

ORIGINAL ARTICLE

Pattern of Presentation and Adherence to Treatment in Young Breast Cancer Patients

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ABSTRACT

Background: Breast cancer is believed to affect a disproportionate percentage of young females in the 3rd world. These women are outside the age range recommended for screening. Hence, breast cancer diagnosis in this group of women is not improved by population screening.

Objective: To examine the pattern of presentation and adherence to treatment of young patients with symptoms and signs of breast cancer.

Methodology: Prospective study of the pattern of presentation and adherence to treatment of patients aged 30 years and below with breast cancer attending the breast clinic of Nnamdi Azikiwe University Teaching Hospital, Nnewi from 2004 to 2008.

Results: Breast cancer was suspected in 275 patients of which 22 were aged 30 years and below with a mean (SD) of 26.6 (3.14) years. Ten patients had advanced disease at presentation, while one patient discovered her breast lump by BSE. Only 5 accepted mastectomy, and 1 patient completed adjuvant chemotherapy and radiotherapy.

Conclusion: Breast cancers in the young in our locality present late as in the general population despite the increased educational attainments of the patients compared to their mothers. Acceptance of treatment and the likelihood of completing treatment are low.

Keywords: Biopsy, chemotherapy, mastectomy, multimodal, reconstruction

INTRODUCTION

Breast cancer detection in young women often follows development of symptoms and signs of the disease. The need for early screening may arise because of a strong family history that is believed to put some women at high risk for breast cancer at an early age.¹ Young women have low incidence rates of breast cancer compared to older women, however, their cancers tend to be

larger and of higher grade, with poorer prognostic characteristics, resulting in a higher risk of recurrence and death when compared to older women.²

The age specific breast cancer incidence rate for African-American women under age 35 is more than twice the rate for white women of similar age, and the mortality rate is more than three times higher.^{3,4} This young group

of females are generally more educated than their parents and would be expected to be better informed on early detection of breast cancer and appropriate action to take.

This study aims to examine the pattern of presentation and adherence to treatment of young patients with symptoms and signs of breast cancer. These form the basis for this report and recommendation of appropriate health education interventions.

METHODOLOGY

A prospective study of all the patients with breast disease attending the breast clinic of a University Teaching Hospital was spanned 2004 to 2008. The relevant data of all patients aged 30years and below were extracted for analysis. Information retrieved included age, duration of symptoms before presentation, how lump was discovered, type of biopsy done and treatment offered. The pattern of presentation and adherence to treatment form the basis for this report. Simple descriptive statistics were used to analyze the data. In this study, *young women* refers to women aged 30years and below.

RESULTS

Over the study period, from January 2004 to December 2008, 664 patients with breast disease were seen in our Centre. There were 275 patients with suspected breast cancer. Out of this number, 22 were ≤ 30 years. Their ages ranged 18-30years with a mean (SD) of 26.6 (3.14) years. All of them completed secondary school education. The mean age at menarche was 15years ± 1.7 (range 12-18years). Twelve (54.6%) were nulliparous, while 10 (45.4%) were multiparous. None had a family history of breast cancer.

The mode of discovery is as in *Table 1*, the duration of symptoms before presentation is shown in *Table 2* and the presenting complaints are shown in *Table 3*. Seven (31.8%) patients refused biopsy. Of the 15 that accepted and had biopsy, only 12 (80%) returned with histology reports which confirmed cancer in all of them. On the

whole, there were 173 confirmed cases of breast cancer, 12 of whom were in the young (age ≤ 30 years). Ten of the 12 patients had advanced disease at presentation, 11 were offered mastectomy but only 5 accepted. Two patients requested for wide local excision.

Table 1. Mode of Detection

Modality	Frequency	%
BSE	1	4.5
Accidental	19	86.4
Pain	2	9.1
Total	22	100.0

Table 2. Duration of Symptoms

Duration	Frequency	%
< 1month	2	9.1
1-3 months	2	9.1
3-6 months	6	27.3
6-12 months	5	22.7
> 12 months	6	27.3
not stated	1	4.5
Total	22	100

Table 3. Presenting Complaint

Complaint	Frequency	%
Lump	13	59.1
Nipple ulceration	2	9.1
Swollen breast	1	4.5
Lump/pain	1	4.5
Lump/ulcer	5	22.7
Total	22	100

Of the 7 who had surgery, only one completed the prescribed adjuvant chemotherapy and had radiotherapy before being lost to follow-up. All the other patients were lost to follow-up before completing adjuvant chemotherapy.

DISCUSSION

Breast cancers in young women aged ≤ 30 years (*mean 26.6 (3.14) years*) comprise 6.9% of women with breast cancer in our study. Ohanaka in Benin reported 3.7% over a 12-year period with the patients having a mean age of 26.3years.⁵ The mean age in the Benin study compares favourably with the mean age in our study, however, the youngest age in our study was 18years whereas in the Benin study, it was 16years. All the patients presented on account of one or more breast symptoms or signs, with 81.8% presenting with a lump or ulcerated breast lump. Only one patient discovered the lump by breast self-examination (BSE). Of the 12 patients with histological confirmation of breast cancer, 11 had advanced disease.

