RESEARCH COMMUNICATION

Marital Adjustment and Loneliness Status of Women With Mastectomy and Husbands Reactions

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Abstract

Aim: The present descriptive analysis of breast-cancer women with mastectomy surgery was conducted to assess husband partner compatibility and level of loneliness during the post-surgery period. Materials and methods: The study was carried out in Ondokuz Mays University, Medical Faculty surgical clinic. A sample of 48 women with mastectomy and 44 husbands were included in the study. A questionnaire form, the dyadic adjustment scale, and UCLA loneliness scale were used to process the data. Descriptive statistics, correlations, Mannhitney U and Kruskalallis tests were used for data analysis with the SPSS 13.0 statistical package for Windows. Results: It was determined that the education background of husbands influenced marital adjustment, this being better with a high school or further diploma. Husbands who described their marriage as bad after the surgery had higher marital adjustment scores ($p<0.01$). A connection was found between loneliness status of participant women and their marital adjustment ($r=0.373$; $p=0.009$). Similar findings were obtained for their husbands ($r=0.412$; $p=0.005$). Conclusion: At the end of this research, women with mastectomy and their husbands described their marital relations before the surgery as good but as bad after the surgery. Women with mastectomy and their husbands stated that they did not feel lonely before or after the surgery. It is critical that nursing initiatives be arranged in line with health training on marital adjustment and loneliness and psycho-social approaches and communications are adjusted to meet the needs of women and husbands.

Keywords: Marital adjustment - loneliness - mastectomy - women - husbands

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Introduction

Cancer, more than frighten the risks involved, a chronic and fatal diseases, as well as being emotional, mental and behavioral reactions that can lead to is an important health problem. Parallel to a great number of countries, cancer ranks amongst the primary causes of mortality in Turkey as well. Breast cancer is one of the most frequent cancers in women worldwide, and its incidence is increasing and in Turkey encompasses 35.47 per hundred thousand of cancer diagnoses in women, ranking second in mortality from cancer after lung cancer. In Turkey, there is a strong correlation of increased incidence of breast cancer in women 40 years and older (Ministry of Health, 2005). The frequency of breast cancer increases with old age and reaches its peak at the oldest ages. As an outcome of advanced medical means, early diagnosis and treatment, life-length of breast cancer patients can be extended. Despite that, cancer is still a disease with negative prognosis, requiring intense treatment procedures and causing a great source of stress (Hocaoğlu et al., 2007).

In addition to creating a painful body transformation threatening woman's life, breast cancer also poses a threat to the symbol of femininity and sexuality. Therefore it has been the most analyzed cancer type ever on accounts of its emotional as well as psycho-social aspects (Sertöz at al., 2004; Okanlı and Ekinci, 2008). Mastectomy that has been a standard and traditional treatment method employed for years in breast cancer is a treatment technique involving cutting and disembodying the breast with cancer tumor in a surgical operation. Mastectomy not only distorts body images of patients with breast cancer; this damage may eventually lead to feelings such as depression, anxiety, fear and anger. The loss of roles at home or professional life caused by disease and swinging relations, feeling of dependency or strong pain, anxieties regarding life may cause breakdowns with immediate friends or marriages and they all adversely affect the life satisfaction and marital life of individuals (Fung et al.,2001; Harnett, 2002; Keçer and Asaoğlu, 2003; Hocaoğlu et al., 2007; Okanlı and Ekinci, 2008; Özkan, 2011).

Mastectomy may be a source of crisis threatening a woman's life as well as womanhood. Regardless of the latest major developments in the early diagnosis and treatment of cancer the fact that breast cancer treatment is a long and expensive process, that it may cause the loss of an organ, that it may spread to other organs and it may cause death are all together bringing about severe psycho-social problems which not only affect the woman but also the husband and kids (Çam and Babacan, 2006;

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Forbair et al., 2006).

