



Relationship between Body Image Concern, Difficulty in Emotion Regulation, and Sexual Satisfaction of Healthy with Mastectomy Women

Masoumeh Noori^{1*}, Floor Khayatan¹ and Simin Hemati²

¹Department of Psychology, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

²Department of Radiation Oncology, Seyed Al-Shohada Hospital, Isfahan University of Medical Sciences, Isfahan, Iran

ABSTRACT

Breast cancer is the most popular malignant cancer in women of advanced countries and the second cancer in Iran. The objective of the present research is studying the relationship between body image and difficulty in emotion regulation and sexual satisfaction of healthy women with women undergoing mastectomy.

Fifty afflicted women to mastectomy who were operated and fifty healthy women that were their companion was selected by convenience sampling method, the objective of this study for the members of these 2 groups was comparing body image concerns, difficulty in emotion regulation, and sexual satisfaction between healthy and mastectomy women in Isfahan in 2016. The methodology was causal-comparative. People filled difficulty in emotion regulation scale (Gratz and Roemer, 2004) with 0.86 reliability, the body image concern inventory (Littleton, 2005) with 0.89 reliability, and Larson sexual satisfaction questionnaire (Larson et al., 1998) with 0.93 reliability. SPSS 22 software, descriptive statistical method (mean, standard deviation), and inferential statistical method (multivariate variance analysis) were used to analyze the hypotheses. Results showed that there is not significant difference between difficulty in emotion regulation and its dimensions (emotional rejection, difficulty in carrying out purposeful behavior, impulse control difficulty, lack of emotional awareness, limited access to emotion regulation strategies, lack of emotional clarity, and total difficulty) in mastectomy and healthy women. ($P > 0.05$). There is not significant difference between body image concern in mastectomy and healthy women. ($P > 0.05$). In addition, results showed that there is significant difference between sexual satisfaction in mastectomy and healthy women. ($P < 0.05$)

Keywords: Mastectomy; Body image concern; Sexual satisfaction

INTRODUCTION

Problem statement

Cancer is a type of disease indicated by the uncontrolled growth and attack to the local and systematic metastases. Breast cancer is the most popular cancer of women in the world as death cause in the second rank after cardiovascular disease. Fortunately, advances in breast cancer screening and treatments increase life to 50% by keeping women alive for 5 more years after diagnosis of the disease. This issue leads to focus on quality in life issues and attention to the sexuality, while this is proved that women sexuality becomes more sophisticated after mastectomy operation [1]. Sexual-mental changes after mastectomy treatment include panic of losing fertility power, negative body image, losing feminine appeal, depression, and anxiety. The sexual objection spectrum includes painful intercourse, vaginal dryness, loss of libido, and breast numbness [2]. Breast cancer is one of disease making intensive mental effects. Many afflicted women to breast cancer suffer from mental problems such as depression and anxiety and undergoing the heavy operations such as surgery and chemotherapy have side effects. These intensify the mental problems. What is studied in this research is body image concern, difficulty in emotion regulation, and sexual satisfaction.

Definition of body image

Body image includes conscious and unconscious emotions about body as a constitutional concept about individual emotions about body size, performance, and ability to achieve objectives [3]. The expression of body image has two perceptual and attitude aspects. The perceptual aspect of body image is related to the manner of seeing sizes, shape, weight, face, movements, and actions, while the attitude aspect is related to individual feeling about these traits, and how these feelings guide his/her behavior [4]. Researchers have shown that women with more positive body image are more satisfied with their lives [5]. The body image concept was defined for the first time by Shoulder with psychological view toward human body as what is shaped in minds, and how body represents for human. This conception has two main aspects of body image capital and body image evaluation that body image capital is attributed to the importance degree of behavior and cognition about people body and appearance, and body image evaluation is related to the satisfaction or dissatisfaction degree of people appearance [6]. (Harginson, 2009) Mental health professionals have many studies in this field for the importance of body image in social communications and interpersonal relationships. It seems that people with good feeling to themselves usually have good feeling to life, actually, positive image from an individual makes a valuable feeling in an individual and the changed mental image by anyway leads to changes in sense of valuableness [7].

