

## Original Article

## The Body Appreciation and Sexual Quality of Life in Pre - and Postmenopausal Women with Mastectomy

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### Abstract

**Background:** Sexual life and body appreciation are an important yet underreported part of a woman's life who had mastectomy. Unfortunately, there are few studies available about breast cancer patients, who are in a menopausal period or its effects on sexuality and body appreciation.

**Purpose:** The purpose of this study was to evaluate the body appreciation and sexual quality of women with mastectomy in pre - and postmenopausal period.

**Design and Methods:** This questionnaire-based descriptive study was conducted 300 women in Turkey using structured questionnaires (Sexual Quality of Life Questionnaire-Female (SQLQ-F) and Body Appreciation Scales (BAS)).

**Findings:** The SQLQ-F of the women who were in postmenopausal was high, BAS was low. SQLQ-F who had a good marital relationship and whose relationship with husbands were affected in a positive was higher. There was a positive correlation between BAS and SQLQ-F.

**Practice Implications:** The findings emphasized it is necessary to provide a multidisciplinary approach to women with mastectomy according to their menopausal status in terms of body appreciation and sexual life.

**Key words:** body appreciation, mastectomy, menopause, sexual life quality

### Introduction

Breast cancer is the most common deadly cancer worldwide (Bray et al., 2018), unfortunately, in Turkey it is also the most common cancer among women (Turkish Health Ministry Report, 2019). Today, there are many effective surgical and medical treatments. These treatments increase the chances the survival rate of these women, but they also can cause undesirable complications. Diagnosis and surgical treatments of breast cancers are associated with major physical and psychological stress for women and can influence their lives negatively. Its treatment like chemotherapy directly influences a woman's body appreciation and sexual functioning (Rezaei et al., 2016). Furthermore, prophylactic mastectomy affects sexual quality of life and body appearance in women in an unfavorable way (Alaofi, Nassif & Al-Hajeili, 2018). Surgical and medical treatments of breast cancer can lead to the deterioration of psychosocial adaptations and can affect the spouse/ family and social relations

negatively (Rezaei et al., 2016; Yildiz & Hicdurmaz, 2019; Zimmerman, 2015; Albers et al., 2020). In addition, weight gain after a mastectomy due to treatment can increase sexual problems and can cause one to feel shame about their appearance and charm (Cil Akinci & Aksoy, 2019; Chang, Hu, & Cang, 2019). There is also an increase in the costs of health care to treat the disease itself and the possible psychological problems, which could reduce adherence to treatment (Bag, 2013). On the other hand, physiologic changes in menopause can change body's appearance and function that may disturb body and then lead to negative body appearance and sexual life (Sibar et al., 2020).

Negative body image among breast cancer patients include dissatisfaction with appearance, perception of loss of femininity and body integrity, reluctance to look at one's self naked, feeling less sexually attractive, and self-consciousness (Kocan & Gursoy, 2016; Chang, Hu, Cang & Chiu, 2019). Sexual life is an

important component in the lives of women. However, despite the importance of sexual function in menopausal women, sexual dysfunction increases with age. Sexuality may impact quality of life through effects on the emotional and psychological health of woman with breast cancer (Rezaei et al., 2016; Thornton et al., 2015). Menopause and age are important factors for patients with a mastectomy and can affect various age groups in different directions. Studies showed that sexual problems and body appearance problems are higher among young women with breast cancer who then seek professional help to cope with the problems (Miaja et al., 2017; Taze&Kanan, 2020). However, older women do cope with life changes due to breast cancer diagnosis and mastectomy (Campbell-Enns & Woodgate, 2015).

Sexual life and body appreciation are an important yet underreported part of a woman's life. Breast cancer diagnosis in individuals must have the support from healthcare professionals regarding their physical and emotional needs (Ertem & Donmez, 2017). Therefore, the detection of sexual and a body appreciation problem in women with breast cancer is important. There seems to be an increasing interest in research. Unfortunately, there are few studies available about breast cancer patients, who are in a menopausal period or its effects on sexuality and body appreciation.

