
EVALUATION OF THE SELF-ESTEEM OF WOMEN WHO HAD UNDERGONE BREAST CANCER SURGERY¹

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ABSTRACT: This cross-sectional observational study with a quantitative approach was developed with women who underwent breast cancer surgery in the period from 2007 to 2009. The aim was to characterize women who underwent such surgery and to analyze their self-esteem. A questionnaire was used to evaluate the self-esteem with the collection of sociodemographic and clinical data and the Rosenberg Scale. The majority of the women were aged between 41 and 50 years, were married, catholic, had low levels of schooling and received on average three times the minimum wage. Regarding the clinical aspects, the majority underwent conservative surgery performed on the left side and received complementary treatments, mainly endocrine therapy. Concerning self-esteem, 54.10% of the women had high self-esteem; Cronbach's alpha of 0.77. The women who had high self-esteem were married, had returned to work, underwent breast reconstruction and had received no complementary treatment.

DESCRIPTORS: Self concept. Women's health. Nursing. Breast neoplasms.

AVALIAÇÃO DA AUTOESTIMA DE MULHERES SUBMETIDAS À CIRURGIA ONCOLÓGICA MAMÁRIA

RESUMO: Estudo observacional, transversal e com abordagem quantitativa, desenvolvido com mulheres que realizaram a cirurgia oncológica mamária no período de 2007 a 2009. Objetivou caracterizar as mulheres submetidas à cirurgia oncológica mamária e analisar a autoestima dessas. Para a coleta de dados, utilizou-se questionário relativo aos dados sociodemográficos e clínicos e a Escala de Rosenberg, para avaliação da autoestima. A maioria das mulheres que participou da pesquisa tinha entre 41 e 50 anos, era casada, católica, com baixa escolaridade e recebia em média, três salários mínimos. Quanto aos aspectos clínicos, a maior parte realizou cirurgia conservadora do lado esquerdo e fez tratamentos complementares, principalmente a hormonioterapia. Com relação à autoestima, 54,10% das mulheres apresentaram autoestima alta, alfa de *Cronbach* de 0,77. As mulheres que possuíam autoestima alta eram casadas, retornaram ao trabalho, realizaram reconstrução mamária e não fizeram nenhum tratamento complementar.

DESCRIPTORIOS: Autoimagem. Saúde da mulher. Enfermagem. Neoplasias da mama.

EVALUACIÓN DE LA AUTOESTIMA DE MUJERES QUE SE SOMETIERON A CIRUGÍA DE CÁNCER DE MAMA

RESUMEN: Estudio observacional transversal con abordaje cuantitativa desarrollado con mujeres que realizaron cirugía oncológica mamaria en el período de 2007 a 2009. Objetivó caracterizar las mujeres sometidas a esa cirugía y analizar su autoestima. Se utilizó un cuestionario para evaluación de la autoestima con coleta de datos socio demográficos, clínicos y la Escala de Rosenberg. La mayoría de las mujeres que participaron de la pesquisa tenía entre 41 y 50 años, eran casadas, católicas, con baja escolaridad y recibían en promedio, tres sueldos mínimos. Cuanto a los aspectos clínicos, la mayor parte realizó cirugía conservadora del lado izquierdo y hicieron tratamientos complementares, principalmente hormonoterapia. Con relación a la autoestima, 54,10% presentaron autoestima alta; alfa de *Cronbach* de 0,77. Las mujeres que poseían autoestima alta, eran casadas, retornaron al trabajo, realizaron reconstrucción mamaria y no hicieron ningún tratamiento complementar.

DESCRIPTORIOS: Autoimagen. Salud de la mujer. Enfermería. Neoplasias de la mama.

