

# A Cross Sectional Study Determining the Knowledge and Awareness About Breast Cancer Amongst Females: An Institutional Based Study

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## ABSTRACT

**Background:** Breast cancer is one of the commonly seen cancer amongst females. There were around 1.38 million new cases of breast cancer diagnosed in the year 2008. There also has been a 20-30% increased prevalence of breast cancer amongst the developing nations in the past decade. The present study was conducted with the aim to determine the KAP breast cancer amongst females.

**Materials and Methods:** The present study was done in cross sectional manner over a period of 2 years at Department of Radiotherapy, All India Institute of Medical Sciences, Patna, Bihar, India. Method of random sampling was used to select subjects for the survey. The questionnaire was pre-tested using a pilot study. The questionnaire included data relevant to the personal information, demography, educational status and occupation of the subjects. All the data was arranged in a tabulated form and analysed using SPSS software.

**Results:** The present study enrolled 200 females between 25-70 years of age. The mean age of the females was 46.87 $\pm$ 6.34 years. Majority of the females (37%) were above 65 years of age. There were 31% females between 25-45 years of age. There were only 17% females who were aware that early

menarche could be a risk factor while 61% were not aware about the same. Majority of females (67%) knew that no breast feeding was a risk factor for breast cancer.

**Conclusion:** The study concluded that there is insufficient knowledge and awareness amongst the females about the risk factors and signs and symptoms of the condition.

**Keywords:** Awareness, Knowledge, Questionnaire.

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## INTRODUCTION

Breast cancer is one of the commonly seen cancer amongst females. There were around 1.38 million new cases of breast cancer diagnosed in the year 2008. It is one of the frequently seen cancer amongst the developed and developing nations of the world with around 690,000 new cases registered in each region.<sup>1</sup> Majority of the debilitation and deaths due to cancer are possibly preventable.<sup>2</sup> Ample and depth knowledge and awareness about Breast cancer leads to empowerment amongst women to actively indulge in the breast cancer screening programme for its prevention. Cancer ranks third in the causes of death and there are around 7.6 million cancer deaths occurring globally every year. By the year 2030, the number of deaths due to cancer are estimated to rise to 17 million per year. Majority of deaths are expected to occur in under developed and developing countries. With advancement of longevity with good medical facilities the number of subjects surviving above 65 years is expected to increase three times.<sup>3</sup> Breast cancer is becoming a grave problem in India also. There has been an increasing rate of incidences due to change in the life style factors like dietary alteration, age at first

conception etc. The problem is further worsened as majority of the females are diagnosed at advanced stages of the disease.<sup>4</sup> As per the information by the IARC, around 45% of the breast cancer cases and approximately 55% deaths due to breast cancer occur in low and middle-income nations. There also has been a 20-30% increased prevalence of breast cancer amongst the developing nations in the past decade.<sup>5</sup> Amongst the rural areas of India like barshi, breast cancer ranks the second most common cancer amongst females after uterine cancer.<sup>6</sup> The present study was conducted with the aim to determine the KAP breast cancer amongst females.

## MATERIALS AND METHODS

The present study was done in cross sectional manner over a period of 2 years at Department of Radiotherapy, All India Institute of Medical Sciences, Patna, Bihar, India. Method of random sampling was used to select subjects for the survey. The study was approved by the institutional ethical board and all the subjects were informed about the study and a written consent was obtained

from all in their vernacular language. The interview consisted of two parts- verbal interview aimed to increase the awareness of the females and a written questionnaire-based interview to check their knowledge about risk factors and signs and symptoms. All the females who failed to give the consent were excluded from the study. The questionnaire was pre-tested using a pilot study. The questionnaire included data relevant to the personal information,

demography, educational status and occupation of the subjects. The second part of the questionnaire assessed their awareness about the risk factors of breast cancer and the third part of the questionnaire had information about the signs and symptoms. Information about family history and mortality in family due to breast cancer was also obtained. All the data was arranged in a tabulated form and analysed using SPSS software.

