

**Audit of delayed presentation in breast cancer from a tertiary centre in the Niger Delta, Nigeria.**Lucy O. Eriba¹ and Peter I. Agbonrofo²¹*Department of Radio-oncology, University of Benin Teaching Hospital, Benin City, Nigeria.*²*Department of Surgery, University of Benin/ University of Benin Teaching Hospital, Benin City, Nigeria.***Abstract**

Context: Breast cancer is the most common cause of cancer-related morbidity and mortality in women in developing countries, compounded by delayed presentation. Determining the contemporary reasons for delayed presentation in our environment, is necessary to properly guide enlightenment campaigns, enhance their effectiveness and improve patient survival.

Subjects and Methods: A 1-year audit of consecutive histologically-confirmed breast cancer patients presenting to University of Benin Teaching Hospital was done. Socio-demographic data, time to presentation with reasons, stage at presentation were obtained in a proforma and analyzed.

Results: 92% of patients had delayed presentation. 270 patients with complete records were included in the study. Mean age of patients was 47.6±11.0years, most were between 40 – 49 years (32.2%). Most patients in the study were married (75.6%), of lower class (52.2%) and had tertiary education (55.9%). Delay of 12 – 15months occurred most (54.8%) with advanced stage disease (Stages 3/4; 73%). Use of alternative medicine accounted for most of the delay (48.9%) while fear of mastectomy (30.4%), financial (6.7%) and referral problems (6.7%) were other common reasons.

Conclusion: Delay in presentation is common in our breast cancer patients. Use of alternative medicine, fear of mastectomy, financial issues were common reasons for delay. There should be proper regulation of alternative medical practice to forestall bogus claims of cancer treatment. More affordable and accessible screening centres, insurance coverage of cancer care, alongside enlightenment about effect of delayed presentation and appropriate cancer care in religious houses, amongst traditional rulers and other custodians of cultural practices are required to help mitigate negative beliefs resulting in delayed presentation.

Keywords: Breast cancer, Delayed presentation, advanced stage, reasons for delayed presentation.

Introduction

Breast cancer is the most common cancer in women worldwide.¹ It constituted 25% of diagnosed cancer cases worldwide in women, in 2012 and 53% of these newly diagnosed cancer cases were from developing countries.¹ It is the most common cause of cancer-related

morbidity and mortality in women in developing countries.^{1, 2} Women in developing countries present late, unlike those in the developed world who tend to present earlier.^{1, 3-6} The disease is usually more aggressive amongst blacks.^{7 - 12} This poor prognosis is further compounded by the late/delayed presentation in sub-Saharan Africa, which is directly linked to poor survival.^{1, 5, 13 - 16} Despite recent health campaigns, patients still present with late stage disease in the University of Benin Teaching Hospital (UBTH), Benin City, Nigeria.^{3, 17}

Corresponding Author: Dr. Peter I. Agbonrofo

Department of Surgery, University of Benin/University of Benin Teaching Hospital, PMB 1111, Benin City, Nigeria.

E-mail: pagbonrofo@gmail.com, peter.agbonrofo@uniben.edu

Phone: +2348028296343

Therefore, it is pertinent to determine the contemporary reasons for delayed presentation in our environment, to properly guide enlightenment campaigns and enhance their effectiveness. This could go a long way in improving breast cancer survival in our environment.

Objective of the study

To determine the reasons for delayed presentation amongst breast cancer patients in UBTH over a one-year period.

Subjects and method

A 1-year audit of consecutive histologically-confirmed breast cancer patients presenting to Surgery and Radio-oncology departments of University of Benin Teaching Hospital (a

tertiary/referral health facility in the Niger Delta, Nigeria) from July 2018 to June 2019 was carried out. Information concerning socio-demographics, duration of symptoms/time to presentation, reasons for time to presentation, stage at presentation were obtained using a proforma. Prolonged time interval from discovery of initial symptom to presentation to an appropriate health care provider of greater than 12weeks (3 months/ 90days) was considered to be delayed presentation (longer periods than this have been linked to reduced survival).¹⁸ American Joint Committee on Cancer Staging System for breast cancer Stage 3 and 4 disease were considered as late stage disease.^{19,20} Patients with incomplete data were excluded from the study. Data obtained were analyzed with IBM Statistical Package for Social Sciences software version 21. The study was carried out in conformity with the World Medical Association Helsinki declaration.

