

RESEARCH COMMUNICATION

Turkish Hysterectomy and Mastectomy Patients - Depression, Body Image, Sexual Problems and Spouse Relationships

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Abstract

The aim of this study was to compare hysterectomy and mastectomy patients in terms of depression, body image, sexual problems and spouse relations. The study group comprised 94 patients being treated in Ege University Radiation Oncology Clinic, Tülay Aktaş Oncology Hospital, İzmir Aegean Obstetrics and Gynecology Training and Research Hospital for breast and gynecological cancer (42 patients underwent mastectomy, 52 patient underwent hysterectomy). Five scales were used in the study: Sociodemographic Data Form, Beck Depression Scale, Body Image Scale, Dyadic Adjustment Scale, Golombok Rust Sexual Functions Scale. Mastectomy patients were more depressive than hysterectomy patients ($t=2.78$, $p<0.01$). Body image levels of the patients were bad but there was no significant difference between the two patient groups ($p>0.05$). Hysterectomy patients had more problems in terms of vaginismus ($t=2.32$, $p<0.05$), avoidance of sexual intercourse ($t=2.31$, $p<0.05$), communication ($t=2.06$, $p<0.05$), and frequency of sexual intercourse than mastectomy patients ($t=2.10$, $p<0.05$). As compared with compliance levels between patients and spouses; hysterectomy patients had more problems related to expression of emotions than mastectomy patients ($t=2.12$, $p<0.05$). In conclusion, body image was negative, mastectomy was associated with more depression and hysterectomy with greater sexual problems and difficulties with spouse relationships.

Keywords: Hysterectomy - mastectomy - depression - body image - sexual problems - spouse relationships

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Introduction

Today, cancer is accepted as a chronic disease, posing many a long and short term adjustment difficulties, as well as physical disabilities and psychological, occupational and sexual problems. A diagnosis of cancer can cause serious psychological problems due to many factors such as; uncertainty in treatment; physical symptoms; fear of recurrence and death; changes in the woman's personality, body image and sexual life; difficulties in daily activities; family problems and lack of support (Abasher, 2009; Anagnostopoulos and Myrghianni, 2009; Ashing-Giwa et al., 2006; Dizon, 2009).

Qualitative studies in breast and gynecological cancer and its treatment have highlighted women's concerns in relation to femininity, fears of sexual relations, social function, role function and the importance of relations with the woman's partner (Bruner and Boyd, 1998; Stead, 2004). Approximately 25% of women may be affected by depression during their cancer experience (Bottomley, 1998; Miller and Massie, 2006).

Previous studies have found higher rates of depression among women with breast or gynecologic cancer (Meyerowitz et al., 2000; Ell et al., 2005; Chen et al., 2009). Nearly 50% of the women with breast cancer show depressive and anxiety symptoms in the first year after

diagnosis. This has a major impact on patients' lives (Den Oudsten et al., 2009). Untreated depression in breast and gynecological cancer patients has been related to poorer adherence to treatment and poorer survival. Depression is also strongly related to body image difficulties. Depressed people negatively distort their body image and sexual function (Kantar and Sevil, 2004; Bayram and Şahin, 2008; Zimmermann et al., 2009).

Cancer disrupts human beings basic belief in their existence. The other important problems may arise connected to reactions over body appearance and feelings of femininity. Previous studies have suggested that body image is an important concern for breast cancer survivors (Petronis et al., 2003; Ashing-Giwa et al., 2006). The bodily changes that occur following breast cancer diagnosis and treatment can result in patients. losing positive image in their own body. This Negative image of body include dissatisfaction with appearance, reluctance to see her's naked body, and feelings of diminished sexual attractiveness (Landmark and Wahl, 2002; Bailey et al., 2009). Externally visible and internal changes resulting from cancer treatment. Radiotherapy can cause skin discoloration. Chemotherapy can lead to dermatitis, hair loss and weight gain. Body image, as a component of self-concept, is include feeling feminine and attractive enjoying one's body as a symbol of social expression.

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Surgeries can make alter sensation. 10-year survival analysis results show that favorable body image reduced risk of mortality (Speck et al., 2009). Body image relate to one's feelings, perceptions, and attitudes towards one's physical self, appearance, functionality. All of treatment had changed womens definition of self, making them feel less of a woman (Anagnostopoulos and Myrzianni, 2009; Sertöz et al., 2009).

