Association of different breast cancer treatment modalities with Sexual satisfaction & body image among mastectomized women in Beni-Suif

Abeer Mohamed E. Eldeeb[1], Shereen Ahmed Qalawa [2], HeshamNafady[3]

Departments of [1]Community Health Nursing and [2]Medical – Surgical Nursing and [3]General Surgery, Faculty of Nursing, [1]Beni – Suif *and [2]Port- said University, [3]Faculty of Medicine, Beni – Suif University
eldeeb1973@yahoo.com

Abstract: **Overview:** Breast cancer affects woman's body image and her feeling of sexuality. Little is known about the perceptions of spouses to the sensitive topics of sexuality feelings and body images**. Objectives:** The aim of the present study is to explore the relationship among different breast cancer treatment modalities, sexual satisfaction and body image among mastectomized women in Beni–Suif. **Subject and methods**:The study was carried out on 45 Mastectomized women at University hospital at oncology clinic in Beni- Suif city, descriptive correlational research was used to conduct this study**.Results:** The study revealed a highly significant relation between sexual satisfaction and body image among mastectomized women, also there are a statistically significant relation among post surgery treatment modalities,types of surgery and body image. **Conclusion:** The present study concluded that mastectomized women needs to improve their knowledge and attitude regarding post surgery treatment modalities and strategy coping with their sexual life in order to improve their sexual desire and body image. **Recommendations:**emphasis on the implementation of an-instructional scheme for breast cancer survivors to obtain the highest level of sexual satisfaction and body image.there are dire need to instruct those women throughout media. Within this context, there is a great demand for strategies and programs that take into consideration all the physiological, psychological, social problems that might face those women.

[Abeer Mohamed E. Eldeeb, Shereen Ahmed Qalawa, Hesham Nafady. **Association of different breast cancer treatment modalities with Sexual satisfaction & body image among mastectomized women in Beni-Suif.** *J Am Sci* 2012;8(11):111-119]. (ISSN: 1545-1003). http://www.jofamericanscience.org. 16

Keywords: Treatment Modalities, Sexual satisfaction, Body image, Mastecctomized women.

1. Introduction

Breast cancer is one of the most common types and the third most frequent cancer among women in the *world* ***(Lim,2007)***.According to the ***WHO (2004)*** statistics, cancer is the leading cause of death. More than 7.4 million cancer deaths annually occurred throughout the world. The main types of cancer leading to overall cancer mortality each year are: lung (1.3 million deaths/year), gastrointestinal (803 000 deaths/year), colorectal (639 000 deaths/year), liver (610 000 deaths/year), breast (519 000 deaths/year). Breast cancer usually originates from ducts and sz lobules. Nearly 1.2 million women are diagnosed with breast cancer annually worldwide. (***National Cancer Institute, 2010.)***. In Egypt according to ***NCI (2001)*** the number of new cancer patients per year was estimated to be 65.000 in Egypt.

Nowadays, breast cancer has already become the deadly killer of the women. ***(WHO 2004.).*** Also, Europe and North America constitute more than half of all breast cancer cases. Statistics suggest that there are approximately 361,000 cases in Europe and 230,000 cases in North America. In the United States alone, "in 1999, there were an estimated 2 million 8 women with a history of breast cancer, representing 41 percent of the nearly 5 million female cancer survivors or 23 percent of 8.9 million total cancer survivors" ***(Hewitt et al., 2004).***From Finnish Cancer Registry, 2008, the number of new cases is about 4317 annually. Every year around 834 women die from breast cancer. The incidence is increasing quite sharply between 35 to 55 years old. The age from 55 to 59 year old reaches the highest point of morbidity in 2008.***(Zhu & Hu, 2010)***

Many Researches also indicates that even though breast cancer is a global disease, incidence rates differ. These rates tend to be high in most developed regions and to be low in the developing regions of the world. Regions of the world where the incidence rate is more modest are in Eastern Europe, South America, Southern Africa, and Western Asia (***Parkin& Fernandez, 2006***).

Treatment is required to reduce morbidity and mortality outcomes from cancer; however, the diagnosis and treatment of cancer influence the physiological, psychological, and sexual dimensions of sexuality, and changes in sexuality decrease patients' quality of life (***Tierney, 2008***). Sexuality involves body image, sexual response, sexual roles, and sexual relationships (***Pelusi, 2006***). Further, female sexual function is influenced by not only physical status but also psychological status, relationships, and sociocultural background (***Li, 2011***).

A breast cancer diagnosis and its treatment side effects have a significant impact on an individuals' view of body image and sexuality, especially among younger women. Cancers of the breast and the female genital organs have been addressed in the research numerous times. However, equal attention has not been paid to related issues of sexual satisfaction and sexual function in females with rectal cancer even though they underwent pelvic surgical procedures just as females with gynecological cancer have, despite the fact that these procedures have been demonstrated to cause organic sexual dysfunction (***Zippe et al, 2006***).