Table 1. Sociodemographics of patients with delayed presentation

Variable	n=270	Percentage (100%)
Sex of patients		
Female	269	99.6
Male	1	0.4
Age group		
20-29	8	3
30-39	58	21.5
40-49	87	32.2
50-59	72	26.7
60-69	39	14.4
70-79	6	2.2
Marital status		
Married	204	75.6
Single	34	12.6
Widowed	32	11.9
Economic status		
Lower Class	141	52.2
Middle Class	108	40
Upper Class	21	7.8
Level of education		
No formal education	7	2.6
Primary Education	25	9.3
Secondary Education	87	32.2
Tertiary Education	151	55.9

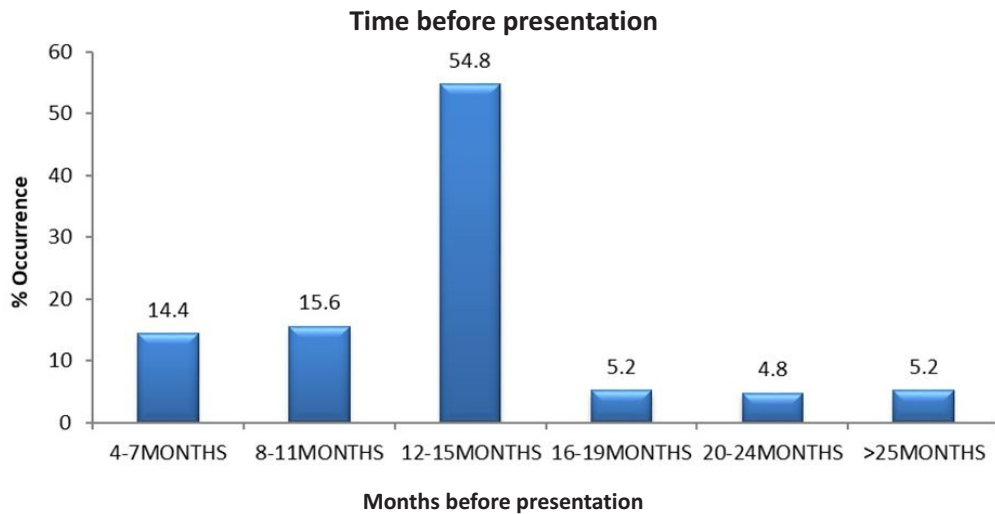


Figure 1: Time interval before presentation

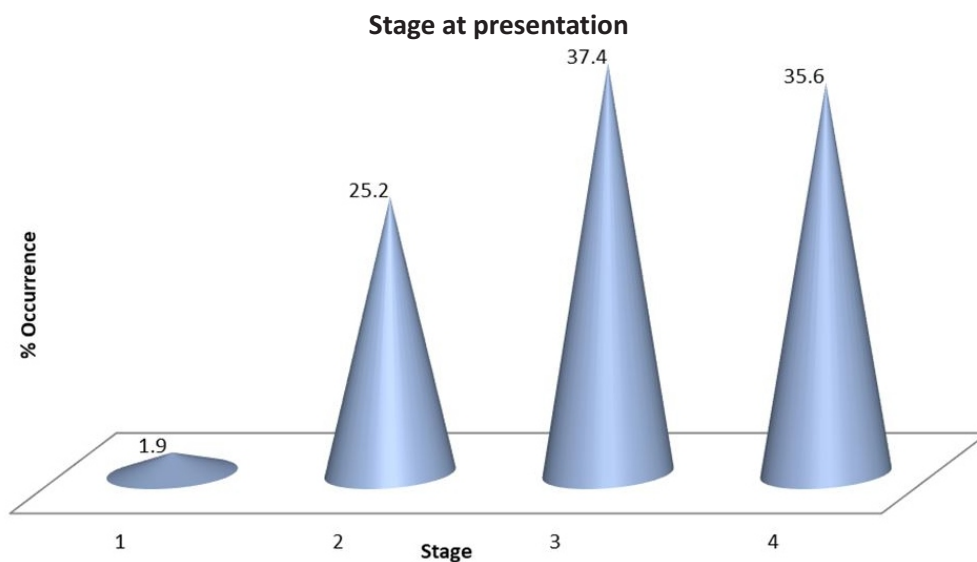


figure 2: stage at presentation

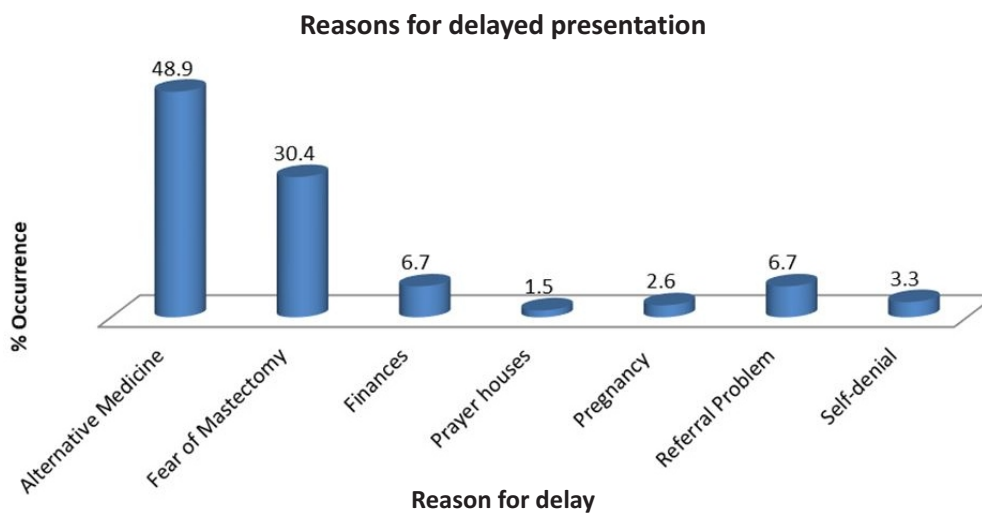


figure 3: reasons for delayed presentation

Results

In the 1-year study period, a total of 299 breast cancer patients were seen. Of these, 275 (92%) patients had delayed presentation. However, 5 patients with delayed presentation had incomplete records and were excluded from the study. Thus, 270 patients with delayed presentation were further analyzed.

Age range was 20 – 79 years, with most patients (32.2%) between 40 – 49 years. Mean age of patients was 47.6 ± 11.0 years, 99.6% were females

Most patients (75.6%) in the study were married, of lower socio-economic class (52.2%) and had tertiary level of education (55.9%) (Table 1).

The highest proportion of patients (54.8%) delayed for 12 – 15 months before presenting followed by delays of 8 – 11 months (15.6%) (Figure 1).

Advanced disease was the most common stage at presentation with 37.4% and 35.6% of patients in Stage 3 and Stage 4 respectively (Figure 2).

Use of alternative medicine accounted for most of the delay in presentation (48.9%) while fear of mastectomy (30.4%), financial (6.7%) and referral problems (6.7%) were other common reasons for delayed presentation (Figure 3).