Having a positive relationship amongst partners, positive feelings and thoughts between partners, establishing good communication, ability to solve a conflict, shared and enjoyed activities between partners, partner compatibility that is defined as the minimum level of conflict between couples may go through some changes once breast cancer is diagnosed and mastectomy is performed (Uğurlu, 2003). It is considered that any woman having experienced breast cancer may not only feel pain due to breast loss that is acknowledged as a symbol of fertility and the upcoming damage in her body image but she also may experience some incompatibilities with the husband (Dorval et al., 1999; Arıkan, 2000; Sertöz et al., 2004; Forbair et al., 2006; Gümüş, 2006; Özbaş, 2006; Shands et al., 2006; Rosadale and Fu, 2010). Mastectomy operation in the aftermath of breast cancer quite adversely affects a woman's body image on mind and additionally women may give up their sexuality and sexual intercourse (Dorval et al., 1999; Huber et al., 2006). In a study conducted amongst mastectomy women and their husbands it has been pointed that husbands were trapped in severe anxiety, bothmen and women needed emotional support and their marriage was affected negatively (Nourthouse et al., 1998). A similar study displayed that husbands were anxious as they were unaware of how to treat their patients and they felt stress as an outcome of this uncertainty (Shands et al., 2006). Research findings demonstrated that if women with mastectomy had positive partner compatibility prior to surgery, this situation held true after the surgery as well (Dorval et al., 1999; Özbaş, 2006). However other researchers argue that after the diagnosis of breast cancer, some husbands left women or marriage life was jeopardized or husbands were worried to catch disease if they had intercourse with their wives (Dorval et al., 1999). A research including the Asian women with mastectomy experience in the U.S. put forth that compared to women diagnosed with a different type of cancer Asian women went through minor depression. This deduction might be related to the cultural differences in both groups so depression and marriage compatibility were found to be less effective in patients with mastectomy than the other patients (Ming, 2002).

Loneliness is mostly associated with the fear and anxiety of being alone in a certain environment at present time or in the future. Fear of loneliness in the surrounding arises when the individual is separated from the familiar or acknowledged physical and social environment. The researches covering patients with critical organic diseases or long-stay patients found out that during the first days of hospitalization patients were filled with fear and anxiety but aftermath they felt loneliness caused by the separation from familiar environment and people (Özkürkçügil, 1998; Rokach, 2000; Yıldirim and Kocabiyik, 2010).

In patients with breast cancer, feeling of loneliness takes place as an outcome of the uncertainty in future plans and the way their lives will be in future. In line with the distorted partnership and family relations and the inconsistency between desired social relation and present one an unpleasant, subjective and psychological condition arises. If the relationship of the patient is not satisfactory, she will eventually feel lonely. The psycho-social problems stemming from the loss of breast-which is case of crisis- are generally emotional ones like uncertainty of the future, anxiety, despair, loneliness, helplessness and fear of death and also problems concerning body image, sexuality, troubles in familial, social and professional life. In addition to all these symptoms mastectomy women may also experience inner problems like loneliness and depression and these problems may be influential positively or negatively in not only the prognosis of disease but also in familial relations (Tan and Karabulutlu, 2005; Çam and Babacan, 2006; Özbaş, 2006).

Present research has been conducted as a descriptive analysis to examine breast-cancer women with mastectomy surgery and their husbands' partner compatibility and level of loneliness during post-surgery period.

Research questions

1. What is loneliness and what are marital adjustments levels in Mastectomy with women and theirs husband?
2. Is there a relationship between loneliness and sociodemographic/disease-related factors in Mastectomy with women and theirs husband?
3. Is there a relationship between marital adjustment and sociodemographic/ disease-related factors in Mastectomy with women and theirs husband?
4. Is there a relationship between loneliness and marital adjustment and theirs husband?

Materials and Methods

A descriptive and correlation design was used in this study. This study was made at Surgery unit of a University Hospital between April - September 2009 dates.