INTRODUCTION

The term cancer (CA) can be used to represent a set of more than 100 diseases, which includes malignant tumors of different locations. Currently in Brazil, breast CA is specifically seen as a public health problem, as it is the most common neoplasm in females, with the exception of non-melanoma skin CA.¹

Although controversial, the risk factor triggers seem to increase the chance of developing this disease. Age is the most important, as the incidence rates increase rapidly until 50 years of age and then decrease (this fact has been associated with the onset of menopause).¹ In addition to this factor, it is important to highlight that other factors should be observed: being female, early menarche, nulliparity, aged over 30 years at first full-term pregnancy, use of oral contraceptives, late menopause, hormone replacement therapy, family history of breast CA, physical inactivity and depressive personality.^{1,2}

After confirmation of the diagnosis, the woman feels that her female identity is being questioned because the breast is a symbol of body beauty, fertility, femininity and health in all the stages of a woman's life.^{2,3} Breast CA disrupts women in a way that brings uncertainty about life to their existence, as well as the possibility of disease recurrence, and doubt about the success of the treatment. It initiates a range of feelings such as grief, anxiety, depression, anger, sadness, desperation, powerlessness, helplessness and fear (due to both the mutilation and the loss of some people from the social group). It is common for the women to deny the disease at first and to develop the belief that the surgery will be the main factor in resolving the issues of conflict. However, each one requires her own subjective time to deal with the consequences of this diagnosis and to establish ways of dealing with it. In this phase of the diagnosis the primary concern lies in the survival; then with the prescribed treatment and subsequently with the routine faced with their new health condition.^{2,4}

With this, the personality of the woman will determine her way of coping with the disease and hence her well-being. Women with greater self-confidence, emotional stability, positive thoughts and high levels of self-esteem (SE) will have a greater propensity for psychological well-being. Furthermore, religious beliefs about coping with the disease can help patients interpret this situa-

tion as a test of God to reaffirm the meaning of life and personal growth.³

Among the therapeutic modalities for breast CA, the most used are: radiotherapy (RT), chemotherapy (CT), endocrine therapy and surgery.⁵ Specifically regarding surgery, the surgical act is seen as aggressive and worrying, causing emotional changes in the women, such as nervousness, irritability, uncertainty and conflict.⁴

Normally, they are unprepared to undergo the surgical removal of the breast, as they carry with them questions about what will be removed, and whether there will be a need for further treatment, and what care they should take after the surgery, among others. This lack of information, associated with the pain and physical limitations the women have in the postoperative period, aggravates the emotional and social conflicts they will be experiencing.⁶ The surgical treatment is required in almost all cases and provokes changes in the self-concept and body image. The distortion in the body image occurs mainly in women undergoing mastectomy and begins with an aversion toward themselves, manifested, for example, as difficulty in looking in the mirror and in resuming their sex lives.^{4,6}

Concomitant to the changes experienced in the body, there is the inability to fulfill social commitments and there are changes in relation to the social life (family, friends, and work). This is due to the prejudice and stigma associated with CA, which results in the withdrawal of some people and in the emergence of situations of embarrassment that hinder the understanding of the women regarding the CA.²

Therefore, the nursing team must establish therapeutic communication with the patient. This aims to provide an affective and conscious relationship between them, in order to assist the women in coping with stress, to exist with other people and to adjust to what can not be changed. This bond, associated with the access to information, induces the women to speak about their discomforts, anxieties and fears, which makes the process of coping with the disease less stressful and exhausting.⁷

Regarding SE, there are several definitions for the construct in the literature and, although there is no consensus, they all refer to the value and the competence of the individual.⁸ It can be defined, for example, as the feeling, appreciation and consideration that the person has about

herself; how much she likes herself, how she sees herself and what she thinks of herself.⁹

Self-esteem can be classified as high, average or low. Having high SE is to feel confidently adequate for life, it is to tend toward a 'positive affect', to believe in one's own competence and value, to demonstrate an ability to deal with challenges and to be able to adapt more easily to a given situation. Have average SE is to fluctuate between feeling adequate and inadequate, right or wrong as a person. Low SE is to feel oneself wrong as a person. Typically, these individuals are more sensitive to criticism, have feelings of worthlessness, inferiority, isolation, insecurity, rigidity, fear of the new, conformism and a defensive posture. The higher the SE, the better equipped a person is to deal with life's adversities and the more likely they are to succeed and maintain healthy relationships.^{8,10}

Thus, the way one feels about oneself crucially affects all aspects of the life experiences. Self-esteem constitutes the key to the success or failure of a person and to understanding him/herself and others. It also reflects the ability to cope with life's challenges, to respect and defend one's own interests and requirements.¹⁰

The study aimed to characterize women who underwent breast cancer surgery at a clinical hospital and to analyze their self-esteem.