Sexuality is a complex and subjective concept that changes over time according to people experience. It is notjust the state of being able physically toperform a sex act.

Rather, sexuality can include body image (how some one sees herself physically and perceives her over all health and sexuality), sexual response(interest, function, and satisfaction), sexual roles, and relationships. Sexuality is a personal expression of one's self and one's relationship with others. The effects of cancer and its treatment on sexuality are not usually included in assessments and plans of care for patients, nor are they often addressed in patient education.***(Pelusi, 2006***)

Traditionally, research on sexuality has focused on males' sexual response and behavior, thus establishing males' sexuality as the norm (***Wood et al, 2006***). Females' sexuality is typically pitched in terms of asexuality or passive-recipient sexuality; therefore, females' sexual desire is rarely perceived as spontaneous (***Bay-Cheng &Zucker, 2007***).Sexual self-schema has been shown to be an important personal factor that buffers the impact of depressive symptoms on sexual satisfaction.

Pelusi, 2006 indicates that sexuality includes body image, sexual response, sexual roles, and relationships. The human sexual response cycle involves four stages: the excitement stage, the plateau stage, the orgasm stage, and the resolution stage. The basic conception of the model focuses on the physiological changes of genitalia in the first three stages of the sexual response; however, the orgasm stage in females is a psychophysiological experience and it is affected by a psychosocial background Body-Image is an individualized phenomenon that is comprised of many elements of experience, including social messages about gender identity and sexual identity. (***Goldenberg, 2011***).Breast cancer affects a woman's body image and feelings of sexuality. Little is known about the perceptions of spouses to the sensitive topics of sexuality feelings and body images. A qualitative inquiry was undertaken by some in-depth interviews. The result shows that a diagnosis of breast cancer brought some couples' relationship closer. The mastectomy could severely obliterate patients' sexual relationships for a long period by disturbing the body images, and women often wrongly think that their spouse will resent these changes. (***Cancer Research Center, 2011***)

Furthermore, this study was carried out to explore the relationships between different breast cancer treatment modalities,sexual satisfaction and body image among mastectomized women in Beni–Suif city.

2. Subjects and Methods

The design for this study was (descriptive correlational one), all mastectomized women receiving post breast cancer surgery treatment, selected for this study, it calculated 44 females from University Teaching hospital at Oncology unit in Outpatient Clinics in Beni- Suif city with the following criteria:

- Female patients in age group between 20 – 60 years have breast cancer surgery, received radiotherapy or chemotherapy or hormonal therapy.
- Women agree to participate in this study

Tool of data collection:

A questionnaire sheet that was designed by the researcher, based on literature review, and modified tools were used from **Female Sexual Function Index (FSFI) used in *Tollin, 2011*** and **SerlinKinaesthetic Imagery Profile scale for body image from *Pilarski, 2008*** was constructed and translated in simple Arabic language for the mastectomized women to suit their level of understanding. Data were collected through using onetool which includes 3 main parts as follows:

Part I:

Includes a sociodemographic characteristics and surgical history of women as age, income, involved sites of breast cancer surgery, treatment modalities following breast cancer surgery

Part II: Female Sexual Function Index (FSFI) sheet

Includes 19 questions about Sexual functioning that was evaluated by the Female Sexual Function Index (FSFI), a self-report that measures desire, subjective arousal, lubrication, orgasm, satisfaction.each questions followed with 5 choice answers as Usually, Most times, Sometimes, A few times, rarely.then answer was arranged in results as severe satisfaction, moderate to mild satisfaction, unsatisfaction.

Part III:An Imagery Profile for body image sheet

Includes 27 questions regarding body image. These questions were ranged from 5 to 1 as highly agree, agree, neutral, disagree, highly disagree respectively. for example the score of highly agree

takes 5 points while 1 point was given for highly disagree answer

Methods of data collection:

This study was covered in four phases:-

1-Validity & Reliability of tool:-.

Tool that was developed, based on the identified needs and demands of mastectomized women..Validity refers to experts from Medical surgical nursing & medicine professor and community nursing professor in the field.

2- Ethical considerations:

Approval was taken from hospital director before stating the research and data were collected after explaining the aim of the study to all breast cancer surgery women who participated in the study.

3- Pilot study: - assess women abilities to participate in filling questionnaire, and any modifications were done. it is approximately 10% of study sample.

4- Data collection:

Data were collected from oncology Unit in Outpatient Clinicin University Teaching hospital in Ben suif city from October 2011 until April 2012 for three days weekly mainly Sunday, Tuesday, Wednesday each week according to time available to women and their attendance schedule for clinic to check – Up as doctor ordered. Each woman takes time approximately between 30-45 minutes to fill a questionnaire, also researcher of study help illiterates women in filling their questionnaire

Statistical analysis:

Data were analyzed using statistical package for social sciences (SPSS).