Furthermore, health care providers are not properly trained to understand the patient's complaints or how to obtain an adequate sexual history (Chang, Hu, Cang, & Chiu, 2019). This is a key factor behind current difficulties in assessing sexual quality of life and body appearance in breast cancer patients. Universally, health care provider function mainly in a caregiver role focusing on treatment delivery, education and symptom management. However, diagnosis and surgical treatment of breast cancer is associated with major physical and psychological stress for women and can influence their lives negatively. Health care provider are in a unique position to influence both the physiologic and psychological well-being of breast cancer patients, helping cancer survivors to cope with the immensity of their experience and its resulting impact on their lives (Chang, Hu, Cang, & Chiu, 2019). They also have led important initiatives addressing psychosocial needs. Health care provider play a central role in the recognition and management of cancer patients' problems. From this point, it is important

to provide holistic approach to women with mastectomy. They can also help to improve quality life by asking patients with mastectomy about obstacles to sexual life and body appreciation that they encounter and by helping patients develop strategies to increase quality of life. Studies on women with breast cancer can help us to understand and improve patients' health better, and we can continue to learn about possible similarities or differences when comparing the two groups. Based on these needs, the aim of this study was to evaluate the body appreciation and sexuality of women with mastectomies who were in a pre-and postmenopausal period. In addition, we planned to assess the association with the relationship between women and her partner/spouse. Research Questions: 1) Are there any differences in sexual life quality and body appreciation between the pre-menopausal and postmenopausal women? 2) Does the marital relationship of both woman's groups influence sexual life quality and body appreciation? 3) Is there a correlation between women's body appreciation and sexual life quality?

## Methods

**Samples and design:** This questionnaire-based descriptive study was conducted on Turkish women who underwent mastectomy for breast cancer at the Oncology Hospital in Ankara, Turkey (TR). The formal records in the Oncology Hospital demonstrated that 560 women required surgical intervention due to breast cancer from the January 1 to December 13, 2017. According to the sample size calculation method for the known population, the sample size of this study had been calculated as 284 patients. In order to get a more reliable result, consequently 300 women, 150 of them were in the postmenopausal period and the other 150 were in the premenopausal periods, who satisfied the inclusion criteria, qualified for final analysis.

Women with a mastectomy were included if they (a) were at an early stages of breast cancer (stage IA to IIB) (b) had completed their definitive surgical treatments (1 year after surgery) (c) had not received neoadjuvant chemotherapy, (d) had no evidence of cognitive impairments at least six months after completion of oncologic treatments such as; surgery, radiotherapy, chemotherapy, (e) spoke Turkish, (f) were free of disease at the time of the study, (g) had patient's consent to the study, and had filled out the questionnaire. The demographics and baseline characteristics of women are presented in Table 1.

**Data collection:** Data were collected using a questionnaire compiled by the researchers after a search of literature (Bray et al., 2018; Cil Akinci & Aksoy, 2019; Zimmerman, 2015) and the Sexual Quality of Life Questionnaire-Female (SQLQ-F) Scale and the Body Appreciation Scale (BAS). Descriptive characteristics form was a questionnaire comprising a series of questions on breast cancer stages, types of surgery and adjuvant therapy (chemotherapy, radiotherapy, systemic treatment), sociodemographic characteristics, level of satisfaction of surgery, meaning of breast for them, and the patient's relationship information (whether he or she was a steady partner, duration of the relationship, and level of satisfaction with the relationship). Sexual Quality of Life Questionnaire-Female (SQLQ-F) Scale has been developed to evaluate patients' sexual quality of life by Symonds, Boolell, and Quirk in 2005 and has been adopted into Turkish by Tugut and Golbasi in 2010. SQLQ-F is a kind of an assessment instrument that is composed of 18 items with the 6-point Likert-type scale can be applied to women over the age of 18. The score interval which can be gained from the scale is between 18-108 and higher indicates a good life quality of women (Symonds et al., 2005; Tugut & Golbasi, 2009). The value of Cronbach Alpha in this study has been calculated as 0.912. Body Appreciation Scale (BAS) was developed to assess women's body appreciation by Tylka and Wood-Barcalow in 2015 and was adopted into Turkish by Anli and her colleagues (Anli et al., 2015; Tylka & Wood-Barcalow, 2015). BAS a kind of an assessment instrument that is composed of 10 items with the 5-point Likert-type (1= never, 5=always) scale. Higher scores gained show a higher level of individual body appreciation. The value of Cronbach Alpha in this study was calculated as 0.951.

