



A descriptive study to assess the knowledge regarding early detection of breast cancer among female students studying in Sharda University

Deepika, Anjali Choudhary, Choni Wangmo, Himanshi, Amisha Rana, Anita Enyinnaya Chisom

School of Nursing Science and Research, Sharda University, Greater Noida, Uttar Pradesh, India

Abstract

Breast cancer or breast malignancy is the leading cause of mortality and morbidity among women worldwide. According to the recent data shared by WHO or World health organisation breast cancer dethroned lungs cancer to become most common cancer worldwide. While it affects both the genders, however women are at greater risk of developing breast cancer as compared to their male counterparts. 1 in every 4-cancer found in women is breast cancer. While statistics are worrying early detection is the key to combat this dangerous disease. Knowledge about this disease and its detection and treatment, are the only ways to combat the current situation. Thus, people especially women should be provided sufficient knowledge to deal with the impending doom.

Keywords: breast cancer, women, early detection

Introduction

Cancer is a generic term which is used to define a large group of diseases that can affect any part of the body. It is categorized by a rapid development of abnormal cells that grow way beyond their original boundaries, thus invading adjoining parts and also spreading to other distal parts of the body through blood stream, this specific property of cancer cells is called malignancy and thus cancer is also known as malignant tumours.

There are many different types of tumours that can affect the breasts, the most common being Ductal carcinomas which comprise nearly 85 percent cases of breast cancer less frequent cancers of breasts include Inflammatory Breast Cancer, Paget disease of the breasts etc.

The cancer does not differentiate between the genders and can occur in either of them however global trends and statistics show that women are at comparatively greater risk of developing it as compared to their male counterparts.

Although, once considered to be a disease of the developed world, breast cancer now plagues the entire globe, and in today's time almost 50% of breast cancer cases and 58% of deaths occur in less developed countries including India.

The scope of the problem can be understood from the fact that one in every 8th cancer detected in the world in year 2020 was breast cancer while in women these statistics is even more staggering and every 4th cancer detected was breast cancer, thus increasing the rate of development by double, it was also found to be leading cause of cancer relate deaths among women in 108 countries. With 2.3 million cases detected worldwide in 2020 and 684,996 global deaths this cancer officially dethroned lungs cancer to become most common cancer worldwide.

The statistics are worrying however it should also be kept in mind that if detected at earlier stages, the treatment of breast cancer is highly effective. In fact, among all the known cancers the prognosis rate of localised breast cancer (i.e., breast cancer limited to a particular area) is 90 percent. However, this rate varies from country to country depending upon the awareness among the masses for example, America has survival rate of localised breast cancer is 90% while in India its around 66%, this staggering difference is a result of lack of information and awareness among people in our country.

Objectives

1. To assess the knowledge regarding early detection of breast cancer among female students studying in Sharda university.
2. To find out the association between level of knowledge regarding early detection of breast cancer among female students with selected demographic variables.

Hypothesis

H0: There will not be any significant association.

H1: There is significant association between level of knowledge regarding early detection of breast cancer among female students with selected demographic variables.

Assumptions

The female students may have some knowledge regarding early detection of the breast cancer.

Material and Method

In present study a quantitative research design (Exploratory) was adopted for the study, to assess the knowledge regarding early detection of breast cancer among female students. A self-prepared questionnaire was used to assess the level of knowledge regarding early detection of breast cancer among female students, the review of literature from books, previous studies, journals and expert opinions was used for preparation of the tool. Analysis and interpretation of data was done according to objectives of the study.

Ethical consideration

Permission was obtained from the dean of the respective schools from where we decided to collect the data.

Written consent was obtained from each student before starting the data collection.

Assurance was given to each student regarding the confidentiality of the data.

Results

Table 1: Data pertaining to frequency and percentage distribution of socio-demographic variables of the selected female students:

Variables	Respondents	
	Frequency (f)	Percentage (%)
Age (Years)		
17-19	22	22%
20-22	41	41%
23-25	25	25%
Above 25	12	12%
Religion		
Hindu	71	71%
Muslim	15	15%
Sikh	4	4%
Christian	6	6%
Others (Buddhism)	4	4%
Type of Family		
Nuclear	65	65%
Joint	29	29%
Extended	6	6%
Place of Residence		
Urban	64	64%
Semi-Urban	22	22%
Rural	14	14%
Marital Status		
Married	8	8%
Unmarried	92	98%
Monthly Income (in INR)		
10,000-30,000	16	16%
30,000-50,000	49	49%
50,000-70,000	24	24%
70,000 and above	11	11%
History of cancer		
No	80	80%
Yes	20	20%

Table I: represents the frequency and percentage distribution of female students with selected demographic variables such as Age, Religion, Type of family, Place of residence, Marital status, Monthly income and history of cancer.

With regard of age majority of 41 (41%) female students were in the age group of 20-22 years. 25 (25%) belonged to the age group of 23-25 years, 22 (22%) were between the age of 17-19 years and 12 (12%) were of age group of 25 years or above. The data also revealed that most of the selected students 71(71%) practiced Hinduism while Islam was followed by 15(15%) of the students followed by Christianity 6 (6%), