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QUALITY OF SEXUAL LIFE AMONG POST MASTECTOMY WOMEN

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Abstract:

The study **aims to** assess quality of sexual life among post mastectomy women. A descriptive exploratory study was utilized with a sample of (200) post mastectomy women who attend outpatient clinic of oncology center at Mansoura University after at least one year of mastectomy. **Data were collected by using two tools**, one for assessing socio demographic and clinical characteristics which developed by the researcher, the second for assessing the quality of sexual life and its developed by the researcher, . **Results** revealed that about two thirds (66 %)of the studied patients have unsatisfactory quality of sexual life, while the other third of them have satisfactory quality of sexual life and there is statistically significant relation between quality of sexual life, and age($P \leq 0.001$), the studied patients whose age is (30-40) years old have the high scores of satisfaction regarding their quality of sexual life with mean of (44.72), while the studied patients whose age is (41-50) years old have the low scores of satisfaction regarding their quality of sexual life with mean of (39.4). In conclusion, about two thirds of the studied patients have unsatisfactory quality of sexual life after mastectomy, Therefore, Comprehensive health educational programs for all women following breast cancer treatment in outpatients' clinics of oncology units include psychological, social, rehabilitation, and follow up, earlier recognition of sexual problems and active involvement for sexual health improvement program are recommended.

Keywords: Breast Cancer, Mastectomy, Quality of Sexual Life

Introduction:

Breast cancer is a significant health problem worldwide, and a complex disease both physically and psychologically [1].

Not only breast cancer cause negative impact on women lives but also used treatment such as, mastectomy, chemotherapy and radiotherapy, cause physical and mental stress and leading to changes in everyday women lives. Therefore, one could expect that breast cancer and its treatment could significantly have negative influence on those women quality of psychosexual life with reference to physical, mental and social dimensions [2].

The bodily changes that occur following mastectomy can result in patients losing positive image in their own body, this negative image of body include dissatisfaction with appearance, embarrassment in exposing her body, reluctance to see her naked body, discomfort in showing scar and feelings of diminished sexual attractiveness, this had an impact on women's relationships with partners, making them hesitant to initiate physical contact, and changed behavior in relation to exposing their body to partners and family [3] & [4] .

Sexuality is an important aspect of physical, psychological and social life, increasing life quality and nurturing the individuals self development, and is affected by the individuals body perception, sexual reactions, roles and relationships. The stress factors throughout the disease process and the side effects of treatment can affect the patients intimate and sexual relationship with the spouse in a negative way and cause sexual dysfunctions [5] .

The psychological sequel of surgical treatment for breast cancer on sexuality include:, overall body change, lack of sexual interest, problems with sexual relations and resumption of sexual activity, general sexual dysfunction, sexual satisfaction and concern about frequency and difficulties with becoming sexually aroused [6].

Mastectomy among women who undergo this surgery after diagnosed with breast cancer not only adversely affects their own perception about body image but also may lead to decrease in their sexuality and the desire to have sexual intercourse with their husbands, the majority of the husbands isolated their wives and separated or got divorced due to the anxiety and tension that they too might catch some kind of disease through sexual intercourse with the wives who had breast cancer, Loss of breast is compared to a stigma in the society which becomes unmanageable by the women who undergo this loss [7].

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 [8]. Generally, [9] stated that sexual dysfunction affects up to 90% of women treated for breast cancer especially with mastectomy.

Female sexual dysfunction after mastectomy may take several forms, including lack of sexual desire, impaired arousal, inability to achieve orgasm, pain with sexual activity, vaginal lubrication difficulties, dyspareunia, inhibited orgasmic satisfaction, lack of interest in partner, brevity of intercourse, and vaginismus or a combination of these issues, sexual problems as a result of mastectomy have a negative impact on measures of quality of life [10].

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 [11].

Yet, sexuality is affected by cancer treatment mainly during the first year of survivorship but as time pass, women are less anxious of disease prognosis and hence their sexual life become normal again [12] & [13].

Some good news from recent research is that within a year after their surgery, most women with early-stage breast cancer have good emotional adjustment and sexual satisfaction. They report a quality of life similar to women who never had cancer [14].

Aim of the study:

The aim of this study was to assess the quality of sexual life among post mastectomy women.

Material and Methods:-

Study Design:-

A descriptive exploratory research design was used to conduct the present study.

Setting:-

The study was carried out in the out-patient clinic of oncology center at Mansoura University.

