



RELEVANCE OF BODY IMAGE, PHYSICAL ATTRACTIVENESS, SEXUAL SATISFACTION AND SELF-ESTEEM IN THE JOINT AND INDEPENDENT INFLUENCE ON PSYCHOLOGICAL ADJUSTMENT OF PATIENTS THAT UNDERGO MASTECTOMY

Adetunji Oluseye Adetayo¹, Orodiran Paulina B. O.² and Adetunji Dorcas Bukola²

¹Main Theatre, Clinical Nursing Services, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife Osun State, Nigeria. Email: tunjioluseye4ever@yahoo.com

²Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife Osun State, Nigeria

ABSTRACT: *The study is a descriptive Ex-post facto research and quantitative design was adopted. Sample size was determined using Taro Yamane formula and purposive sampling technique was adopted to select one hundred and twenty post-surgical patients who had mastectomy for the study. Data was processed using statistical package for social science version 21. Two research questions were answered using descriptive statistics of percentages and three hypotheses were tested using inferential statistics of student t-test at 0.05 level of significance. Findings revealed that there is influence of physical attractiveness and Body image on psychological adjustment among patients undergoing mastectomy in OAUTHC. It is shown that there exists a significant physical attractiveness and Body image difference in psychological adjustment [$t(118) = 1.99; <.05$]. There exists influence of sexual satisfaction on psychological adjustment among patients undergoing mastectomy in OAUTHC. It is shown that there exists significant sexual satisfaction difference in psychological adjustment [$t(118) = 5.98; P<.01$]. High level of sexual satisfaction leads to highest psychological adjustment (Mean = 17.87; SD = 3.22) as compared to low level of sexual satisfaction (Mean = 15.91; SD = 2.87). There exists no significant difference in the effect of self-esteem on psychological adjustment [$t(118) = 1.45; P>.05$]. Sexual satisfaction, self-esteem and physical attractiveness had significant joint influence on psychological adjustment [$R = .33; R^2 = .11; F(3, 118) = 4.33; P<.01$]. Collectively, sexual satisfaction, self-esteem and physical attractiveness accounted for about 11% variance in psychological adjustment. However, only sexual satisfaction ($\beta = .43; t = 6.33; P<.01$) and physical attractiveness ($\beta = .15; t = 1.99; P<.05$) had independent influence on psychological adjustment. The improvement of body image and physical attractiveness will positively enhance the sexual satisfaction of patients which will have a positive effects on their psychological adjustment and improved quality of life.*

KEYWORDS: Body Image, Self-Esteem, Sexual Satisfaction, Mastectomy, Breast Cancer, Psychological Adjustment

INTRODUCTION

Cancer is a major healthcare challenge. Appearance changes can be a significant source of distress and body dissatisfaction for women with breast cancer (Helms, O’Hea, & Corso, 2008; Falk Dahl, Reinertsen, Nesvold, Fosså, & Dahl, 2010) particularly because they are out of their control (Tacón, 2011). Fobair et al (2006) identified appearance concerns among 17–33% of women within 7 months of their diagnosis. These disturbances to body image can



persist long beyond treatment, as reported by 27% of long-term survivors in an additional study (Falk Dahl, Reinertsen, Nesvold, Fosså, & Dahl, 2010). Evidence shows that women with breast cancer experience a range of serious negative emotional changes after treatment as a result of disturbances to their sexuality, including fear of loss of fertility, negative body image, feelings of sexual unattractiveness (Bertero & Wilmoth, 2007), loss of femininity (Archibald, Lemieux, Byers, Tamlyn, & Worth, 2006), depression and anxiety (Garrusi & Faezee, 2008) as well as alterations to their sexual self (Wilmoth, 2001).

Studies show that breast surgery, regardless of type, mastectomy or lumpectomy, has a major impact on both health and psychosocial life, affecting patient's femininity, body image and indirectly her behaviour and social integration (Postolică, Luncă, Porumb, Simona, & Gabriel, 2013).

METHODOLOGY

Study Design: The study is a descriptive Ex-post facto research and quantitative design was adopted to describe the implications of socio-demographic factors on the self-esteem and sexual satisfaction of patients following mastectomy at Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria between December, 2018 and February, 2019.

