



DEMOGRAPHIC PROFILE OF PATIENTS WITH BREAST CANCER SEEKING TREATMENT IN A TERTIARY CARE CENTRE IN JHARKHAND

Surgery

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ABSTRACT

Objectives: This study was done to know the demographic profile of female patients presenting with breast cancer in tertiary centre in Jharkhand
Method: Retrospective observational study done at indoor department of RIMS. Simple statistical descriptive measures primarily focusing on measures of central tendency were used. Written consent was taken from all patients. All female patients with suspected breast cancer were admitted in indoor of surgery unit in the period of 12 months from august 2018 to July 2019 of which 39 cases were confirmed. Their data were collected in form of preset questionnaire from medical records, imaging studies, interview at follow up. Cases of recurrence, Second primaries, history of partial treatment from other hospital and with incomplete medical records were excluded from study. Complete information on demographic profile were gathered as age, residence (rural/urban), religion (Hindu, Muslim, or others), marital status (married, widow/divorced, unmarried), educational status, occupation, family history of breast cancer etc.

Results: There were 39 patients of which 51.3% were above 40 years. 61.5% were tribals and about 51.3% were Hindu followed by Muslims (30.7%). About 56.4% of cases were of low socioeconomic strata and 53.9% of cases were illiterate. 59% of patients were married and about 89.8% cases had no family history of cancer. About 59% cases presented in late stage (3&4).

Conclusion: This study shows Delay by the patient in seeking medical care immediately after the onset of breast symptoms is a major barrier to its treatment and this delay is much much longer in economically backward tribal population. Thus a greater need exists to direct greater resources toward educating patients and the population about the importance of assertively seeking early medical assessment

KEYWORDS

Breast Cancer, Demographic Profile, Tribal Population, Stage At Presentation

INTRODUCTION

Breast cancer is the most common cancer in women in India and accounts for 14% of all cancers in women [1, 2]. Overall, 1 in 28 women is likely to develop breast cancer during her lifetime. In urban areas, 1 in 22 women is likely to develop breast cancer during her lifetime while in rural areas about 1 in 60 women develops breast cancer in her lifetime [4]. ICMR reported 1.5 lakh new breast cancer cases in India of which 70000 succumb [3].

It has been proved that Longer the delay in diagnosis, greater the chances of cancer to be detected in advanced stages and poorer will be the outcome [5, 6]. If diagnosis is delayed by 3-6 months after symptom onset it reduces 5-years survival by 7% compared to early diagnosed patients within 3 months [7,8]. Shortening the patient or diagnostic intervals can dramatically improve breast cancer survival. Almost 50% of Indian women present in locally advanced stages i.e. stage 3 or more. Stage II moving to Stage I gives 12% better survival while Stage IV moving to Stage III gives 30% better survival and to stage II 50% better survival.

The present study has been undertaken with following **aims and objectives:**

- To study the demographic profile of female patients presenting with breast cancer in tertiary centre in Jharkhand
- To evaluate the stage of breast cancer at presentation

MATERIAL AND METHODS

Place Of Study: Department of Surgery at Rajendra Institute of Medical Sciences (RIMS) Ranchi. My study was approved by the institutional ethics committee.

Type Of Study: Retrospective observational study

Sampling Method: All female patients with suspected breast cancer were admitted in indoor of surgery unit in the period of 12 months from august 2018 to July 2019. Total 202 cases were admitted of which 39 cases had been confirmed positive through histology and staging were done in each case through histopathology, sentinel lymph node biopsy, CT scan and other imaging modalities as required. Their demographic profile were collected in form of preset proforma.

Inclusion Criterion:

All female patients with primary breast cancer.

Exclusion Criterion:

- Recurrence
- Second primaries

- History of partial treatment from other hospital
- Incomplete medical records

Statistical Method: Simple statistical descriptive measures primarily focusing on measurement of central tendency.

Complete information on demographic profile were gathered as age, residence (rural/urban), religion (Hindu, Muslim, or others), marital status (married, widow/divorced, unmarried), educational status, occupation, family history of breast cancer etc. Anyone who can read or write any language considered as literate.

OBSERVATION

Patient Demographic profile

Age Incidence

<40 years	19(48.70%)
>40 years	20(51.3%)

Majority of patients were above 40 years.

Locality

Tribal	24(61.5%)
Non tribal	15(38.5%)

Majority of tribal woman came at advanced stages of breast cancer.

Religion

Hindu	20(51.3%)
Muslims	12(30.7%)
Christians	7(18%)

Predominantly Hindu women followed by Muslims came with breast cancer.

Economic Status

low	22(56.4%)
middle and high	17(43.6%)

Among low economic status majority were tribals.