Discussion

Many cancers are curable with early presentation and treatment, but delayed presentation of patients with diagnosis of cancer is a common phenomenon in developing countries leading to poor outcome and survival.²¹ The reasons for delayed presentation vary.

Most of the patients (32.2%) in this study were between the ages of 40-49 years with mean age of 47.6 ± 11.0 years, this is similar to other studies where many of the patients presenting with breast cancer are tending towards a lower age.^{3,22,23}

This study showed that majority (92%) of the patients with breast cancer had a delay of more than three months before presenting to a health professional with most patients (54.8%) presenting between 12-15 months after onset of symptoms. A

large proportion of patients presented in advanced stage III and IV (37.4% and 35.6% respectively). This finding is comparable with reports of other studies which found that over 50% of patients diagnosed with breast cancer in most African countries present late and report to the hospital with advanced stage III and IV disease, a major reason for the poor survival rate.^{3,23-25}

One hundred and forty one patients (52.2%) were of lower socio-economic status. Lower socio-economic status has been shown to limit patients' access to effective breast cancer care^{26, 27} and could be a contributory factor to the high incidence of delayed presentation in this study.

Majority of the patients (48.9%) in this study, sought alternative care with unorthodox or traditional healthcare systems, consisting of herbal medicines, rituals, occultism and many others. They considered this a major option for their treatment as they believe it is an avenue to their quick recovery.