The *P*-value < 0.05 was used as the cut off value for statistical significance and the following statistical measures were used.

Graphic presentation:

Graphs were done for data visualization and by using Microsoft Excel.

3. Results

Table (1) illustrated Distribution of involved sites of breast cancer surgery according to women age. the table reveals that about (34.09 %) of women sample were performed breast cancer surgery in one breastfrom age group20-40 years while (29.5%) were performed breast cancer surgery in both breasts from age group above 40 years with statistically significance difference between sites of breast cancer surgeries and women agewith s (*P*<0.005).

Table (2): Illustrates Association between involved sites of breast cancer surgery and feeling of sexual desire. it can be seen that above one third (31.8%) of women with breast cancer surgeriesin one breast feels sometimes sexual desire or interest while (29.5 %) of women with breast cancer surgeries in both breasts feels a few times sexual desire with a statistically significant relation were founded between all involved sites of breast cancer surgery and feeling of sexual desired with *P*s <0.005).

Table (3): Demonstrates association between involved sites of breast cancer surgeries and level of body image among mastectomized women. the table revealed that About (34.09%) of women with breast surgerycancer in both breasts had poor level of body image while about (31.8%) ofwomen with one sites breast cancer surgery had very good level of body image with statistically significant relation between both involved sites of breast cancer surgeries and levels of body image with *P*s (<0.005).

Table (4): ShowsAssociation between post breast cancer surgery Treatment modalities and level of body image.Near half (47.7 %) of mastectomized women who received chemotherapy and radiotherapy had poor level of body image while (18.2%) who received hormonal therapy had poor level of body image with statistically significant relation between post breast cancer treatment modalities and levels of body image with *P*s (<0.005).

Table (5): Shows Relationship between level of education and level of body image. the table revealed that About (40.9%) of illiterate women had poor level of body image while (18.2%) of educated women had good level of body image with statistically significant relation between women level of education and their level of body image

Table (6): shows Relationship between body image and sexual satisfaction. the table shows that More than half (56.8%) of women with poor level of body image had mild degree of sexual satisfaction in addition to, very good levels of body image had mild degree of sexual satisfaction with a highly significant relation between levels of bod image and degrees of sexual satisfaction among those women with *P*s (<0.005).

Figure (1): illustrated Relationship between level of education and feeling of sexual desire. We can see clearly that half of illiterates women (50%) feels some times sexual desire while all educated women (100%) feel most times degree of sexual satisfaction.

Table (1): Distribution of sites of breast cancer surgery according to women age.

Women age	sites of breast cancer surgery(n= 44)				X^2	*P*
	partial		Total			
	No	%	No	%		
20-04	15	34.09	4	9.09	4.361	0.037*
>40	12	27.2	13	29.5		
Total	27	61.4	17	38.6		

P-value at 0.05 *statistically significance

Table (2): Association between involved sites of breast cancer surgery and feeling of sexual desire

Involved Sites of breast cancer surgery	Feel sexual desire or interest(n= 44)						X^2	*P*
	Most times		Sometimes		A few times			
	No	%	No	%	No	%		
One breast site	6	13.6	14	31.8	7	15.9	13.562	0.001*
Two breast sites	0	0	4	9.09	13	29.5		
Total	6	13.6	18	40.9	20	45.4		

P-value at 0.05*statistically significance

Table (3): Association between involved sites of breast cancer surgery and level of body image

Involved Sites of breast cancer surgery	level of body image (n= 44)				X^2	*P*
	v good		poor			
	No	%	No	%		
One breast site	14	31.8	13	29.5	6.146	0.013*
Two breast sites	2	4.54	15	34.09		
Total	16	36.4	28	63.6		

P-value at 0.05*statistically significance

Table (4): Association between post breast cancer surgery Treatment modalities and level of body image

Post breast cancer surgery treatment modalities	Level of body image(n= 44)				X^2	*P*
	poor		Very good			
	No	%	No	%		
Chemotherapy & radiotherapy	21	47.7	15	34.09	5.057	0.025*
Hormonal therapy	8	18.2	0	0		
Total	29	65.9	15	34.09		

P-value at 0.05*statistically significance

Table (5): Relationship between level of education and level of body image

Levels of education	Level of body image(n= 44)				X^2	*P*
	Poor		Good			
	No	%	No	%		
University	0	0	8	18.2	7.586	0.023*
Read & write	3	6.81	0	0		
Illiterate	18	40.9	15	34.09		
Total	21	47.7	23	52.3		

