

## A study on cases of breast cancer attending to government general hospital, Anantapuramu

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### ABSTRACT

Breast cancer accounts for one of the chief cause for morbidity and mortality in women both in India and abroad. It has age adjusted rate as high as 28.5 per one lakh women and mortality of 12.7 per one lakh women. The intensity of the disease is projected to as high as 1797900 sufferers by 2020. The current study was carried out to assess the incidence of breast cancer in relation of various parameters among the sufferers attending to Department of Radiotherapy for management purposes which revealed that the incidence of breast cancer is high in rural population, women with obesity, high body mass index, poor literacy rate, low parity, younger age group and who are hailing from good socio-economic status. Creation of better health awareness, provision for screening programmes, Establishment of dedicated palliative care centers can reduce the incidence of breast cancer in the community.

**Key Words:** Breast cancer, Government General Hospital, Anantapuramu, India, Risk factors.

### Introduction

Carcinoma of breast is one of the commonest neoplasm presenting to any oncology/ department in the country. Breast cancer is adjudged as the commonest form of female cancer in India with a age adjusted rate as high as 25.8 per 1,00,000. The mortality resulting in Indian women because of Breast Cancer is estimated to about 12.7 per 1,00,000 women[1]. It is estimated that the number of breast cancer sufferers in India will reach 1797900 by 2020[2]. Though new modalities of management of the menace are made available due to which the life expectancy is increased and even cure is possible, but the incidence of the disease is increasing owing to changes in life style, diet, lack of awareness. There is significant increase in incidence and cancer associated mortality and morbidity in Indian Subcontinent as described in many studies that are made in India and in different parts of the globe[3-7].

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As per the incidence of mortality related to breast cancer in India is concerned it surpassed the cervical cancer which used to be the chief killer in the past. In this context, the current study is carried out with an objective to know burden of the disease in the region of Anantapuramu, a remote and poor district situated in Andhra Pradesh State of South India.

### Materials and methods

The current study is carried out at Department of Radiotherapy, Government Medical College and General Hospital, Anantapuramu, Andhra Pradesh between January 2015 to December 2015 and included all (n=243) subjects suffering with Breast Cancer, visiting the Radiotherapy for treatment. A detailed history as to age, sex, place of residence, socio economic status, personal and family history were recorded at the time of their first visit to the department for the treatment. Consent from the subjects and clearance from Institutional ethics committee were obtained for proceeding through the study. The data so obtained is recorded in a pretested proforma and the data was analyzed using appropriate statistical methods.

**RESULTS AND DISCUSSION:****Age and Sex wise distribution of cases (Table No.1):**

It is observed from Table No.1 that most of the subjects suffering from carcinoma breast are in the age group of 35 to 50 years amounting to 43.62% and lowest incidence is seen in women who are less than 35 years amounting to 9.88%. Among 49 subjects who are above 65 years of age, six subjects are above 80 years.

From the data it is evident that the incidence is quite common in the early middle age when compared to extremes of age. It is to be stated that the age of onset of disease is quite possible even at the very old age that is in eighties and with better management the life expectancy can be improved to the maximum extent. Similar results were noticed in the other studies [3,8].

**Table:1 Distribution of study subjects according to age groups**

Age group	No of study subjects	%
<35	24	9.88
35-50	106	43.62
51-64	64	26.34
>65	49	20.16
<b>Total</b>	<b>243</b>	<b>100.00</b>

Incidentally no male subjects suffering with breast cancer were reported to the department for treatment during the study period.

**Distribution of Subjects as to place of residence (Table -2):** It is observed from the study that 125 subjects amounting to 51.44% are hailing from rural areas while 48.56%(118) subjects belong to urban areas. usually it is evident that the incidence used to be

less in rural areas due to adherence to the rural life style [9]. However, it is observed in the trends that the incidence is comparatively more in the rural areas and this observation may be attributed to the reasons such as low educational status, lack of awareness regarding the disease, lack of medical facilities for diagnosis and due to life style modifications. similar findings are noticed in the studies conducted by other authors [4-6].