Cash (1997) referred that body image is a structure different from the real appearance of an individual. In other words, it returns to the specific and personal relationship of an individual with his/her body. In other words, it is representation of beliefs, perceptions, emotions, and activities relating with the physical appearance of an individual. Body image is the mental image of each person from his/her body.

Definition of emotion

The term “emotion” refers to the inner thinking, feeling, and mental mode and a range of individual intentions to act and use by them [8]. Actually, emotion is a specific inner and emotional mode starting with interpretation a situation by a specific manner and collection that make internal physiological changes which finally lead to the balance return between organism and environment.

Emotion regulation

Emotion regulation refers to the step that mediating people influence on their emotion and how they state and experience them. Difficulty in emotion regulation must be the result of lack of emotion regulation abilities and capabilities [9]. Emotion regulation is considered as a process of moderating emotions to respond to the conscious and unconscious environmental expectations [10]. Emotion regulation is known using effective strategy in reduction, increase, or oppresses, or survives emotion, and it is believed that motion regulation is one of inherent characteristics of man. Emotion regulation makes a specific response to emotion and helps him to modify individual emotional responses [11].

Cognitive emotion regulation

Cognitive emotion regulation is called to the all cognitive styles that each person use it to increase, reduce, or keep his/her emotion in stressful situations [11].

Granefski & Kraaij (2002) proposed 9 different cognitive emotion regulation about cognition coping strategies that are divided as following:

- Mal-adaptive strategies for cognitive notion regulation: 1- self-blaming: thought of knowing yourself guilty and blame yourself, 2- rumination: occupation of mind by related thoughts and emotions to negative evidences, 3- catastrophizing: though with panic of evidence, 4- other blaming: thought of knowing others guilty and blame others
- adaptive strategies for cognitive notion regulation: 1- acceptance: though with evidence content acceptance, 2-positive refocusing: thinking to enjoyable and happy issues instead of thinking to real evidence, 3- refocusing on planning: thinking to the steps of coping with negative realities or change it. 4-positive reappraisal: thinking to the positive aspects of an evidence or personal promotion, 5- putting in to perspective: related thoughts to the minority of an evidence or emphasis on its relativity in comparison to other evidences.

EXPERIMENTAL SECTION**Difficulty in emotion regulation**

According to the positive and constitutional role of emotions in human life, another aspect is represented for them that are the destructive aspect of emotions in people lives [12]. This double performance of emotions refers to the emotion regulation process in which people regulate and moderate their emotions according to various situations. Emotional regulations are said to regulating emotional processes. Therefore, difficulty in regulation means emotion

irregularity. Although, many clients like to know their emotional irregularity equal to lack of control on emotional citations. In addition, when these cases are comparative, emotional irregularity is called to disabilities in experience, express, and use emotions. When people emotions get regular, they report the emotion of losing control. They don't have talent to do and take things in ordinary mode [13]. Difficulty in emotion regulation means a key element in several mental pathology for a specific disorders such as individual personality disorder, major depression, bipolar disorder, generalized anxiety, social anxiety, eating disorders and substance abuse disorders and alcohol that difficulties role in their emotional regulation have been studied and influenced [14]. Disabilities in emotion regulation are an infrastructure mechanisms for morale and anxiety disorders.

Aldao (2010) studied the relationship between inefficient strategies in emotion regulation and mental harms in a meta-analytical research in 241 effect in 144 articles. Results showed that strategies such as rumination, oppression, prevention from solution have the maximum effect size on mental disorders. Moreover, depression disorders and anxiety has more and more aligned relationship with inefficient strategies of emotion regulation in various research in comparison to the disorders of eating and drug abuse. According to researchers, people with various emotional disorders use different strategies in facing with miserable conditions. Evidences of studies showed that depression is not only known by abnormal emotional experiences (for example low positive and high negative affect), but also is indicated by inefficient strategies of emotion cognition. In medical cases, more using of rumination predict response to negative emotions, start, duration, and ascending period of depression.

