CHAPTER V

Discussion

Mastectomy produces significant negative effects on a woman's body image, self-confidence, self-esteem, emotional status and relationship and sexual life. The mastectomy patient's role in social, sexual and interpersonal situations may be altered in various ways after surgery, a woman with mastectomy must learn how to cope not only with herself but also with the reactions of others, especially her male counterpart. The absence of a breast and the importance attached with body image may elicit various reactions from others, especially the spouse, which have to be dealt with **(Taib, Yip, Ibrahim, *et. al*., 2007)**,. Therefore, the current study was conducted to assess body image, self-esteem and quality of sexual life among post mastectomy women. The present study was carried out on 200 post mastectomy women who attend for follow up in oncology center of Mansoura University.

This chapter discusses the results of the current study, compares them with other related studies, recent research, as well as representing the researcher's interpretations of the present results. The results of this study will be presented, and discussed in this chapter with regard to both descriptive data and relational data of the studied sample. The descriptive data include socio-demographic characteristic, clinical data, body image, self-esteem and quality of sexual life. The relational data include: body image as related to socio demographic characteristics, self-esteem as related to socio demographic characteristics and quality of sexual life as related to socio demographic characteristics.

Part(I): Descriptive data of the studied patients of mastectomy women patients;

First: Socio-demographic characteristics of the studied patients:

Results of the current study revealed important features describing prevalence mastectomy problem, and associated description of their body image, self-esteem and quality of sexual life in an Egyptian sample of post mastectomy women at Oncology Center of Mansoura University. The results revealed that the most prevalent age group of mastectomy is ranging between (41–50)years old constituting more than half of that studied patients (57.5%) and (42.5%) of the studied patients age 30 to 40 years old (Table, 1). Mean age of the studied patient is (41.69± 6.66378).

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.

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 other studies in Egypt and different countries. For instance, in Egypt, **Ahmed, Mohamed& Hamza, (2010),** reported that the most common age of mastectomy is 40 to 49 years old. As reported by **Motawy, Hattab, Fayaz, *et. al*.,(2004)**, 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)**, reported that the most common age of mastectomy is 40 to 49 years old. **Gulseren&Aysun**, **(2011)**, also reported that the mean age of the mastectomy patients was

47.78±9.80 years. In the same line **Nesreen& Zienab(2011),** found 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 result consistent with **Sabah, Eman, Salwa, *et. al.*,(2012),**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); Beaulac, Nair, Scott, *et. al*., (2008)**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)** reported that most mastectomy women are between 35 to 44 years of age.

The majority of the studied patients' educational level represented higher level of education in about quarter (26%) of the sample, and another quarter (24.5%) were secondary educated(Table,1). These findings of the educational level of the current studied patients showed that exactly half of the sample achieved reasonable levels of education, nonetheless that education did not protect these patients from developing breast cancer and becoming mastectomies women or surplus the remaining half of the sample who did not receive adequate level education. The educational level of the second half of the sample were (17.5%) read and write, (14%)illiterate, (9%) primary education, and (9%) preparatory education.

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 breast self-examination monthly.

These findings as regard to education are congruent with **Nesreen& Zienab, (2011),** who reported that 2.38 % of mastectomy patient were illiterate, 16.67% can read and write, 4.76% were primary educated, 38.1 were secondary educated and 38.1% were highly educated. **Ilknur& Hatice, (2011),** also reported that 39.6 % of mastectomy patient were primary educated, 14.6 % were secondary educated and 45.8% were highly educated. Conversely **Gulseren& Aysun**, **(2011),** reported that 11.7% of their mastectomy patients were illiterate, 70.3% were primary educated, 9.6% were secondary educated and 8.5% 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 **Sabah, *et. al*., (2012)** who reported that 47.5 % of mastectomy women are living in rural residence, 52.5% are living in urban residence. This is also congruent **Gulseren& Aysun**,**(2011),** who reported that 44.75% of mastectomy women were living in town and congruent with **Ilknur& Hatice, (2011),** who reported that 35.4% of mastectomy patient were living in village, 25 % were living in town and 39.6 were living in city.