All eligible women with mastectomy for the study were recruited during regular medical checkups and were interviewed by one of the authors of this study. Participants were asked to complete the questionnaire in a quiet waiting room to ensure maximum privacy. The interview lasted about 25 minutes.

**Statistical analysis:** The data was analysed by using the IBM SPSS 21 program (SPSS Inc., Chicago, IL, USA). Descriptive statistics such as frequency, mean, standard deviation and percentage were used. Kolmogorov-Smirnov test was used to investigate the suitability of the data for normal distribution. In the comparisons between binary groups, the Mann-Whitney U test

was used, and in comparison, of groups with three or more variables, the Kruskal-Wallis variance analysis was used. Chi-Square and Fisher's Exact tests were also used for group comparisons with nominal variables. Because neither normality nor homogeneity was encountered, The Spearman correlation was used to evaluate correlation. Significance was accepted at a level of  $p < 0.05$ .

**Ethical considerations:** All procedures involving human participants performed in this study were in accordance with the ethical standards of the Institutional and/or National Research Committee and with Helsinki declaration. Written informed consent was obtained from all participants included in this study. The study design was approved by the Ethics committee (Ref: 28.02.2018; No: 3/1) and hospital administration (Ref: 10.04.2018, No:36). The participants were informed about the study's objectives, and their approval was also granted. They were told that their names would be kept confidential.

## Results

In this study, the rate of being undergone total (simple) mastectomy in pre-menopausal women with mastectomy was high, the rate of those had undergone a modified radical mastectomy was higher in postmenopausal ( $p < 0.01$ ). In terms of surgery satisfaction, no differences were found between the women in these groups ( $p > 0.05$ ), the rate of implanting artificial breasts in premenopausal women was observed at a significantly high level ( $p < 0.05$ ). Pre-menopausal women described their breast(s) as a part of their femininity and sexuality, yet postmenopausal women described their breast(s) as one of their any organs ( $p < 0.001$ ). There were no significant differences found in terms of the quality of marital relationships before their illness between these women ( $p > 0.05$ ), surgical intervention was a positive effect on the relationship between the postmenopausal women and their husbands ( $p < 0.01$ ) (Table 2). In the present study, the SQLQ-F score of the women in postmenopausal periods was found significantly higher than women who were in their pre-menopausal periods. However, the BAS score was found significantly lower compared to pre-menopausal (Table 3). In pre-menopausal periods, the BAS score of women who had an arranged marriage type had significantly lower scores than those having an autonomous marriage ( $p < 0.05$ ). There were no differences between marital relationship before the illness and BAS scores of women who were in premenopausal period ( $p > 0.05$ ), the BAS

score of the postmenopausal women whose surgery had a negative effect was significantly lower than other the women. ( $p < 0.05$ ). SQLQ-F score of the women who had a good marital relationship before the cancer was significantly higher ( $p < 0.001$ ). In the study, SQLQ-F scores of the women whose surgery had a negative effect on

the marriage was significantly lower ( $p < 0.001$ ) (Table 4). A correlation between SQLQ-F and BAS scores of the women in pre and postmenopausal period was detected in a positive way ( $p < 0.001$ ). The women whose body appreciation score was low have a low sexual quality of life scale score (Table 5).