P-value at 0.05*statistically significance

Table (6): Relationship between body image and sexual satisfaction

Levels of body image	Degrees of sexual satisfaction(n= 44)				X^2	*P*
	Very satisfied		Mild satisfaction			
	No	%	No	%		
Poor	5	11.3	25	56.8	17.297	0.000***
Very good	0	0	10	22.7		
Total	5	11.3	35	79.5		

P-value at 0.05***highly statistically significance

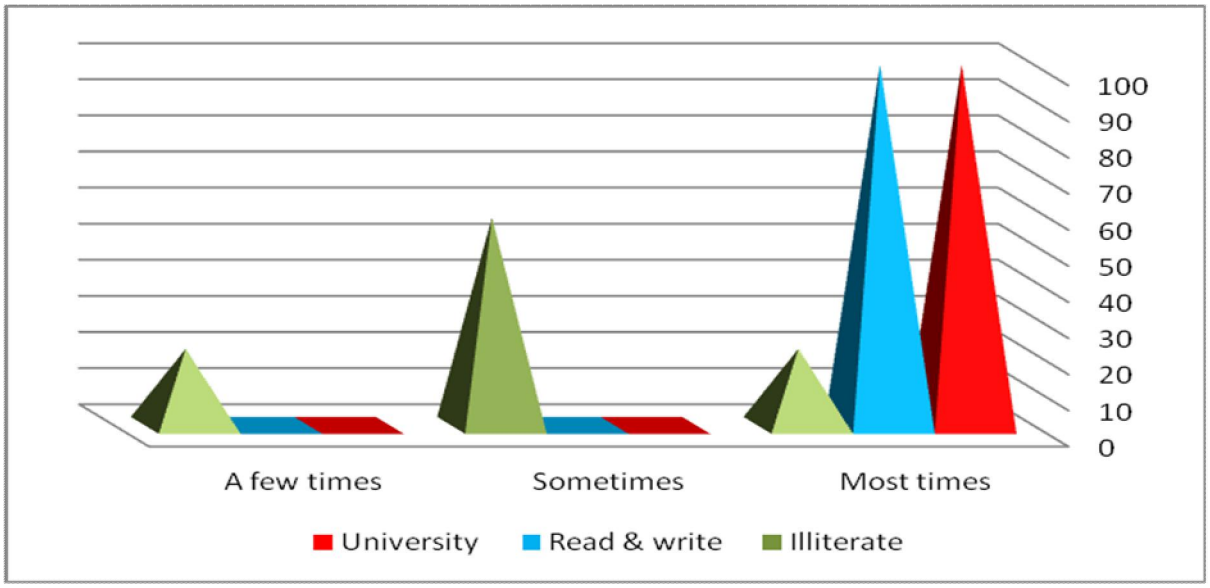

Figure (1): Relationship between level of education and feeling of sexual desire

4. Discussion

Breast cancer is probably one of the diseasesthat womenmost fear, due to its biopsychosocial effects, which deeply and significantly affect women's lives. It is the cancer typenot only with the highest incidence levels in the femalepopulation, but also with the highest mortality ratios, turninginto a true global public health problem (***Alves et al.,2010***)

The diagnosis and treatment of breast cancer impacts a woman on many levels. Women often experience a wide range of psychological and sexual difficulties. The psychosocial and psychosexual impact of this disease is influenced by a number of factors including medical factors, individual factors. Overall, breast cancer treatments (medical factors) did not disrupt sexual function or body image. Instead, depression and fatigue (individual factors) were found to impact women's sexual functionand depression was related to women's own body image as well as how she perceived her male partner to view her body.. Results suggest a more optimistic view regarding the anticipated negative consequences of a breast cancer diagnosis ***(Dye, 2008)***

Regarding association between sites of breast cancer surgery and women age, the present study revealed that three quarter of women had breast cancer surgeries in both breasts were in age group 20-40 years with statistically significance difference between all age group and sites of breast cancer surgery. This finding goes in the same line with Brazilians women which many studies emphasized on a pressing need for further studies on the socio-cultural characteristics of women with breast cancer, the differences of (re)construction of body image of young and older women, and the personal experience and socio-cultural context of women with breast cancer.***(Santos &Vieria, 2011)***

Older women who are subjected to menopause and are diagnosed with breast cancer typically have greater psychological distress. Not only can breast cancer impact a women's responses tofemininity and sexuality, menopause can also impact responses to

femininity and sexuality withthe loss of fertility. Younger women face different challenges more than older women. Age is an indicator of the various social roles whichwomen play throughout their lifetime. Younger women are typically concerned more with their families and careers, while older women are concerned with their own retirement. (***Hammond, 2000***)

Further studies add more weight to the impact of surgical treatments on body image and sexuality,particularly for younger women with breast cancer. This does not imply that older women arenot significantly concerned about body image and sexuality. However, women of younger ages aremore likely to choose breast conserving surgery over mastectomy. Clinicians should ask a woman about any body image and sexuality concerns that she may have when surgery is discussed ***(Kissane, 2004)***