As presented in table (1), the current study shows that nearly one third (31%) of the studied patients were working, while the more than two thirds of the studied patient (69%) were not working. This is congruent **Gulseren& Aysun**, **(2011),** who reported that 79.8% of post mastectomy women were housewives and **Ilknur& Hatice, (2011)**, who reported that 39.6 %of mastectomy patient were employed, and 60.4% were unemployed. In contrast, **Nesreen& Zienab, (2011)**, reported that about two thirds 64.29% of the post mastectomy women were working, while 35.71% of them were house-wives.

***Second*: clinical data of the studied patients:**

The present study revealed that only very small percentage (6%) of the studied patients suffered from medical disease such as diabetes mellitus, hypertension, cardiac diseases, liver diseases and other gynecological cancers e. g cervix cancer, ovarian cancer and endometrial cancer, while almost all of the remaining studied sample (94%) were not suffering of medical diseases (Table, 2).These women, who suffered from gynecological cancers, were found to have cancer breast metastasis.

In this respect, **Gulseren& Aysun**, **(2011),**reported that 19.6% of mastectomy women have cervix cancer, 17.7% ovarian cancer, 52.2 uterine cancer and 17.9% endometrial cancer. In relation to other surgical operations beside mastectomy more than one third (36.5%) of the studied patients have other surgical operations as hysterectomy, oophorectomy (also known as ovarioectomy) and lumpectomy, while two thirds (63.5%) didn't have any other operations.

According to, **Shuster, Gostout, Grossardt, *et. al.*,(2005),** 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 chemotherapy and radiotherapy only one case constituting (0,5%) of the studied patients received chemotherapy and radiotherapy, while almost all the sample (99.5%) didn't receive such treatment (Table, 2).

Mastectomy as 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 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%). This complains included psychological distress such as depression, anhedonia, hopelessness and anxiety. 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 from the researcher point of view may be misleading as 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. Evidence of this notion is found in **Oudsten, Heck & Steeg, (2009)**who stated that nearly 50% of the women with breast cancer show depressive and anxiety symptoms in the first year after diagnosis and treatment, and this has a major impact on patients' lives. **Nauman, Waqar**, **Mohammad*,et. al*., (2010),** added that depression may be present with feelings of guilt, worthlessness, hopelessness, lowered self-esteem, social withdrawal or suicidal preoccupation. **Shrestha (2012),** also reported that all women

after surgery become self-conscious regarding their altered body image, they reported the problems like depression, anxiety, uncertainty about the future, appearance and fear of recurrent of disease and metastasis and distress from surgery.

Furthermore**, Enache**, **(2012)**found that depression in patients who underwent mastectomy surgery derives from several aspects, the first and most important is the change in body structure. Breast removal is equivalent to the loss of femininity and shapes the sense of inferiority, prompts the feeling of embarrassment, isolation from society and even isolation from family unfortunately, this would result in increased distance between the patient and her partner. Fear of recurrence of cancer and doubts about the success of the surgery may cause high anxiety in patients undergoing mastectomy, and an increased anxiety at the loss of a vital feminine organ, additionally, doubts about one's appearance and desirability as a sexual partner are factors that may play an important role in development of anxiety (**Yasmin**, **2005).**

Third: **Body image of the studied patients:**

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, and affecting women quality of life ***(*Hopwood, Fletcher, Lee, *et. al.*, 2001)**. Concern regarding post mastectomy disfigurement in body image may continue for years.

The current study documents that nearly three quarters (71.5) of the studied patients have high concerns of their body image, about quarter (26%) of the studied patients have moderate concerns of their body image and only (2.5%) of the studied patients have minimum concerns of their body image (figure, 3).As nearly three quarters of the study sample

(71, 5 %) demonstrated high concern of their body image and about one quarter demonstrated moderate concerns of their body image, one can refer to the pervious result of depression and anxiety of this sample.

These findings are consistent with, **Shoma, Mohamed, Nouman, *et. al.*,(2009)**, who reported that women undergoing mastectomy have moderate to severe distress regarding their body image. In addition, **Gaughey, (2006)** reported that up to half of all women suffer a negative effects on body image after performing prophylactic mastectomy. Some women specified negative influence on gaze and touch of their breasts, as well as their physical and social well-being. Naturally, younger women had more negative feelings related to the changes in their bodies due to mastectomy than older ones.