METHOD

This observational, cross-sectional, quantitative study, developed at the Gynecology and Obstetrics Clinic of the Clinical Hospital of the Triângulo Mineiro Federal University (UFTM) in Uberaba-MG, was carried out through an active search for women who underwent breast cancer surgery from 2007 to 2009. All the women over 18 years of age, who underwent breast cancer surgery at least one year previously, residents in Uberaba-MG, and who agreed to participate in the study through understanding and signing the Terms of Free Prior Informed Consent were included in the study. Women under 18 and/or those who were undergoing chemotherapy and/or radiotherapy at the time of data collection were excluded from this study. Thus, the population consisted of a total of 48 people, divided into 16 women for each year of the study period. Of those studied, only 37 (77%) were interviewed due to the following reasons: four changed address and

were not found, two moved to other cities, two were not in Uberaba during the data collection period, two died and one could not be located in the hospital records.

Two instruments were used for the data collection. The first, constructed by the researchers of this study, considered the demographic and clinical data of the women who had undergone surgery. Subsequently, the Rosenberg Scale was applied to evaluate the SE.⁹ This is a self-administered scale and consists of ten questions with the following response options: strongly agree, agree, disagree and strongly disagree. For each response a score of importance is assigned ranging from 1 to 4, with this value decreasing for the affirmative questions (1, 3, 4, 7 and 10) and increasing in the others. For the classification of SE, all the items are summed, which provides a single value for the scale. According to the total, SE can be rated as satisfactory or high (score greater than 31 points), average (score between 21 and 30 points) and unsatisfactory or low (scores below 20 points). Thus, the greater the overall score, the higher the SE.

The software program Statistical Package for the Social Sciences (SPSS) version 11.5 was used to calculate the SE scale scores. In the bivariate analysis of quantitative variables Pearson's correlation coefficient was used, and the comparison of means between known groups was used for the analysis between quantitative outcomes and categorical explanatory variables. Analysis through the t test for independent samples was used to evaluate the quantitative and categorical variables, and to verify whether the results were statistically significant ($p \leq 0.05$). It is noteworthy that the p values should be interpreted considering the assumption that the study group constituted a simple random sample from a population with similar characteristics.

The study was initiated after approval by the Human Research Ethics Committee (HREC) of UFTM under the Protocol. 1.629. It is emphasized that this work is part of a larger study entitled 'Self-esteem and quality of life of women undergoing breast cancer surgery at least one year ago'.

RESULTS AND DISCUSSION

Table 1 presents the sociodemographic characteristics of the study participants.

Table 1 - Sociodemographic characterization of the women who had undergone breast cancer surgery. Uberaba-MG, 2011

Variables	n	%
Age group (in years)	36 - 40	2 5.4
	41 - 50	13 35.1
	51 - 60	10 27.0
	61 - 70	6 16.2
	71 - 80	5 13.5
	81 - 90	1 2.7
Schooling (in years)	No schooling	4 10.8
	One to four	13 35.1
	Five to eight	9 24.3
	Nine to eleven	8 21.6
Marital status	Twelve or more	3 8.1
	In a stable union	16 45.9
	Not in a stable union	20 54.1
Religion	Catholic	17 45.9
	Evangelist	9 24.3
Average monthly family income (in x minimum wage)	Spiritualist	11 29.7
	One to two	13 35.1
	Two to three	11 29.7
	Over three	12 32.4

The mean age was 56 years, with a median of 53 years, which varied from 36 to 90 years. The majority of the women studied (62.1%) were in the age group 41-60 years of age, slightly surpassing the predominant age range for the incidence of breast CA, which goes up to 50 years of age.¹ At the same time, this data is in agreement with another study¹¹ that considered breast CA to be rare prior to the age of 35. In the present study there were no occurrences below that age.

The majority of the women were not in a stable union at the time of interview. It should be noted that those married or living with a steady partner were considered to be in a stable union, and the single, divorced, widowed, and separated women were considered not to be in one.