Moreover, defect in cognitive emotion regulation plays a central role on growth of depression [15]. The anxious and depressed people try to prevent their negative emotions. This fact returns and appraise he negative emotions. These people use emotional prevention as a presumed strategy to improve their moralities. In addition, afflicted people to anxiety and depression may use other maladaptive strategies such as situational avoidance, using safety signs to give attention, rationalization, or drug abuse to release negative emotions. These people will lose the opportunities of learning adaptive and effective methods of facing with pressure and anxiety by non-accepting negative emotion experience [16].

Studies have shown that skills are significantly with various indexes of mental health in ordinary and medically population and difficulties of emotion regulation can be the beginning of mental disorders [12].

Difficulties of emotion regulation are for the relationship between characteristics of borderline personality and extreme subjectivism [11].

Regulated and unregulated emotion

Cognitive emotion regulation is always with human helping to management or emotion regulation, and feelings and gives more adaptation power, particularly after negative emotional experiences [10].

Since ability of emotion regulation can determine the quality of individual relationship. People that can regulate their emotions can understand his/er and others emotions better. Consequently, they have better perception about people in various conditions and have more developed interpersonal and intrapersonal skills. Therefore, such people have better relationships than people have difficulties in emotion regulation. (Lupes et al., 2004) People who have difficulty in emotion regulation get their emotional situations again, protect their relationship, and feel that they are in negative models of relationships with others, they feel out of control; therefore, they have less sexual satisfaction [14].

Sexual relationships and satisfaction

Sexual satisfaction or satisfaction from sexual relationship is considered as one one of marital satisfaction element as one of important indexes of successful marriage, survival, and health of family.

Sexual relationship is influenced by emotional relationships among spouses and there are possibility for sexual dissatisfaction, and finally various family problems. Sexual dissatisfaction reduces health, life time, and satisfaction from life, disorder in growth, and perfection of souses, and separation of marital relationship [11].

Sexual relationships by being impressed on thoughts and emotions of spouses can influence relationships among them directly and indirectly in extensive spectrum. It means spouses with adaptation in this field are happy, able to neglect their life inconsistency, while life inconsistency can make harsh side effects in spouses with sexual dissatisfaction [9].

Among sexual needs, sexual instinct has deep mixture with mental needs as though its effects can be observed in many life aspects. This instinct has undeniable effect in marital life, its consistency, and durability. Moreover, it has important and infrastructural role toward health and mental equilibrium. Sexual desire stays far from other biological needs by these significant characteristics and changes to a mental need. Sexual satisfaction is not just a physical pleasure and it includes all the remained emotions after the positive and negative aspects of sexual

relationship. Sexual satisfaction includes individual satisfaction from sexual activity to reach the orgasm. Sexual life satisfaction is divided to 5 classes:

- Interpersonal variables: quality of marital relationship and interactions; sexual self-presentation.
- Physiological variables: number of sexual activity and orgasm experience,
- Sexual schema variable.
- Personal variables: women knowledge and awareness, sexual disorders, personality traits, physical disease, mental problems, sexual self-confidence, sexual harm in childhood.
- Demographic variables: age, marriage duration, his/her and spouse education.

Perhaps out of fear and anxiety, shame, embarrassment or feelings of inadequacy and guilt it stays hidden and not stated. In many cases, these problems are hidden and may show themselves by symptoms such as physical bothersome or depression and dissatisfaction from marital life and goes up to intensive family disputes and divorces [13].