In contrast, **Arndt, Stegmaier, Ziegler, *et. al*., (2008),** mentioned that women after mastectomy had major differences regarding to body image in the first year after the surgical procedure, but this difference decreases over time. However, it was also reported that a considerable number (91 %)of women had persistent negative body image over three years. **(Dahl, Reinertsen, Nesvold, *et. al*., 2010).**

Brandberg, Sandelin, Erikson, *et. al*.,(2008),also reported that large proportion of those women reported problems with body image 1 year after mastectomy (e.g., self-consciousness, 48%; feeling less sexually attractive, 48%; and dissatisfaction with the scars, 44%).

Current study findings related to body image also reported that, the highest distress and concerns of body image expressed by the studied patients were finding difficulties to look at herself naked, felling less physically attractive as a result of disease or treatment, dissatisfaction with appearance when dressed, feeling less feminine as a result of disease

or treatment and feeling less sexually attractive as a result of disease or treatment (Table, 3).

Landmark & Wahl, (2002) and; Bailey, Pérez & Aft, (2009), also emphasized the bodily changes that occur following mastectomy. They referred to 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.

In addition**, Shoma, *et. al*.,(2010),**observed that most of the women who had undergone mastectomy had severe degrees of anxiety about situations to see her scar or let others see it. Similarly, **Frierson& Andersen,(2006),** stated that psychological stress that accompanies women's negative and distressing feelings and emotions, thoughts, and behaviors resultant from breast cancer and/or breast surgeries, 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.).

***Fourth:* Self-esteem of the studied patients:**

The current study documents that nearly quarter (21%) of the studied patients only showed low self-esteem, while other three quarters (75.5) of the studied patients have normal range of self-esteem and only (3.5 %) have high self-esteem (figure, 4). Once again this result might

indicate the sample tendency to repress their negative feelings and deny their worries. **Madhumanti & Anuradha, (2014)**, mentioned that majority of post mastectomy women who have immediate dependency issues, adversely affects their self-esteem and marital status**. A** change in the body condition also leads to changes in the self-perception and self-esteem due to changes in the appearance which women come across as the treatment procedure progresses, therefore, a woman feels unattractive and lack of confidence about her appearance post-surgery, she begins to lose her sexuality and her self-confidence in confiding to her husband.

Yurec, Farrar, & Andersen, (2000) reported that woman undergo mastectomy has to deal with the loss of a body part, which may be important to her femininity and sexuality, being those with the poorer body image had lower self-esteem.

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

Sexuality is an important aspect of physical, psychological and social life, increasing life quality and nurturing the individual's self-development, and is affected by the individual's body perception, sexual reactions, roles and relationships. The stress factors throughout the disease process and the side effects of treatment can affect the patient's intimate and sexual relationship with the spouse in a negative way and cause sexual dysfunctions **(Arıkan, 2000; Pelusi, 2006).**

As the number of mastectomy surgeries is increasing, the relationship between husband and wife is also getting disturbed with the intensity of the surgery affecting the women. Diagnosis and treatment of breast cancer has major psychological impact and a disturbed sexual life. After mastectomy women face difficulties in the three major areas namely, mental, emotional and the sexual phase. These areas are mainly

related to the frequencies associated with the anxiety about the recurrence of disease (75%), fear of death (24%) as well as body image issues and inadequate sexual attractiveness (19%) **(Madhumanti& Anuradha, 2014).**

The present study shows that 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 (figure,4).

This is in harmony in study done by **(Markopoulos, Tsaroucha, Kouskoa, *et. al*., 2009),**who stated that (about 42%) of post mastectomy women reported feeling unsatisfied with regard to their sexual life. Similarly **Alder, Zanetti& Wight, (2008),** who reported that approximately one third of married couples experience sexual difficulties related to mastectomy. **Hazrati, (2008),** also mentioned that sexual function and satisfaction with the sexual performance are common problems which women experience after mastectomy. In addition, **Brandberg ,*et. al*., (2008)**, reported that sexual pleasure was rated lower 1-year post-mastectomy as compared with before operation.