**Table 1: The socio demographic characteristics of the study subjects**

Variable	Frequency	Percentage
<b>Age</b>		
25-45 years	62	31
46-65 years	64	32
>65 years	74	37
<b>Marital status</b>		
Married	182	91
Single	4	2
Widow	14	7
<b>Occupation</b>		
Unskilled	176	88
Semi-skilled	16	8
Skilled	8	4
<b>Education</b>		
Illiterate	34	17
Primary	22	11
Secondary	134	67
Graduate	10	5

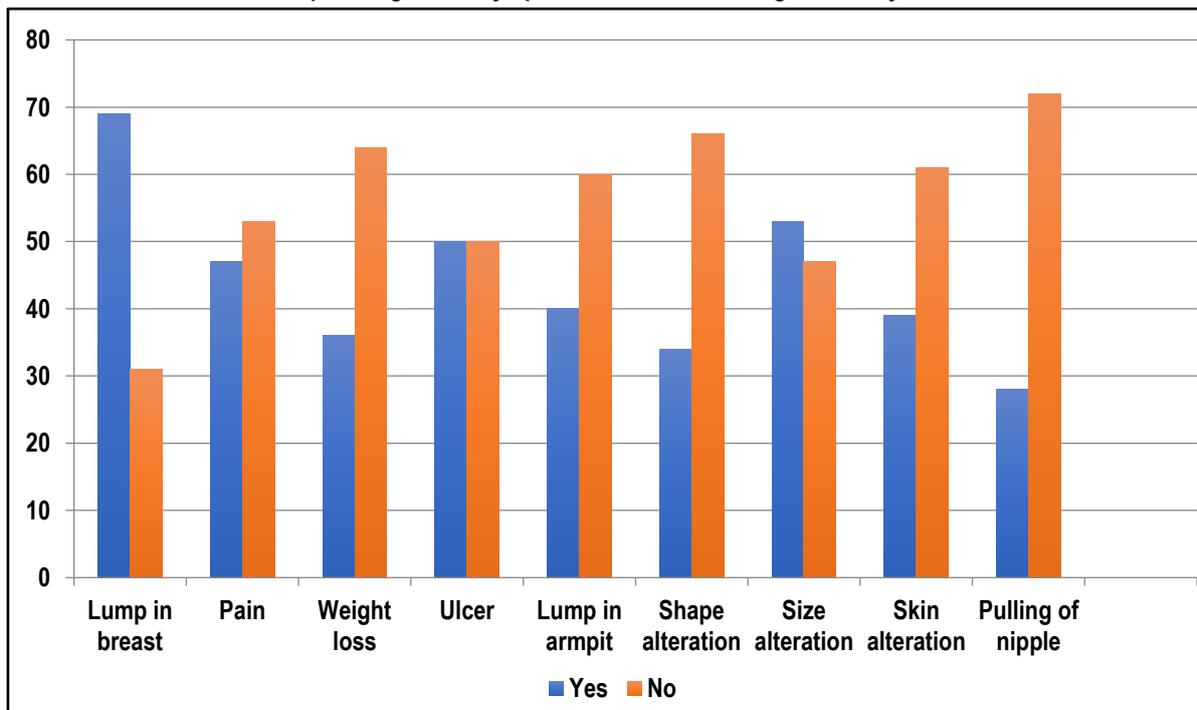
**Table 2: Risk factors awareness amongst the subjects**

Risk factor	Yes (%)	No(%)	Don't know (%)
Advancing age	45	27	28
High fat intake	42	28	30
Early menarche	17	22	61
Alcohol	28	29	43
Stress	32	30	38
No breast feeding	67	11	22
Family history	32	20	48
Smoking	44	29	27
Late menopause	35	21	44
Large breast	36	31	33
Late age of first conception	18	28	54

**Table 3: Signs and symptoms awareness amongst the subjects**

Signs/symptoms	Yes	No
Lump in breast	69	31
Pain	47	53
Weight loss	36	64
Ulcer	50	50
Lump in armpit	40	60
Shape alteration	34	66
Size alteration	53	47
Skin alteration	39	61
Pulling of nipple	28	72

Graph 1: Signs and symptoms awareness amongst the subjects



**RESULTS**

The present study enrolled 200 females between 25-70 years of age. The mean age of the females was 46.87+/-6.34 years.

