

DETERMINANTS OF DELAY IN ADVANCED STAGE PRESENTATION AMONG BREAST CANCER PATIENT IN A PERIPHERAL MEDICAL COLLEGE AND HOSPITAL OF WEST BENGAL

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Abstract

Background: To determine the socio demographic characteristics of women presenting with advance breast cancer. Identify the factor responsible for delayed presentation of patient with Breast Carcinoma. **Materials and Methods:** It was Hospital based prospective cohort study. Data collected during the time period of 22 months from September 2020 to June 2022. A total 50 Female patient admitted in the General Surgery Ward through emergency or OPD for breast swelling and newly diagnosed late presenting breast cancer patients admitted in the General Surgery ward were interviewed in our Midnapore medical college and hospital. Patient delay was defined as time from first symptoms until first medical consultation. **Result:** Demographic data showed that, Muslim were more prevalent than Hindu, most of them unemployed, there educational level was very poor, they had family history of breast cancer, they had no knowledge about cancer. Maximum number of the patients does not found support from their family, and travel long distance from home to clinics. **Conclusion:** Our results also show that patients in our study are more likely to experience a lengthy delay in diagnosis and a more advanced stage of the disease. Important predictors of patient delay included distance travelled, living in a rural area, and illiteracy. Public awareness efforts about breast cancer should avoid patient delays and promote early identification.

INTRODUCTION

Breast cancer is a global health problem with more than 1 million cases of breast cancer diagnosed worldwide each year. Since early detection improves the prognosis of breast cancer, WHO emphasizes on increasing the awareness of risk factors, common presentation, and evidence-based approaches for diagnosis and management of breast cancer.^[1]

In India, the age-adjusted incidence rate of breast cancer was 25.8 per 100,000 women making it leading cancer among Indian females in 2012. Although the incidence rate was lower than many developed countries, it's rapidly rising in Indian cities and the mortality rates were more than the United Kingdom (UK).^[2]

Lack of knowledge of signs and symptoms is considered as one of the major reasons contributing to the late detection backed by cumbersome referral pathways for diagnosis, lack of proper regional

centres for treatment, incomplete treatment due to high out of pocket expenditures and several socio-economic, geographical, and cultural barriers associated with women's health.^[3]

MATERIALS AND METHODS

It was Hospital based prospective cohort study. Data collected during the time period of 22 months from September 2020 to June 2022. A total 50 Female patient admitted in the General Surgery Ward through emergency or OPD for breast swelling and newly diagnosed late presenting breast cancer patients admitted in the General Surgery ward were interviewed in our Midnapore medical college and hospital. Patient delay was defined as time from first symptoms until first medical consultation. Prospective information and clinical data were collected on a pro forma with each patient. This was studied in relation to patients' age, educational level, marital status, shyness to talk to others, any other

treatment modalities like homeopathy, family history of breast cancer, history of benign breast disease, number of children and the nature of the first symptom were noted.

Inclusion Criteria

Female patient admitted in General Surgery Ward and having Locally advanced disease, metastatic disease at the time of diagnosis. [Patient was evaluated clinically with sign and symptoms, radiological and histopathological investigation was carried out. Analysis of the investigation was done before inclusion.]

Exclusion Criteria

1. History of previous cancer.

2. Relapsed disease
3. Early-Stage breast carcinoma.
4. Pregnant female

RESULTS

Age distribution among study population most of the patients were belong to 40-50 years from an advance stages and >60 of age group belongs to 30-120 days delay in diagnosis. We have found significant different p value <0.05, between two groups among aged <40 years and > 60 Years respectively.

Table 1: Age Distribution(n=50).

Age Distribution	Delay in diagnosis		Difference [95% CI]	P Value
	An advanced stage (n=28)	30-120 days(n= 32)		
<40	9(32.1%)	03(9.4%)	22.70%[-0.68, 46.08]	0.030756
40 - 50	12(42.9%)	09(28.1%)	14.80%[-12.60, 42.20]	0.176763
>50 - 60	05((17.9%)	08(25.0%)	7.10% [-16.91, 31.11]	0.362492
>60	02(7.1%)	12(37.5%)	30.40% [7.77, 53.03]	0.006711
Total	28(54.0%)	32(64%)	10.00%[-18.20, 38.20]	0.300384

