

A Study on Acceptance of Mastectomy among Patients Diagnosed with Breast Cancer in Tertiary Hospital in Rivers State, Nigeria

Elenwo SN1*, Ijah RF²

¹University of Port Harcourt, Port Harcourt, Nigeria

²Department of Surgery, University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria

ABSTRACT

Aim: This study was aimed at ascertaining the acceptance of mastectomy among patients who had breast cancer in a tertiary health facility in Port Harcourt over a 3 year period.

Background: The pattern of presentation of breast cancer among Nigerian women is that of prolonged delay, symptomatic breast cancer, advanced breast cancer and poor long-term survival. Seventy percent of cases of breast cancer present in advanced stage.

Materials and Methods: The reasons for delayed hospital presentation among patients with breast cancer was assessed using a hospital-based longitudinal study. Data were obtained using a structured proforma. Retrieved data were entered into Microsoft Excel and exported to United States CDC Epi-Info version 7 for statistical analysis.

Results: Out of 61 patients counselled for mastectomy, 11 (18%) declined while 50 (82%) accepted. 35 patients with late breast cancer accepted mastectomy while 7patients in the same category did not. Among patients who accepted mastectomy, 15 (30%) were early while 35 (70%) were late breast cancer.

Conclusion: The relatively high acceptance of mastectomy seen in this study is tied to patients presenting in late stage of breast cancer. More work is required to improve acceptance of the procedure at early stages of the disease.

Keywords: Breast cancer; Acceptance of mastectomy; Clinical stage; Port Harcourt

INTRODUCTION

In Nigeria, 100,000 new cases of cancer are reported to occur every year [1,2]. Breast cancer is the commonest cancer among women in Nigeria [3,4] and a rise in its prevalence has been reported [5]. Acceptance of treatment modalities among patients is variable and may include factors such as client/extratherapeutic/cultural, relationship, placebo, hope and expectancy, and models/techniques [6,7]. Education has been reported to be a major determinant of the knowledge and health behaviour of women on breast cancer [8,9].

The pattern of presentation of breast cancer among Nigerian women is that of prolonged delay, symptomatic breast cancer, advanced breast cancer and poor long-term survival [10-13]. Seventy percent of cases of breast cancer present in advanced stage [14]. This is a source of concern. Some of the factors that contribute to this experience were investigated in this study.

This study was aimed at ascertaining the acceptance of mastectomy among patients who have breast cancer in a tertiary health facility in Port Harcourt, by determining the proportion of breast cancer patients who readily accept mastectomy and exploring some factors (age, parity, family history of breast cancer, breast feeding history, and clinical stage) which may be associated with acceptance of mastectomy among patients diagnosed with breast cancer over the last 3 years.

METHODOLOGY

Data on socio-demographic (age, sex, parity), and clinical staging were obtained using a structured proforma. Retrieved data were

*Correspondence to: Solomon Elenwo, Consultant General Surgeon and Senior Lecturer, University of Port Harcourt, Port Harcourt, Nigeria, Tel: +2348033124878; E-mail: snelenwo@yahoo.co.uk

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entered into Microsoft Excel and exported to United States CDC Epi- Info version 7 for statistical analysis.

Data were tested for normality using Kolmogorov-Smirnov (K-S) statistics. Normally distributed data were summarized using means and standard deviation, otherwise medians and ranges were employed. Categorical variables were presented in counts and percentages. Non-parametric Spearman's correlation was used to determine the correlation between duration of symptoms and clinical staging. A p-value of less than 0.05 was considered statistically significant.

RESULTS

A total of 61 female patients who had breast cancer were involved in the study. The mean age of participants was 43.13 ± 11.60 years, with an age range of 20-75 years. The median parity was 3.00 with parity range of 0 to 10.

Table 1 shows data on acceptance of mastectomy. Out of 61 patients counselled for mastectomy, 11 (18%) declined while 50 (82%) accepted.

Table 1: Acceptance of Mastectomy

Acceptance of Mastectomy	Frequency	Percentage (%)
Yes (Readily and reluctantly accepted)	50	82
No (Refused)	11	18
Total	61	100

Sixty percent of those who accepted mastectomy were above 40 years of age, while 40% were below the age of 40 years (Table 2). There were 50 patients who accepted mastectomy, out of which 38 (76%) had their parity between 0-4, while 12 (24%) their parity was more than 4.

