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Original Research Article

Breast cancer: knowledge, attitude and practices among undergraduate female students at a government college in Koppal, Karnataka

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ABSTRACT

Background: Breast cancer is the second most common malignancy in general and most common cancer among women in both the developed and developing countries. Its incidence is on the raise due to increased life expectancy of people, increased urbanization and adoption of unhealthy lifestyles. An awareness of brest cancer and its presentation is essential among women for detection at an early stage and timely treatment for better prognosis. The objective of the study was to assess knowledge, attitudes and practices towards breast cancer among female students in the study setting.
Methods: A descriptive study was conducted for duration of 3 months from July 2018 to September 2018 among female students at a degree college in Koppal city, Karnataka. A total of 396 students were included and data was collected using a pre tested and semi structured questionnaire after taking an informed consent. Data thus obtained was entered and analyzed using Microsoft Office Excel 2013.
Results: More than 80% of study participants had heard about breast cancer in the present study but their knowledge on its various aspects was limited. More than half were positive in their attitude believing that they are not at risk of breast cancer and were willing to practice breast self-examination (BSE) in future but only 5.28% of them admitted to have done BSE in the past. Most common source of information about disease was school in the present study.
Conclusions: The present study demonstrated KAP gap among graduate female students which needs to be tackled through proper educational interventions.

Keywords: Attitude, Breast cancer, Knowledge, Practices

INTRODUCTION

Cancer is one of the major cause of death both in developed and developing countries. The morbidity and mortality associated with cancer has increased in the last few decades with occurrence of 18.1 million new cases and 9.6 million deaths especially in developing countries.[1]

As per recent estimates, number of people living with cancer in India was 2.25 million and the number of cancer related deaths were around 0.7 million. Among women, breast cancer is one of the most common cancer and accounts for 14% of all cancers in them. Recently, breast cancer has surpassed cervical cancer and now is the leading cause of cancer deaths in India.[2,3]

A total of 1,62,468 new cases of breast cancer were registered in the year 2018 and the number of deaths reported were 87,090 and it is estimated that by the year 2020, the number is likely to increase to 1.7 million. Incidence rates begin to rise in the early thirties and peak at 50-64 years among Indian women. The probability of development of breast cancer is one in every 28 women with one in every 22 woman and one in every 60 women in urban and rural areas respectively. Breast cancer

burden was found to be 41 per 1,00,000 women in Delhi, followed by Chennai, Bangalore and Thiruvanathapuram.[2-4]

The increased incidence of breast cancer in urban areas can be attributed to lifestyle changes such as bearing a child late in life, lack of breastfeeding, hormonal therapy, sedentary lifestyle, obesity, little or no awareness on early signs of disease and screening methods.[5-7] We cannot completely eliminate the occurrence of breast cancer by lifestyle modification but we can improve the prognosis / outcome by timely detection and adequate treatment. For the breast cancer to be detected at an early stage, women must be aware of the various signs and symptoms of disease as well as about breast self-examination. With this background, the present study was done to assess knowledge, attitude and practices (KAP) of female students towards breast cancer at a degree college in Koppal city, Karnataka.

Objective of the study

To estimate the level of knowledge, attitudes and practices towards breast cancer among undergraduate female students in the study setting.

METHODS

A cross-sectional study was conducted for duration of 3 months from July-September 2018 among female students at a Governement degree college in Koppal city, Karnataka. Prior permission for the study was obtained from concerned authorities. Minimum sample size calculated was 256 with an absolute precision of 5% and significance level of 0.05, taking 80% prevalence of awareness on breast cancer as per recent estimates.[8] Only female students were segregated separately and explained about the purpose of the study. Data were collected using a pretested and semi structured questionnaire after taking an informed consent. The study was conducted anonymously and students absent on the day of data collection were excluded. In the present study, knowledge, attitude and practices were defined as the responses given by study participants to the administered questionnaire. Data thus obtained were entered and analyzed using Microsoft Office Excel version 2013.