Body image and sexual function may be influenced by medical factors. Certain surgical procedures such as a mastectomy may make a woman feel unattractive and create negative body image concerns. A mastectomy can cause a complete loss of sensation in the chest area from a sexual function perspective. Generally sexuality is affected by cancer treatment during the first year of survivorship, but as time pass, women are less anxious of the disease prognosis and hence their sexual life become normal again (Moyer, 1997; Dragisic and Milad, 2004; Abasher, 2009) Sexual dysfunction affects up to 90% of women treated for breast cancer (Dizon, 2009). Surgery, radiation, chemotherapy, and hormonal therapy can affect a womans sexual enjoyment. Chemotherapy has been associated with vaginal dryness, pain during intercourse and worse sexual function (Henson, 2002). Also, other medications that are used to treat anxiety, pain or depression may interfere with sexual function (Martinez, 2008).

The loss of the uterus via hysterectomy carries significant negative repercussions especially in the case of women from developing countries. As the uterus is a highly valued body part, its loss carries physical and emotional repercussions and may result in intense psychological reactions across the globe. Hysterectomy has traditionally been regarded as having an adverse effect on womens sexuality because it is thought to reduce their sense of femininity (Farooqi, 2005). Their sexual desire inhibit after surgical and adjuvant treatment. Further process they improve a fear that their partner may be repelled sexually. Some of these women had stopped sexual intercourse, A few others continue their sexual life exhibit a low level (Abasher, 2009).

Close relationships are important potential sources of coping with life-threatening events. Negative body image, sexual dysfunction affect dyadic relationship sexual intercourse is equally important to the patient and his partner (Zimmerman et al., 2009). Fertility is another problem for gynecological cancer that improve after surgery. It affects spouse relations (Pearman, 2003). Partners of cancer survivors report fatigue, sleep disturbance, eating disorders, mood disorders, relationship difficulties, sexual morbidity, work and lifestyle disruption, and poor quality of life (Hodgkinson et al., 2007).

There may be various reasons why sex may not be enjoyable after cancer diagnosis. There can be emotional and physical reasons. Cancer is stressful for many to manage from a financial, family relation and employment perspective. Day to day life for many women is filled with plenty of stress, but when the diagnosis of cancer and its treatments are added to this mix, the stress can be overwhelming. This stress can interfere with one even considering having an intimate relationship (Martinez,

2008).

Breast and genitals are erogenous zones for women sexuality that provide sexual arousal when touched. The neuropeptide hormon oxytocin, which is secreted form the pituitary gland during cuddling and physical intimacy. Hysterectomy and mastectomy operations deeply influence the perception of women's sexuality, body image and femininity. However, depression is often developed after oncology surgery, contributes to the deterioration of women's sexuality and spouse relation (Onat Bayram, Şahin, 2008). When evaluating holistically the life of women after surgical treatment such as mastectomy and hysterectomy, all spheres of everyday functioning should be taken into account: physical, emotional and social (Skrzypulec et al., 2009). Mainly personality and psychological factors affect patients' depression, body image, sexual problems and spouse relations, personality relations after surgical treatment. Few studies have prospectively assessed the impact of mastectomy and hysterectomy on women's depression, body image, sexual lives and spouse relations in Turkey.