With regard to religion, none of the women claimed not to be religious, nor did any cite a religion that was not covered in the questionnaire. Of the 37 respondents, 27 considered themselves religious practitioners (73%) and 10 non-practitioners. Religious beliefs, expressed through prayers, meditations and rituals, are common mechanisms that people rely upon in times of illness.¹² The more extreme the gravity, the more it intensifies the religious connection and affects the making of decisions related to the direction of the treatment, which is influenced by the religious context in

which the patient is.¹³ The pursuit of religion then becomes one of the ways the women lessen the impact of coping with breast CA, as it facilitates the process of accepting the disease and the activities/restrictions imposed by it.¹² Faith in the cure is based on the belief of the existence of a 'Higher Being', which provides hope and trust. Thus, faith acquires the function of establishing a covenant with life and becomes an ally against the disease.^{5,14}

The majority had a family income between one and two times the minimum wage, it should be noted that the minimum wage in the period of data collection was R\$545.00 (five hundred forty-five Brazilian Reais). The majority of the women, 25 (67.6%) worked prior to the surgery, however, up to the time of the interview, only 11 had returned to work. The mean time to return to work was five months after the surgery and ranged from 15 days to 22 months.

According to a study conducted in the city of Ribeirão Preto in 2010, some reasons given for not resuming work were: the physical limitations resulting from the treatment that were incompatible with the previously performed function, the difficulty in reconciling roles, and a change in life priorities, excluding the function performed. The desire to return to work was principally motivated by a need to assist their families financially, as, if they did not work, it would negatively effect the household budget, attesting to their condition of dependency (which would lead to them often recalling their health condition and limitations). The respondents also wanted to occupy their time with a useful and socially valued activity.¹⁵

Table 2 - Clinical characterization of the women who had undergone breast cancer surgery. Uberaba-MG, 2011

Variables	n	%
Type of surgery	Conservative	20 54.1
	Radical	17 45.9
Side of surgery	Right	14 37.8
	Left	21 56.8
	Right and left	2 5.4
Time since surgery (in months)	12 - 24	8 21.6
	25 - 36	17 45.9
	37 - 52	12 32.4
Complementary treatments	Yes	35 94.6
	No	2 5.4

Table 2 refers to the clinical characterization of the women who had undergone breast cancer

surgery. The mean time since the surgery was 31.7 months. Most of the women underwent conservative surgery on the left side, and, for the majority, this did not correspond to the dominant side of the patient (54.1%). Some prospective randomized trials have shown that the survival rate is not related to the type of surgery, leading to the choice of conservative surgery as it is less mutilating.¹⁶

Regarding the complementary treatments, 29 women (78.40%) underwent endocrine therapy, 18 (48.6%) radiotherapy, 15 (40.5%) adjuvant chemotherapy, and seven (18.9%) neoadjuvant chemotherapy.

Of the women studied, four (10.8%) underwent breast reconstruction, and the time to perform this ranged from three to twenty months from the date of surgery, with the mean being 13.25 months and the median 15 months. Many of the women expressed interest in performing this procedure, however, they were affected by numerous doubts and fears, especially fear of the pain. They were unaware of the right to reconstructive plastic surgery for the breast provided by the Brazilian National Health System (SUS), in cases of mutilation resulting from treatment for CA (Law 9.797 of 06 May 1999).¹⁷ The most common motivations for performing breast reconstruction are: to feel whole again, to eliminate the external breast prosthesis, to be able to vary the style of clothing, to improve the SE and a desire to resume the social life.^{4,18}

Regarding SE, the minimum score obtained was 19 points and the maximum 40, with the mean being 30.32 and the median 31. The standard deviation was 4.58 and the Cronbach's alpha 0.77. Only one (2.7%) woman presented low SE, 16 (43.2%) women had average SE and 20 (54.1%) women high SE.

The prevalence of high SE can be explained by the mean age of the respondents (56.11 years), as SE tends to increase with age⁸, as well as the time elapsed between the surgical procedure and the interview, mean of 31.7 months. Of these 20 women, 11 (55%) had stable unions and four (20%) had undergone breast reconstruction. The presence of the partner has been shown to be significant in combating the disease due to facilitating the reintegration of the woman into the family context.² As the minority who had high SE had undergone breast reconstruction, it is suggested that there are other factors involved such as resilience, the social network, and the changes in a woman's life caused by the diagnosis and treatment.