Population: The post-surgical patients following mastectomy at the Surgical Outpatient clinic of OAUTHC, Ife Hospital Unit, Ile-Ife constitute the target population for the study. The average population of the post-surgical patients in the first quarter of the year 2018 (from the surgical out-patients' register) was enumerated and one hundred and twenty post-surgical patients were sampled for the study.

Sample size and sampling Technique: Sample size was determined using Taro Yamane formula and purposive total enumeration sampling technique was adopted to select all the available surgical patients (120 at the Surgical Out-Patient Unit of OAUTHC, Ife Hospital Unit, Ile-Ife).

Instrumentation: The instrument utilized for data collection were a developed demographic data form consisting of six items and used to collect data about the surgical patients' demographic data. The Self-esteem, and sexual satisfaction data were collected using Rosenberg Self-Esteem Adjustment Scale-6 (BASE-6) and Index of Sexual Satisfaction (ISS); adapted instrument which contained validated, closed-ended questions from standardized scales for variable measurement respectively. Rosenberg Self-Esteem Scale possesses high ratings in reliability; internal consistency was 0.77, minimum Coefficient reproducibility was at least 0.90 (Rosemberg, 1965).

Procedure for data collection: The questionnaires were taken to the Surgical Out-Patient department of the hospital during their clinic days (Monday, Tuesday and Thursday) by the researcher. The consent form was given to the target group who are sampled from the out-patient clinic of the hospital. After giving their consent following the explanation of the purpose of the study, a questionnaire was given to the respondent to fill. Clarifications were given where necessary. The filling of the questionnaire took about 10-15 minutes by the clients. Through the use of the questionnaire, necessary data were collected to aid the findings of this research work.



Method of data analysis: Data gathered from surgical patients were processed using statistical package for social science (SPSS) version 21. Frequency table was constructed and data were expressed on it. One research question was answered using descriptive statistics of percentage and one hypothesis was tested using inferential statistics of student t - test at 0.05 level of significance.

Ethical Consideration: Ethical clearance was obtained from the management of Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Osun State, Nigeria before the study was conducted. The surgical patients were ad equally informed about the study and consent was obtained before data was collected. Information obtained from the surgical patients was kept confidential and the right to withdraw from the study at any point by the surgical patients was respected with no consequences suffered. No harm was suffered by the surgical patients during the research study.

RESULTS

Socio-Demographic Data of Study Participants

Table 1: Socio-Demographic Data

Demographic Data	Frequency	Percentage	Mean value
Age			
30 – 39	16	13.4	2.32
40 – 49	52	43.2	
50 – 59	50	41.7	
60 and Above	2	1.7	
Religion			
Islamic	40	33.3	1.66
Christianity	80	66.7	
Educational level			
Primary education	12	10.0	2.33
Secondary education	58	48.3	
Tertiary education	50	41.7	
Occupation			
Civil service	60	50.0	1.95
Artisan	10	8.3	
Trading	50	41.7	
Marital Status			
Married	114	95.0	2.03
Widow	6	5.0	
Year of surgery			
One year ago	32	26.7	1.81
Two years ago	78	65.0	
Three years ago	8	6.6	
Four years ago	2	1.7	

Field survey, 2019.



From table 1 above, it showed that majority (43.2%) of the respondent were between age 40 – 49years, few (41.7%) of them were of the age 50 – 59years, very few (13.4%) of them were of the age 30 – 39years, while minority (1.7%) of them were 60years and above, with the mean value of 2.32. It was also deducted that, majority (66.7%) of the respondents were Christian while minority (33.3%) of them were practicing Islamic religion, with the mean value of 1.66. Also, majority (48.3%) of the respondent had secondary school education, few (41.7%) of them had tertiary education, while minority (10.0%) of them had primary education, with the mean value of 2.33.

Moreover, majority (50.0%) of the respondent were civil servant, few (41.7%) of them were into trading, while minority (8.3%) of them were Artisan, with the mean value of 1.95. It was also deducted that, majority (95.0%) of the respondent were married while minorities (5.0%) of them were widow, with the mean value of 2.03.

Furthermore, majority (65.0%) of the respondent had their surgery two years ago, few (26.7%) of them had their surgery one year ago, very few (6.6%) of them had their surgery three years ago, while minority (1.7%) of them had their surgery four years ago, with the mean value of 1.81.

