of the variance in overall self-

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esteem using multiple regression analysis. In breast cancer patients, there was a significant correlation between exercise participation and general self-esteem, which was completely mediated by physical abilities.

Participants who underwent breast-conserving surgery or a mastectomy with late rebuilding were happier and experienced fewer negative effects on their self-esteem and sexual life than those who underwent a mastectomy alone, according to Markopoulos et al. (2009). Although getting a breast cancer analysis has a negative mental impact on the participants, the type of surgery performed has a significant impact on the patient's post-operative sexuality and self-esteem.

Only 9% of breast cancer patients reported having high self-esteem, whereas 70% of patients reported having mediocre self-esteem, according to Manot et al. (2020). Anxiety and self-esteem had a weakly inverse connection (r = -0.690) among breast cancer survivors.

Teenagers and socially isolated women had a higher risk of dying after receiving a breast cancer diagnosis because there was a lack of acknowledgement of carefulness, especially helpful caring from friends, family, and adults. Near relatives (12.0%), friends, and partners or colleagues (94.3%) supplied the majority of the social care for all patients (5.4%), according to Minna Salakari and LiisaPylkkanen (2017). It was believed that the spouse or partner was the most significant source of support, especially in the group with arterial hypertension and breast cancer. The depressed group reported significantly less social support in every area of the evaluation (p = 0.001). 24.6% of all respondents claimed to receive social help more frequently than not. It is commonly recognised that social support affects wellbeing. The results of the study support the importance of the spouse or partner during the breast cancer recovery phase. Investigating factors that affect breast cancer survivors' quality of life is a major public health concern.

A crucial component of a woman's social network that affects survival was noted by Chou, Stewart, Wild and Bloom (2012). An increase in social interaction, or higher social support, may improve the women's coping mechanisms, provide emotional support, and create more opportunities for information exchange.

Srivastava (2021) stated that life satisfaction was greatly influenced by social support among breast cancer patients. Along with emphasising and strengthening the social support system, psychologists and counsellors should adopt an integrated strategy for evidence-based intervention options to help cancer patients better manage their positive and negative emotions and increase life satisfaction.

Social support is an important factor in decreasing blood pressure and improving health. Cancer patients may be more pessimistic and desperate in the absence of social support and want to receive support from others (Moyer, 1999).

Self-esteem is strongly related to psychological functioning and adjustment (Katz & Rodin, 1995; Thoits, 1995; Curbow& Somerfield, 1991). Higher self-esteem is associated with lower levels of depression and higher levels of well-being (Carpenter, 1997), (Dirksen, 1989), and (Hobfolf, 1984). In cancer patients, social support is positively related to self-esteem (Carpenter, 1997) and dis-ease (Dirksen, S.R. 1989). Therefore, we analyse the self-esteem and social support of Indian women who suffer from breast cancer. It is important and beneficial for breast cancer patients' health and we want to know whether breast cancer patients are psychosocially strong or weak. This type of study has not yet been done on the Indian population.

Objectives

1.To assess the self-esteem of breast cancer patients.

2. To assess the social support of breast cancer patients.

3. To examine the association between self-esteem and social support.

4. To see the association between self-esteem and social support with demographic variables.

Material and Method

This study aimed to assess self-esteem, social support, and demographic variables in breast cancer patients. The total number of patients was one hundred

and forty-four, out of which 133 were Modified Radical Mastectomy (MRM) and the rest were Breast-Conserving Surgery (BCS). It was a hospital-based study and data collection was completed at the radiotherapy outpatient department, Sir Sunder Lal Hospital, Banaras Hindu University, Varanasi. There were two questionnaires used in this study. The first questionnaire was the Self-Esteem Questionnaire, which was developed by Dr. R.N. Singh and Dr. Ankita Srivastava. The twenty items are rated on a five-factor scale, with the positive scores being assigned to items 3, 4, 5, 6, 7, 11, 12, and 20 and the negative scores going to items 1, 2, 8, 9, 10, 13, 14, 15, and 18. There are five possibilities: excessive, excessive, average, low, and inadequate. Negative elements are scored in the opposite sequence from positive ones, according to a pattern of 5, 4, 3, 2, 1. This scale has a low score of 20 and a high score of 100. Scores between 20 and 60 are regarded as low, whereas 61 to 100 are regarded as high. Reliability was investigated using the split-half method at 0.86 and the test-retest coefficient of correlation. This scale's reliability for the English/Hindi model was.98.