Table 1 shows the sociodemographic characteristics of the study. Majority of the females (37%) were above 65 years of age. There were 31% females between 25-45 years of age. Out of the total, 91% females were married. 7% of them were widowed. There were 88% unskilled workers, 8% involved in semi-skilled work and 4% in skilled work. There were 17% illiterates and 67% had their secondary education completed.

Table 2 shows the awareness about the risk factors amongst females. Advancing age was regarded as a risk factor by 45% females while 28% had no idea about the same. There were only 17% females who were aware that early menarche could be a risk factor while 61% were not aware about the same. Majority of females (67%) knew that no breast feeding was a risk factor for breast cancer. 28% females did not consider late conception age as risk for breast cancer. Large breast was regarded as a risk factor by 36% of the females. Smoking was seen as risk by 44% females and liquor consumption by 28% females.

Table 3 shows the awareness about the signs and symptoms amongst the subjects. There were 69% subjects aware about the lump in breast but only 40% knew that it could be projected in armpit. There were 50% subjects who had idea of ulcerative changes of the skin over breast. Size alteration was known by 53% subjects. Weight loss was known by 47% females. Pain was regarded as a symptom by 47% subjects.

**DISCUSSION**

As per the latest report by The International Agency for Cancer Research, breast cancer is rated as the world's most common malignancy amongst females and is the most likely cause of female mortality worldwide.<sup>7</sup> Breast cancer is seen amongst 23% of the cancer subjects around the world, it ranks second overall when both the genders are regarded together. It is the foremost

reason for cancer mortality amongst females and establishes 14% of female deaths due to cancer.<sup>8</sup> Prevalence rates are increasing in majority of countries.<sup>9</sup> It has been prophesied that the main elevation in incidence of cancer will be seen within the next 15 years around the world especially in the Eastern Mediterranean Region, where breast cancer is the commonest form of female malignancy.<sup>10,11</sup> The incidence of breast cancer is increasing in developing countries, like Egypt, which is chiefly due to aging of the population, late conception, small number of children and no breastfeeding, and a deflection towards high-calorie diets.<sup>12</sup> In our study, advancing age was regarded as a risk factor by 45% females while 28% had no idea about the same. There were only 17% females who were aware that early menarche could be a risk factor while 61% were not aware about the same. Majority of females (67%) knew that no breast feeding was a risk factor for breast cancer. 28% females did not consider late conception age as risk for breast cancer. Large breast was regarded as a risk factor by 36% of the females. Smoking was seen as risk by 44% females and liquor consumption by 28% females. Breast cancer is a progressive affair, small lumps are more commonly to be seen at an early age and therefore, their early detection is likely to have a good prognosis and more successful outcome.<sup>13</sup> Regular screening along with awareness is necessary for self-detection of breast cancer. Screening increases body awareness, such that there is increased awareness of the alterations that might be detected during examination.<sup>14</sup> Lack of proper knowledge and wrong beliefs regarding breast cancer prevention amongst females are responsible for the negative perception of the cure rate. It can be detected early and prevented with the screening tests.<sup>15</sup> In our study, there were 69% subjects aware about the lump in breast but only 40% knew that it could be projected in armpit. There were 50% subjects who had idea of ulcerative changes of the skin over breast. Size alteration was known by 53% subjects. Weight loss was known by 47% females. Pain was

regarded as a symptom by 47% subjects. The results of our study were similar to the study done by Montazeri et al.<sup>16</sup> Comparable observation was observed in the study conducted by S. Ahuja et al.<sup>17</sup>

## CONCLUSION

Adequate and ample knowledge and awareness about breast cancer is necessary for its prevention. If diagnosed at early stage this condition is curable. Since prevention is always better than cure therefore, knowledge about risk factors is required to prevent the occurrence of the condition. In this study we tried to estimate the knowledge and awareness about breast cancer amongst females. The study concluded that there is insufficient knowledge and awareness amongst the females about the risk factors and signs and symptoms of the condition.

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