Subjects:

The subject of the study constitute 200 women have mastectomy who fulfill the following criteria:

1. At least one year after mastectomy.
2. Age between 30-50 years old.
3. Married before mastectomy and still married after mastectomy.
4. Willing to voluntary participate in the study.
5. Receiving hormonal Therapy.

Tools: Two tools was used to collect data:

Tool I: Socio- Demographic and clinical history developed by the researcher.

Tool II: Quality of Sexual Life Scale and it is developed by the researcher, it contains 20 items; the response was measured on a four Likert scale ranging from 1 to 4. Reliability done using Cronbach's Alpha test equaled 0.67.

Methods:

1. Official approval for conducting this study was obtained from the director of Oncology Center of Mansoura University and the head of the Medical Out-patient Clinics of Oncology Center of Mansoura University.
2. Once permissions were granted to proceed in this proposed study, 200 post mastectomy women who fulfilled the inclusion criteria were approached by the investigator to gain their approval to participate in the study.
3. The investigator started data collection by introducing himself to participants, explain to them the purpose of the study and assure confidentiality.
4. The validation process of all study tools used both face and content validity by the judgment of a jury of six professors (three psychiatrists, two professors in medical oncology, and one professor specialized in psychiatric and mental health nursing). This panel of experts approved both face, and content validity of the study tools, and its scoring systems
5. A pilot study was carried out on a total of 10% of the sample (20 of post mastectomy women) according to the criteria of selection at Oncology Center of Mansoura University before starting the data collection and these patients didn't included in the actual study to test the clarity and applicability of the tools.
6. Each patient was individually interviewed to collect the necessary data in privacy.
7. Patients' privacy was maintained, and patients were informed about their rights to withdraw from the study at any time without penalty.
8. The participants who refused to continue filling the questionnaire were excluded from the sample size.
9. Structured interviews conducted in Medical Outpatient Clinic of Oncology Center of Mansoura University. The interview with each patient lasted for 30 to 45 minutes.
10. All tools of data collection were coded to avoid declaration of any personal information of sample information.

Filed work: The investigator collected data over a period of 5 months from the beginning of May 2014 to the end of September 2014.

Ethical consideration:

- The permission was obtained from the faculty of nursing ethics committee.
- Informed written consent from the patients were obtained

Statistical analysis:

Data were analyzed using **SPSS** version 16. The normality of data was first tested with one-sample Kolmogorov-Smirnov test. Quantitative data were presented as mean and standard deviation. Continuous variables were presented as M (Mean) ± SD (standard deviation) for parametric data, and Median for non-parametric data.

Analysis Of Variance (ANOVA test) used for comparison of means of more than two groups (parametric data) and Kruskal Wallis Test for comparison of means of more than two groups (non-parametric data).
Pearson correlation used for correlation between continuous parametric data while spearman correlation to correlate between continuous non- parametric data. The significance is fixed at 5% level (p-value).

Results:

Table (1)represent Socio-demographic characteristics of studied patients .the result revealed nearly half of the studied patients(42.5%) aged between 30 to 40 years old and more than half of the studied patient (57.5%) aged from 41 to 50 years old , while mean age of the studied patient was 41.69± 6.66. Concerning the educational level, (14%) of the studied patients were illiterate, (17.5%) read and write, (9 %), had primary education, (9%) preparatory education,and (24.5%) had secondary education, and only(26%) finished high education. Regarding the occupation, nearly one third (31%) of the studied patients was working, and the rest (69%) did not work . As regard the residence, nearly half of the studied patients (45.5%) are living in rural areas while more than half of the studied patients (54.5%) were living in urban areas.

Table(1) Socio-demographic characteristics of studied patients (n=200):

Socio-demographic data	N	%
Age(years) 30-40 40-50	 85 115	 42.5 57.5
Mean age of the studied patient is (41.69± 6.66)		
Gender Male Female	 44 63	 41.5 58.5
Residence Urban Rural	91 109	45.5 54.5
Education Illiterate Read write primary preparatory secondary school Higher education	 28 35 18 18 49 52	 14 17.5 9 9 24.5 26
Occupation working Not working	62 138	31 69
Residence rural urban	91 109	45.5 54.5
Total	**200**	**100%**

Table (2):represent clinical data and history as reported by the studied patients. The results show that (6%) of the studied patients mentioned they suffer from medical diseases while the rest of the studied sample (94%) reported they had no medical diseases .In relation to psychological complains about one third of the studied patients (32.5%) reported they complained from psychological distress, while the other two thirds (67.5%) reported no psychological distress. In relation to other surgical operations beside mastectomy more than third of the studied patients (36.5%) reported they have other operations, while two thirds of them (63.5%) didn't have any other operations.

