"A Study To Assess The Knowledge On Breast Cancer Among Women In A Selected Area, Visakhapatnam"

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Abstract

Background
Cancer is a generic term for a large group of diseases that can affect any part of the body. One defining feature of cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries, and which can then invade adjoining parts of the body and spread to other organs, the latter process is referred to as metastasizing. Metastases are a major cause of death from cancer. According to the World Health Organization, Cancer is the second leading cause of death globally, and was responsible for an estimated 9.6 million deaths in 2018. Globally, about 1 in 6 deaths is due to cancer. Approximately 70 percent of deaths from cancer occur in low- and middle-income countries. Around one third of deaths from cancer are due to the 5 leading behavioral and dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use, and alcohol use. About 28,082 people in Andhra Pradesh died of cancer in 2015, according to the Indian Council of Medical Research which finds that breast cancer is common among women followed by cervical cancer. Between 30–50 percent of cancers can currently be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies. The cancer burden can also be reduced through early detection of cancer and management of patients who develop cancer. Many cancers have a high chance of cure if diagnosed early and treated adequately. Knowledge serves to be the fundamental key to curb this fatal disease.[1,2,6]

Objectives
The objectives of the present study were
1. To assess the knowledge on breast cancer among women in selected area, Visakhapatnam.
2. To determine the association between knowledge on breast cancer and selected demographic variables.

Methods
A descriptive study was conducted in Sheelanagar, Visakhapatnam from March 2019 – April 2019 in women aged of 21 – 50 years. The sample size was one hundred (100) respondents chosen by convenient sampling technique. Data for the study was collected using self-designed structured questionnaire. Data collected and analyzed by using descriptive statistical methods. Chi square test was used to test association.

Results
Results showed that 38 percent of the study population belonged to age group between 31- 40 years. 46 percent of the study population were Hindus. Most of the study subjects (45 percent) were having secondary level education, were housewives (80 percent) and married (89 percent). 68 percent of the study population belonged to nuclear family. Maximum of the study population were from lower middle class (44 percent), 7 percent of the study subjects had a family history of breast cancer. Among the 100 respondents, 32 percent of them had inadequate knowledge, 53 percent of them had moderately adequate knowledge and only 15 percent of them had adequate knowledge on breast cancer. The range of knowledge score was between 0 – 40. The mean was 23.26 with a standard deviation of 8.9. There was no significant association between knowledge on breast cancer and demographic variables like age, religion, marital status, type of family, occupation and socio economic status. Education wise, moderately adequate knowledge on breast cancer was demonstrated by those who had graduate level and post graduate level of education (Chi – Square = 35.49).

Conclusion
There is a need for developing health education programs about symptoms and early signs of breast cancer with emphasis on the importance of early breast cancer detection. Breast selfexamination, health education programs and mass media education should be targeted towards females in the age group between 21 years and above, ideally those 35 years of age and above. Further research regarding knowledge and practice of women towards breast cancer is recommended.

Keywords: Knowledge, Breast Cancer, Women

INTRODUCTION

"Cancer is a journey, but you walk the road alone. There are many places to stop along the way and get nourishment - you just have to be willing to take it."- Emily Hollenberg

Cancer is a generic term for a large group of diseases that can affect any part of the body. One defining feature of cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries, and which can then invade adjoining parts of the body and spread to other organs, the latter process is referred to as metastasizing. Metastases are a major cause of death from cancer.[1]

According to the World Health Organization, Cancer is the second leading cause of death globally, and is responsible for an estimated 9.6 million deaths in 2018. Globally, about 1 in 6 deaths is due to cancer. Approximately 70 percent of deaths from cancer occur in low- and middle-income countries. Around one third of deaths from cancer are due to the 5 leading behavioral and dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use, and alcohol use. [1]

The most common cancers are - Lung (2.09 million cases), Breast (2.09 million cases), Colorectal (1.80 million cases), Prostate (1.28 million cases), Skin cancer (non-melanoma) (1.04 million cases) and Stomach (1.03 million cases).[1]

India has around 2.25 million cases with over 1 lakh new cases being registered every year, according to Cancerindia.org. In 2018, the disease led to nearly 7 lakh deaths. The Indian Council of Medical Research (ICMR estimates that the country is likely to register over 17 lakh new cases and report over 8 lakh deaths by 2020. [2,6]