In Table 2, a total of 50 patients accepted mastectomy, and 3 (6.0%) had a family history of breast cancer, while 47 (94%) had no such family history. Also, all 3 patients (100%) with a family history of breast cancer accepted mastectomy. Out of 58 without a family history of breast cancer 47 (81%) accepted mastectomy,

while 11 (19%) declined. Out of this 11 that rejected mastectomy, 4(36.4%) were with early breast cancer. Also 70% of those who accepted mastectomy were with early breast cancer.

Out of 61 breast cancer patients in the study, 48 patients breastfed their babies while 13 did not. Also 41 of the patients who breastfed their babies accepted mastectomy while 7 did not. Out of fifty patients who accepted mastectomy, 41 had a history of breastfeeding while 9 did not. 63% of those who rejected mastectomy breastfed their babies while 36.4% of them did not (Figure 1).

Table 2: Socio-demographic characteristics and acceptance of mastectomy.

Acceptance of Mastectomy							
Variables	Number	Yes N=50 n (%)	No N=11 n (%)	OR (95%CI)			
Age							
<40 years	24	20 (40.0)	4 (36.4)				
≥40 years	37	30 (60.0)	7 (63.6)	1.167 (0.302 - 4.512)			
		Fisher	's exact p-value=1.000				
Parity							
Para 0 – 4	48	38 (76.0)	10 (90.9)				
>Para-4	13	12 (24.0)	1 (9.1)	0.472 (0.051 - 4.335)			
		Fisher	's exact p-value=0.667				
Family History	(Breast cancer)						
Yes	3	3 (6.0)	0 (0.0)	**			

No	58	47 (94.0)	11 (100.0)						
Chi square=0.694; p-value=0.626									
Breast Feeding History									
Yes	48	41 (82.0)	7 (63.6)						
No	13	9 (18.0)	4 (36.4)	0.384 (0.092 - 1.597)					
Fisher's exact p-value=0.226									
Clinical Stage									
Early	19	15 (30.0)	4 (36.4)						
Late	42	35 (70.0)	7 (63.6)	0.750 (0.191 –2.949)					
Fisher's exact p-value=0.726									

**No odds ratio value due to presence of zero in one of the crosstab cells



Figure 1: Distribution of responses to mastectomy acceptance.

Nineteen of the patients had early breast cancer while 42 were in late stages of breast cancer. Out of the 19 patients with early breast cancer, 15 patients accepted mastectomy while 4 declined. 35 patients with late breast cancer accepted mastectomy while 7patients in the same category did not. Among patients who accepted mastectomy, 15 (30%) were early while 35 (70%) were late breast cancer.

DISCUSSION

The study revealed that majority of patients who were offered mastectomy accepted it, though reluctantly. This finding is not in agreement with another study [15] done among male spouses of breast cancer patients which showed that the acceptance rate is low. The findings in this study appear to suggest that the acceptance rate is high. However, a look at the clinical staging of these patients shows that most of the patients who accepted mastectomy did so at the late stages of their disease. This agrees with previous studies that reported late presentation among Nigerian patients [10-14]. It is noteworthy that majority of the patients who accepted mastectomy were above 40 years of age. We also observed that the higher the parity of the patient, the less readily they accepted mastectomy.

There does not seem to be any significant relationship between age and acceptance of mastectomy, though most of those who accepted it were more than 40years of age. This finding differed from an Iranian study [16] in which patients who were 50 years and above (with > 1 child, a history of lactation, and a positive family history of breast cancer) were found to prefer mastectomy. However, a similarity exists here in that the higher the age of the patient the higher the likelihood of acceptance of mastectomy. This study also shows that the relationship between parity and acceptance of mastectomy is not statistically significant. In the same vein, a family history of breast cancer has no statistically significant correlation with acceptance of mastectomy. This finding is different from that of Gumus in Iran [16]. Probable explanation(s) for this discrepancy could be regional and other factors. Acceptance of mastectomy has no significant relationship with history of breast feeding in this study. We also observed that majority of those who rejected mastectomy breast fed their babies, and most of those who accepted mastectomy had early breast cancer. This is at variance with the Iranian study [16].

CONCLUSION

The relatively high acceptance of mastectomy seen in this study is tied to patients presenting in late stages of breast cancer, and reluctantly so. More work is required in our subregion to improve acceptance of the procedure at early stages of the disease.

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