Really**,** still, it is true that sexual response and function may change with aging. For example,more than half of men over age 40 have at least a little trouble with erections. According to someof these men, the problem is severe. Many women also notice changes as they get older,sometimes even before menopause begins. A decrease in sexual desire and problems withvaginal dryness may increase during and after menopause. ***(Greenwald & McCorkle, 2008)***In contrast, ***Breast. 2000*** founded that a negative impact of breast cancer and its treatment was greater for younger women

Occasionally, ***Elaine, 2006*** expected that there is likely to be an inverse relationship between age and negative body imaging, and a positive relationship between age and impaired sexual functioning. Findings in this study revealed, older breast cancer survivors were more likely to report greater body image adjustment compared to younger counterparts (p<.01). There was no statistically significant relationship between age and sexual adjustment.The number of cancer patient's in Egypt is expected to expand in the future as the population continues to grow and age, as well as the prevalence of known etiological factors increase ***(Gab-Alla, 2003)***.

Concerning association between involved sites of breast cancer surgery and sexual satisfaction. The present study revealed that there are a statistically significance differences between involved sites of breast cancer surgeries and women feeling of sexual desire. This finding goes in the same way with ***Elaine, 2006*** who mentioned that African American women regardless of income were less likely to report sexuality concerns compared to Caucasian survivors. In addition to Sexual problems have been linked to mastectomy and lumpectomy – surgeries that remove all or part of the breast. Losing a breast can be very distressing. A few women even lose both breasts. sexual. In our culture, breasts are often viewed as a basic part of beauty and womanhood. If a breast is removed, a woman may feel less secure about whether her partner will accept her and still find her sexually pleasing. The breasts and nipples are also sources of sexual pleasure for many women and their partners. Touching the breasts is a common part of foreplay. Some women can reach orgasm just from having their breasts stroked. For many others, breast stroking adds to sexual excitement. Surgery for breast cancer can interfere with pleasure from breast caressing. After a mastectomy, the whole breast is gone. Some women still enjoy being stroked around the area of the healed scar. Others dislike being touched there and may no longer even enjoy having the remaining breast and nipple touched. ***(American Cancer Society, 2011)***

Additionally, there is no physical reason which was derived from breast surgery or radiation to the breasts should decrease a woman's sexual desire. These treatments do not change her ability to have sexual pleasure. They do not lessen her ability to produce vaginal lubrication, to feel and enjoy normal genital sensation, or to reach orgasm.***(Greenwald & McCorkle, 2008)***,***Dirbas, 2010*** Though there is not much data available on female sexuality problems after cancer treatment, it appears to be a significant issue. One large-scale study found that while 80 percent of responders reported a good or satisfying sex life before treatment, 70 percent reported sexual problems after treatment.

Body image is an important endpoint in quality of life evaluation since cancer treatment may result in major changes to patients' appearance from disfiguring surgery, late effects of radiotherapy or adverse effects of systemic treatment. ***(Hopwood et al., 2001)***. In Sweden, body image in breast cancer survivors was associated with the types of surgery and radiotherapy and with mental distress. Body image ratings were relatively stable over time, and the antecedent body image score was a strong predictor of body image at follow-up. Body image in breast cancer survivors differed very little from that in controls. ***(Dahl et al., 2010)***

Body change stress refers to subjective psychological stress that accompanies women's negative and distressing feelings and emotions, thoughts, and behaviors resultant from breast cancer and/or breast surgeries. Body change stress manifests with traumatic-like stress symptoms. This includes re experiencing(e.g., feeling upset with reminders of breast change), avoidance (e.g., attempts to limit exposure of the body to self or others), numbing (e.g., a loss of interest in activities or behaviors relevant to the body, such as sexual activity), and arousal symptoms (e.g., irritability, anger, etc.). We suggest that the peak of body change stress occurs in the days

or weeks following surgery and related treatments.***(Frierson et al., 2006)***

Concerning Association between post breast cancer surgery treatment modalities and level of body image,the present study found that there are statistically significant relation between post breast cancer treatment modalities and levels of body image. in contrast, ***Iris, 2007*** founded the majority of women in the healthy group and in the mastectomy group represented the medium to high level of body image satisfaction, but half of women in the lumpectomy group perceived the medium level of body image satisfaction, and one third perceived the low level of body image satisfaction. For most women, breast satisfaction was in the medium to high level of satisfaction. The findings indicated that no significant difference was found between body image perceptions of women who had been undergone mastectomy, women who had been undergone lumpectomy and healthy women. Furthermore, the majority of women in the surgical groups whoperceived the impact of surgery to be little or none,was satisfied with the scar from the surgery.