Haide & Delamater (2006) believe that in cases with anger or failure, the sexual relationships among spouse is damaged leading to sexual dissatisfaction in some cases of sexual disorders. The problems in sexual relationships can be sign of other problems in marriage, and so-called the problem is from somewhere else. Dissatisfaction from sexual relationships can lead to deep problems in spouses and making detest from spouse, annoyance, jealousy, competition, sense of revenge, feelings of humiliation, lack of confidence, and so on. These problems are reinforced or represented by stresses and disputes and deepens the gap among spouses. Men and women have dispute about the number and time of sexual relationships. Proud plays role in most sexual relationships. Women perception about womanish and man from manhood is mostly related to the reaction of partner. Having sense of being accepted and reciprocal pleasure reinforce sexual instinct, and reduction of love sense, companionship, and acceptance weaken it.

Difficulty in emotion regulation scale

The difficulty in emotion regulation is a self-reporting index made to evaluate the difficulties in emotion regulation. It has 36 clauses and 6 sub-scales as following:

Lack of emotional acceptance: it includes clauses (11, 12, 21, 23, 25, and 29). Impulse control difficulty: it includes clauses (3, 14, 19, 24, 27, 32); lack of emotional awareness includes clauses (2, 6, 8, 10, 17, 34), limited access to emotional regulation strategies includes clauses (15, 16, 22, 28, 30, 35, and 36), and lack of emotional clarity includes clauses (1, 4, 5, 7, and 9). The clauses 1, 2, 6, 7, 8, 10, 17, 20, 22, 24, and 34 were reversely scored. Related results to study the reliability by Gratz and Roemer showed that this scale has high internal consistency (total scale $\alpha=0.86$), awareness sub-scale ($\alpha=0.80$), strategies sub-scales ($\alpha=0.88$), clarity subscale ($\alpha=0.84$), and reliability of test-retest for total score of this scale is $\alpha=0.88$. The validity of this study shows structure validity with good prediction for this scale. The accountability scale is five –point (nearly never=1 to nearly always=5) as 1 means never (0-10%), 2 means sometimes (11-35%), and 5 mean nearly always (91-100%). Each participant is in range of 1-5. Higher score show more difficulty in emotion regulation. In Alavi *et al.* (2011) research, this scale was used in Iran for the first time. In this research, Cronbach's alpha coefficient for total scale was reported 0.86.

Body image concern inventory

This scale was made by Littleton *et al.* (2005) to evaluate people concerns about their appearance. Littleton *et al.* conducted this inventory on 1403 people to evaluate and prepare it. Cronbach alpha coefficient was obtained 0.893 and internal validity coefficient was obtained 0.92 using Cronbach's alpha coefficient. Moreover, high correlation with other scales in this field was shown. For example, reliability of this scale with body dysmorphic disorder questionnaire in 0.001 sig. level was obtained 0.83 ($T=0.83$) which shows the high validity of this scale. This inventory is self-assessment with 19 questions that each has 5 points from 1(never) to 5(always). Basakzadeh and Ghaffari (2007) reported this inventory based on internal validity by Cronbach's alpha coefficient 0.95 in Iran. Entezari and Alavi (2011) also reported internal validity 0.89 by Cronbach's alpha coefficient [15].

Sexual satisfaction scale

Larson sexual satisfaction was made by Larson *et al.* (1998) including 25 questions by Likert five-point spectrum questionnaire that has 1(never), 2(seldom), 3(sometimes), 4(often), 5 (always) that numbers of questions are as following: 1-2-3-10-12-13-16-17-19-21-22, and 23 and other questions were reversely scaled. In other words the questions 4.5.6.7.8.9.11.14.15.18.20.24. and 25 were scored as following: 5 is never, 4 is seldom, 3 is sometimes, 2 is often, and 1 is always. Scores are generally 25-125 according to this scale, and sexual satisfaction gives less than 50 to the lack of sexual satisfaction level, 51-75 to low satisfaction, and 76-100 to medium satisfaction, and 101 to higher is given to high satisfaction.

It must be noticed that Shams Mofarahe (2001) under the title of “study the effect of marital counselling on couples’ sexual satisfaction reported 0.90 and 0.86 for validity and reliability, respectively. Moreover, in Bahrami research under the title of “study the sexual satisfaction and depression among fertile and infertile couples obtained 0.93 for Cronbach’s alpha coefficient.