RESULTS

A total of 396 female students participated in the present study and their mean age was 19.02±0.84 years. Majority i.e. 384 (96.9%) were unmarried, majority i.e. 361 (91.1%) belonged to Hindu religion and majority i.e. 270 (68.1%) of study participants were residing in rural locality.

Table 1 and Figure 1-3 demonstrate distribution of study subjects according their knowledge on various aspects of breast cancer. As seen in the table, majority i.e. 341 (86.11%) of the study subjects have agreed to have heard about Breast cancer and among them, majority i.e. 222 (65.10%) know that Breast cancer is the most common cancer among women and majority i.e. 273 (80.06) have also heard about Breast self-examination. When enquired about risk factors, more than one third of the women who were aware about the disease, believed that smoking and alcohol consumption were the major risk factors for breast cancer followed by use of contraceptive pills, genetic factors as well as family history of disease by 90 (26.39%), 90 (26.39%) and 84 (24.63%) women respectively as evident from Figure 1. Similarly when asked about signs and symptoms among women who accepted to have heard about disease, nearly two third i.e. 224 (65.68%) of them knew that mass/lump in the breast could be a symptom of disease followed by pain in the breast and change in size/shape/color of breast by 210 (61.58%) and 132 (38.70%) of women respectively as seen in Figure 2. Women who had agreed to have heard about disease, had satisfactory knowledge on protective factors for breast cancer with majority i.e. 210 (61.58%) quoting regular exercise followed by 142 (41.64%) quoting diet rich in fiber as shown in Figure 3. Further, 70% of them believed that early detection improves their chances of survival and another 218 (63.92%) believed that breast cancer is curable.

Table 1: Distribution of study subjects according to their knowledge on breast cancer.

Sl. no	Questions	Responses	Number of subjects N (%)
1	Have you ever heard about Breast cancer?	Yes	341 (86.11)
		No	55 (13.89)
2	Breast cancer is the commonest cancer among women?	Yes	222 (65.10)
		No	76 (22.28)
		Don't know	43 (12.60)
3	Have you heard about breast self-examination (BSE)?	Yes	273 (80.06)
		No	68 (19.94)
4	Which of the following can be used for screening breast cancer?	BSE	72 (21.11)
		Clinical examination	136 (39.88)
		Ultrasonography	40 (11.73)
		Mammography	42 (12.31)
		Don't know	164 (48.09)

Continued.

Sl. no	Questions	Responses	Number of subjects N (%)
5	Do you think early detection of breast cancer improves chances of survival?	Yes	239 (70.08)
		No	14 (4.10)
		Don't know	88 (25.80)
6	Do you think Breast cancer is curable?	Yes	218 (63.92)
		No	19 (5.57)
		Don't know	104 (30.49)
7	Which of the following is/are treatment modalities for breast cancer?	Surgery	146 (42.81)
		Chemotherapy	62 (18.18)
		Radiotherapy	38 (11.14)
		Don't know	186 (54.54)

Note: Responses for questions from 2–7 are only from study subjects who accepted to have heard about breast cancer.