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 relationship with her partner.

F**obair, Stewart, Chang, *et. al*., 2006;Mols, Vingerhoets, Coebergh, *et. al*.,(2006),**also added that reasons suggested for disturbed sexual function include low self-esteem, hair loss, abrupt menopause,

vaginal dryness, partner's difficulty understanding one's feelings and body image problems.

Part (II); Relational and co-relational data of the studied variables;

First: **Body image as related to the socio demographic characteristics of the studied patients including;** age, educational level, occupation and residence:

The present study reveals that there is statistically significant relation between body image, and age, the studied patients whose age is (30-40) years old have the high scores of increasing distress and concerns of body image, while the studied patients whose age is (41-50) years old have the less scores of increasing concerns of body image (Table, 9). According to the researcher point of view, a possible explanation for the relation between age and body image is that younger women are self-conscious about their appearance, taking care of it in front of others, want to appear more physically and sexually attractive for their partners, and want to enjoy more by their life than older women, so that, they have more concerns and distress regarding their body image post mastectomy as shown in (Table, 9).This is congruent with **Gaughey, (2009)**, who reported that younger women under 40 years of age had more negative feelings related to the changes in their bodies due to mastectomy than older women. These data are contrasted in another study, in which no significant differences in body image as related to age **(Dahl, *et. al*., 2010).**

Elaine, (2006), also reported that there is likely to be an inverse relationship between age and negative body imaging, findings in this study revealed, older post mastectomy women were more likely to report greater body image adjustment compared to younger counterparts.

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

As regarding to educational level, this study show that there is statistically significant relation between body image and education, the studied patients with high education have the highest scores of increasing distress and concerns of body image, while the studied patients with primary education have the lowest scores of distress and concerns of body image (Table, 12).

From the researcher point of view, an explanation of the relation between body image and education, is that, highly educated women have more awareness towards their bodies, understand their body parts , know that breast is erogenous zone, as genitalia, a symbol of femininity and sexuality for women and important sexual organ for her partner, so loss of it represented as a shock for her, so that they have more distress and concerns regarding their body image than illiterate women who don't understand anything about their body parts.

This is congruent with **Abeer, Shereen& Hesham, (2012),** who shows the relationship between level of education and level of body image and revealed that about (40.9%) of illiterate women had poor level of body image and (49.1) of them had good level of body image, while only (18.2%) of educated women had good level of body image and (81.8%) of them had poor level of body image with statistically significant relation between women level of education and their level of body image.

As regard to occupation, this table shows that there is statistically significant relation between body image and occupation, the studied patients who are working have the highest scores of increasing distress and concerns of body image than the studied patients who aren't working.

From the researcher point of view an explanation of the relation between body image and occupation, is that, working women forced to go off their homes daily and go to their work, they exposed more to other people in their work place and in the street than the non-working women who kept in the homes most of the time, they also want to appear more attractive and with acceptable appearance in front of their colleges and when they lost their breast, this result in breast asymmetry, their appearance diminished and become less attractive, so that they are self-conscious about their appearance and have more distress and concerns regarding to their body image as shown in (Table, 9).

Concerning the residence, there is no statistical significance between body image and residence, but the table shows that distress and concerns of body image increase between those who live in urban areas than those who live in rural areas with mean (Table, 9). This may due to that urban women are more exposure to different cultures and different social classes which lead to increase their awareness toward their bodies, they also more interested in their appearance and dressing than rural women, so that they have more distress and concerns regarding to their body image after mastectomy as shown in (Table, 9).

Second: **Body image as related to the clinical characteristics of the studied patients including;** medical diseases, other surgical operations, psychological complains, chemotherapy, and radiotherapy:

Table 12 shows that there is no statistical significance in the relation between body image and medical diseases, psychological complains, chemotherapy and radiotherapy.

There is statistically significant relation between body image and having other surgical operations beside mastectomy, the studied patients who have other surgical operations have the high scores of increasing distress and concerns of body image than other patients who didn't have other operations, this may due to increase scars and disfigurements in other areas of the woman's body at the sites of these operations in addition to the site of mastectomy which lead to increasing distress and concerns related to body image.