Participants

The research included 48 breast-cancer women with mastectomy surgery and 44 husbands that applied between the dates April - September 2009. All women and husbands meeting selection criteria have been included in research scope. However, since 3 husbands rejected participation and 1 husband completed data form inexactly the research has been finalized with the participation of 48 women and 44 husbands.

Inclusion Criteria;

· Mastectomy surgical experience (Patients that visited hospital for post-surgery check up or any other reason)
· Minimum 3 months of interval after the surgery (3-month is the appropriate duration to analyze the patient's marital adjustment and loneliness level in the earliest process possible).
· With no metastasis
· Able to communicate
· Married or living with a partner
· Literate
· With no psychiatric medical history
· and volunteering to participate women and husbands were included in the research.

Data collecting tools

It was used questionnaire form, Marital Adjustment

Scale, and UCLA Loneliness Scale for data collecting.

a) Questionnatire form; In this form, it was asked questions to patient and husbands that formed from socio-demographic characteristics with (age, educational level, profession, monthly income amount, the living environment, social security, number of children) 7 question, characteristics of marriage (his wife's profession, spouse's education level, age of marriage, marriage duration, preoperative During the marriage relationship description, the operation will affect the relationship of expression) containing 6 questions and preoperative levels for loneliness ("Do you feel alone Did you", "yes, how often") was composed of 2 questions. Form a group of 10 people applied before, in terms of content and meaning of the questions after checking the final offer is being implemented.

b) Marital Adjustment Scale

The Locke- Wallace Marital Adjustment Test. The 15-item Locke-Wallace (Locke and Wallace, 1959) provides a measure of marital happiness and allows both couples and individuals to be placed into satisfied and dissatisfied groups according to their score as well yields an overall adjustment score. Marital problems, which are not of the scale of the spouses was able to significantly distinguish. This scale consists of 15 items of the number of options for each item is different. Validity and reliability study of our country in 1999 were made by the Kışlak. Under of 43 points and taken in the assessment scores in marriage has been reported to indicate compatibility problems. Scale the highest score will be taken from the 60 'truck. Internal consistency α of the scale .84 found (Tutarel-Kışlak, 2002). Scale alpha reliability coefficient of 0.78 was found in this research.

c) Loneliness scale

The UCLA-LS was developed to assess the subjective feelings of loneliness or social isolation. Loneliness was measured by 20-item, UCLA-LS (Russell et al., 1980) in which subjects were asked to rate each of the 20 statements as to how often they agreed with the description. The responses ranged from 4 (often) to 1 (not at all), with a total possible aggregate score range of 20-80. The higher the score, the more loneliness the person experienced. This instrument had an internal consistency of alpha that was equal to 0.94 (16). The validity and reliability of the Turkish version of the UCLA-LS have been confirmed. In addition, this instrument had an internal consistency of alpha that was equal to 0.96 for Turkey (Demir, 1989). Scale reliability coefficient alpha of 0.85 was found in this research.

Procedure and data Analysis

Before the study, data collection forms were administered to a pilot group consisting of 10 people and were distributed to the study group without making any changes. The researcher visited the surgery clinic on five working days every week recruited the patients and conducted interviews confirming that women and theirs husbands met the inclusion criteria. Then, the questionnaire was explained to the participants, who read it and marked their answers on the sheets. Data collection process lasted for nearly 15 min. It was given to patients in a separate quiet room in this clinic. The SPSS 13.0 statistical package for Windows was used for statistical analyses. Descriptive statistics, correlations, Mann-Whitney U and Kruskal–Wallis tests were used for data analysis.

Ethical Principles

Ethics committee approval has been obtained (Ondokuz Mayis University, Number of Ethics Committee decisions; 2009/121). The patients and theirs husbands were informed about the purpose of the research. The participants and theirs husbands were assured of their right to refuse to participate or to withdraw from the study at any stage.