Table 1. Study demographics and baseline characteristics

Variables	Before Menopause (n=150)	After Menopause (n=150)	Statistical analyses
	$X \pm SD$	$X \pm SD$	
Age	42.83±6.42	57.24±7.74	t=-17.555; p=0.000
Duration of marriage	20.10±8.75	35.74±9.22	U=1862.500;p=0.000
Time since diagnosis (mo)	24.55±25.18	36.59±51.35	U=9756.000; p=0.046
Time since mastectomy (mo)	22.89±24.95	35.51±52.23	U=10395.500; p=0.252

Table 2. Data for women's surgical and private life (n=300)

Surgical Period	Pre-menopause		Post-menopause		Statistical Analysis
	n	%	n	%	
Surgery					
Total mastectomy	111	74	82	54.7	$\chi^2 = 12.523$ ; p=0.002*
Modified radical mastectomy	37	24.7	66	44	
Radical mastectomy	2	1.3	2	1.3	
The level of surgery satisfaction					
Very satisfied	88	58.7	89	59.3	$\chi^2 = 2.968$ ; p= 0.625
More than satisfied	49	32.7	53	35.3	
Neutral	10	6.7	8	5.3	
Not satisfied	2	1.3	0	0	
Artificial breast					
Yes	14	9.3	4	2.7	$\chi^2 = 5.910$ ; p=0.015
No	136	90.7	146	97.3	
The description of the breast					
One of the any organs	52	34.7	88	58.7	$\chi^2 = 18.477$ ; p=0.000
A part of a femininity and sexuality	98	65.3	62	41.3	
<b>Private life</b>	<b>Pre-menopause</b>		<b>Post-menopause</b>		<b>Statistical Analysis</b>

Types of marriages	n	%	n	%	
Family arranged one	46	31.1	107	71.8	$\chi^2 = 51.512; p = 0.000$
Self-arranged one	58	39.2	30	20.1	
Autonomous one	44	29.7	12	8.1	
Marital relationship before the illness					
Good	130	87.8	126	85.7	$\chi^2 = 0.290; p = 0.590$
Bad	18	12.2	21	14.3	
The effect of surgery on relationship between the couples					
Positive effect	16	10.8	36	24.5	$\chi^2 = 12.505; p = 0.002$
Negative effect	43	29.1	25	17	
Neutral	89	60.1	86	58.5	

\*Chi-square test

Table 3. The Scale Scores of Women's Sexual Quality of Life and Body Appreciation

	<i>Pre-menopause</i> $\bar{X} \pm SD$	<i>Post-menopause</i> $\bar{X} \pm SD$	<i>Statistical Analysis</i>
<b>BAS</b>	39.22±8.53	36.30±8.18	U=8829.000; p=0.001
<b>SQLQ-F</b>	60.89±19.28	67.76±18.34	U=8759.000; p=0.001*

BAS, Body Appreciation Scale; SQLQ-F, Sexual Quality of Life Questionnaire-Female \* Mann Whitney U Test

Table 4. The Relationship between Women's Marital Relationship and Sexual Quality of Life and Body Appreciation

<i>Variables</i>	<b>Pre-menopause BAS</b>		<b>Post-menopause BAS</b>	
	$\bar{X} \pm SD$	<i>Statistical Analysis</i>	$\bar{X} \pm SD$	<i>Statistical Analysis</i>
Types of Marriages				
Family Arranged one	37.26±9.49	KW=6.013; p= 0.049	36.11±8.26	KW=1.705; p= 0.426
Self-arranged one	39.00±8.15		35.80±8.15	
Autonomous one	41.82±7.55		38.92±8.02	
Marital Relationship before the Illness				
Good	39.34±8.46	U=1168.500; p= 0.993	36.78±8.21	U=879.500; p= 0.014
Bad	39.00±9.46		32.28±6.89	
The effect on relationship between couples				
Positive	41.37±7.09	KW=5.647; p= 0.059	37.78±8.64	KW=8.381; p=0.015
Negative	36.44±9.74		31.68±7.30	
Neutral	40.30±7.92		36.74±7.83	
<b>Pre-menopause SQLQ-F</b>		<b>Post-menopause SQLQ-F</b>		

