

## RESEARCH ARTICLE

### Evaluation of body image after mastectomy due to breast cancer in women referred to Imam Khomeini clinic in Hamadan

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#### ABSTRACT


**Background:** Cancer is the third leading cause of death in Iran, and breast cancer is the most common cause of death in Iranian women. Cancer and cancer treatment can have a profound effect on the appearance of the patient. **Aims and Objectives:** The present study was conducted to examine the body image of women with mastectomy breast cancer in patients. Another purpose of the study is to examine the relationship between factors such as education, the number of pregnancies, age, and sexual satisfaction with the physical image. **Materials and Methods:** This descriptive-analytical study was performed on 71 mastectomy women in 2016 at Imam Khomeini Clinic in Hamadan. Data were collected using a demographic questionnaire and lactational amenorrhea method questionnaire for examining body image. Participating subjects were selected by picking clients meeting the inclusion criteria from the list of patients referred to the clinic and based on a random number table. **Results:** In this study, 6.74% of mastectomy women had a moderate body image, and 4.25% had poor physical image. Education, age, and the number of pregnancies did not have a significant correlation with physical image; rather, their relationship was inverse. No significant relationship was found between body image and sexual satisfaction. **Conclusion:** Due to the low body mass index after mastectomy, it is necessary for the planners of the treatment centers to pay more attention to the psychological field and help cancer patients with the help of experienced specialists.

**KEY WORDS:** Breast Cancer; Mastectomy; Body Image

#### INTRODUCTION

Cancer is one of the major causes of mortality in human societies; nowadays, with one-third of all cancers in

women and the second leading cause of death from cancer, breast cancer is one of the most common causes of human mortality.<sup>[1]</sup> According to the WHO, the incidence of this cancer is increasing in the world.<sup>[2]</sup> Evidence suggests that about 60% of cases of breast cancer in Iran occur in women under the age of 50 years; of this, about one-quarter is 22–24% of young women under 40, whereas in advanced countries, only 7% of patients are under the age of 40, and in most cases, patients are over 50 years' old.<sup>[3]</sup> Cancer and its treatment can have a profound effect on the physical appearance of patients.<sup>[1]</sup> For most patients, changes in appearance are very uncomfortable and often even more

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difficult to deal with than other secondary symptoms, such as nausea and vomiting.<sup>[4]</sup>

Cancer treatment may result in major changes to the body image due to the lack of an episode, malformation, ulcers, or physical changes. Radiography may cause tissue damage and internal changes over the years, the effects of surgery are more immediate, but often lasting, while transient, reversible changes (such as loss of hair) may be due to systematic chemotherapy.<sup>[5]</sup> More general changes, such as weight gain, may mediate in the reversibility and duration of the disease.<sup>[6]</sup> Furthermore, physical appearance is one of the components of female sexuality, because having an acceptable body is associated with satisfactory sexual life, and this satisfaction increases the self-esteem of women.<sup>[4]</sup> Diagnosis of the disease and treatments such as radical surgery, radiation therapy, chemotherapy, breast reconstruction, and mastectomy associated with breast reconstruction are related to the image of the female body. Physical treatments in sexually active women can lead to major concerns such as Increase or decrease weight, change in appearance, skin texture and sensitivity.. These changes affect the lives of patients in terms of social activities, daily activities, and communication.<sup>[7,8]</sup>

Body image is an important component of the quality of life of a cancer patient and plays an important role in adapting to the disease.<sup>[4]</sup> 80% of the surgeries performed for the treatment of cancer patients are mastectomy in Iran.<sup>[8]</sup> Mastectomy causes complete destruction of the body image of the patients and has a profound effect on the patients' mental status.<sup>[9]</sup> Mastectomy can cause feelings of disability, disorientation in the mental image of the body, and diminished charm and sexual function and provide context for mood disorders.<sup>[10]</sup> Body image is a person's perception of the size and proportion of the body that accompanies the thoughts, feelings, and views of other individuals toward his body and has a multidimensional structure that includes two distinct parts of the perception and the viewpoint.<sup>[9]</sup> In most recent perspectives, the physical image of a multidimensional structure consists of cognitive, emotional, and behavioral elements. Patients who have better feelings about their own body have stronger beliefs about the disease and its treatment.<sup>[6,9]</sup> Although some empirical evidence studies have shown positive effects on the adaptability of breast cancer patients, they have generally shown that those who are more concerned about their appearance are more vulnerable in the face of extermination in the treatment of cancer.<sup>[11]</sup> Studies have shown that there is a significant difference in the quality of life, general health, and depression among people with cancer.<sup>[1]</sup> Breast cancer has a detrimental effect on sexuality, body image, intimate relationships, and quality of life in women with breast cancer.<sup>[12]</sup> Since most cases of breast cancer in Iran are observed among young women who have a family history, the identification and evaluation of these factors can be helpful in the promotion of marital satisfaction and general health.<sup>[13]</sup> Therefore, the aim of this study was

to investigate the body image and its effect on mastectomy women.