Materials and Methods

Sample and setting

This study is important in establishing the depression, body image perception and spouse relationships in patients with mastectomy and hysterectomy. The aim of this cross-sectional study was to assess and compare: (1) the patients' and relatives' burden of illness, depression, body image; (2) to assess the patients' spouse relations problems and sexual dissatisfactions. 3) Do depression in this population affect spouse realtions and sexual satisfactions? 4) to compare spouse relations and sexual satisfactions in patients undergoing a modified total mastectomy or total hysterectomy. 94 outpatients who were between the ages of 25-70 and who were under observation due to cancer at Ege University radiation Oncology Clinic, Tülay Aktaş Oncology Hospital, İzmir Aegean Obstetrics and Gynecology Training and Research Hospital were included in this study. All patients who visit Oncology Unite can admit themselves to this unit or can be referred by the oncology nurses or doctors. All patients had been informed about their cancer diagnosis by a physician prior to testing. Here, priority was given to an immediate treatment of physical symptoms. The psychiatric nurses working in oncology unit assess and evaluate the patients psychosocially and provide counselling services. Oncologist, if they see fit, patients are referred to psychiatry. Out of 102 patients, 8 of them were excluded from the study since six were denied participation because they refused to fill in the questionnaire and two of them didn't complete the interviews during the study. Thus, the data of 94 patients were used in this investigation. Eligibility criteria included: Turkish women who 1) were 18 years old or older, 2) had undergone mastectom or hysterectomy 3) were midway in their course of curative treatment by chemotherapy or radiotherapy, and 4) who did not have any other cancer history apart from cancer 5) who were married or living with a partner. The exclusion criteria were being 1) had difficulty in understanding the

questionnaire, having any cognitive and hearing loss, had a history of psychiatric disorder, or 3) had metastatic brain disease. Patients have not received any psychiatric diagnosis or assistance from a mental health professional before. The participants were asked if they had received any psychiatric diagnosis and any psychiatric assistance (such as medicine or psychotherapy) in this respect. The mean age of the study participants was 47.78±9.8 years. Patients' experience with cancer ranged between eight months and ten years.

Ethical Considerations

In order to carry out the research, permission was granted by Ege University School of Nursing Ethical Committee and Ege University Dean's Office of Faculty of Medicine. The patients were further informed about the purpose of the study and they were assured of their right to refuse participation or to withdraw at any stage and that the study data would be kept anonymous. Patients, who disclosed their individual information to anyone other than the researchers will not be allowed access to this information (demographic information and scales results). The patient reported information will be kept confidential. It was also stated that in case of refusal, a patient's privacy would be respected in accordance with the policies of Oncology Units and it would in no way hinder any treatment that patient may receive.

Data collection

Five types of questionnaires were used for the collection of data from the patients. Data were collected during 16 weeks, between September-December, 2009. The study details were explained verbally to women and they were also given a written outline of the study to read if they so wished. It was given to patients in a separate quiet room in these clinics. Data collection took place over a three month period utilising semi-structured, 30-40, minute duration. The interviews were conducted and a Socio-Demographic Data Form, Beck Depression Scale, Body Image Scale, Dyadic Adjustment Scale, Golombok Rust Sexual Functions Scale. In this paper the following sociodemographic characteristics of patients were examined; the patients socio-demographic variables included patients age, stage of illness, length of time in treatment.

Instruments

a) Beck Depression Scale (BDS): This is a self report scale, developed by Beck (1961) in order to measure emotional, cognitive, somatic and motivational components (Beck, 1961). BDS is the most frequently used tool in clinics and research with the purpose of self recognition. Although its main purpose is to evaluate signs of depression, it also enables the evaluation of the cognitive content. The scale is composed of 21 items, two items evaluate emotions, eleven items cognition, two items behavior, five items physical signs, and one item interactive signs. Patients were asked to choose the questions most coherent to their situation. Every question was scaled from 0 to 3, obtaining total scores between 0 - 63. Results were interpreted as; 0 - 9 absent/minimal

depression, 10 - 18 mild depression, 19 - 29 moderate depression, 30 - 63 severe depression. While developing the Turkish version of BDS the intersecting points were evaluated, and it was established that scores of 17 and above determine depression needing treatment at a rate of 90%. The reliability and validity of the BDS test in establishing the depression level in the Turkish population was proven by Hisli (1989). In this study, the Cronbach's alpha coefficients for the depression scales were 0.806 respectively.

b) Body Image Scale (BIS): This scale developed by Secord and Jourard (1953) measures the level of satisfaction with various body parts. Lower scores on this 40-item scale point to higher levels of dissatisfaction. There is no cut-off score. In Turkey, the validity and reliability study of the scale was performed by Hovardaoglu (1993). Cronbach alpha value was for the sample was found to be 0.89.