Types of Marriages				
Family Arranged one	57.71±19.56	KW=2.829; p=0.243	67.82±18.63	KW=0.839; p= 0.657
Self-arranged one	62.95±19.16		70.19±16.49	
Autonomous one	62.40±19.16		64.35±18.61	
Marital Relationship before the Illness				
good	63.29±19.13	U=440.500; p=0.000	71.12±16.67	U=459.000; p=0.000
bad	43.21±9.32		48.84±15.44	
The effect on relationship between couples				
Positive	78.54±13.89	KW=56.258; p=0.000	80.18±12.19	KW=48.259; p=0.000
Negative	43.38±13.22		46.27±11.57	
Neutral	66.10±16.60		69.11±16.37	

\* Kruskal Wallis Varyans Analizi/ \* Mann Whitney U Test

Table 5. Correlation between BAS and SQLQ-F Scale

BAS	SQLQ-F	
	Pre-menopause	Post-menopause
	R	0.440
P	0.000	0.000

\* Spearman's Correlation Coefficient

## Discussion

In the present study, we determined the body appreciation and sexuality of women with mastectomy who were in a pre and postmenopausal period. Sexual life and body appreciation are important aspects of life for women with a mastectomy. Breast cancer and its treatments influence their sexual quality of life for all women. In addition, breast cancer treatments and surgery leading to removal of the breast directly affect the sexual organs like the breast. This can affect body appreciation and sexual life leading to the feeling of loss of femininity.

In this study the breast was described as a part of a femininity and sexuality by the premenopausal women; however, it was also described as one of their organs. In another study, majority of the women defined their breasts as femininity, beauty, motherhood, and attractiveness and perceive it as the organ perfecting women (Kocan & Gursoy, 2016). It was suggested since the rate of premenopausal women's assessment that the breast is a part of femininity and sexuality is higher than the rate of postmenopausal women's

and that young patients care about sexual attraction and physical appearance on being sexually active. Besides, the high rate of implanting an artificial breast in young patients supports this case.

There is a growing awareness that a cancer diagnosis and its treatment influence not only the patients but also their spouse/partner. In addition, cancer patients identify their partners as their major source of support. Breast cancer introduces individual and relationship challenges for both the patient and her spouse (Zimmermann, 2015; Rezaei et al., 2016; Tane & Kanan, 2020). Research has shown that some of these issues can serve to bring a couple closer together while others can disrupt the relationship and how it functions in different ways (Albers et al., 2020). The study clearly showed that most premenopausal women were affected negatively while most postmenopausal women were affected positively in terms of their husband- relationship. Though neither pre-menopausal women nor postmenopausal women have come across a study assessing their relationship with their husbands

before, in Turkey presented that Turkish women's relationships with their husband varied whether they were in pre- or postmenopausal period and had marital problems based on their age group (Yalçın, 2014). Marriage is an essential institution in the Turkish culture and these couples support each other in sickness and in health. It is thought that the couples' who were faithful to each other is benefitted the women who were in a postmenopausal in a positive manner.