Concerning the chemotherapy and radiotherapy only one case (.5%) of the studied patients receive chemotherapy and radiotherapy , while the rest (99.5%) don't receive such treatment.

Table(2) Clinical data and history as reported by the studied patients:-

Clinical data	N	(%)
Medical diseases		
Present	12	6
Not present	188	94
Psychological complains		
Present	65	32.5
Not present	135	67.5
Other surgical operations		
present	73	36.5
not present	127	63.5
Chemotherapy		
present	1	.5
not present	199	99.5
Radiotherapy		
Present	1	.5
Not present	199	99.5

Table (3)shows frequency and percentage of the studied patients with regard to quality of sexual life. The results revealed about two thirds (66 %) of the studied patients have unsatisfactory quality of sexual life, while the other third of the studied patients (34 %) have satisfactory quality of sexual life.

Table (3): Frequency and percentage distribution of the studied patients with regard to quality of sexual life (n=200):

Quality of sexual life among post mastectomy women			
Satisfactory quality of sexual life		**Unsatisfactory quality of sexual life**	
N	%	N	%
68	34	132	66

Table (4) shows that there is statistically significant relation between quality of sexual life and age ($P \leq 0.001$), the studied patients whose age is (30-40) years old have the high scores of quality of sexual life with mean of (44.72), while the studied patients whose age is (41-50) years old have the low scores quality of sexual life with mean of (39.4) . As regard to educational level, there is no statistically significance in relation between quality of sexual life and education ($P = 0.500$), the studied patients with high education have the high scores of quality of sexual life with mean of (43.85) while the studied patients with primary education have the lowest scores of quality of sexual life with mean of (39.9). As regard to occupation, this table show that there is no statistically significance in relation between quality of sexual life and occupation ($P = 0.552$), the studied patients who are working have the higher scores of quality of sexual life with mean of (42.24) than the studied patients who aren't working with mean of (41.4). Concerning the residence, there is no statistically significance in relation between quality of sexual life and residence ($P = 0.181$), the table show that the studied patients who live in urban areas have the higher scores of Quality of sexual life with mean of (42.5) than the studied patients who live in rural areas with mean (40.65).

Table(4): Relation between quality of sexual life scale score and socio-demographic data (n=200):

Socio-demographic data	Mean± SD	Min-Max	Test of sig	p-value
Age in years				
30-40y	44.7±9.8	30-76	t=4.059	≤0.001*
41-50y	39.36±8.76	23-74		
Educational level				
Illiterate	41.93±9.99	26-66	F=.873	.500
Read and write	40.8±11	23-76		
Primary	39.9±10.4	30-65		
Preparatory	40.1±7.85	27-54		
Secondary	40.94±8	30-67		
High education	43.85±9.8	30-74		
Occupation				
Work	42.24±7.84	30-64	t=.595	.552
Don't work	41.4±10	23-76		

Table(4): Relation between quality of sexual life scale score and socio-demographic data (Cont' d):

Socio-demographic data	Mean± SD	Min-Max	Test of sig	p-value
Residence				
Rural	40.65±9	26-67	t=1.341	.181
Urban	42.5±10	23-76		

Discussion:

Results of the current study revealed important features describing prevalence mastectomy problem and associated description of their quality of sexual life in an Egyptian sample of post mastectomy women at Oncology Center of Mansoura University. Results revealed that the most prevalent age group of mastectomy found at the age between (41–50) years old constituting more than half of that studied patients (57.5%) This result is a very serious finding as it is shows high prevalence of mastectomy among the sexually active age group, the highest work/ production time, marriage, and desire to have children. In addition the majority of the studied patients' their educational level represented high level of education (Table, 1) .These results indicate that patients with problems of mastectomy constitute an important sector of population, and play the most important functions in the society. These groups of patients suffer from unsatisfactory quality of sexual life on top of their post mastectomy problems.

These findings are congruent with studies in different countries. For instance, In Egypt, **Ahmed, Mohamed& Hamza, (2010)**, [15],who reported that the most common age of mastectomy is 40 to 49 years old. Also **Motawy, Hattab, Fayaz, *et. al.*, (2004)** reported that [16], the median age incidence of Kuwaitis mastectomy patients was 45 years, which is close to that of Egyptian patients . In the United states **Armstrong, Elizabeth, Williams, *et. al.*, (2007),** [17], reported that the most common age of mastectomy is 40 to 49 years old. **Gulseren&Aysun**, **(2011)**, [18], also reported that the mean age of the mastectomy patients was 47.78±9.80 years. In the same line **Nesreen& Zienab(2011),** [19] **,** added that the mean age of the mastectomy patients was 47.36±13.61.