Results

In Table 1, descriptive findings of women and husbands have been illustrated. Age average of women is 50.1±11.4, husbands' is 44.9±12.2. 45.8% are high school and further education graduates, 60.4% are unemployed. 59.1% of husbands are primary education graduates and 68.2% are unemployed. 60.4% of women stated that they had mid-level income, 63.6% of husbands stated that they had high-level income. 83.3 % of women described their marriage before the surgery as good, 81.8% of husbands described it as good. 81.3% of women described their marriage after the surgery as bad, 77.3% of husbands described it as bad. 89.6% of women informed that they did not feel lonely before the surgery, 81.8% of husbands informed that they

Table 1. Descriptive Features of Women with Mastectomy and Theirs Husbands

Features		Women		Husbands	
Age		50.1±11.4		44.9±12.2	
Education	Primary School	19	39.6	26	59.1
	Secondary School	7	14.6	5	11.4
	≥High School	22	45.8	13	29.5
Employment	Employed	19	39.6	30	68.2
	Unemployed	29	60.4	14	31.8
Place of	Village	17	35.4	16	36.4
Residence	Town	12	25.0	12	27.2
	City	19	39.6	16	36.4
Income	Low	19	39.6	19	29.5
	Middle	29	60.4	28	63.6
	High	-	-	3	6.8
Social	Yes	45	93.8	41	93.2
Assurance	No	3	6.3	3	6.8
Marriaged Age		24.9±6.5		21.7±6.5	
Marriage length		24.4±12.2		22.3±12.2	
Years of Diagnosis		2.1±2.1		-	
Preoperative	Good	40	83.3	36	81.8
marriage	Bad	8	16.7	6	13.6
relationship	Unknown	-	-	2	4.5
Postoperative	Good	7	14.6	6	13.6
marriage	Bad	39	81.3	34	77.3
relationship	Unknown	2	4.2	4	9.1
Status to feel	Yes	5	10.4	8	18.2
lonely before	No	43	89.6	36	81.8
the surgery					
Status to feel	Yes	7	14.6	8	18.2
lonely after the	No	41	85.4	36	81.8
surgery					

Table 2. Marital Adjustment Scores According to the Characteristics of Women with Mastectomy and Their Husbands

Features		Marital Adjustment							
		Women				Husbands			
		x	SD	Statistics	p	x	SD	Statistics	p
Age		r=0.032		0.829		r=0.022		0.982	
Education	Primary School	50.7	7.3	KW= 2.686	0.26	47.3	1.1	KW= 6.88	0.03
	Secondary School	49.4	3.4			54.0	2.1		
	High School and up	52.4	4.1			59.3	2.6		
Employment	Employed	51.3	6.3	U= 263.0	0.79	49.1	5.8	U= 78.0	0.98
	Unemployed	51.5	4.3			44.8	15.5		
Place of Residence	Village	48.6	8.4	KW= 6.117	0.05	47.1	6.4	KW= 4.272	0.12
	Town	50.4	4.2			48.3	4.5		
	City	53.7	4.0			50.3	9.1		
Income	Low	50.8	5.2			47.6	6.2	KW= 1.117	0.6
	Middle	51.8	5.9	-	-	49.5	6.1		
	High	-	-			45.0	16.6		
Social Assurance	Yes	51.4	5.7	U= 67.5	0.98	48.6	7.2	U= 60.0	1.00
	No	52.0	1.0			46.3	3.1		
Marriage Age		r=0.33		0.02		r=0.148		0.337	
Marriage Length		r=-0.34		0.81		r=-0.026		0.867	
Years of Diagnosis		r=0.006		0.97		r=-0.048		0.756	
Preoperative Marriage Relationship	Good	51.3	5.5	KW= 0.222	0.64	48.8	7.5	KW= 0.97	0.616
	Bad	52.0	6.1			49.0	4.5		
	Unknown					46.0	1.4		
Postoperative Marriage Relationship	Good	51.0	4.8	KW= 2.405	0.30	39.2	8.6	KW= 10.71	0.005
	Bad	51.2	5.7			50.7	5.2		
	Unknown	57.0	4.2			45.8	6.1		
Status to Feel Lonely before the Surgery	Yes	53.6	5.6	U= 78.5	0.34	45.1	7.2	U= 90.0	0.10
	No	51.1	5.6			49.2	6.8		
Status to Feel Lonely after the Surgery	Yes	50.9	10.4	U= 118.5	0.47	41.5	8.7	U= 54.0	0.005
	No	51.5	4.5			50.3	5.5		