c) Dyadic Adjustment Scale (DAS): This scale was developed by Spanier (1976) to measure the adjustment of couples using subscales such as satisfaction, fidelity, and expression of feelings. Scores can vary from zero to 151 points and high scores denote good adjustment, whereas scores of 100 points or lower indicate the presence of a problem in the relationship. In Turkey, the validity and reliability study of the scale was conducted by Fıfılođlu and Demir (2000). The scale, therefore, is composed of four subscales; dyadic consensus, which measures agreement on various topics such as religion, goals, and household tasks; dyadic satisfaction, which contains questions around interpersonal behavior; dyadic cohesion, which covers shared activities; and affectional expression, which briefly addresses physical interactions (Spanier, 1976). The DAS was designed with both clinical and research usage in mind (Spanier, 1976). Cronbach alpha value was for the sample was found to be 0.85.

d) Golombok-Rust Inventory of Sexual Satisfaction (GRISS): The Golombok-Rust Inventory of Sexual Satisfaction (Rust and Golombok, 1986) is a 28-item questionnaire used to evaluate the presence and extent of sexual problems. It includes 12 subscales evaluating impotence, premature ejaculation, orgasmic disorder, vaginismus, lack of communication, avoidance in males and females, nonsensuality, insensitivity in males and females, and dissatisfaction in males and females. A score of 5 points or higher in any category indicates sexual dysfunction. Tuđrul et al., (1993) reported that GRISS is valid and reliable for the Turkish population. Cronbach alpha value was for the sample was found to be 0.89.

Data analyses

Number and percentage distribution, mean, and standard deviation values were given for analysis of the patients socio-demographic characteristics. Analysis of variance (Anova) (F), independent t-test, and correlation were used to determine the relationships between the dependent and independent variables. For most of the results t-tests, as well as effect sizes were reported. Cohens d is a measure of effect size that is the difference between means divided by the Standard deviation. P-values of <0.05 were accepted as significant. When the BDS, BIS,

DAS, and GRISS scale scores distributions in the study, were analysed by “One-sample Kolmogorov Smirnov testi”, the distribution was found to have a normal distribution characteristic ($p < 0.05$).

Results

The socio-demographic characteristics of the patients participating in the study are given in Table 1. The mean age of the patients was 47.78 ± 9.80 years. All patients were women. 54.3% were elementary school graduates, 79.8% were housewives, 88.3% were working. 98.9% of the patients were married, with a mean marriage period of 25.6 ± 10.8 years. 84.0% had a nuclear family structure. 44.75 were living in town (Table 1). 44.7% were breast ca., 19.6% cervix ca., 17.7% over ca., 17.9% endometrium ca. 46.8% had undergone mastectomy, and 53.2% hysterectomy.

There was a positive correlation between the mean age of the patients and mean GRISS communication ($p = 0.049$, $r = 0.204$) and mean GRISS frequency scores ($p = 0.003$, $r = 0.302$). There also was a positive correlation between the mean age and mean DAS emotional expression score ($p = 0.033$, $r = 0.220$).

The evaluation of the disease stage of the patients showed that; 51.1% were stage I, 33% stage II, 11.7% stage III and 4.3% stage IV. The stage of the disease did not create a statistically significant difference in the mean scores of BDS, BIS, DAS, GRISS ($p > 0.05$). 64.9% of the patients were being treated for cancer for less than a year, 6.4% between 1 to 5 years, and 28.7% for more than 5 years. The mean scores patients received from the different scales were evaluated by Kruskal Wallis test. The analysis according to treatment periods showed significant

Table 1. Socio-Demographic Variables of Patients

Socio-Demographic Variables	Frequency	%
Education		
Illiterate	11	11.7
Primary School	63	70.3
High School	9	9.6
University	8	8.5
Marital Status		
Married	93	98.9
Family Type		
Nuclear Type	79	84.0
Extended Type	15	16.0
Diagnosis		
Breast Ca.,	42	44.7
Gynecological Ca	52	65.3
Treatment year		
1 Years under	63	67.0
1.1-5 Years	26	27.6
5.1 Years and upper.	5	5.3
Treatment type		
Chemotherapy	25	26.6
Radiotherapy	69	73.4
Disease stage		
1. stage	48	51.1
2. stage	31	33.0
3. stage	11	11.7
4. stage	4	4.3
Mean age	47.78 ± 9.8	
Marital period (years)	25.6 ± 10.8	

differences in the mean GRISS communication scores (KWT=7.19, $p = 0.027$), mean DAS satisfaction scores (KWT=6.62, $p = 0.036$) and mean DAS cohesion scores (KWT=7.50, $p = 0.023$) (Table 2).