RESULTS AND DISCUSSION

Frequency table and descriptive indexes of research variables

Table (1) frequency and frequency percentage of two research groups based on marital status background;

Table 1: Shows frequency and frequency percentage of two groups based on number of children

Row	Marital status background	Mastectomy		Healthy	
		Frequency	Percent Frequency	Frequency	Percent Frequency
1	1 year and less	0	0	0	0
2	2 years	0	0	15	30
3	3 years	2	4	21	42
4	4 years and more	48	96	14	28
5	Total	50	100	50	100

Table 2: Frequency of the two groups in terms of the number of children

Row	Number of children	Women with mastectomy		Healthy Women	
		Frequency	Percent Frequency	Frequency	Percent Frequency
1	0	0	0	6	12
2	1	5	10	26	52
3	2	15	30	14	28
4	3	30	60	4	8
	Total	50	100	50	100

As it is seen in table (2), from all afflicted to mastectomy, 5 people (10%) have 1 child, 15 people (30%) have 2 children, and 30 people (60%) have more than 3 children. In addition, as it is seen in table (2), 6 from all 50 member of healthy women group (12%) don’t have any children, 26 (52%) have 1 child, 14 (28%) have 2 children, and 4 (8%) have 3 and more children. Table (3) shows the results of presumptions of multivariate variance analysis.

Table 3: Results of Kolmogorov-Smirnov test (normal distribution of data) and Levine test (equal variances) in determination difficulty in emotion regulation, body image, and sexual satisfaction

Row	Variables	Dimensions variable	Levine test		Kolmogorov-Smirnov test	
			Statistics	sig. level	Statistics	sig. level
1	Difficulty in emotion regulation	Rejection	3.384	0.069	35.08	0.028
2		Difficult in purposeful behaviors	3.71	0.057	28.82	0.051
3		Impulse control problems	1.968	0.164	26.5	0.231
4		Lack of emotional awareness	0.002	0.962	46.16	0.001
5		Limited access to strategies	1.166	0.283	30.14	0.262
6		Lack of emotional clarity	1.091	0.299	52.32	0
7		The overall difficulty	1.649	0.202	19.68	1
8		Body Image	2.007	0.16	44	0.598
9		Sexual Satisfaction	0.053	0.819	28.26	0.997

It is seen in table (3), difficulty in emotion regulation are in sub-scale (rejection, difficulty in carrying out purposeful behavior, impulse control problems, limited access to strategies ($P>0.05$), and lack of emotional awareness, and lack of emotional clarity ($P<0.05$). Except the sub-scale of lack of emotional awareness and lack of emotional clarity whose normality and equal variance are considered, other sub-scales have distributed normality ($P>0.05$) and equal error variance in healthy and mastectomy group weren’t considered. It is noticeable that multivariate variance analysis is strong against violating some presumptions and results are reliable. In addition, body image concern variable has considered distributed normality ($P>0.05$) and equal error variance between 2 healthy and mastectomy groups. However, according to table (3), sexual satisfaction has normal distribution ($P>0.05$) and error variance are equal between healthy and mastectomy groups.

Table 4: Descriptive indexes (mean and standard deviation) of difficulty in emotion regulation, body image, and sexual satisfaction in two healthy and mastectomy groups

Row	Difficulty in regulating emotions	Mastectomy		Healthy	
		M	SD	M	SD
1	Emotional rejection	15.5	6.94365	13.64	5.16961
2	Difficulty in carrying out purposeful behaviors	13.62	5.28336	13.62	4.33255
3	Impulse control difficulty	15.466	6.40539	15.06	5.50477
4	Lack of emotional awareness	16.66	4.84288	16.98	4.62685
5	Limited access to emotional strategy	20.3	7.91859	20.1	7.50892
6	Lack of emotional clarity	11.86	3.60844	11.48	3.75386
7	Total difficulty	92.84	25.8515	90.58	21.4401
8	Body Image	40.52	17.1717	42.76	14.1675
9	Sexual Satisfaction	86.14	16.6905	95.5	16.6037