Table 3. Loneliness Scores According to the Characteristics of Women with Mastectomy and Their Husbands

Features		Loneliness							
		Women				Husbands			
		x	SD	Statistics	p	x	SD	Statistics	p
Age									
Education	Primary School	60.3	10.4	KW= 4.92	0.085	61.5	9.3	KW= 1.76	0.41
	Secondary School	61.6	7.8			66.4	8.0		
	High school and up	67.0	9.9			65.1	11.9		
Employment	Employed	61.9	10.2	U= 217	0.22	63.6	9.8	U= 56.5	0.35
	Unemployed	65.9	9.8			59.0	12.8		
Place of Residence	Village	59.0	12.8	KW= 4.86	0.09	56.3	8.9	KW= 8.32	0.01
	Town	62.0	8.5			63.6	8.9		
	City	67.2	12.3			67.8	9.5		
Income	Low	62.8	10.1			62.5	9.4	KW= 5.89	0.05
	Middle	64.0	10.4	-	-	64.8	10.0		
	High	-	-			51.0	2.6		
Social Assurance	Yes	63.5	10.2	U= 64.5	0.90	63.4	10.1	U= 47.0	0.53
	No	63.3	11.9			59.0	10.1		
Marriage Age		r=0.28		0.06		r=-0.040		0.80	
Marriage Length		r=-0.03		0.82		r=0.101		0.49	
Years of Diagnosis		r=-0.16		0.28		r=-0.403		0.007	
Preoperative Marriage Relationship	Good	63.3	10.2			63.1	10.6	KW= 0.645	0.72
	Bad	64.5	10.8	-	-	64.7	7.7		
	Unknown	-	-			59.0	7.1		
Postoperative Marriage Relationship	Good	66.3	10.0	KW= 1.320	0.52	51.7	4.9	KW= 10.680	0.005
	Bad	62.7	10.4			65.4	9.0		
	Unknown	70.5	2.1			60.1	13.1		
Status to Feel Lonely before the Surgery	Yes	66.6	2.9	U= 93.5	0.65	60.3	9.5	U= 116.0	0.40
	No	63.2	10.7			63.8	10.1		
Status to Feel Lonely after the Surgery	Yes	63.4	12.2	U= 136.5	0.84	56.9	7.8	U= 80.5	0.05
	No	63.5	10.0			64.5	10.0		

did not feel lonely before the surgery. 85.4% of women stated that they did not feel lonely after the surgery, 81.8% of husbands stated that they did not feel lonely after the surgery. In the research the total score women received from marital adjustment scale was 51.4±5.6 (min 30, max 60 points) and the total score husbands received from marital adjustment scale was 48.7±7.0 (min 26, max 59 points). In the research the total score women received from loneliness scale was 63.5±10.2 (min 37, max 80 points) the total score husbands received from loneliness scale was 63.1±10.0 (min 43, max 80 points).

It has been detected that the location women lived in has an effect on their marital adjustment and women living in cities had higher scores of marital adjustment compared to others ($p<0.05$). It has also been found out that marriage age of women was influential on marital adjustment and those with older ages of marriage had better marital adjustment ($p<0.05$).

It has been determined that education background of husbands was effective on marital adjustment and husbands with a high school or further diploma had better marital adjustment ($p<0.05$). The views of husbands on marriage after the disease were influential on marital adjustment. Husbands who described their marriage as bad after the surgery had higher marital adjustment scores ($p<0.01$). Husbands' feeling of loneliness after the surgery was effective on their marital adjustment. Husbands who did not feel lonely after the surgery had higher marital adjustment scores ($p<0.01$).