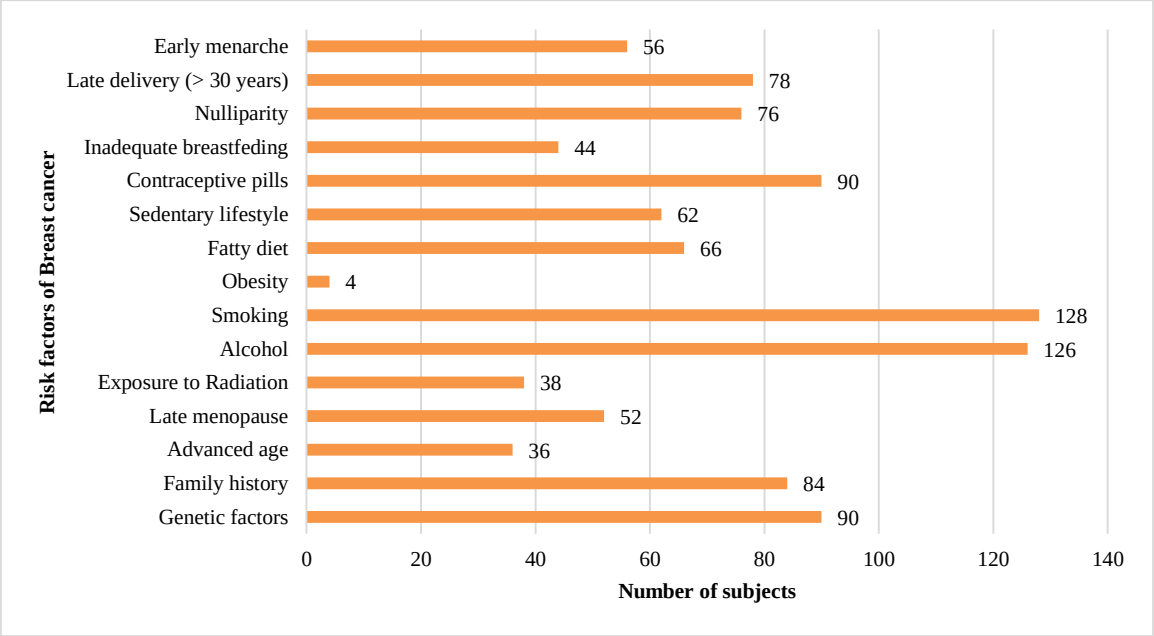

Figure 1: Distribution of study subjects according to their knowledge on risk factors for breast cancer (n=341).

Note: Number of study subjects may exceed sample size as multiple options were allowed.

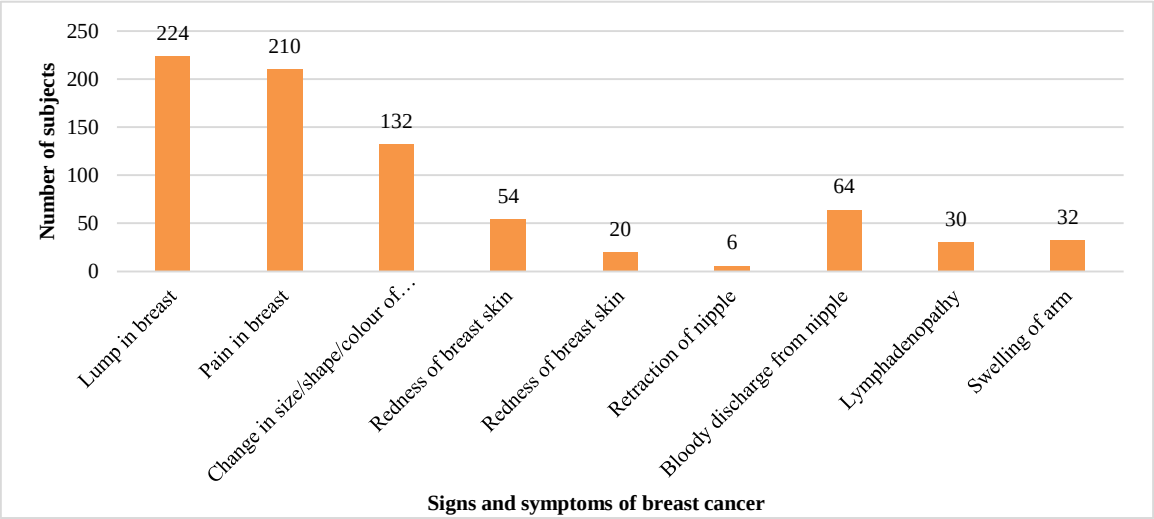

Figure 2: Distribution of study subjects according to their knowledge on signs and symptoms of breast cancer (n=341).

Note: Number of study subjects may exceed sample size as multiple options were allowed.