As it is seen in table (4), difficulty mean in emotion regulation (emotional rejection in mastectomy group is 15.500 and in healthy group is 13.6400), difficulty in carrying out purposeful behavior (136.200 in mastectomy group and 13.6200 in healthy group), impulse control difficulty (15.46600 in mastectomy group and 15.0600 in healthy group) lack of emotional awareness (in mastectomy group is 20.3000 and in healthy group is 16.9800), limited access to emotional strategies in mastectomy group is 20.3000 and in healthy group is 20.1000), and lack of motional clarity (in mastectomy group is 11.8600 and in healthy group is 11.4800).

Findings of research hypotheses

First hypothesis:

There is significant difference between difficulty in emotion regulation (emotional rejection, difficulty in carrying out purposeful behavior, impulse control difficulty, lack of emotional awareness, limited access to emotional strategies, lack of emotional clarity, and total difficulty) between mastectomy and healthy women.

Second hypothesis:

There is significant difference in body image between mastectomy and healthy women.

Third hypothesis:

There is significant difference in sexual satisfaction between mastectomy and healthy women.

Multivariate variance analysis on elements of difficulty in emotion regulation, body image, and sexual satisfaction between mastectomy and healthy women.

Row	Difficulty in emotion regulation	Sum of squares	Degrees of freedom	Mean Square	F coefficient	Sig. level	Chi-share (η)	Test ability
1	Emotional rejection	86.49	1	86.49	2.308	0.132	0.023	0.325
2	difficulty in carrying out purposeful behavior	0	1	0	0	1	0	0.5
3	impulse control difficulty	4	1	4	0.112	0.738	0.001	0.63
4	lack of emotional awareness	2.56	1	2.56	0.114	0.736	0.001	0.63
5	Limited access to emotion regulation strategies	1	1	1	0.018	0.895	0	0.52
6	Lack of emotional clarity	3.61	1	3.61	0.266	0.607	0.003	0.8
7	Total difficulty	127.69	1	127.69	0.226	0.635	0.002	0.76

There is significant difference between difficulty in emotion regulation (emotional rejection, difficulty in carrying out purposeful behavior, impulse control difficulty, lack of emotional awareness, limited access to emotional strategies, lack of emotional clarity, and total difficulty) between mastectomy and healthy women.

As it is seen in table (5), there is not significant difference in emotion regulation between healthy and mastectomy women ($P>0.05$). Therefore, hypothesis 1-1, based on significant difference in emotion regulation between healthy and mastectomy women, is not confirmed.

Row	Body Image	Sum of squares	Degrees of freedom	Mean Square	F coefficient	Sig. level	Chi-share (η)	Test ability
		125.44	1	125.44	0.506	0.478	0.005	0.109

Hypothesis 1-2- There is significant difference in body image between mastectomy and healthy women. As it is seen in table (5), there is not significant difference in body image between healthy and mastectomy women ($P>0.05$). Therefore, hypothesis 1-2, based on significant difference in body image between healthy and mastectomy women, is not confirmed.

Row	Sexual Satisfaction	Sum of squares	Degrees of freedom	Mean Square	F coefficient	Sig. level	Chi-share (η)	Test ability
		2190.24	1	2190.2	7.903	0.006	0.075	0.795

Hypothesis 3-1- There is significant difference in sexual satisfaction between mastectomy and healthy women. As it is seen in table (5), there is significant difference in sexual satisfaction between healthy and mastectomy women ($P<0.05$). Therefore, hypothesis 1-3, based on significant difference in sexual satisfaction between healthy and mastectomy women, is confirmed.