perceived social support questionnaire, which was developed by Dr.Ritu Nehra, Dr. Parmanand Kulhara, and Dr. Santosh (1987). The questionnaire uses a four-point scale, with positive scores going to items 2, 4, 8, 9, 11, and 12 and negative scores going to items 1, 3, 5, 7, 10, 13, 14, 15, and 17. Positive items are scored differently than negative ones. The minimum score is 17 and the maximum score is 68. The ranges between 17 and 42 and 43 and 68 are regarded as low and high, respectively. This survey's validity is 0.80 and its reliability is strong ($r = .59$, $p > .01$), both of which are highly significant. Social support with a high score indicates a high level of social support, whereas social support with a low score indicates a lower level. well-informed and written consent from the patients about the study. Statistical analysis using SPSS 16.0 was done. A P value of 0.05 was regarded as significant.

Results

A correlation was computed between self-esteem and social support and between demographic variables like family type, education level, and treatment with self-esteem and social support.

Table-1
Demographic details of breast cancer patients

Variables	Frequency
Native place	
Rural	110
Urban	34
Family type	
Joint family	86
Nuclear family	58
Education	
Uneducated	67
Educated	77
Type treatment	
Pre-treatment	77
Follow-up	77

One hundred forty-four breast cancer patients completed the study. The age means the score of the patients was 44.38. Patients who underwent modified radical mastectomy made up 92.4% of the population, whereas BCS patients made up 7.6%. One hundred and ten patients belonged to rural areas, and 34 patients belonged to cities. 86 patients belonged to joint families and 58 to nuclear families. 67 patients were educated, and 77 patients were illiterate. There were equal numbers of patients in pre-treatment and follow-up.

Table -2
Correlation between self-esteem and social support

Variables	Mean	Standard Deviation	P value
Self-esteem	68.78	10.57	.049
Social support	50.86	8.41	

Seventy-eight percent of breast cancer patients reported having good self-esteem, whereas 21.5 % reported having low self-esteem. A high level of social support was found in 86.1% and a low level of social support was found in 13.9% of breast cancer patients. There was a significant association found between self-esteem and social support (.049).

Table 3
Association between self-esteem and demographic variables

Demographic variables		Self-esteem		P Value
		20-60 (Low)	61-100 (High)	
Family type	Joint	12 (14%)	74 (86%)	0.007
	Nuclear	19(32.8%)	39 (67.2%)	
Age type	<=45	19(21.34%)	70(78.66%)	.553
	>45	12(21.82%)	43(78.18%)	
Native place type	Rural	23(20.90%)	87(79.09%)	.456
	Urban	8(23.52%)	26(76.47%)	
Education	Uneducated	17(25.37%)	50(74.62%)	.199
	Educated	14(18.18%)	63(81.81%)	
Types of treatment	Pre-treatment	15(20.83%)	57(79.16%)	.500
	Follow-up	16(22.22)	56(77.77%)	

Patients from joint families had a low self-esteem rate of 14% and a high self-esteem rate of 86%. In nuclear, 32.8% of patients had low self-esteem and 67.2 had high self-esteem. Low self-esteem was discovered in 21.34% of patients under the age group of 45, and high self-esteem was reported in 78.66%. Over the age of 45, 21.82 % of people reported having low self-esteem and 78.18 % reported having high self-esteem. In patients who were related to rural areas, low self-esteem was found in 20.90% of patients, and high self-esteem was found in 79.0% of patients, whereas in patients who were related to urban areas, low self-esteem was found in 23.52% of patients, and high self-esteem was found in 76.47% of participants. Self-esteem was low in 25.37% of uneducated patients but high in 74.62%, and low in 18.8% but high in 81.82% of educated patients.Patients with pre-treatment had low self-esteem of 20.83% and high self-esteem of 57.16%. Among the follow-up patients, 22.22% of patients had low self-esteem and 77% had high self-esteem.