It has been ascertained that the city husbands lived in was effective and they had higher scores of loneliness than the others ($p<0.05$). Women's duration of diagnosis has been influential on the loneliness level of husbands. As the year of diagnosis increased, so did the level of loneliness ($p<0.01$). Husbands' views on their marital relations before the surgery were effective on the condition of loneliness. It has been detected that loneliness scores of women who described marital relations after the surgery as bad were higher ($p<0.01$).

A connection has been diagnosed between loneliness status of participant women and their marital adjustment ($r=0.373$; $p=0.009$). This has been a statistically significant relationship. A correlation has been detected between loneliness status of husbands and their marital adjustment. This has been a statistically significant relationship ($r=0.412$; $p=0.005$).

Discussion

At the end of research it has been determined that women with mastectomy and their husbands described the marital relations before the surgery as good. In present research, marital relations of women before the surgery have been evaluated with respect to subjective views of women (Table 1). In a research conducted by Okanlı, partner compatibility of breast cancer women before and after mastectomy has been examined and it has been found out that in post-surgery period women's marital adjustment was good which is a finding parallel to the deduction in present study (Okanlı and Ekinci, 2008). However, in this study it has been detected that marital relations between women and their husbands were negatively affected after the surgery. In a study by Avci et al., (2009) "Women's marital adjustment and hopelessness levels after mastectomy" it was noted that in post-surgical period the marital relations of women with mastectomy were negatively affected. These results are parallel to the findings of present research. It is thought-provoking that husbands also described their marital relations after surgery as bad.

According to the findings of present research, women and their husbands did not feel much lonely in the period prior to surgery. However there has been an increase in the number of women who stated to have felt lonely after the surgery (Table 1). These are subjective expressions of women and their husbands.

The statement of women and husbands claiming that they generally did not feel lonely may be related to their strong belief in the family and social support system. However the high score women received from loneliness scale in the research may indicate that women tend to not to express their loneliness.

In this research it has been ascertained that marital adjustment scores of women and husbands are mid-level and loneliness levels are high. In Okanlı and Ekinci's study (2008) low marital adjustment score prior to mastectomy was low again after the surgery but the difference in between was not statistically significant (Okanlı and Ekinci, 2008). In a study conducted by Dorval et al., (1999) it was found out that mastectomy was not influential on marital relations (Dorval et al., 1999). In Aygın and Aslan's research covering 190 women with mastectomy, 107 patients expressed that the treatment they received did not affect their relation with husbands (Aygın and Aslan, 2008). In Akyolcu's research (2008) it was put forth that husbands who had strong marital ties before the diagnosis visited their wives more frequently, returned back to their sexual activities sooner and were more willing to see their wives naked compared to other husbands (Akyolcu, 2008).

After mastectomy one of the greatest fears of patients is the feeling of rejection or dislike by their husband. These feelings affect the marital affairs of patients negatively. After mastectomy the increased affection of husband, feeling of togetherness, accepting the disease as a family problem shall enhance marital adjustment by affecting familial relations positively. After mastectomy emotional and psychological problems that arise with the perception of a distorted body image can be misleading the woman's feelings of attraction, sexual charm and desire hence negatively affecting her marriage. In a degenerative disease like cancer, increased affection of husband shall positively affect not only the patient's but also the husband's adaptation to disease (Okanlı and Ekinci, 2008; Özkan, 2011). The finding of this research is parallel to the literature. In present research as well patients described their marital relations in pre-surgery period as good. Their partner compatibility after the surgery was mid level. These findings all indicate that mastectomy operation did not affect at all or affected insignificantly partner compatibility. However in the research despite their mid-level score of marital adjustment, both women

and husbands described their marital relations after the surgery as bad which is a provoking statement that should be handled and analyzed seriously by oncology nurses. Indeed parallel results have been obtained in similar researches and it was exhibited that in the post-surgical periods as an outcome of the transformed image of body partner compatibility issues and frequency of psychological disorders increased in both women and husbands (Northose et al., 1998; Al-Ghazal et al., 2000; Sertöz et al., 2004).