West Africa has been shown to have the highest use of alternative medicine; Ibrahim and Oludara reported that 61.6% of the participants studied relied mainly on alternative medicine for the treatment of their disease,²⁸ Ezeome and Anarado noted 65% alternative medicine use in Enugu,²⁹ while a similar finding was made by Clegg-Lamprey et al in Ghana³⁰ and in Kaduna, Nigeria, 38.4% of breast cancer patients sought alternative care before presenting for medical consultation.³¹ However, in East Africa, Otieno et al. reported 9.6% of breast cancer patients in Kenya relied on alternative medicine,³² similar to a study done in Enugu, Nigeria where 17.5% of patients first sought aid from traditional healers.³³

Almost 80% of Africans use unorthodox healthcare,³⁴ probably because unorthodox medical services are easily accessible to all, including the poor and vulnerable. It is therefore not surprising, that many women with breast cancer present late and only come to the hospital when their symptoms worsen like intractable pains, ulceration, fungation and sometimes imminent death from complications of their disease.

Other identified causes of delayed presentation include fear of mastectomy. From this study, 30.4% of patients delayed because of fear of surgery. This is similar to the report by A.T Ajekigbe, where fear of mastectomy was the major cause of delayed

presentation and this was neither affected by age or educational background.³⁵

The authors believe that the fear of mastectomy could contribute to the high proportion of patients with tertiary level of education (55.9%) and also increased use of unorthodox therapy found in this study.

Fear as the major contributing factor causing late presentation or delayed diagnosis of breast cancer in Africa has been documented.³⁶ Individuals were afraid that mastectomy would leave a dreadful cosmetic deformity, lymphedema, arm pain, chest tightness, financial burden, and sexuality issues (women expressed very passionately that the diminished sexuality a woman experiences after mastectomy was the biggest fear associated with a mastectomy), this could result in divorce and embarrassment.³⁷⁻³⁹ It is the authors' opinion that the high proportion of married patients (75.6%) with delayed presentation in this study, could be as a result of this fear of possible marital issues from mastectomy.

However, studies from Europe have shown that divorce is not associated with breast cancer diagnosis but rather the patients experienced increased intimacy and support.^{40,41} This is in contrast to what pertains in Africa.^{39,42}

Finances and problem in referral system accounted for 6.7% each in delayed presentation in this study. In most African countries, healthcare is expensive and individuals are required to pay out of pocket.^{27,43} Therefore, financial barriers prevent the poor in the society from seeking medical help while some may sometimes have to travel long distance to access healthcare facility. Geographical inequalities in healthcare service provision and utilization is a major concern in Africa.^{27, 44} Longer travel time deters patients from seeking medical help as at when due.

Nine Patients (3.3%) delayed in presenting due to Self-denial. The "it is not my portion syndrome", borne out of spiritual belief, has kept patients in a denial phase while cultural practices and negative cultural beliefs has led to refusal of treatment hence resulting to worsening of symptoms and presentation in advanced stages.^{27, 42}

About 2.6% of patients in our study, noted their pregnancy status prevented them from presenting early and seeking medical care; symptoms of

pregnancy can mask breast cancer and this can lead to delayed presentation.^{45,46} In developing countries, the reported frequency of diagnosis delay of >3 months was 72.6% of patients with Breast cancer.⁴⁵ The delays are mainly caused by an underestimation of Breast Cancer symptoms during pregnancy and lactation. Therefore, an increased awareness of clinicians may help reduce the delay in the diagnosis of women with Pregnancy Associated Breast Cancer.

About 1.5% went to prayer houses, considering the fact that our society in Africa is very religious, some women diagnosed with breast cancer felt confident in discussing their diagnosis with church affiliates to get "spiritual covering" rather than presenting to the hospital and this has led to delayed presentation and poor outcome and survival.^{27,35,11, 13}

Conclusion

More than 90% of breast cancer patients in our experience delay in presenting to appropriate health care facility with associated advanced stage disease. Use of alternative medicine, fear of mastectomy, financial and referral issues were common reasons for delay. Proper legislation/regulation of alternative medical practice to forestall bogus claims of effective cancer treatment. More enlightenment about effect of delayed/late presentation and appropriate cancer care should be carried out in religious houses, amongst traditional rulers and other custodians of cultural practices to help mitigate some of the negative beliefs which lead to delayed presentation. More affordable and accessible screening centres, with greater health insurance coverage of cancer care will attenuate the financial burden of patients.

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