The current study also revealed that (42.5%) of the studied patients age 30 to 40 years old, this study consistent with **Sabah, Eman, Salwa*, et. al.*,(2012),** [20] who reported that the majority (95.0%) of premenopausal group who made mastectomy aged less than 45 years old with mean age was 39.6 ± 3.6 years, also this findings go in the same line with **Chu, Tarone, Kessler, *et. al.*, (2008)**, [21] & **Beaulac, Nair, Scott, *et. al.*, (2008)**, [22], who discovered that mastectomy is common among females with similar group less than 40 years of age. In addition, **Taleghani, Parsa, Nikbakht*, et. al.*,(2008)**, [23], reported that most mastectomy women are between 35 to 44 years of age.

The findings of the educational level of the current studied patients show that 24.5% secondary education, 26% represent higher level of education, 17.5%

read and write and 14% illiterate which indicates that education did not protect these patients from developing breast cancer and becoming mastectomies women.

From the researcher point of view, education could help women to lead a rather healthy life, and would follow regular medical checkups to protect themselves from reaching the stage of mastectomy if they develop breast cancer. Many of the health educational material or media instruct women to change their life style in such a way to decrease intake of food rich in fats, increase intake of foods rich in fruits and vegetables, avoid occurrence of obesity, making exercise, avoidance of sedentary life style or alcohol use, avoidance of exposure to pollution and radiation, and making monthly breast self examination.

The findings for education are nearly congruent **with Gulseren&Aysun**, **(2011)**, [18], who reported that 11.7% of mastectomy patient were illiterate, 70.3% were primary educated, 9.6% were secondary educated and 8.5% were highly educated. In addition **Nesreen& Zienab(2011),** [19], reported that 2.38 % of mastectomy patient were illiterate, 16.67% read and write, 4.76% were primary educated, 38.1 were secondary educated and 38.1% were highly educated. [24], also reported that 39.6 % of mastectomy patient were primary educated, 14.6 % were secondary educated and 45.8 were highly educated.

It is also noted that nearly half of the studied patients (45.5%) are living in rural residence, and more than half of them (54.5%) are living in urban residence (Table, 1) . Once again, being an urban resident does not protect these patients from becoming mastectomies patients, which indicates that residence in urban areas is not very much different from rural areas. This study is consistent with [20], who reported that 47.5 % of mastectomy women are living in rural residence, 52.5% are living in urban residence.

As presented in table (1), the current study shows that nearly one third (31%) of the studied patients is working, and more than two thirds of the studied patient (69%) don't work . This is congruent **Gulseren&Aysun**· [18], who reported that 79.8% of post mastectomy women were housewives and **Ilknur& Hatice, (2011),** [24], who reported that 39.6 % of mastectomy patient were employed, 60.4% unemployed.

Second: **Clinical characteristics of the studied patients:**

The present study revealed that (6%) of the studied patients reported they suffer from medical disease while (94%) of the studied sample reported they did not suffer from any medical diseases (Table, 2).

The same results were reported in another study by **Gulseren& Aysun**, **(2011)**, [18], who reported that 19.6% of mastectomy women have cervix cancer, 17.7% over cancer, 52.2 uterine cancer, and 17.9% endometrial cancer.

Mastectomy as a devastating crises in women's lives, many of them suffer psychological problems and emotional distress. This may due to the change and disfigurement in body image in post mastectomy women. Mastectomy affects physical and sexual attractiveness of the women as a female or a wife of a partner and which adversely affect the sexual relation between women and their partners.

In the current study psychological complains, was reported by only one third of the studied patients (32.5%), which adversely affect the sexual relation between women and their partners. On the other hand the other two thirds of the studied patients (67.5%) didn't report suffering from psychological distress (Table, 2). This result may due to that these patients might be using denial or

reaction formation as defense mechanisms to appear accepting their body appearance and avoiding negative feelings related to disfigurement in their body image.

Similarly, **Oudsten, Heck & Steeg, (2009)** [25] stated that nearly 50% of the women with breast cancer show depressive and anxiety symptoms in the first year after diagnosis and treatment, this has a major impact on patients' lives . **Nauman, Waqar**, **Mohammad,*et. al*., (2010),** [26], also added that depression may present with guilt, worthlessness, hopelessness, lowered self esteem, social withdrawal or suicidal preoccupation.