The significant relation between body image and having other surgical operations is consistent with **(Markopoulos, *et. al.*,2009)** who stated that surgical interventions, including lumpectomy, hysterectomy or others, have been reported to impact a woman's body image and satisfaction with sexual life.

The lack of a significant relation between body image and suffering of psychological complains are incongruent with **(Dahl, *et. al.*, 2010)** who reported that a significantly higher number of breast cancer survivors with poor body image also reported diagnoses of anxiety or depression and chronic fatigue, compared with survivors who have better body image**.**

Gulseren& Aysun, **(2011)**also reported that there was a positive relationship between body image and depression in women with mastectomy and hysterectomy, and depression increased as the negative perception of body image increased.

The lack of a significant relation between body image and receiving chemotherapy and radiotherapy is congruent with **(Lucila, Dândara, Fernanda, *et. al*., 2013)** who reported that there was no significant differences in body image as related to chemotherapy and radiotherapy and in contrast **(Dahl, *et. al*., 2010)** who reported that there was a higher proportion of women who received chemotherapy and radiotherapy had worse body image than others.

Third: **Self-esteem as related to the socio-demographic characteristics of the studied patients** including; age, educational level, occupation and residence:

Table (10) show that, there is no statistical significance in relation between self-esteem and age, educational level, occupation and residence.

The lack of a significant relation between self-esteem, age and education are in contrast with **Nathália& Sueli,(2013),** who stated that self-esteem tends to increase with age and positive correlation between self-esteem and education was noted, It is assumed that the higher the level of education, the greater the access to information and, consequently, the greater the understanding of the situation. The women start to value the fact that they are survivors of breast cancer and attach less value to the breasts, feeling themselves to be more peaceful, secure and confident, reflecting positively in their self-esteem.

***fourth*: Self-esteem as related to the clinical characteristics of the studied patients**:

Table (13) shows that there is no statistical significance in the relation between self-esteem and medical diseases, other surgical operations, chemotherapy and radiotherapy, but there is statistically significant relation between self-esteem and Psychological complains, the studied patients who don't suffer from Psychological complains as result of mastectomy have the high scores of self-esteem, while the studied patients who suffer from Psychological complains have the low scores self-esteem (Table, 13).

The significant relation between self-esteem and Psychological complains are congruent with **(Nauman, *et. al*., 2010)**, who reported that psychological problems associated with mastectomy as anxiety and depression may present with guilt, worthlessness, hopelessness, lowered self-esteem, social withdrawal or suicidal preoccupation**.**

***Fifth*: Quality of sexual life as related to the socio demographic characteristics of the studied patients** including; age, educational level, occupation and residence:

Table (11) shows 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 of 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 consistent with **Gulseren& Aysun (2011),** 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),** who stated that younger women undergoing mastectomy are at a higher risk for alterations in sexuality than older women. (**Gab-alla, 2003)**, also reported that there was no statistically significant relationship between age and sexual adjustment.

The results of current study show that there is no statistical significance between quality of sexual life and education, occupation and residence (Table, 11).

The lack of a significant relation between education and sexual satisfaction is in contrast with **Gretchen, (2011)**, who stated that education is negatively associated with sexual dysfunction, women who have graduated from college are roughly half as likely to experience low sexual desire, problems achieving orgasm, sexual pain and sexual anxiety as women who have not graduated from high school, he also added that education was significantly related to a participant's sexual satisfaction, women with a secondary school less reported greater sexual satisfaction as compared to women who had received a graduate or professional degree.

In contrast, **Abeer, Shereen, &Hesham, (2012),** illustrated the relationship between level of education and feeling of sexual desire, and show that half of illiterates women (50%) feel sometimes sexual desire while all educated women (100%) feel most times degree of sexual satisfaction.

***Sixth*: Quality of sexual life as related to the clinical characteristics of the studied patients:**

This study shows that there is no statistical significance in the relation between quality of sexual life and medical diseases, Psychological complains, other surgical operations, chemotherapy and radiotherapy (Table, 14).