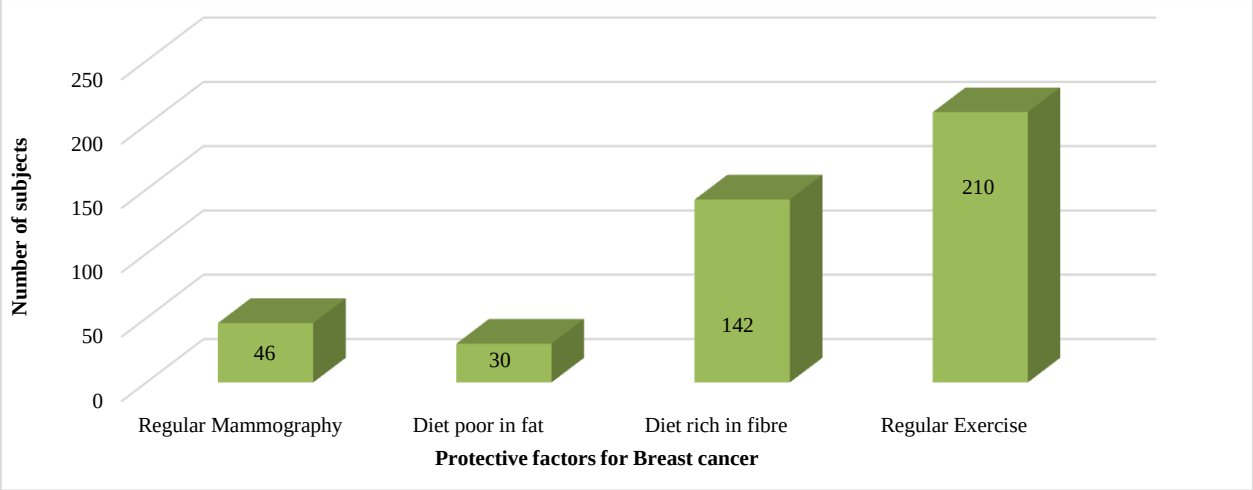

Figure 3: Distribution of study subjects according to their knowledge on protective factors for breast cancer (n=341).

Note: Number of study subjects may exceed sample size as multiple options were allowed.

Table 2: Distribution of study subjects according to their attitude and practices on breast cancer (n=341).

Sl. No	Questions	Responses	Number of subjects N (%)
	Attitude		
1	Do you think you are at risk of developing breast cancer?	Yes	0 (0)
		No	197 (57.77)
		Don't know	144 (42.23)
2	Will you perform BSE regularly in the future for its early detection?	Yes	232 (68.03)
		No	109 (31.97)
3	Whom will you prefer to consult if you develop any of the breast cancer symptoms?	Allopathy	44 (12.90)
		Homeopathy	123 (36.07)
		Traditional	109 (31.96)
		Others	65 (19.05)
	Practices		
4	Have you ever done breast self-examination?	Yes	18 (5.28)
		No	323 (94.72)