In relation to other surgical operations beside mastectomy more than third (36.5%) of the studied patients have other operations as hysterectomy, oophorectomy (also known as ovarioectomy) and lumpectomy, while two thirds (63.5%) didn't have any other operations.

This is congruent **Gulseren& Aysun**, **(2011)**, [18], who reported that 53.2% of mastectomy women had hysterectomy. According to **Shuster, Gostout, Grossardt, *et. al.*,(2005),** [27] oophorectomy (removal of ovaries) in conjunction with hysterectomy (removal of the uterus) are most often performed in post mastectomy women as a prophylaxis to reduce the chances of developing recurrence of breast cancer, ovarian cancer and uterine cancer.

Concerning the chemotherapy and radiotherapy only one case constituting (.5%) of the studied patients receive chemotherapy and radiotherapy , while the rest of the sample (99.5%) did not receive such treatment. Almost all of the study sample (99.5%) don't receive chemotherapy or radiotherapy (Table, 2), this is because the researcher interviewed with the patients who had mastectomy after at least one year and this is the period of finishing the doses of chemotherapy and radiotherapy and receiving hormonal therapy for at least five years, but there is only one case (.5%) of the studied patients receive chemotherapy and radiotherapy as this case has metastasis of cancer to other body organs as liver and spleen.

Third: **Quality of sexual life of the studied patients:**

The current study shows that about two thirds (66 %)of the studied patients have unsatisfactory quality of sexual life, while another third of the studied patients (34 %) have satisfactory quality of sexual life (Table 3).

From the researcher point of view, reasons for dissatisfaction of quality of sexual life after mastectomy include negative body image concerns, feeling unattractive, feeling less feminine and shyness of their damaged body image , all this make women hesitant to initiate sexual relationship with her partner.

This is in harmony with study done by **(Markopoulos, Tsaroucha, Kouskoa, *et. al*., 2009),** [28], who stated that (about 42%) of post mastectomy women reported feeling unsatisfied with regard to their sexual life. Similarly **Alder, Zanetti& Wight, (2008),** [29]**,** reported that approximately one third of married couples experience sexual difficulties related to mastectomy. **Hazrati, (2008),** [30]**,** also mentioned that sexual function and satisfaction with the sexual performance are common problems which women experience after mastectomy**.**

Fourth: **Relation between quality of sexual life scale score and socio-demographic data (n=200):**

Table 4 show that, there is statistically significant relation between quality of sexual life and age, the studied patients whose age is (30-40) years old have the high scores of quality of sexual life, while the studied patients whose age is (41-50) years old have the lower scores quality of sexual life. According to the researcher point of view, a possible explanation for the relation between age

and quality of sexual life is that as persons grow older they tend to be less interested in sex, decrease sexual activity, and. In contrast, younger persons tend to be more interested in sex and sexual activity and want to persevere their sexual life for longer time than older women to maintain a healthy sexual and intimate relationship between them and their partners.

This is in the same line with study conducted by **Gulseren& Aysun**, **(2011)**, [18], who reported that aging can cause some changes in sexual life, there was a relationship between the woman age and sexual satisfaction level and it was found that as age increased, the sexual satisfaction 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.

This is incongruent with**(Knobf, 2006),** [31], who stated that younger women undergoing mastectomy are at a higher risk for alterations in sexuality than older women. In the same line (**Gab-alla, 2003**), [32], also reported that there was no statistically significant relationship between age and sexual adjustment.

Conclusion:

This study concluded that about two thirds of the studied patients have unsatisfactory quality of sexual life after mastectomy.

Recommendation*:*

Based on the findings of the current study, the following recommendations are:

1- There is a need to carry out more researches to assess the quality of sexual life of any patients complain of chronic diseases affecting his/her sexuality as it is important dimensions of quality of life , hence improving it improving the patient quality of life.

2- Comprehensive health educational programs for all women following breast cancer treatment in outpatients' clinics of oncology department units include psychological, social, rehabilitation, and follow up.

3- Earlier recognition of sexual problems and active involvement for sexual health improvement program for breast cancer survivors.

4- Sexual life reframing program can also be applied to survivors’ education or support group to better understand the sexual life issues among breast cancer survivors who may benefit from nursing intervention.

5- Patients who are to undergo either prophylactic or therapeutic mastectomy should have access to breast reconstruction consultation programs.

An experimental study should be carried out to find out the effectiveness of a liaison psychiatric nursing program in reducing the stress levels, improving quality of life, and enhancing coping strategies among the patients with cancer especially those undergoing mastectomy**.**

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