Literacy Rate

Literate	18(46.1%)
Illiterate	21(53.9%)

Majority Were Illiterates

Marital Status

Married	23(59%)
Unmarried/divorced	16(41%)

Stage Of Cancer Detected

Early (stage 1 &2)	16(41%)
Late (stage 3&4)	23(59%)

About 59% of patients presented at late stage of which majority were illiterates with tribal background

DISCUSSION

India is a large country with diverse culture and socioeconomic profile. Breast cancer manifestation also modulated among diverse group (9). In my study majority of the women were above 40 yrs (51.3%). Sathwara JA et al (10) found mean age of 49 years. According to national cancer institute factsheets (mean age of diagnosis was 62 years(11).

Only 46.1% of patients were literate and majority of them were non tribal population living in urban area. There were more tribal women (61.5%) than non tribal's (38.5%). Nagrani R T et al(12) in their study found more prevalence of breast cancer in urban area as lifestyle in rural area were protective . Sathwara JA,etal (10) also found more cases of breast cancer in urban areas. This indifference can be explained as tribals have lack of access to health care services, lack of knowledge of breast cancer symptoms and eventually they come to RIMS with late stage (stage 3 &4).

Religion wise presenters were most prevalent in Hindu population (51.3%) followed by Muslims (30.8%), Christians (17.9%). Sathwara JA et al (10) also found majority of patients of Hindu religion, 83%.

On the socioeconomic front women with low socioeconomic group were more offenders (56.4%). Miller BA et al in their study also found more prevalence of BC among women with low socioeconomic group(13).

59 % of patients were married .Among late presenters with advanced stage majority were with much lower education, unmarried/divorced ,lower income, rural background with lack of access to health care with fate believer mindset. Harirchi I et al (14) also have similar findings in their study.

SUMMARY AND CONCLUSION

Delay by the patient in seeking medical care immediately after the onset of breast symptoms is a major barrier to its treatment and this delay is much much longer in economically backward tribal population. Thus a greater need exists to direct greater resources toward educating patients and the population about the importance of assertively seeking early medical assessment

REFERENCES

1. Ferlay J, Soerjomataram I, Ervik M, et al. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2013.
2. Bray F, Ren JS, Masuyer E, et al. Estimates of global cancer prevalence for 27 sites in the adult population in 2008.; 2013; Int J Cancer.; 132(5):1133-45.
3. Indian council of medical research : Department of health research ,MOHFW, Govt of India ,media report (2 february to 8 february 2019)
4. Chaurasia V, Pal S. A Novel Approach for Breast Cancer Detection using Data Mining Techniques.; 2014 International Journal of Innovative Research in Computer and Communication Engineering.; 2(1);2456-65.
5. Odongo J, Makumbi T, Kalungi S, Galukande M. Patient delay factors in women presenting with breast cancer in a low income country. BMC Res Notes. 2015; 8:467. Epub 2015/09/22. <https://doi.org/10.1186/s13104-015-1438-8> PMID: 26395344
6. Weller D, Vedsted P, Rubin G, Walter FM, Emery J, Scott S, et al. The Aarhus statement: improving design and reporting of studies on early cancer diagnosis. Br J Cancer. 2012; 106(7):1262-7. Epub 2012/03/13. <https://doi.org/10.1038/bjc.2012.68> PMID: 22415239
7. Montazeri A, Ebrahimi M, Mehrdad N, Ansari M, Sajadian A. Delayed presentation in breast cancer: a study in Iranian women. BMC Women's Health. 2003;3(1):4.
8. Richards MA, Westcombe AM, Love SB, Littlejohns P, Ramirez AJ. Influence of delay on survival in patients with breast cancer: a systematic review. Lancet. 1999;353(9159):1119-26.
9. Herndon JE 2nd, Kornblith AB, Holland JC, Paskett ED. Effect of socioeconomic status as measured by education level on survival in breast cancer clinical trials. Psychooncology 2013;22:315-23.
10. Sathwara JA, Balasubramaniam G, Bobdey SC, Jain A, Saoba S. Sociodemographic factors and late-stage diagnosis of breast cancer in India: A hospital-based study. Indian J Med Paediatr Oncol 2017;38:277-81.)
11. National Cancer Institute. SEER Stat Fact Sheets: Breast Cancer. Available at <http://seer.cancer.gov/statfacts/html/breast.html>.)
12. Nagrani R T, Budukh A, Koyande S, Panse N S, Mhatre S S, Badwe R. Rural urban differences in breast cancer in India. Indian J Cancer 2014;51:277-81)
13. Miller BA, Hankey BF, Thomas TL. Impact of sociodemographic factors, hormone

receptor status, and tumor grade on ethnic differences in tumor stage and size for breast cancer in US women. Am J Epidemiol 2002;155:534-45.

14. Harirchi I, Ghaemmaghami F, Karbakhsh M, Moghimi R, Mazaherie H. Patient delay in women presenting with advanced breast cancer: An Iranian study. Public Health 2005;119:885-91.