Body image has focused on describing a negative body image such as body dissatisfaction, body shaming while body appreciation has been defined as accepting, holding favorable view toward, and respecting the body (Tylka & Wood-Barcalow, 2015). According to the study, the body image of women who were in the postmenopausal was lower than women who were in the premenopausal periods. In the studies on body image, it was seen that comparisons between healthy women and women who underwent mastectomy or comparisons between different types of surgery or mastectomy (Bagheri & Mazaheri, 2015; Denizgil & Sonmez, 2015). However, body image was found that young patients with breast cancer were influenced more by body image disorder (Miaja, Platas, & Martinez-Cannon, 2017; Rezaei et al., 2016; Tane & Kanan, 2020; Paterson et al., 2016). Mastectomy's more negative effects on the body image and life quality compared to another treatment types are also indicated (Erturhan Turk & Yilmaz, 2018; Paterson et al., 2016). Other studies have found that age had a negative correlation with difficulties of body image and young women report body image disorders more as well (Rezaei et al., 2016; Przedzicki et al., 2013). In the study it was suggested that the reason why postmenopausal women's body appreciations were lower could be low expectancy with the aging in terms of femininity and attractiveness. In addition to this, body appreciation unlike body image scales was assessed in the study. When taken into consideration it could infer that women who started to lose their body appreciation due to the aging had a more comorbid view of themselves which probably affected their self-esteem and being appreciated and needed. Since the rate of breast implants is higher in pre-menopausal women, their body appreciation could also be higher. No studies have compared the body appreciation of pre, and post-menopausal women

have been conducted. This situation played a role for making our study unique.

Sexuality is an integral part of human life. However, sexual problems are frequent in with cancer patients and can negatively affect the relationship satisfaction (Cil Akinci & Aksoy, 2019; Albers et al., 2020 ; Clayton & Harsh, 2016). This study has found that SQLQ-F point average of the postmenopausal women was higher than the premenopausal women. National and international studies point out that breast cancer has a negative influence on the sexual life of women with breast cancer; mastectomy increases sexual problems (Ertem & Donmez, 2017; Slakari et al., 2019) the levels of sexual affection, arousal, orgasm, fantasy, and sexual pleasure are lower especially for young women with cancer (Champion et al., 2014). Aging has shown a decrease in sexual activities, need, and desires (Clayton & Harsh, 2016). Besides the cancer treatment, the variances of sexual function in women due to the reasons like advancing age and menopausal cause sexual problems. These variances of sexual functions are the most common illness encountered in postmenopausal. In this period, the variances of sexuality in women are affected by various reasons like personal and hormonal factors (Bozkurt & Sevil, 2016; Simbar et al., 2020).

Menopausal transition is a period characterized by hormonal, physiologic, and social changes that is generally related to a sexual function disorder. The physiologic mechanism in which menopausal transition affects sexual health includes the flexibility of vaginal mucosa, fluctuating and the decreasing of gonadal steroid hormone having a negative influence on vaginal secretions and resulting in a pain and vaginal atrophy during sexual relation (Simbar et al., 2020). Most women measure being femininity with the ability to give birth. When this ability disappears, they may suffer from a sexual function disorder even if there is no organic reasons (Krebs, 2018). Premenopausal women in this study referred to the younger group compared to women who were in postmenopausal period. However, sexual life scores of the postmenopausal women were higher. This result paralleled with the literature review suggested that since the postmenopausal women were already having some problems in their sexual life because of the menopause, the mastectomy did not pose any obstacles to their sexual life and was assessed as an expected result. On the other hand, it was detected that previous

studies were more geared to younger patients. It was also showed that younger women were negatively affected by their cancer and treatments (Aygin & Yaman, 2017; Bozkurt & Sevil, 2016; Silverman & Rabow, 2018; Tane& Kanan, 2020). It has been observed that the study findings are paralleled with literature.

The study founded that BAS points of premenopausal women who were in arranged marriages were lower and those who were in a non-arranged marriage was higher. Autonomous marriages have not been arranged therefore the woman has chosen who she wants to marry. An arranged marriage which is generally accepted by Turkish society is a marriage in which family members and relatives match intended parties to be married. Studies found that if the marriage affected (marital adjustments) the patient they were also able to deal with these changes. Marital adjustment is one of the most crucial factors to maintain a healthy and happy married relationship (Kubilay, 2015). In the study, the fact that the BAS scores of the women who had autonomous marriages are higher shows that marital adjustment and spouse support were good.