A moderate and positive correlation between SE and education was noted (Table 3). It is assumed that the higher the level of education, the greater the access to information and, consequently, the greater the understanding of the situation. The women start to value the fact that they are survivors of breast CA and attach less value to the breasts, feeling themselves to be more peaceful, secure and confident, reflecting positively in their SE.

Table 3 – Pearson's correlation between self-esteem and the sociodemographic and clinical variables. Uberaba-MG, 2011

	Self-esteem Pearson's correlation (r)	P
Age (complete years)	0.18	0.29
Schooling	0.32	0.05
Family income	0.06	0.70
Time since surgery (months)	0.02	0.90

In table 4, the distribution of the SE classification in relation to the qualitative variables can be observed in detail.

Regarding the type of surgery and SE, the majority of the women in both groups presented high SE, with the percentages being equivalent. This finding contradicts the findings of some studies,^{14,19} as in these, radical surgery affected the SE and body image of the patients and was cited as a source of emotional and physical distancing between the mastectomized woman and her partner. This can be justified because in these studies, this impact is more pronounced in the period immediately after surgery and, in the present study, the minimum time since the surgery was 12 months.

In relation to the side of surgery, it was noted that if this occurred on the dominant side the SE scores tended to be lower, as the impact and limitations more strongly prejudice the return to the routine activities of the women, mainly due to the fear of lymphedema.¹⁵ In this study, two women underwent bilateral mastectomy surgery: one presented low SE and the other high SE; this demonstrates the possible influences of resilience, of the value assigned to the breasts, and of previous experiences. The one with low SE said that she did not leave her home anymore as she imagined her clothes would show her mutilation, she was ashamed and demotivated, and she could no longer look in the mirror.

Table 4 - Evaluation of self-esteem according to the qualitative variables. Uberaba-MG, 2011

Qualitative variables		Low self-esteem	Average self-esteem	High self-esteem
		n (%)	n (%)	n (%)
Type of surgery	Conservative	-	10 (27.03%)	10 (27.03%)
	Radical	1 (2.70%)	6 (16.22%)	10 (27.03%)
Side of surgery	Right	-	9 (24.32%)	5 (13.51%)
	Left	-	7 (18.92%)	14 (37.84%)
Surgery on the dominant side	Right and left	1 (2.70%)	-	1 (2.70%)
	Yes	1 (2.70%)	10 (27.03%)	6 (16.22%)
Complementary treatments	No	-	6 (16.22%)	14 (37.84%)
	Yes	1 (2.70%)	16 (43.20%)	18 (48.65%)
Breast reconstruction	No	-	-	2 (5.40%)
	Yes	-	-	4 (10.81%)
Returned to work	No	1 (2.70%)	16 (43.20%)	16 (43.20%)
	Yes	-	3 (11.11%)	8 (29.63%)
Marital status	No	1 (3.70%)	8 (29.63%)	7 (25.93%)
	With steady partner	-	8 (21.62%)	9 (24.32%)
Religion	Without steady partner	1 (2.70%)	8 (21.62%)	11 (29.73%)
	Catholic	-	8 (21.62%)	9 (24.32%)
Religion	Evangelist	1 (2.70%)	6 (16.22%)	2 (5.40%)
	Spiritualist	-	2 (5.40%)	9 (24.32%)

With regard to the complementary treatments, among the seven women who underwent neoadjuvant CT, four (54.15%) presented average SE and three (42.85%) high SE; of the 15 who underwent adjuvant CT, one (6.67%) presented low SE, six (40%) average SE, and eight (53.33%) high SE. Of the eighteen women who underwent RT, nine (50%) presented average SE, nine (50%) high SE and, finally, of the 29 who underwent endocrine therapy, 12 (41.4%) presented average SE and 17 (58.6%) high SE. The two who did not perform any of the aforementioned complementary treatments had high SE. Despite knowing that the systemic therapies and the hormonal adjuvant therapies negatively influence the quality of life of patients and their SE, due to the adverse effects (decreased physical function, role performance and body image, and increased symptoms of anxiety, fatigue, nausea, vomiting and constipation),²⁰ the present study did not encounter this result. This was probably because the women had undergone the treatment at least one year prior to the date of the interview and also due to the fact that undergoing CT and/or RT at the time of the interview constituted an exclusion criterion for participation in the study. While CT, particularly adjuvant CT, aims to decrease the chance of recurrence by eradicating micrometastases, and increase the survival of

the patients²¹, the performance of this treatment can also constitute a belief and a hope for a cure, raising the level of SE.