78.8% of the patients participating in the study were found to be depressive. The mean BDS scores of the patients with mastectomy were significantly higher than the patients with hysterectomy ($t = 2.78$, $p = 0.007$). The mean BIS scores were low both in patients with mastectomy and in patients with hysterectomy, and there was no significant difference between the two groups ($t = 0.456$, $p > 0.05$). The mean GRISS vaginismus

Table 2. Comparison of the Mean of GRISS and DAS Point by Patients Treatment Years

	N	X±Ss	KWT	p
GRISS				
Orgasmic Disorder				
1 Years under	61	4.31 ± 3.30	1.31	0.273
1-5 Years	6	2.33 ± 2.30		
5 Years and upper	27	3.59 ± 3.21		
Vaginismus				
1 Years under	61	6.49 ± 2.83	0.179	0.836
1-5 Years	6	7.16 ± 2.48		
5 Years and upper	27	6.44 ± 2.59		
Nonsensuality				
1 Years under	61	4.90 ± 3.60	0.878	0.419
1-5 Years	6	3.16 ± 2.22		
5 Years and upper	27	5.29 ± 3.46		
Avoidance				
1 Years under	61	4.13 ± 3.16	0.671	0.514
1-5 Years	6	3.50 ± 3.98		
5 Years and upper	27	3.18 ± 3.45		
Dissatisfaction				
1 Years under	61	3.54 ± 3.07	0.330	0.720
1-5 Years	6	3.83 ± 3.18		
5 Years and upper	27	4.11 ± 2.97		
Lack Of Communication				
1 Years under	61	3.78 ± 3.11	7.190	0.027
1-5 Years	6	1.16 ± 2.85		
5 Years and upper	27	2.37 ± 2.57		
Infrequency				
1 Years under	61	4.37 ± 1.96	0.036	0.965
1-5 Years	6	4.50 ± 1.76		
5 Years and upper	27	4.48 ± 1.62		
DAS				
Consensus				
1 Years under	61	11.18 ± 10.96	0.067	0.935
1-5 Years	6	9.66 ± 2.16		
5 Years and upper	27	11.07 ± 7.04		
Cohesion				
1 Years under	61	12.40 ± 4.66	7.50	0.023
1-5 Years	6	16.33 ± 1.96		
5 Years and upper	27	14.51 ± 5.47		
Affectional Expression				
1 Years under	61	3.39 ± 2.10	0.019	0.981
1-5 Years	6	3.50 ± 1.04		
5 Years and upper	27	3.33 ± 1.94		
Satisfaction				
1 Years under	61	26.59 ± 5.15	6.62	0.036
1-5 Years	6	26.16 ± 4.11		
5 Years and upper	27	24.00 ± 4.78		
Total Adjustment				
1 Years under	61	53.57 ± 12.68	0.135	0.874
1-5 Years	6	55.66 ± 6.25		
5 Years and upper	27	52.92 ± 10.21		

Table 3. Comparison of the Mean of BDS, BIS, GRISS, DAS Point by Hysterectomy and Mastectomy Cases

BDS	N	X±SS	t	p
Mastectomy	42	14.85±8.99	2.783	0.007
Hysterectomy	52	10.38±6.57		
BIS				
Mastectomy	42	87.28±18.55	0.456	0.650
Hysterectomy	52	85.36±21.61		
GRISS				
Orgasmic Disorder				
Mastectomy	42	3.33±2.93	1.768	0.080
Hysterectomy	52	4.50±3.36		
Vaginismus				
Mastectomy	42	5.80±2.13	2.328	0.022
Hysterectomy	52	7.09±3.02		
Nonsensuality				
Mastectomy	42	4.92±3.18	0.059	0.953
Hysterectomy	52	4.88±3.86		
Avoidance				
Mastectomy	42	2.88±2.98	2.331	0.022
Hysterectomy	52	4.57±3.87		
Dissatisfaction				
Mastectomy	42	3.09±2.67	1.828	0.071
Hysterectomy	52	4.23±3.22		
Lack of Communication				
Mastectomy	42	2.52±2.98	2.006	0.048
Hysterectomy	52	3.76±2.99		
Infrequency				
Mastectomy	42	3.97±1.52	2.109	0.038
Hysterectomy	52	4.76±2.01		
DAS				
Consensus				
Mastectomy	42	10.07±7.68	0.892	0.375
Hysterectomy	52	11.84±10.89		
Cohesion				
Mastectomy	42	13.45±4.79	0.329	0.743
Hysterectomy	52	13.11±5.05		
Affectional Expression				
Mastectomy	42	2.90±1.32	2.128	0.036
Hysterectomy	52	3.76±2.34		
Satisfaction				
Mastectomy	42	25.30±5.55	0.874	0.385
Hysterectomy	52	26.23±4.66		
Total Adjustment				
Mastectomy	42	51.73±9.31	1.341	0.183
Hysterectomy	52	54.96±13.13		