Physical attractiveness/ Body image and Psychological adjustment after Mastectomy

Testing the hypothesis of respondents with high physical attractiveness and Body image will significantly report higher psychological adjustment than those with low physical attractiveness and Body image, using t-test for independent samples and the result is presented on Table 2.

Table 2: Summary of T-test for Independent Samples Showing Physical Attractiveness and Body image Differences in Psychological Adjustment

Dependent	Physical attractiveness and Body image	N (%)	Mean	SD	t	df	P
Psychological Adjustment	High	48 (40)	17.58	3.99	1.99	118	<.05
	Low	72 (60)	17.28	3.91			

Table 2 presents results on the influence of physical attractiveness and Body image on psychological adjustment among patients undergoing mastectomy in OAUTHC. It is shown that there exists a significant physical attractiveness and Body image difference in psychological adjustment [$t(118) = 1.99; <.05$]. This confirms the stated hypothesis, hence was retained in this study.

Sexual Satisfaction Levels and Psychological adjustment after Mastectomy

Testing the hypothesis of respondents with high sexual satisfaction will significantly report higher psychological adjustment than those with low sexual satisfaction, using t-test for independent samples and the result is presented on Table 3.



Table 3: Summary of T-test for Independent Samples Showing Sexual Satisfaction Differences in Psychological Adjustment

Dependent	Sexual Satisfaction	N (%)	Mean	SD	t	df	P
Psychological Adjustment	High	57(48)	17.87	3.22	5.98	118	<.01
	Low	63 (52)	15.91	2.87			

Table 3 revealed the influence of sexual satisfaction on psychological adjustment among patients undergoing mastectomy in OAUTHC. It is shown that there exists significant sexual satisfaction difference in psychological adjustment [$t(118) = 5.98; P < .01$]. Further, those with high level of sexual satisfaction reported highest psychological adjustment (Mean = 17.87; SD = 3.22) than those with low level of sexual satisfaction (Mean = 15.91; SD = 2.87). This confirms the stated hypothesis, hence was retained in this study.

Self-esteem Levels and Psychological adjustment after Mastectomy

Testing the hypothesis of respondents with high self-esteem will significantly report higher psychological adjustment than those with low self-esteem. This was tested using t-test for independent samples and the result is presented on Table 4.

Table 4: Summary of T-test for Independent Samples Showing Self-Esteem Differences in Psychological Adjustment

Dependent	Self-Esteem	N (%)	Mean	SD	t	df	P
Psychological Adjustment	High	54 (45)	17.97	4.01	1.45	118	>.05
	Low	66 (55)	17.01	3..87			

Table 4 presents results on the influence of self-esteem on psychological adjustment among patients undergoing mastectomy in OAUTHC. It revealed that there exists no significant difference in the effect of self-esteem on psychological adjustment [$t(118) = 1.45; P > .05$]. This negates the stated hypothesis, hence was rejected in this study.

Joint influence of Sexual Satisfaction, Self-Esteem & Physical Attractiveness on Psychological Adjustment

Sexual satisfaction, self-esteem and physical attractiveness will have significant joint and independent influence on psychological adjustment among patients that undergo mastectomy at OAUTHC, Ile-Ife. This was tested using multiple regression analysis and the result is presented on Table 5.



Table 5: Summary of Multiple Regression Table Showing Sexual Satisfaction, Self-Esteem and Physical Attractiveness as Predictors of Psychological Adjustment

Criterion	Predictors	β	t	P	R	R ²	F	P
Psychological Adjustment	Sexual satisfaction	.43	6.33	<.01				
	Self-esteem	.11	1.56	>.05	.33	.11	4.33	<.05
	Physical Attractiveness	.15	1.99	<.05				

Table 5 presents results on the joint and independent influence of sexual satisfaction, self-esteem and physical attractiveness on psychological adjustment among patients undergoing mastectomy in OAUTHC, Ile-Ife. It is shown that sexual satisfaction, self-esteem and physical attractiveness had significant joint influence on psychological adjustment [$R = .33$; $R^2 = .11$; $F(3, 118) = 4.33$; $P < .01$]. Collectively, sexual satisfaction, self-esteem and physical attractiveness accounted for about 11% variance in psychological adjustment. However, only sexual satisfaction ($\beta = .43$; $t = 6.33$; $P < .01$) and physical attractiveness ($\beta = .15$; $t = 1.99$; $P < .05$) had independent influence on psychological adjustment. This confirms the stated hypothesis.