Also, Chemotherapy have a significant impact on a woman's physical and emotional state, which inturn may affect quality of life. Chemotherapy has been associated with long termimpairments in sexual functioning. The influence of chemotherapy on sexuality is direct,through gonadal and hormonal effects, and it is indirect, by producing feelings of fatigue, apathy, nausea, vomiting and malaise and causing sleep or appetite disturbances that interfere with libido ***(Kissane, 2004)***

The impact of breast cancer treatment and surgery on body image varies greatly among women,. The impact may include: altered sexual function; poor self-image; loss of libido, and relationship problems. Although body image is often perceived as relating to physical appearance alone,women describe it as involving a sense of wholeness and functionality. Evidence suggests that women who consider body image to be a major part of their sense of self-worth, attractiveness orwholeness may be at an increased risk of poor psychosocial adjustment following treatment forbreast cancer.***(Kissane, 2004)***

In Egypt,***Ashraf et al., 2009*** mentioned that Body image is an important factor for postmenopausal women with breast cancer in developing countries where that concept is widely ignored. We should not deprive those cases from their right of less mutilating option of treatment as breast cancer treatment.

In turkey, over half of breast cancer surgeries patients had problems with sexual relations that started following surgery. In a further 24%, problems began following chemotherapy. Current treatment protocol in turkey is as in Egypt treatment plan for breast cancer survivors as follows: patients undergo surgery which is followed by adjuvant chemotherapy and followed up by radiotherapy. They suggest that in a high proportion of patients, psychosexual problems occur early in the course of treatment and this has implications for the timing of any intervention, also type of surgery and menopausal status played an importantrole in the occurrence of these problems. (***Alicikus et al.,2009***)

On the other hand, ***Holmberg, 2001*** high lights on the other important factors that affected sexual satisfaction which are understanding and support from the partner to the survivor order to to be able to obtain and maintain healthy sexual roles and relationships.The partner's overall sexual health and function may also influence a survivor's sexual roles.Many women have indicated that theywanted to be sexually active but they were unable to doso because of their partner's health. This affected their view of their own sexual role and their sexual relationships. Therefore, physician & oncology nurse must consider the partner's status and how potential changes in the person with cancer may affect sexual relationships.

Otherwise,Culture influences on sexuality and body imagein relation to cancer and its treatmentAn organized approach is crucial for clinicians asthey assess a patient's understanding of sexuality,body image,the potential effects of the diseaseand treatment.Patientsand survivors with cancer should be encouraged toparticipate in studies to develop evidence-based interventions (***Pelusi, 2006***).

We, as individuals, and in most cases, become the designers of our external appearance.Through hair styles, cosmetics, grooming behaviors, tattoos, piercing, and our style of dress, our outward appearance send messages about ourselves to others. This out ward appearance is the primary focus in identity recognition and first impressions. As humans, we are influenced by our social interactions and the impressions that we give and receive from others. Very little attention has been given to altered appearance inwomen who are receiving treatment for breast cancer. The personal impact ofappearance-related changes due to cancer treatment can be devastating for most women.The importance of looking like yourself (the "you" that you created) throughout thecancer process has received little attention by the social work profession.(**Preston, 2010)**

The Impact of Medical Factors on Body Image and Sexual Functioning in Women with Breast Cancer Women with breast cancer are faced with a number of options and considerations concerning their treatment process. These options, however, often come with a price; some are more costly than others. These

treatment considerations include the type of surgical treatment performed; the option of breast reconstruction; and type of post surgical treatment such as chemotherapy (occasionally offered prior to surgery). This idea and finding goes in the same way with the finding of the present study which revealed that the post breast cancer surgery treatment modalities were interferences with women body image with statistically significance differrrence between all women received different cancer treatment(***Dye, 2008)***.

Additionally, following a diagnosis of breast cancer a number of areas in a woman's lifebecome impaired (***Beatty et al., 2008***). According to ***Frierson and Anderson (2006),*** a woman's responses related to her body changes as a result of havingbreast cancer consist of "psychological adjustment, social adjustment, relationships withsexual partners, physical symptoms, and related concerns" (**Preston, 2010)**. Also, ***Croff, 2005*** mentiend that Cancer and its treatments have been shown to have a negative psychological effect on many patients. One effect of cancer that is often described anecdotally isbody image disturbance. A moderate amount of research has been conducted on the relationship between body image and cancer. However, the results of these studies are limited because until recently a psychometrically validated measure designed to assess body image disturbance in cancer patients did not exist.

As regard relationship between level of education and level of body image, the present study revealed that there are a statistically significance difference between all levels of education regarding women feeling of their body image. According to the opinion of the researcher, he clarified the role of education, culture in breast cancer women 's perception affect her adaptation, and acceptance of cancer in her life and it's effects and changes.