All the patients who underwent breast reconstruction had high SE, corroborating the findings of other studies.^{4,18} According to these studies, this procedure and especially the possibility of changes in clothing style, provide improvements in the SE, in the self-image, in the sense of femininity, and in the sexual relationships of the women.

Among those who returned to work, 72.73% had high SE, while those who had not returned to work presented average SE (50.0%). The return to work is important not only from the social point of view, since absenteeism is costly to both the employee as well as the employer, but also for the rehabilitation of the women, their survival, quality of life and physical and mental health. In the present study, 40.74% of the women who worked returned to their jobs. This percentage could be increased through good communication between employee and employer, with early contact with the workplace and with the adaptations in the service (flexibility with regard to working hours and/or a gradual return).²²

Regarding the marital status, the majority were married and among these, nine (56.25%) had high SE. Marriage probably influences the

health, social status and survival, and provides support for many procedures and psychological alternatives.⁵

The religious choice of the patient showed no influence on the classification of their SE. This highlights that the important thing is not the religion but the belief in a 'Higher Being' that provides support for coping with the disease and its repercussions.

Table 5 shows the evaluation of SE in relation to the qualitative variables. The significant differences are highlighted between the means for the women who underwent, or did not undergo, surgery on the dominant side and breast

reconstruction. The fact that the surgery limits the movements of the ipsilateral side results in the loss of the ability to perform certain activities that were once part of their routine. This can directly influence their SE, as they begin to have feelings of inferiority.

Also known as 'reverse mastectomy', breast reconstruction is considered the most effective method for the restoration of the psychological well-being after mastectomy. It improves the body outline, preserves or restores the personal integrity, increases optimism for a cure, and contributes to sexual identification, thus increasing the SE and improving the self-image.¹⁷

Table 5 - Evaluation of self-esteem according to the qualitative variables. Uberaba-MG, 2011

Qualitative variables		Mean	Standard Deviation	Minimum	Maximum	P
Type of surgery	Conservative	29.95	4.35	21.00	37.00	0.60
	Radical	30.76	4.93	19.00	40.00	
Surgery on the dominant side	Yes	28.53	4.89	19.00	36.00	0.03
	No	31.85	3.77	26.00	40.00	
Breast reconstruction	Yes	35.25	4.42	31.00	40.00	0.02
	No	29.73	4.28	19.00	37.00	
Worked prior to the surgery	Yes	29.92	5.15	19.00	40.00	0.45
	No	31.17	3.07	26.00	37.00	
In a stable union	Yes	30.00	3.74	23.00	36.00	0.70
	No	30.60	5.27	19.00	40.00	

CONCLUSION

The population was mainly composed of women between 41 and 50 years of age, with low levels of schooling, who were married, and were Catholic. Among those who worked most had not returned to work and received on average three times the minimum wage. With regard to the clinical aspects, the majority underwent conservative surgery on the left side, 25 to 36 months prior to the interview, and underwent complementary treatments, especially endocrine therapy.

Regarding SE, the majority presented high SE, with a Cronbach's alpha of 0.77. A moderate positive correlation was identified between SE and education, as well as statistically significant differences between the means of SE with regard to women who had, or had not, undergone surgery on the dominant side and breast reconstruction. The women who presented high SE were married, had returned to work, had performed breast reconstruction, and had undergone no complementary treatment or endocrine therapy only.

Considering that publications regarding the SE of women with breast cancer in the late postoperative period are still limited, it is believed that this study will add, endorse and identify the needs affected and/or overcome by these women. In practice, this identification may result in the implementation of nursing proposals, such as the formation of groups aimed at maintaining high self-esteem and offers of support for those with needs still to be met, considering that the physical and psychosocial rehabilitation does not end with the finalization of the surgical procedures.

This study has limitations regarding the non-analysis of the co-morbidities, the tumor stage at diagnosis and the type of tumor, as well as being a small population. It is suggested that in future studies these data are checked in order to determine the possible influence of these factors on the SE of women with breast CA, since the results of this study differ from other studies with respect to SE.

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