In the previous researches it has been ascertained that cancer affected loneliness level and both the patients and their husbands experienced loneliness (Hawkley and Cacioppo, 2010; Rosedale, 2010; Yıldırım and Kocabıyık, 2010).

In present research the women living in cities and married for a longer period of time had higher marital adjustment scores than the rest (Table 2). This finding may be parallel to the idea that as the marriage life of women rises, the women get a better chance to know and trust their husbands so they may experience lower levels of loneliness.

In the research husbands with high school and further education diplomas had higher marital adjustment scores than the others (Table 2). It may be considered that as the educational level of husband increases he may be more supportive to his wife, share her feelings hence make her feel less lonely. In the struggle against disease, greatest source of social support for breast cancer patients is their husbands. It has been argued that women who receive partner support can adapt to the disease more easily which in turn affects their life satisfaction positively (Okanlı and Ekinci, 2008). This deduction is supportive of our judgment. However it is thought provoking that husbands describe their marital relations after the surgery as bad. Northouse (1998) in his research covering breast cancer women with mastectomy and women with benign breast disease and the husbands demonstrated that partner compatibility of breast cancer patients and the husbands was lower one year later than the couples with benign tumor breast disease women (Northose et al., 1998). This research also exhibits similar findings. Marital adjustment is higher in husbands who do not feel themselves lonely (Table 2).

It has been presented that descriptive features of mastectomy women were not effective on their loneliness levels. Loneliness levels of partners living in the city and whose wives were diagnosed with mastectomy had higher levels of loneliness (Table 3). Distorted image of female body after mastectomy can cause a variety of psychological and social problems in women which in turn may affect husbands negatively (Özbaş, 2006). Particularly for the partners whose wives are diagnosed with breast cancer there may be critical psychological problems after the diagnosis and feeling of uncertainty or even loneliness may arise. Present research also demonstrated similar results. High level of loneliness may be indicative of the fact that husbands were affected badly in psychological terms from the surgery.

The loneliness level of husbands describing their marital relations as bad after the surgery was high (Table 3) which is an expected result. Expressions describing the marital relations after the surgery are subjective statements hence they represent momentary thoughts of husbands. Their negative statement on the course of marriage and focusing on their loneliness are findings that deserve further analysis.

In conclusion, at the end of this research, women with mastectomy and their husbands described their marital relations before the surgery as good but as bad after the surgery. Women with mastectomy and their husbands stated that they did not feel lonely before or after the surgery. It has been determined that marital relations of couples were mid-level and their status of loneliness feeling was high. Women who were married for longer period had higher marital adjustment level. Marital adjustment score of husbands who described their post-surgery marital relations as bad was high and their loneliness level was also high. Marital adjustment score of husbands who stated that women did not feel lonely after surgery was higher; loneliness level of husbands whose wives were diagnosed with disease a short while ago was also higher.

In this study, the findings should be interpreted in light of its limitations. The study was carried out in a university hospital located in north of Turkey in Central Black Sea Region and only in surgery clinic. In Turkey, there are traditional, social, cultural and economic differences according to regions. The number of patients included in the study was also low. All the above limitations make generalizations difficult.

It is critical that nursing initiatives be arranged in line with health trainings on marital adjustment and loneliness and psycho-social approaches and communications are adjusted to meet the needs of women and husbands. Thanks to their awareness of partner compatibility and loneliness levels of patients, oncology and public health nurses in particular may have a positive effect on the social wellness and disease prognosis through the initiatives they conduct and perform in both the clinic and homes of patients. Besides, oncology and public health nurses may be provided with trainings covering psycho-social approaches specific to breast cancer patients and other relevant topics as well. Well informing the patients and husbands before the surgery and guidance of nurses shall be assistive in coping with the disease and maintaining partner compatibility. Additionally it is suggested that for a better enlightenment on this topic, sampling size may be increased in prospective researches and further analyses may be conducted.

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