From the foregoing discussion, it can be seenthat The potential for detecting the impact of treatment of breast cancer on a woman's sexuality andbody image is very critical issue and there has also been greatest needs to increase awareness of the psychosocialdistress associated with breast cancer. Also, body image and sexuality are issues that require sensitive exploration withwomen who have been diagnosed with breast cancer.

5. Conclusion

From the foregoing discussion, it can be seen that there are asignificant relation and association between post breast cancer surgery treatment modalities and types of breast cancer surgerieswith sexual satisfaction and body image among mastectomized women.

Recommendation:

Recommendation involves emphasis on the implementation of an-instructional scheme for breast cancer survivors women especially post surgery in order to obtain the highest level of sexual satisfaction and body image,and there are obvious needs to instruct those women through media..Within this context, there is a great demand for strategies and programs that take into consideration all the physiological, psychological, social problems that might face those women.

References

1. **Alicikus, Z. A; Gorken, I. B; Sen, R. C; Kentli, S; Kinay, M; Alanyali, H; Harmancioglu, O. (2009):**Psychosexual and body image aspects of quality of life in turkish breast cancer patients: a comparison of breast conserving treatment and mastectomy.Tumori, 95: 212-218
2. **Alves, P; Silva, A; Santos, M; Fernandes, A. (2010):**Knowledge and expectations of women in the preoperative mastectomy, Rev Esc Enferm USP; 44(4):985-91
3. **Ashraf, S. M, Mohamed Madiha H, Nouman, N, Amin, M, Ibrahim, I. M, Tobar, S, Gaffar, H.E, Aboelez, W. F, Ali, S, William, S. G. (2009):** Body image disturbance and surgical decision making in Egyptian postmenopausal breast cancer patients, World Journal of Surgical Oncology,7, p: 66. ashoma@hotmail.com
4. **Bay-Cheng, L. Y., &Zucker, A. N. (2007):**Feminism between the sheets: Sexual attitudes among feminists, nonfeminists, and egalitarians. Psychology of Women Quarterly, 31,Pp.: 157–163.
5. **Beatty, L., Oxlad, M., Koczwara, B., & Wade, T. D. (2008)**: The psychosocial concerns and needs of women recently diagnosed with breast cancer: A qualitative study of patient, nurse, and volunteer perspective. Health Expectations, 11,Pp.: 331-342.
6. **Carpenter, K. M., Andersen, B. L., Fowler, J. M., & Maxwell, G. L. (2009):**Sexual self-schema as a moderator of sexual and psychological outcomes for gynecological cancer survivors. Archives of Sexual Behavior, 38,: 828–841.
7. **Cancer Research Center. (2011):**The Studies on Effects of Mastectomy to Sexual Feelings of Breast-Cancer Patients and Their Spouses, P.3
8. **Croff, R. (2005):**Development of a Cancer Specific Body-Image Instrument, Published doctorate thesis in Philosophy, Drexel University
9. **Dirbas, F. (2010):**New Insights into Breast Cancer Treatment and Survivorship, Sexuality and Breast Cancer Survivorship Journal, Cancer Center's Breast Disease, P.2
10. **Dye, S. M. (2008):**Factors affecting the impact of breast cancer on body image and sexual functioning, Published Master thesis in Arts, The University of North Carolina at Chapel Hill
11. **Elaine, J. C. (2006):**The relationship between age and ethnicity on perceived body image and sexuality of breast cancer survivors, ALLIANT INTERNATIONAL UNIVERSITY, LOS ANGELES, pp.4-8