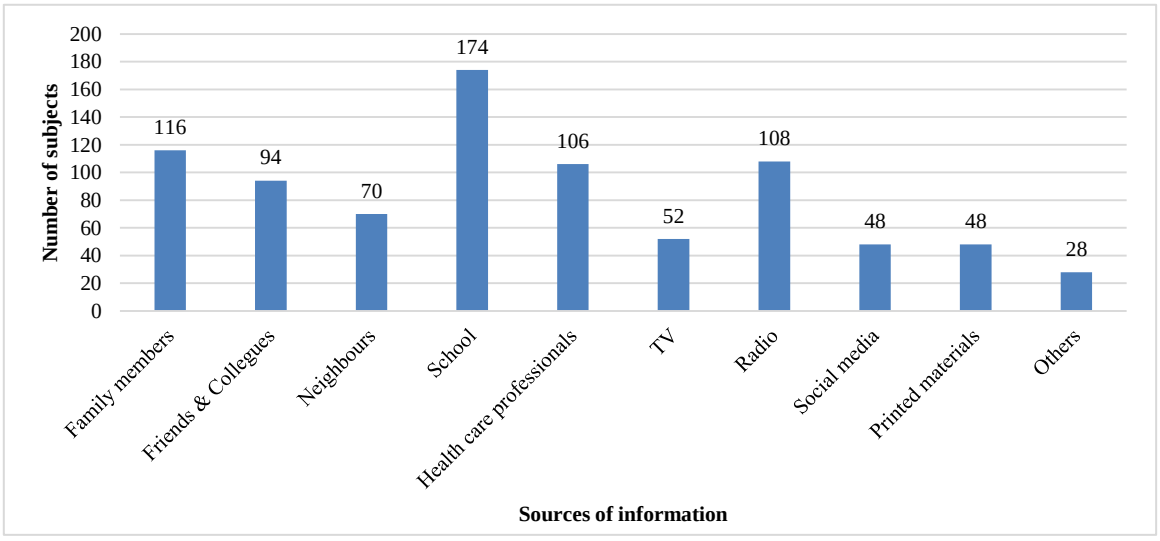

Figure 4: Distribution of study subjects according to their source of information about breast cancer (n=341).

Note: Number of study subjects may exceed sample size as multiple options were allowed.

Table 2 shows distribution of study participants according to their attitude and practices towards breast cancer. In the present study, no study participant believed that they are at risk of developing breast cancer and in fact more than half i.e. 197 (57.77%) assumed that they are not at risk. Despite this, majority i.e. 232 (68.03) still wanted to practice Breast self-examination in future for early detection but very few i.e. 44 (12.90) would prefer to consult allopathic system of medicine in case if they develop any symptoms of breast cancer. Only 18 (5.28) of women in the present study admitted to have done breast self-examination.

Figure 4 reveals distribution of study subjects according to various sources of information on breast cancer and it was found that the most common source of information as mentioned by more than half of study subjects was school, followed by family members, radio and health care professionals mentioned by 116 (34.01%), 108 (31.67%) and 106 (31.08%) of women respectively.

DISCUSSION

The present study was an attempt to assess knowledge, attitude and practices among female students studying various graduate courses at a Government college in Koppal city and a total of 396 female students participated in the study after excluding absentees. Majority i.e. 341 (86.11%) of the students in the present study accepted to be aware about breast cancer similar to the findings of many other studies [8,10,12-14] done both within and outside India and was higher than a couple of studies.[9,11] Four out of every five in the present study had heard about BSE in confirmation with the findings of few studies and was far better than many other studies done in the past.[8-14] This difference in awareness levels both about Breast cancer and BSE could be due to differences in study periods, study settings, sampling techniques, profile of study subjects, tools of data collection etc.

On enquiring about risk factors for Breast cancer, majority of the females in the present study quoted smoking and alcohol consumption as confirmed by other studies.[10,14-16] On the contrary, majority of the study participants in few other studies done in different parts of the country have quoted family history of breast cancer as the major risk factor.[17-20] When asked about symptoms, majority mentioned any mass/lump in the breast followed by pain in line with the findings of many other studies.[8,11,14,15,20] Regular exercise was considered as one of the major protective factor against the occurrence of breast cancer by more than 60% of study participants in the present study in confirmation to the findings of other studies.[10,12,18]

More than half of the participants in present study believed that they are not at risk and remaining were unaware but none positively believed that they are at risk of developing breast cancer. But still, majority i.e. 232 (68.03) of study subjects were admitted to have will to practice BSE regularly in future for early detection of breast cancer, demonstrating a positive attitude. Only 18 (5.28) however have agreed to have done BSE in the past similar to the findings of two more studies done in India exhibiting a KAP gap for breast cancer.[8,11] A number of other studies have found out a high proportion of participants practicing BSE on contrary to the findings of present study.[10,13-16,18]

CONCLUSION

The present study concludes that the level of knowledge among female graduate students about breast cancer was poor and identifies several areas where educational interventions are necessary. Even though majority had positive attitude both towards disease and practice of BSE only few practiced it which needs to be tackled through BCC. The introduction of the subject in the curriculum could address some of these deficiencies. Television and other mass media can also be used to disseminate information.

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