About 28,082 people in Andhra Pradesh died of cancer in 2015, according to the Indian Council of Medical Research which finds that breast cancer is common among women followed by cervical cancer. Breast cancer can also affect men, but it is less common in men than in women [3] Between 30–50 percent of cancers can currently be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies. The cancer burden can also be reduced through early detection of cancer and management of patients who develop cancer. Many cancers have a high chance of cure if diagnosed early and treated adequately. [1]

Bansal A.B, Pakahare A.B et.al (2015) conducted a cross sectional study to assess the knowledge, attitude, and practices related to cervical cancer and its screening among women of reproductive age (15-45 years) at the All India Institute of Medical Sciences Bhopal. Structured questionnaire consisting 20 knowledge items and 7-items for attitude and history of pap smear for practices were administered by one of the investigators. Data was analyzed using Epi-Info version 7. Qualitative variables were summarized as counts and percentages while quantitative variables as mean and standard deviation. Predictors of better knowledge, attitude, and practices were identified by binary logistic regression analysis. Among the 400 respondents, two-third (65.5 percent) had heard of cervical cancer. At least one symptom and one risk factor were known to 35.25 percent and 39.75 percent participants. Only 34.5 percent participants had heard, and 9.5 percent actually underwent screening test, however, 76.25 percent of the participants expressed a favourable attitude for screening. Binary logistic regression analysis revealed that education, age and income were independent predictors of better knowledge. Education level influences attitude toward screening and actual practice depends on age, income, and marital status. This study shows that despite the fact that women had suboptimal level of knowledge regarding cervical cancer, their attitude is favourable for screening. [4]

Deniz S, Kurt B, et.al (2017) conducted a study to assess the Knowledge, attitudes and behaviors of women regarding breast and cervical cancer in Malatya, Turkey, to increase the knowledge level of the relevant age group and to begin including the relevant age group in screening programs. A cross-sectional study was conducted on 6910 women aged 30–69 years in Malatya, Turkey with a questionnaire and face-to-face interview. Results showed the average age of the women was 45.6±11.4. Nearly half of the women (46.4 percent) did not know that scans for early detection of breast and cervical cancers were free. Only 22.2 percent of women knew that breast cancer could be diagnosed early by mammography. 72.7 percent had never received a mammogram. One third (31.6 percent) of women did not know it was possible to recognize cervical cancer early, and two thirds (64.5 percent) of women had not received a Pap smear test. [5]

Keeping the above facts in view the researcher was keen to assess the knowledge on breast cancer

among women in Sheelanagar because knowledge is a fundamental key to curb this fatal disease.

OBJECTIVES

The objectives of the present study were
1. To assess the knowledge on breast cancer among women in selected area, Visakhapatnam.
2. To determine the association between knowledge on breast cancer and selected demographic variables.

OPERATIONAL DEFINITIONS

1. Knowledge: Refers to awareness among women on facts related to breast cancer as assessed by self-administered questionnaire.
2. Women : Women aged between 21 – 50 years
3. Breast Cancer: Cancer that develops from breast tissue.

METHODS AND MATERIALS

A descriptive study was conducted in Sheelanagar, Visakhapatnam from March 2019 – April 2019 in women aged of 21 – 50 years. The sample size was one hundred (100) respondents chosen by convenient sampling technique.

INCLUSION CRITERIA

Women between the age of 21-50 years in the study area and who gave consent to participate were included in the study.

EXCLUSION CRITERIA

Women who were terminally ill/ pregnant and those who did not give consent were excluded from the study.

DATA COLLECTION

Data for the study was collected using self-designed structured questionnaire (after obtaining written informed consent). The questionnaire had two sections - section one was designed to obtain socio-demographic information of the respondents, section two was designed to obtain information on the knowledge of women on breast cancer.

DATA ANALYSIS

Data collected and analyzed by using descriptive statistical methods. Chi square test was used to test association.

RESULTS

The knowledge level has been arbitrarily divided into three categories based on the scores in the structured questionnaire.