scores (t=2.32, p=0.022), mean GRISS avoidance scores (t=2.33, p=0.022), mean GRISS communication scores (t=2.01, p=0.048), mean GRISS intercourse frequency scores (t=2.10, p=0.038) were higher in patients with hysterectomy compared to the patients with mastectomy. On the other hand the mean DAS affectional expression scores were found to be lower in patients with mastectomy compared to patients with hysterectomy (t=2.12, p=0.036) (Table 3).

There was a positive correlation between the patients BDS scores and BIS scores (p=0.001, r= 0.336), the scores from GRISS nonsensuality subscale (p=0.040, r= 0.212), and the scores from DAS consensus (p=0.006, r=0.281) and, there was a negative correlation in DAS satisfaction subscale (p=0.013, r=-0.257). There was a positive correlation between the scores from BIS and the GRISS communication (p=0.032, r=0.221), and vaginismus (p=0.018, r=0.244) subscales, and

between the DAS consensus (p=0.036, r=0.216), and total adjustment scores (p=0.031, r=0.223). There was a negative correlation between the scores from DAS cohesion subscale and the scores from GRISS avoidance (p=0.017, r=-0.246), and satisfaction (p=0.002, r=-0.313), orgasmic disorder (p=0.026, r= -0.230); there was a positive correlation between the emotional expression subscale and GRISS nonsensuality (p=0.000, r=0.398), avoidance (p=0.000, r=0.378), and satisfaction (p=0.000, r=0.459), communication (p=0.018, r= 0.243), frequency (p=0.000, r=0.438), orgasmic disorder subscales (p=0.019, r= 0.241); the scores from consensus subscale had a positive correlation with GRISS nonsensuality (p=0.037, r=0.216), doyum (p=0.001, r=0.327) satisfaction (p=0.001, r=0.327), sıklık (p=0.006, r=0.283) communication (p=0.002, r=0.313), and frequency subscales (p=0.006, r=0.283); there also was a positive correlation between the total adjustment and GRISS communication (p=0.003, r=0.306), and frequency subscales (p=0.006, r= 0.284).

Discussion

In our study it was established that cases with mastectomy and hysterectomy had depressive symptoms and problems regarding body image, spouse relationships and sexual satisfaction. The problems cancer brings differs according to the disease type, stage, therapy type and period (Wilmoth and Spinelli, 2000). In our study, the stage of the disease had no effect upon depression, body image, the harmony between couples and sexual satisfaction. On the other hand, the treatment period has been found to affect the harmony between couples and sexual satisfaction, and that the harmony between couples was affected regarding satisfaction and commitment and sexual satisfaction was affected related to communication.

A diagnosis of a life threatening disease such as cancer, has a negative effect upon the psychological state, well being and life quality of the patients, starting at the very point of receiving the diagnosis. Surgical therapy causes various fears and anxiety, and is perceived as a loss. The first year is a hard one, with the shock of the diagnosis, hospitalization, and surgical and adjuvant therapy applications, and therefore is the period in which psychological treatment is needed most (Yıldırım et al., 2009). When cancer is perceived as a loss in physical strength, roles, expectations and a future, the patients show depressive reactions (Özkan, 1993). It has been stated that diseases within the depression scale are seen frequently in patients with breast and gynecologic cancer (Farooqi, 2005; Den Oudsten et al., 2009). In our study the depressive symptom levels were high in both case groups. When the depressive state was compared between the cases with mastectomy and hysterectomy, it was found that patients with mastectomy were more depressive than patients with hysterectomy.