The lack of a significant relation between Psychological complains and sexual satisfaction is in contrast with **(Bayram**, **Şahin, 2008),** who mentioned that psychological problems as depression is often develop after mastectomy contributes to the deterioration of women's sexuality and spouse relation. **Kantar & Sevil, 2004; Bayram& Şahin, 2008 and Zimmermann, Scott & Heinrichs, 2009),** also stated that depressed people negatively distort their body image and sexual function, depression is significantly associated with lower sexual desire and arousal difficulties**.**

The lack of a significant finding between surgical operations and sexual satisfaction is consistent with **(Gretchen, 2011**), who reported that there was no differences in sexual functioning on the basis of surgical treatment, but in contrast with **(Markopoulos*, et. al.,* 2009),** who stated that Surgical interventions, including lumpectomy, hysterectomy, and oophorectomy have been reported to impact a woman's satisfaction with sexual life.

Part (III): Correlation analysis among studied variables:

Table (15) shows that there is highly statistically significant negative correlation between body image and self-esteem, which indicates that distress and concerns of body image of the studied patients increase with decrease the level of self-esteem of the studied patients and vice versa.

According the researcher point of view, an explanation of negative relationship between self-esteem and body image is that, body image is conceived, as part of self-concept which can be understood as personal perception and self-appraisal of one's physical appearance, self-esteem is another aspect of self-concept, referring to a positive or negative attitude and feeling toward oneself, based on the assessment of one's own characteristics, women who perceive herself as attractive physically and sexually and satisfied with their bodies experience higher level of self-esteem than others.

This is congruent with **(Crocker, Luhtanen, Cooper, *et. al.,* 2003)** who mentioned that individuals who believe that they are attractive tend to experience higher levels of self-esteem and vice versa.

In other words, **(Stokes & Frederick, 2003),** stated that body image reflects a direct personal perception and self-appraisal of one's physical appearance, whereby negative thoughts and feelings related to one's body indicate a disturbance of body image and lead to dissatisfaction with one's self.

Table (18) also shows there is no statistically significant correlation between body image and quality of sexual life, this is consistent with **Gaughey, (2009)**, who stated that most women experience negative feelings toward their breasts in particular, this alone does not necessarily affect sexual functioning.

In addition **Cready, Holloway, Shelley, *et. al*., (2005)**, reported that there was no significant differences related to marital and sexual satisfaction or body self-image. In contrast **Gutl, Greimel& Roth, 2002; Harcourt, Rumsey & Ambler,2003; Nobre& Pinto (2008),** reported that positive body image affects sexual satisfaction positively and negative body image increases, the sexual satisfaction and couple harmony decreases and the negative body image increases, the sexual satisfaction decreases.

On the other hand **Abeer, Shereen& Hesham, (2012),** also illustrated that there was highly significant relation between levels of body image and degrees of sexual satisfaction among those women, they reported that more than half (56.8%) of women with poor level of body image had mild degree of sexual satisfaction, only (22.7%) of women with very good levels of body image had mild degree of sexual satisfaction, but other women with very good levels of body image had high degree of sexual satisfaction.

Table (18) also reveals that there is highly statistically significant positive correlation between self-esteem and quality of sexual life which indicates that increase self-esteem of the studied patients increase with increase quality of sexual life and vice versa.

According to the researcher point of view, an explanation of relationship between self-esteem and quality of sexual life is that, self-esteem refer to the value and the competence of the individual, feeling, appreciation and consideration that the person has about herself; thus, the way one feels about oneself crucially affects all aspects of the life experiences including sexuality, that the women that appreciate themselves as good and take positive attitude toward themselves report

more satisfactory quality of sexual life than others as shown in (Table18).

Moreover, sexuality is properly understood to encompass body image, self-esteem, mood, support and sense of emotional connection and intimacy. It is an important and integral part of being human throughout life. It plays a central role in our personality and in how we meet existential threats throughout life **(Burwell, Case, Kaelin, *et. al.*, 2006)**.

Junkin, Beitz& Colwell (2005) also stated that sexuality is a complex, multidimensional phenomenon that incorporates biological, psychological, and behavioral parts. Biologic dimensions include the reproductive organs, and physical appearance; psychological dimensions include body image, self-esteem, and self-concept; and social aspects include gender roles, cultural expectations, and stereotypes.

Finally, 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 **(Avdin& Kumcagiz, 2011).**