12. **Frierson, G. M., & Andersen, B. L. (2006):**Breast reconstruction, Psychological aspects of reconstructive and cosmetic plastic surgery. 1st ed, Philadelphia: Lippincott Williams &Wilkins, pp.173-183.
13. **Frierson, G; Thiel, D; Department of Psychology, The Ohio State University Andersen, B. (2006):** Body Change Stress for Women With Breast Cancer: The Breast-Impact of Treatment Scale, Ann Behav Med; 32(1):pp. 77–81.
14. **Fadaei,S; Janighorban,M; Mehrabi,T; Ahmadi, S; Mokaryan,F; and Gukizade,A. (2011):** Effects of cognitive behavioral counseling on body Image following mastectomy, J Res Med Sci. August; 16(8): 1047–1054.
15. **Falagas, M. E., Zarkadoulia, E. A., Ioannidou, E. N., Peppas, G., Christodoulou, C., &Rafailidis, P. (2007):**The effect of psychosocial factors on breast cancer outcome: a systematic review. Breast Cancer Research, 9(4): R44.
16. **Falk Dahl, C.A; Reinertsen, K. V; Nesvold, L; Fosså, S. D; Dahl, A. A.(2010):** A study of body image in long-term breast cancer survivors. Cancer Journal. 1;116(15):Pp. 3549-57.
17. **Gab-alla, S. (2003):**Quality of life in cancer patients under chemotherapy, Unpublished Master Thesis, Faculty of Nursing,Suez Canal University, Egypt, p.54.
18. **GOLDENBERG, M. A. (2011):** Femme Perspectives Of Relational Body Image: An Interpretative Phenomenological Analysis Of Experiences In Couple-Hood With Transgender Men A Published Doctorate thesis, Wright Institute Graduate School of Psychology, P.4
19. **Greenwald HP, McCorkle R.(2008):**Sexuality and sexual function in long-term survivors of Cervical Cancer. J Womens Health. 17:Pp. 955-963.
20. **Hammond, M. (2000):**Qualitative Study of Treatment Issues of Eight Women With Breast Cancer, Published doctorate thesis in Phylosphy, College of Human Resources and Education, West Virginia University
21. **Holmberg, S. K. (2001)**: Relationship issues of women with breast cancer. Cancer Nurs J;24(1):Pp.: 53-60.
22. **Iris, H. (2007):**A comparison of body image among healthy women, women who have undergone mastectomy and women who have undergone lumpectomy, Published master thesis in Nursing.
23. **Hopwood, P; Fletcher, I; Lee, A; Al Ghazal, S. (2001):** A body image scale for use with cancer patients. Eur J Cancer.;37(2):Pp. 189-97.
24. **Kenny, P; King,M; Shiell, J; Seymour, J; Hall, A; Langlands, J; Boyages,M. (2000):**Early stage breast cancer: costs and quality of life one year after treatment by mastectomy or conservative surgery and radiation therapy. Breast Journal; 9 (1): Pp. 37-44
25. **Kissane, D. (2004):**Psychosocial impact in the areas of body image and sexuality for women with breast cancer, University of Melbourne, Kate White School of Nursing and Public Health, National Breast Cancer Centre
26. **Li, C. (2011):**Factors Affecting Sexual Function and Sexual Satisfaction among Females with or without Rectal Cancer or Gynecological Cancer, Published doctorate thesis in Philosophy, Faculty of the Graduate School of The University of Texas at Austin, P. 7.
27. **National Health Service. (2010):** Breast Screening. Available//www.cancerscreening.nhs.uk/breastscreen/.
28. **National Cancer Institute. (2004):**Clinical trial summary from the National Cancer Institute's PDQ, U.S. National Library of Medicine:3 (3):P. 1-12, http://www.google.com
29. **Pelusi, J. (2006):** Sexuality and Body Image Research on breast cancer survivors documents altered body image and sexuality, AJN 3(106): Pp. 4-9 http://www.nursingcenter.com/ajncancersurvivors
30. **Preston, M. (2010):** An Exploration Of Appearance-Related Issues Of Breast Cancer Treatment On Sense Of Self, Self-Esteem, And Social Functioning In Women With Breast Cancer, Published Doctorate thesis of Social Work, Faculties of the University of Pennsylvania
31. **Parkin, D.M., & Fernandez, L. M. G. (2006):** Use of statistics to assess the global burden of breast cancer. The Breast Journal, 12(1), Pp.:70-s80.
32. **Pilarski, D. J. (2008):** The Experience of Younger Women Diagnosed with Breast Cancer Involved in Dance/Movement Therapy with Regards to Body Image and Sexuality, Published Master thesis in Arts, Drexel University, College of Nursing and Health Professions, Pp.4-6
33. **Santos, D. B; Vieira, E. M. (2011):** Body image of women with breast cancer: a systematic review of literature, CienSaude Colet. 16(5): Pp.: 2511-22.
34. **Tollin, S. (2011):** Prophylactic, Risk-Reducing Surgery in Unaffected BRCA-Positive Women: Quality Of Life, Sexual Functioning and Psychological Well-Being, Published Doctorate thesis of Philosophy, College of Nursing, University of South,p.13
35. **Tierney, D. K. (2008):** Sexuality: A quality-of-life issue for cancer survivors. Seminars in Oncology Nursing, 24, Pp.:71–79.
36. **Wood, J. M., Koch, P. B., & Mansfield, P. K. (2006):** Women's sexual desire: A feminist critique. Journal of Sex Research, 43, Pp.:236–244.
37. **World Health Organization. (2010):** Guidelines for The Early Detection and Screening of Breast Cancer. Available: http://www.emro.who.int/dsaf/dsa696.pdf.
38. **Zhu, J; Hu, Y. (2010):** WOMEN'S AWARENESS OF REDUCING RISKS OF BREAST CANCER IN FINLAND AND CHINA, CENTRAL OSTROBOTHNIA UNIVERSITY OF APPLIED SCIENCES, Degree Programme in Nursing,P.5
39. **Zippe, C., Nandipati, K., Agarwal, A., &Raina, R. (2006):** Sexual dysfunction after pelvic surgery. International Journal of Impotence Research, 18(1),Pp.: 1–18.

9/22/2012