The female reproductive organs and breasts represent sexuality, fertility and motherhood, and are of great importance in a woman's existence, environmental communication, fertility and sexuality (Özkan, 1993; Arıkan, 2000). However, cancer is a disease that causes substantial differences in a person's body, depending on the

treatment performed. The organ losses due to treatments spoil the body image and affect negatively the patients adjustment (Bredin, 1999; Ögel et al., 1999). Although in the normal mourning process the loss of the object is accepted with time, solving the mourning due to organ loss is much more complicated (Özkan, 1993). For many women reproductive organs and breasts are closely related to their self / self-confidence and identity, and body image (Pelusi, 2006). In our study the women with mastectomy and hysterectomy had a negative body image. There was no difference between groups in body perception.

Mastectomy and hysterectomy causes a negative effect upon the woman's self confidence, body image, emotional status and relationships depending on the magnitude of the feeling of loss (Wilmoth and Spinelli, 2000; Landmark and Wahl, 2002; Avis et al., 2004; Ashing et al., 2006; Fobair et al., 2006). In this study as well, there was a positive relationship between body image and depression in women with mastectomy and hysterectomy, and depression increased as the negative perception of body image increased.

Sexuality is an important aspect of physical, psychological and social life, increasing life quality and nurturing the individual's self development, and is affected by the individual's body perception, sexual reactions, roles and relationships (Arıkan, 2000; Pelusi, 2006). The stress factors throughout the disease process and the side effects of treatment can affect the patient's intimate and sexual relationship with the spouse in a negative way and cause sexual dysfunctions (Avis et al., 2004; Fobair et al., 2006; Pelusi, 2006; Martinez 2008). The results from this study show that women do have sexual satisfaction problems following mastectomy and hysterectomy. According to Turkish and Islamic culture, the sexuality for women is usually a taboo. Women have access to little or no information as the issue. Sexuality is an important social issue and source of power for men in the Turkish society. Furthermore, because of Turkish women being passive in sexual activity and sexual desire they carry out sexual activities less than men and Turkish men must be active and lead the sexual activities. Generally most Turkish believe that 'A woman's sexuality ends after menopause' (Gursu Hariri et al., 2009).

Mastectomy affects the body image in a negative way and can cause various problems in intimate relationships and sexual life (Özkan, 1993; Avis et al., 2004; Fobair et al., 2006). Many women have fears that they will lose their sexual attractiveness as a spouse after mastectomy, that they will not be liked, they will be rejected and their sexual life will be ruined (Ögel et al., 1999). In some studies, it was stated that sexual harmony is negatively affected following operation in women with breast cancer (Avis et al., 2004; Budin, 2005). Gynecologic operation brings into light the subconscious conflicts and fears regarding womanhood. Although hysterectomy does not create any visible organ loss, the psychological reflections of the anxieties regarding femininity are prominent (Özkan, 1993).

Many women have complicated feelings after hysterectomy, about the probability of not being seen as appealing by their spouse, as before the hysterectomy, that their attractiveness as a sexual partner would fade and

that their sexual life would be hampered (Wilmoth and Spinelli, 2000). All the same, in some studies it was stated that there was no difference in the sexual drive, intercourse frequency and orgasm in women after hysterectomy (Thakar et al., 2002; Dragisic and Milad, 2004), and even in some studies it was stated that there was a substantial improvement in the women's sexual functions (Roovers et al., 2003; Kuppermann et al., 2005).