According to the study, the BAS scores of the women who had a bad relationship with their husbands before the cancer had appeared in postmenopausal period was lower. A spouse is the most critical support system for a woman with breast cancer (Borstelmann et al., 2015; Albers et al., 2020). It has been reported that women who had this support witnessed an increase in psychosocial adjustments during their illness both in and during recovery (Albers et al., 2020)

In our study, it was found that women who had a good marriage in both groups had a higher score with the SQLQ-F. Another study found that breast cancer patients whose had a higher quality sexual life had higher levels of sexual functions, lower anxiety, higher physical and emotional satisfaction along with a higher emotionally, physically intimacy with their spouse (Kowalczyk et al., 2019; Albers et al., 2020). Research also showed lower levels of sex hormones in patients with cancer which resulted in changes in body image and a poor relationship with their partners (Albers, et al., 2020; Rezaei et al., 2016; Tane& Kanan, 2020). Studies showed that there was a direct proportion between being having a satisfied marital and sexual life satisfaction (Ziaee et al., 2014; Bilal & Rasool, 2020). In our study, although the marital adjustment was not examined

in detail, our findings reveal that women whose sexual life and body appreciation was higher and had no effect on their marital adjustment.

In our study, we found that the women whose body appreciation scores average is low both premenopausal and postmenopausal periods had a lower sexual life quality score. Concerns about body image changes after surgery could also cause sexual problems in women. Mastectomy, causes body image disorders, and sexuality is affected negatively due to the loss of feminine appearance (Albers, et al., 2020; Rezaei et al., 2016; Tane& Kanan, 2020; Tay et al., 2017). The findings of this study showed that women with low body appreciation had more negative effects on their sexual lives.

This study has some limitations. Firstly, the results are not generalizable because it only included women diagnosed with early-stage breast cancer. Secondly, most women had a spouse. For that reason, we were not able to analyze the influence of having a partner on sexual function, body appearance and marital adjustments. Thirdly, the role of sexual life in women's lives is influenced by age, environment, health, relationships, culture, beliefs, opportunities, interests, and levels of self-esteem. We were not investigating these factors effects in our population and we don't have any pre-treatment data on sexual function to indicate whether cancer and mastectomy had the most impact on body image or sexual function. However, we discuss marital satisfaction but did not include a validated tool to assess marital satisfaction. Other hand, this study contributed information about the body appreciation and sexuality of women who had mastectomy in pre- and postmenopausal period to the literature and offered important implications for further clinical care of patients.

## Conclusion

In this study, it was found that the sexual life and body appreciation of women with mastectomies differed according to the presence or absence of menopause. This difference arises from the fact that postmenopausal women have lower body appreciation, and pre-menopausal women have lower quality of life. The negativities with a sexual life and body appearance can also affect the life satisfaction of women. Regardless of the diseases, it is possible for everyone to experience sexual satisfaction and enjoy their bodies. However, in this situation while women still



struggle with breast cancer, they may not be able to adequately express their sexual and body appreciation problems. All health professionals (clinic nurses, psychiatric nurses, oncology nurse doctors and etc.) should provide professional support for women's sexual problems and decreased body appreciation. The information on the importance of regaining sexual function and body appreciation problems after mastectomy must be clearly provided to all patients both in pre- and post-menopause period.

### Implication for Nursing Practice

The findings emphasized it is necessary to provide a multidisciplinary approach to women with mastectomy according to their menopausal status in terms of body appreciation and sexual life. On the other hand, the role of the nursing team which include oncology nurse, psychiatric nurse, navigator nurse and surgical nurse towards patients with breast cancer is to evaluate knowledge about the undesirable results such as negative body appreciation, sexual life, spouse relationship and to guide the coping with them. Regarding the effect of mastectomy on body appreciation and quality of sexual life, nurses can play a pivotal role in positive body appreciation among the patients who were in the pre- and post-menopausal period through detection and referring these patients to counseling centers. They can also prevent the possible patients' mood disorders through detection of their psychological situation.

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