There was no significant difference found between self-esteem and family, natal place, age, education, and type of treatment, respectively.

Table 4
Association between social support and demographic variables

Demographic variables		Social Support		P Value
		17-42 (Low)	43-68 (High)	
Family type	Joint	8 (9.3%)	78 (90.7%)	0.04
	Nuclear	12 (20.7%)	46 (79.3%)	
Age type	<=45	15 (16.86%)	74(83.14%)	.114
	>45	5 (9.09%)	50(90.90%)	
Native placetype	Rural	14 (12.73%)	96(87.27%)	.319
	Urban	6 (17.65%)	28(82.35%)	
Education	Uneducated	12 (17.91%)	55(82.08%)	.145
	Educated	8 (10.38%)	69 (89.61%)	
Types of treatment	Pre-treatment	10 (13.88%)	62 (86.11%)	.595
	Follow-up	10 (13.88%)	62 (86.11%)	

Patients belonging to a joint family had low social support of 9.3% and 77.77% had high social support, while 20.7% of patients belonging to a nuclear family had low social support and 79.3% of patients had high. There was a significant difference found between social support and family (0.04).

Low social support was found in 16.80 percent of patients under the age of 45, whereas 83.74 percent of patients reported high social support. Meanwhile, 20.09 percent of participants over the age of 45 reported having low self-esteem, whereas 90.90% reported having high social support.

Low social support was found in 13.73 % of patients who were related to rural areas, and high social support was found in 87.27 % of patients. In contrast, low social support was found in 17.65% of patients who were related to urban areas, and high social support was found in 82.35% of participants.

Social support was low in 17.91% of patients who were uneducated but high in 82.08%; conversely, it was low in 10.38% of patients who were educated but high in 89.61%. Pre-treatment patients reported high social support (86.11%) and low social support (13.88%), respectively. Among the follow-up patients, 13.88% of patients had low social support and 62.11% had high social support.

Discussion

The aim of the study was to analyse the self-esteem and social support in breast cancer patients. A high level of self-esteem and social support were found in breast cancer patients, and a significant association was found between these factors. This finding is consistent with a study conducted by Aprilianto et al. (2021), and they indicated that there was a strong positive correlation between family support and a patient's self-esteem.

(Pardede et al., 2020) showed that breast cancer patients had strong family support and a high level of self-esteem. Family support and breast cancer patients' sense of self-worth were moderately correlated ($p = 0.01$). Breast cancer patients undergoing chemotherapy will have higher levels of self-esteem if they have more family support. Therefore, it is advised that all family members help the patient by providing care,

knowledge, and practical assistance so that the patient's quality of life and self-esteem will improve.

Thus, it can be said that self-esteem would be better and social support would also be better. It means a lower probability of the incidence of mental disorders over the course of the disease, during treatment, and in women after mastectomy (Kornblith et al., 2001). So breast.cancer patients had to be psychosocially strong.

Significant differences were found between the joint family members' self-esteem. Previous studies have shown that improved self-esteem and social responsibility in the joint family (Akhter Shayama, 2012).

Patients belonging to the nuclear family received high self-esteem and high social support. However, higher self-esteem and social support were found in the joint family than in the nuclear family. The family's role in the lives of breast cancer patients is important as the family makes decisions, manages funds, and provides emotional support and involvement during the illness (Alexander et al., 2019).

The patients' mean age was 44.38. Participants who were under forty-five years of age had higher self-esteem and more social support. Similarly, those who were more than forty-five years of age had higher self-esteem and social support. When we compared both the age groups, patients older than forty-five years had a higher score. In India, marriage provides strong personal and social security. Breast cancer patients who were over forty years old and had completed their families helped to overcome psychological reactions related to breast disfigurement (Khan et al., 2010). Self-esteem increases from adolescence to middle age, and it's high at the age of 50 to 60 years (Orth et al., 2008).

Breast-conserving surgery (BCS) patients were 7.63% and had higher self-esteem and social support. Due to the low number of BCS patients, we have not compared the self-esteem and social support of MRM and BCS patients.

Breast cancer patients were shown to have high levels of confidence and social support. They were significantly associated with patients who live in rural areas, educated individuals, and joint families are typically shown to have significant levels of psychological support.

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