This study agrees with the finding that breast cancers in the young present late, probably because the disease is often discovered accidentally, not by BSE or clinical breast examination (CBE) and the patients delay before presenting to a medical practitioner.⁶ This would have been expected to be different considering that these patients all completed at least a secondary school education.

Eighteen (81.8%) patients presented after 3months of noticing the breast lump. Okobia, *et al* and Atoyebi, *et al* in their studies on breast cancer patients of all ages, noted respectively that 78% of their patients reported after 3months of symptoms and 64% after 6months.^{7,8} Thus, duration from onset of symptom to presentation is not shorter in young breast cancer patients.

The acceptance and likelihood of completing treatment is low considering that 7 patients out of 22 refused biopsy necessary to confirm diagnosis of cancer to enable proper

counselling of the patient for a life-long treatment of breast cancer. Only 5 of the 11 patients that were offered mastectomy accepted it. Two patients requested for wide local excision and did not continue further treatment modalities that were recommended. Only one patient completed the recommended modalities of treatment.

These attitudes of the young to treatment in this study are similar to what Anyanwu, *et al* noted in the general population of women with breast cancer.⁹ The low rate of BSE in women in our community, and the low rate of acceptance of treatment by these women, may contribute to the presentation with advanced disease and the attendant increased mortality rate in black women when compared to young white women with breast cancer. Breast cancer in Nigerian and African women present about a decade earlier than patients in Western countries with a mean age range of 42.7-48years.^{10,11,12,13,14}

The high mortality from breast cancer in African women has been attributed to advanced stage of the disease at presentation.^{10,15,16} Other reasons given for the higher mortality include: unfavourable tumour characteristics and higher rate of infiltrating poorly differentiated anaplastic carcinoma in West-Africans.¹⁵ Also, Ikpatt, *et al* in Calabar evaluated the proliferative activity of mitotic count in 300 cases of invasive ductal carcinoma and compared with values reported for Europe and other Western countries.¹² They found that Nigerian breast cancers are higher grade, higher stage and higher proliferating cancers compared to those diagnosed in the Western countries. This may also account for the high mortality in Nigerian breast cancer patients.

The benefit of adjuvant chemotherapy in young women is one of the less debated topics.¹⁷ The findings from a number of investigations confirm that sexual difficulties occur at a substantially higher rate for women undergoing chemotherapy than for other

interventions. Women and their partners need to be made aware of these issues.^{18,19}

It has been found that younger women with breast cancer tend to prefer a more active role in the treatment decision making process.^{20,21} Physicians, however, are often unaware of their breast cancer patients' preferences regarding decision making roles.²² Thus, physicians involved in managing young patients with breast cancer need to be informed of this need of young breast cancer patients because it may increase the rate of acceptance of biopsy and other treatment modalities.

Young women information needs are also somewhat different from those of older women. Young women seek more information about how their physical and sexual attractiveness will be affected by breast cancer and the treatment.²¹ Women's reasons for choosing reconstruction include desire to look good in clothing and to avoid wearing a prosthesis.²³ Among married women with cancer, partner support is viewed as the most crucial source of support and predicts lower levels of depression and anxiety and better quality of life.²⁴

Health education directed at early detection of breast cancer through promotion of BSE and CBE may result in early detection in the young. It should also be directed at the necessity for a biopsy and histology as part of the process to reach a definitive diagnosis. Information on the benefit of chemotherapy, with balanced information regarding the effect of treatment on the sexual health of the woman, if provided through health education, may reduce the likelihood of non-adherence. Information on the availability and accessibility of breast reconstruction after mastectomy, if included in health education targeted at the young, may improve the rate of acceptance of mastectomy.

Health care providers involved in the treatment of breast cancer in the young should be informed of the need to provide

adequate information to young cancer patients and help them reach a decision on the treatment options. This should be done along with the patients' partner (if she is married) as it may facilitate acceptance of treatment modalities by the patient. The public should also be made aware that breast cancer can and does occur in young women, even though it is rare. This may help improve the incidence of early presentation and avoid the shame of being stigmatized because of breast cancer.

CONCLUSION

Breast cancers in the young in our locality present late despite the increased educational attainments of the patients. Acceptance of treatment and the likelihood of completing treatment are low. Health education directed at early detection of breast cancer, and need for a biopsy and histology with emphasis on the benefits of completing prescribed treatment modalities, may prepare the young for a meaningful life in spite of the existing breast cancer. Health care providers need to provide adequate information to young women along with their partners to enable them participate fully in decision on their treatment.

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