CONCLUSION

The present study aims on comparing difficulty in emotion regulation, body image, and sexual satisfaction between mastectomy and healthy women in Isfahan city. The methodology was causal-comparative to analyze data by multivariate variance analysis (MANOVA), statistical population of this study includes all afflicted women to breast cancer who were gone under mastectomy that 50 of them and 50 of healthy women (among patients companions) were selected and tested as sample by convenience sampling method. Measurement instrument was difficulty in emotion regulation scale (DERS), body image concern inventory (BICI), and Larson sexual satisfaction questionnaire (LSSQ). Results were examined in two descriptive and inferential statistical levels that some results are mention briefly in following, then research discussion and conclusion is stated, and finally research limitation and suggestions are offered.

- There is significant difference between difficulty in emotion regulation (emotional rejection, difficulty in carrying out purposeful behavior, impulse control difficulty, lack of emotional awareness, limited access to emotional strategies, lack of emotional clarity, and total difficulty) between mastectomy and healthy women.

According to the first hypothesis in table (5), difficulty in emotion regulation and its elements are not significant. Therefore, the first hypothesis is not confirmed that is based on the significance difference between difficulty in emotion regulation (emotional rejection, difficulty in carrying out purposeful behavior, impulse control difficulty, lack of emotional awareness, limited access to emotional strategies, lack of emotional clarity, and total difficulty) between mastectomy and healthy women. These findings are in disagreement with some previous research results as following.

- There is significant difference in body image between mastectomy and healthy women.

According to the second hypothesis from table (5), it is seen that there is not a significant significant difference in body image between mastectomy and healthy women. Therefore the second hypothesis based on difference in body image between mastectomy and healthy women is not confirmed. These findings are in disagreement with some previous research results as following.

- According to the third hypothesis from table (5), it is seen that there is a significant significant difference in sexual satisfaction between mastectomy and healthy women. Therefore the third hypothesis is confirmed. These findings are in agreement with some previous research results as following.

ACKNOWLEDGEMENTS

This study was supported by Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran, and resulted from M.Sc thesis of Masoumeh Noori.

REFERENCES

- [1] O Didem; A Neriman. *Jap J Nurs Sci.* **2016**, 13, 220-228
- [2] G Emilee; JM Ussher; J Perz. *Maturitas*, **2010**, 66(4), 397-407.
- [3] N Akyolcu; G Altun Ugras. *J Breast Health*, **2011**, 7, 10-14.

-
- [4] R Siegel; D Naishadham; A Je mal. *Cancer J Clin*, **2012**, 62(1), 10-29
- [5] SM Bigatti; LF Brown; JL Steiner; KD Miller. *Cancer Nurs*. **2011**, 34(3), 193-201.
- [6] H Henson. *Sem Disabil*. **2002**, 20, 4-8.
- [7] LM Anllo. *J Sex Martial Ther*, **2000**, 26: 241-248.
- [8] M Hagedoorn; M Dagan; E Puter Man; C Hoff; WJ Meijerink; A Delongis; Sanderman. *J Behav Med* **2011**, 34(4), 288-297
- [9] J Coutinho; E Ribeiro; R Ferreirinha. *Psi. Clin. J*, **2010**, 37(4), 145-151.
- [10] BM Ohaeri; AB Ofi; OB Campbell. *Psychooncology* **2011**, 23(13), 23-29.
- [11] J Gross *J Pers Soc Psychol*, **1998**, 74, 224-237.
- [12] R Esfehiani; Sabahi; P Rafienia; S faNejati. *Iranian J Cognition Edu*. **2014**, 1(1), 34-39.
- [13] I Harirchi; A Montazeri; F Zamani Bidokhti; N Mamishi; Zendehtdelk. *J Eupclin cancer Res*, **2012**, 31, 20-28.
- [14] J Benson; C Kraemer. *J Consul Clin Psychol*, **2002**, 70(4), 916-925
- [15] A Rahmani; N Sadeghi; L Allahgholi; A Marghati Khuei. *Iran J Nur*, **2010**, 23(66), 22-23.
- [16] B Owhad. Normal and non-normal human sexuality. Sadegh Hedayat Publications, **2005**, 341.