**Table:2 Distribution of study subjects according to Place of residence**

Place of residence	No of study subjects	%
Urban	118	48.56
Rural	125	51.44
<b>Total</b>	<b>243</b>	<b>100</b>

**Breast Cancer and Socio-economic status (Table -3):** Findings of the current study indicates that the incidence of breast cancer is common in richer socio-economic sections of the society as observed in 65.44%(n=159) of cases in comparison to poorer section of society. This fact may be attributed to the

dietary habits such as high fat diet, less house hold/physical activity and associated factors. similar findings are observed in a study conducted by [10]. Socio-economic status depicted in the table is based on the white card issued by Government of Andhra Pradesh to the below poverty line population.

**Table:3 Distribution of study subjects according to Socio-economic status**

Socio-economic status	No of study subjects	%
Upper and middle class	159	65.44
Lower class	84	34.66
<b>Total</b>	<b>243</b>	<b>100</b>

**Breast cancer and Parity of women (Table-4):** It can be emphasized from table-5 that the incidence of breast cancer is relatively common in women who are having two or less than two children (58.85%) when compared to women who are having more than two children.

Similar findings were notice in studies conducted elsewhere [11-12]. The probable reason for such observation may be linked to the established fact that breast feeding reduces the risk of breast cancer.

**Table:4 Distribution of study subjects according to Parity**

Parity	No of study subjects	%
≤2 children	143	58.85
> 2 children	92	37.86
No children	8	3.29
<b>Total</b>	<b>243</b>	<b>100</b>

**Age at Menarche and breast cancer(Table-5):**It can be inferred from table-5 that the incidence of breast cancer is common in women who have attained menarche before thirteen years of age. amounting to

about 67%in contrast to women who attain menarche after 13 years of age(34%). Similar findings are noticed in other studies [11-12] and hormonal reasons are attributed for the same.

**Table:5 Distribution of study subjects according to age at menarche**

Age at menarche	No of study subjects	%
≤ 13 yrs	163	67.08
>13 yrs	80	32.92
<b>Total</b>	<b>243</b>	<b>100</b>

**Education and incidence of breast cancer(Table-6):** It is observed from the table no.6 that the incidence of breast cancer is less who are highly educated that whole has no or formal primary education. This fact indicates that the fact the literacy increases awareness

and hence low incidence. This form a basis for plan of action to reduce the incidence among the people in the community. Similar findings were observed in other studies[13].

**Table:6 Distribution of study subjects according to Parity**

Education	No of study subjects	%
illiterate	143	58.85
Preschool and primary education	92	37.86
No children	8	3.29
<b>Total</b>	<b>243</b>	<b>100</b>

**Incidence of breast cancer and Body MassIndex(Table-7):** It can be visualized form Table No.7 that the incidence of breast cancer is high in subjects with more body mass index amounting to 39-

09% (n=95) wherein the BMI is more than 25. The risk relatively reducing with reducing Body Mass Index. Similar findings are presented by Matthew A et al[14].

**Table:7 Distribution of study subjects according to BMI**

BMI	No of study subjects	%
<18.0	12	4.94
18.01-22.9	64	26.34
23 to 24.9	72	29.63
≥25	95	39.09
<b>Total</b>	<b>243</b>	<b>100</b>

### Conclusion

Carcinoma of breast is one of the prime etiology resulting in both mortality and morbidity among women in India and around the globe. The current study also indicate that it is one of the major carcinoma with which public are visiting General Hospital and Radiotherapy department of the institute. It forms one of the major malignancy attending to this hospital while the other being the carcinoma cervix. In most of the cases higher BMI obesity, lack of exercise, diet, parity, poverty and illiteracy and lack of awareness are identified as important causative factors for the disease. one of the obscure finding is that incidence of this carcinoma in younger woman. lack of awareness, negligence, delayed presentation at the hospital, lack of diagnostic facilities, poverty and other lacunae in the medical facilities form the relative risk factors leading to increased mortality and morbidity of the disease. Holistic approach in management, promotion of sports and fitness, targeted health education and screening of women in high risk age group, provision of dedicated palliative and cancer care centers might help to bring down the mortality and morbidity related to the disease.

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