Presentation Among Breast Cancer- Delay in Advanced Stages



Table 2: Demographic Data

Religion	Delay in diagnosis		Difference [95% CI]	P Value
	an advanced stage (n=28)	30-120 days(n= 32)		
Hindu	9(32.1%)	03(9.4%)	22.70%[-0.68, 46.08]	0.030756
Muslim	12(42.9%)	09(28.1%)	14.80%[-12.60, 42.20]	0.176763
Others	05((17.9%)	08(25.0%)	7.10% [-16.91, 31.11]	0.362492
Employment				
Unskilled worker	01(3.6%)	00(0.0%)	3.60%[-6.65, 13.85]	0.469826
Subsistence farmer	10(35.7%)	06(18.8%)	16.90% [-8.77, 42.57]	0.118215
Formal employment	14(50.0%)	14(43.8%)	6.20%[-22.42, 34.82]	0.412589
Unemployment	3(10.7%)	12(37.5%)	26.80%[3.14, 50.46]	0.018170
Number of children				
None	2(7.1%)	0(0.0%)	7.10%[-5.76, 19.96]	0.208962
1-2	16(57.1%)	27(84.4%)	27.30%[1.72, 52.88]	0.019993

>3	10(35.7%)	5(15.6%)	20.10%[-5.00, 45.20]	0.067406
Education level				
None	6(21.4%)	24(75.0%)	53.60% [28.90, 78.30]	0.000051
Primary	02(7.1%)	06(18.8%)	11.70%[-8.19, 31.59]	0.171252
Secondary	10(35.7%)	01(3.1%)	32.60% [10.52, 54.68]	0.001736
Tertiary	10(35.7%)	01(3.1%)	32.60% [10.52, 54.68]	0.001736
History of familial breast cancer				
Yes	18(64.3%)	04(12.5%)	51.80% [27.33, 76.27]	0.000051
No	10(35.7%)	28(87.5%)	51.80% [27.33, 76.27]	0.000051
Did you think it could be cancer				
Yes	15(53.6%)	08(25.0%)	28.60% [1.45, 55.75]	0.022379
No	13(46.4%)	24(75.0%)	28.60% [1.45, 55.75]	0.022379
Travel long distance from home to clinics				
Near	17(60.7%)	08(25.0%)	35.70% [8.85, 62.55]	0.005608
Far distance	11(39.3%)	24(75.0%)	35.70% [8.85, 62.55]	0.005608

Demographic data showed that, Muslim were more prevalent than Hindu, most of them unemployed, their educational level was very poor, they had family history of breast cancer, they had no knowledge about cancer. Maximum number of the patients does not found support from their family, and travel long distance from home to clinics.

DISCUSSION

As a whole, we discovered that individuals wait an average of 84 days until their first medical appointment. Studies conducted in developed countries indicated a median delay to initial medical consultations of 14–61 days.^[4]

The majority of patients in our study did not seek medical attention for 4 months after first experiencing symptoms. This is likely due to patients' perceptions of the 'seriousness' of their symptoms, which were likely influenced by their level of breast cancer awareness (knowledge). It was shown that 32 (64%) of the 50 patients evaluated had intermediate-to-late-stage illness. This is consistent with earlier studies,^[5] and may be the result of unnecessary waiting that accelerated the development of the disease. Most cancers in low and middle income countries (LMIC) are diagnosed at a more advanced stage,^[6] which may explain the advanced stage at presentation. It is widely believed that inadequate or nonexistent screening programmes and a lack of awareness among the general public are to blame for the delayed diagnosis that so many people experience. Patient delay was significantly associated with advanced disease stage upon presentation. There is substantial evidence that delays have an effect on disease progression.^[7]

Those patients were more likely to wait who lacked social support, such as from spouses and family. This accords with the findings of a 2011 study conducted in Mexico, which found that social support is vital for both the realisation of the initial contact and the implementation of community care.^[8] The concept of social support was defined as the "felt and actual knowledge that one is cared for, has aid available from other people (spouse, family, and friends), and is part of a supportive social network".^[9] Social support is especially important in

our environment because we do not have access to state-wide welfare benefits. Several studies have detailed how the patient's refusal to disclose their concerns with loved ones or friends can postpone their choice to seek medical care.^[10]

In this analysis, people who were aware of treatment options took longer to get care. This contradicts the results of prior research.^[11] This might probably be attributed to people's lack of faith in their ability to get entry to the services that are currently offered.

Patient delay was significantly correlated with age, education, socioeconomic position, family history of breast cancer, and the nature of the patient's first symptom. Other studies have found considerable associations between delay and sociodemographic characteristics,^[12] so perhaps we just required a larger sample size.

CONCLUSION

Our results also show that patients in our study are more likely to experience a lengthy delay in diagnosis and a more advanced stage of the disease. Important predictors of patient delay included distance travelled, living in a rural area, and illiteracy. Public awareness efforts about breast cancer should avoid patient delays and promote early identification.

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