DISCUSSION

The scope of the study was on 120 adult surgical patients who had elective mastectomy procedures during their hospital admission at Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria. The relevance of body image, physical attractiveness, sexual satisfaction and self-esteem on the joint and independent influence on psychological adjustment of the surgical patients who had elective mastectomy.

This study validated the major impact of breast surgeries on both health and psychosocial life, affecting patient's femininity, body image and indirectly her behaviour and social integration (Postolică, Luncă, Porumb, Simona, & Gabriel, 2013).

The study shows that body image and physical attractiveness disturbance had a negative influence on psychological adjustment. A qualitative study reported interviews done among women who talked about their body image with respect to femininity and sexuality as a result of surgery, including one participant that expressed issues of body disfigurement because of breast surgery and another talking about her inability to feel desirable towards her husband as a result of breast surgery (Elmir, Jackson, Beale, & Schmied, 2010). This study corroborated the patients' comments. This was also in support with the study conducted to assess the impact of undergoing a mastectomy without reconstructive surgery on a patient's psychological state using 60 European breast cancer survivors married or in a relationship (by completing the Marital Happiness Questionnaire (MHQ) (Andrzejczak, Markocka-Maczka, & Lewandowski, 2013). Appearance changes can be a significant source of distress and body dissatisfaction for women with breast cancer, and the disturbances of body image can persist long beyond treatment, as reported by 27% of long-term survivors (Falk Dahl, Reinertsen, Nesvold, Fosså, & Dahl, 2010). The review of 40 studies by Moyer (1997) found that breast-conserving surgery predicted better outcomes than mastectomy on measures of body image, psychological and



social adjustment, sexual functioning and fear of cancer recurrence but not on global adjustment.

This study revealed that there exists no significant difference in the effect of self-esteem on psychological adjustment of the patients who had mastectomy. This result negated the statements of Kreger (1995) and Abel (1996) that people having high self-esteem seem to be protected from feeling distress from negative events, especially removal of breast, by experiencing lesser threat to their sense of self and by having the ability to be more resilient. Moreover, McKay and Fanning (1998) linked low self-esteem to a higher need for social approval. Higher reported levels of global self-esteem were associated with more favourable scores on most measures of adjustment. This seems not to make significant difference in the patients' psychological adjustment to mastectomy.

The influence of sexual satisfaction on psychological adjustment among patients undergoing mastectomy in OAUTHC revealed that there exists significant difference in the influence of sexual satisfaction on the psychological adjustment of patients after mastectomy. High level of sexual satisfaction reported highest psychological adjustment (Mean = 17.87; SD = 3.22) than those with low level of sexual satisfaction (Mean = 15.91; SD = 2.87). Studies have reported that younger women diagnosed with breast cancer experienced problems related to sexuality often following surgical and adjuvant treatment leading to sexual distress and body image issues, particular issues of sexual functioning that cause distress for younger women vary by each individual (Andrzejczak, Markocka-Maczka, & Lewandowski, 2013; Befort & Klemp, 2011; Fallbjork, Rasmussen, Karlsson, & Salander, 2013; Wang, et al., 2013).

Implication To Practice

In view of the results of the study, the following recommendations were made:

- i. The surgical care of patients with breast cancer should be organized towards having a positive body image and physical attractiveness. The planning should start from the assessment of the patient's possible concerns with body image, physical attractiveness, self-esteem, sexual satisfaction and psychological adjustment.
- ii. Interventions to enhance the self-esteem and sexual satisfaction of the patients should be planned with care involving the husband and family members. This will help to promote the psychological adjustment after the initial hospital care in the long term.
- iii. Preoperative teachings involving the short term body image enhancement devices should be administered by the surgical team members.
- iv. Healthcare provider should advocate for the support of patient's husband and family support for effective psychological adjustment after the breast surgery.

CONCLUSION

Body image and physical attractiveness as well as sexual satisfaction of patients who had mastectomy independently influenced their psychological adjustment. There is a collective influence of body image and physical attractiveness, self esteem and sexual satisfaction on the



psychological adjustment of patients who had mastectomy. Therefore, the improvement of body image and physical attractiveness will positively enhance the sexual satisfaction of patients which will have a positive effects on their psychological adjustment and improved quality of life.

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