In one study, it was stated that hysterectomy created problems regarding tactile senses, satisfaction, avoidance, communication and vaginismus (Kızıltepe, 2006). In another study, it was stated that there was sexual dysfunction in women with breast cancer in sexual communication and avoidance subfields (Sertöz et al., 2004). In our study the sexual satisfactions of the women with mastectomy and hysterectomy were compared, and it was found that the women with hysterectomy lived more sexual problems, in dimensions such as; vaginismus, avoiding intercourse, communication with partner and intercourse frequency. This result is supported by a study that stated that sexual health was more affected in women with gynecologic cancers compared to breast cancer (Bruner and Boyd, 1998). Patients with sexual dysfunction often benefit from behaviorally oriented treatment. Therapist suggests specific sexual activities. Using traditional techniques, therapists set up a hierarchy of anxiety-provoking situations. Then, the patient is instructed in body-awareness and instructed to explore his or her own body and genitals, followed by identifying sensitive, pleasurable areas. Body tension and blood flow to the pleasurable areas continue to build as a woman receives more sexual stimulation and duration usually will lead to orgasm (Yang et al., 2000; Binik and Meana, 2009)

Aging can cause some changes in sexual life. In our study there was a relationship between the woman's age and sexual satisfaction level and it was found that as age increased, the sexual satisfaction related to communication and frequency decreased. On the other hand, there was a relationship between age and the level of expressing themselves to the spouse, and as age increased the level of expressing their feelings to the spouse increased as well.

The good relationships between spouses can be hampered physically and emotionally due to cancer. In our study, the evaluation of the relationship in both case groups showed that the level of expressing their feelings was lower in the women with mastectomy. Kim and Jang (1998) have stated in their study that the women who underwent hysterectomy were less willing to share their body image issues with their spouses.

In our study, it was found that as depression and negative body image increases, the sexual satisfaction and couple harmony decreases. Similar results have been reported by some studies and it was stated that positive body image affects sexual satisfaction positively (Gutl et al., 2002; Harcourt et al., 2003; Nobre and Pinto-Gouveia 2008). On the other hand, Chun and Kim (1996) have reported that there was no relationship between spouse support and depression or body image.

Another result we obtained from our study was the relationship between sexual satisfaction in women and couple harmony. As couple harmony increases sexual

satisfaction also increases. Similar results were reported in studies performed upon women who underwent hysterectomy and it was stated that spouse support had a positive effect on sexual satisfaction (Koh and Kim, 2004; Sung and Lim, 2010).

Limitations

There are some limitations to our study. First of all, the study is not a wide scaled one, has been performed with a small sample group. Secondly, the scales used in the study were self report scales. Self report scales can lead to some confusing results. These scales are questionnaires that rely on the patients declaration, and not always, proper and realistic answers are obtained, the participant can develop different perceptions depending on their social environment and cultural background. The third limitation of our research results is that it should only be generalized for this population. The fourth limitation regarding the study design is the absence of a control group. Finally, some women were difficult to be included into the study because of their low education level, which made them resistant to accept and even understand such a sensitive issue, because as a Muslim, girls are raised up with a notion that sex is a taboo. The Muslim socialization process shapes women to be passive in their sexual relationships. There is a strong belief that a woman can not discuss her sexual needs or complaints.

In conclusions, cancer of the breast and reproductive organs is an important health issue, affecting many a womens physical, emotional, social and family life. It is thought that the change in physical appearance and tissue integrity due to a disease or treatment will also change the body image of the person and this will lead to sexual problems, it will affect spouse relationships and can cause depression. This impairment in the patients emotional state can also affect treatment compliance and results. Awareness of the patients depression state, body image perception, spouse relationship, and level of sexual satisfaction, enables the reference of the patients with problems to psychiatric consultation and these precautions help increase the life quality of the patients within the process, and procure a better compliance to treatment and a better adjustment to the disease. On the other hand, the psychological state of the patient can be overlooked within clinical routine, as little time can be spared to each patient, but using self-assessment reports in routine evaluation can help establish the patients under risk. Though oncology personel do seem to be in the center of the psychosocial services, it is seen that, nurses, who spend real long times with the patients, are psychologically more supportive, starting from the time of diagnosis, throughout the treatment process (Książek et al., 2007). Oncology nurses awareness and sensitivity of the psychological risks faced by breast cancer survivors after completion of primary care, contribute to the beter prognosis for cancer. Early screening and intervention may prevent more serious pressive episodes, sexual problems. Therefore, continued assessment of psychological problems of the patients' and relatives'. Rehabilitation programmes should be developed for assessing the patients needs. In this process, patients' symptoms needs may provide a basis

for purposeful counselling. There is a need to extend the psychosocial services in onchology, and thus determine the patients under risk of emotional disorders, and this can be best actualized with the services of consultation liaison nurses.

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