## MATERIALS AND METHODS

This is a descriptive-analytic study and sampling was done at Hamadan Imam Hospital from October 2016 to June 2017. Participating subjects were selected by picking clients meeting the inclusion criteria from the list of patients referred to the clinic and based on a random number table. Inclusion criteria were including having stage one or two diseases after chemotherapy, spouse over 25 years of age, failure to perform lumpectomy, having reading and writing skills, non-addiction, lack of underlying illnesses, and living in complex units under study in Hamadan. First, a demographic questionnaire was prepared by the researcher that includes demographic characteristics of the clients. The life after mastectomy questionnaire was completed by 71 people who had undergone mastectomy due to breast cancer; this questionnaire includes a list of questions about life after mastectomy. The answer to this questionnaire is within a range of six options, from I totally disagree with the number one to I totally agree. Seven questions from this questionnaire (3, 5, 7, 9, 11, 13, and 14) were reciprocally scored. The score below 30 represents a good physical image, between 30 and 60 represents moderate body image, and above 60 represents poor body image. A higher score indicates the severity of the problem. The validity of the questionnaire was determined by a number of faculty members. The reliability of the questionnaire was 0.85, according to Cronbach's alpha. Questionnaires were provided to 71 mastectomized women. Clients were confident about the confidentiality of the information. Finally, the data were analyzed by SPSS20.

## RESULT

The mean age of the subjects was between 43 and 45 years' old. 52.7% of the subjects had the minimum literacy and could just read and write, 54.7% had lower than diploma, and 57.66% had university education.

The minimum score was 33, and the maximum was 81. In this questionnaire, the lower score indicates a greater satisfaction with the body image [Table 1].

Frequency of body mass index in mastectomy women showed that 74.6% of mastectomy women had a moderate body image of themselves and 4.25% had poor body image [Table 2].

**Table 1:** Mean score of body image in mastectomy women  $n=71$

Standard deviation	Average score	Minimum	Maximum
12.07	53.42	33	81

Furthermore, there was no significant correlation between demographic variables such as age, number of pregnancies, number of children, and sexual satisfaction [Table 3] ( $P > 0.05$ ). However, with increasing age, the number of pregnancies, and the number of children, the score of the body images increased and the satisfaction of the subjects decreased.

## DISCUSSION

Considering that today the survival rate in breast cancer patients has increased, and due to the physical and psychological outcomes of treatment that have a significant effect on the life of patients, this study needs to be improved. The purpose of this study is to examine the body image of mastectomy women and the impact of factors such as education, age, number of pregnancies, and sexual satisfaction. In this study, the majority of subjects turned out to have a modest body image, and in some cases, the body image turned out to be weak. Education, age, and the number of pregnancies did not have a significant relationship with body image; rather, their relationship was inverse, which means that the higher the number of pregnancies, education, and age, the lower the satisfaction with the body image. Physical image can play a significant role in the psychological functions of women with cancer.<sup>[15]</sup> In the present study, no correlation was found between physical image and sexual satisfaction and other studied factors; however, sex, body image, and marital life were found to be harmed after breast cancer in the study of Teo *et al.*<sup>[7]</sup> In Unukovych *et al.* review of the physical image and marital life of women with breast cancer, low quality of marital satisfaction was observed in women with breast cancer.<sup>[16]</sup> According to Esfandiari *et al.*, there was no significant relationship between sexual satisfaction and body image.<sup>[3]</sup> The results of Fobair *et al.* study indicated that physical problems in mastectomized women are more

than healthy subjects.<sup>[5]</sup> The study of Rajabi *et al.* confirms the reduction in body image satisfaction and the concerns of women with breast cancer about their body image.<sup>[17]</sup> There is a significant relationship between age, marital status, income, and education with the quality of life in Masoumi *et al.* study; it is inversely related with age and directly with other criteria. Also, the type of surgery is related to the quality of life. Quality of life in patients with breast-maintaining surgery is higher than mastectomy patients.<sup>[6]</sup>

The strengths of this study were to examine the relationship between factors such as education, age, and other factors with body image. The lack of follow up and the lack of honest cooperation between patients were the limitations of this study.

## CONCLUSION

Women with breast cancer, especially those who undergo mastectomy, experience serious physical damage because they lose parts of their body; this causes them to become gradually less sensitive to how they look. In the process of generalized breast cancer, attention and treatment are focused on physical improvements in these patients, while physical illnesses have psychological trauma. Hence, after treatment and after controlling the physical dimension of the disease, the psychological injuries might sustain for a long time; therefore, it is necessary for the planners of the treatment centers of this disease to pay attention to the psychological field and help cancer patients with the help of experienced specialists.

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**Table 2:** Frequency surfaces of body image in mastectomy women

Frequency of body image index	n (%)
Weak	18 (25.4)
Medium	53 (74.6)
Good	0 (0)
Total	71 (100)

**Table 3:** Body image associated with certain demographic characteristics

Variable	P	The correlation coefficient
Age	0.554	-0.73
Gravid	0.584	-0.068
Number of children	0.095	-0.204
Sexual satisfaction after mastectomy	0.146	0.178

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