Inadequate knowledge: < 50 percent
Moderately adequate knowledge: $51 – 75$ percent
Adequate knowledge: > 75 percent

Table – 1 - Frequency and percentage distribution of respondents according to demographic characteristics
n = 100

Sn	Characteristics	Category	Respondents	
			Number	Percentage
1	Age	21 - 30	32	32
		31 - 40	38	38
		41 - 50	30	30
2	Religion	Hindus	46	46
		Christian	22	22
		Muslim	24	24
		Others	8	8
3	Education	Primary level (up to VIII std)	28	28
		Secondary level(IX, X)	45	45
		Intermediate	12	12
		Graduation and above	15	15
4	Type of family	Nuclear family	68	68
		Joint family	32	32
5	Family class	Lower (Income Rs. <10000/month)	35	35
		Middle (Income Rs 10000-40000/ month)	44	44
		Upper (Income > Rs. 40000 /month)	21	21
6	Occupational status	Working	20	20
		Homemaker	80	80
7	Marital Status	Married	89	89
		Unmarried	11	11
8	Family history	Yes	7	7
		No	93	93

The above table shows that 38 percent of the study population belonged to age group between 31- 40 years. 46 percent of the study population were Hindus. Most of the study subjects (45 percent) were having secondary level education, were housewives (80 percent) and married (89 percent). 68 percent of the study population belonged to nuclear family. Maximum of the study population were from lower middle class (44 percent), 7 percent of the study subjects had a family history of breast cancer.

Table 2 - Range of knowledge score, Mean knowledge score and standard deviation score on different assessment domains of breast cancer
n = 100

Sl	Assessment Domains	Max Score	Range	Knowledge	
				Mean	S.D
1	Knowledge on cancer	6	0 - 6	3.54	1.4
2	Knowledge on breast cancer	7	0 - 7	4.77	1.5
3	Knowledge on mammography	7	0 - 7	5.13	1.8
4	Knowledge on Breast self-examination	3	0 - 3	1.94	0.8
5	Knowledge on clinical breast examination	6	0 - 6	2.69	1.5
6	Knowledge on treatment modalities	11	0 -11	5.19	1.9
7	Total	40	0 - 40	23.26	8.9

The above table shows that the total range of score was 0 – 40. The total mean knowledge score was 23.26 with a standard deviation of 8.9.

Table 3 - Knowledge level of respondents n = 100

Sl	Knowledge level	Frequency	Percentage
1	Inadequate knowledge	32	32
2	Moderately adequately knowledge	53	53
3	Adequately knowledge	15	15
4	Total	100	100

Among the 100 respondents, 32 percent of them had inadequate knowledge, 53 percent of them had moderately adequate knowledge and only 15 percent of them had adequate knowledge on breast cancer.

There was no significant association between knowledge on breast cancer and demographic variables like age, religion, marital status, type of family, occupation, socio economic status/family class and family history. Education wise, adequate knowledge on breast cancer was demonstrated by those who had graduation and higher level of education (Chi – Square = 35.49). Chi-Square established at 0.05 level of significance denotes that the association between knowledge on breast cancer and the demographic variable - education is statistically significant. (Table value: 9.488 at Df–4)

DISCUSSION

With cancer being on the rise across Andhra Pradesh, oncologists call for early detection to check the growth of the disease. The state came in the $10\{+t\}\{+h\}$ place in terms of the highest cancer rate across the country, as per the data in the national cancer registry (NCR). [2] In the present study, among the 100 respondents, only 15 percent of them had adequate knowledge on breast cancer. Knowledge is the key tool to detect the onset of the disease in its initial stages and take necessary precautions to prevent further spread. After assessing the knowledge level of the respondents, the researcher decided to initiate a mass education programme for all the respondents and the people residing in Sheelanagar.

LIMITATIONS

1. Sampling being convenient technique was not a true representative of the study population
2. There were many drop outs during the study.

CONCLUSION

The present study was undertaken to assess the knowledge on breast cancer among women in selected area, Visakhapatnam and to determine the association between knowledge on breast cancer and selected demographic variables. Among the 100 respondents, 32 percent of them had inadequate knowledge, 53 percent of them had moderately adequate knowledge and only 15 percent of them had adequate knowledge on breast cancer. Hence, there is a need for developing health education programs about symptoms and early signs of breast cancer with emphasis on the importance of early breast cancer detection. Breast self-examination, health education programs and mass media education should be targeted towards females in the age group of 21 years and above, ideally those 35 years of age and above. Further research regarding knowledge and practice of women towards breast cancer is recommended because this fatal disease has been steadily growing over the years, bolstered by the lack of awareness, say experts. As they say, despite its potential for major harm, cancer is not deadly if detected at an early stage.

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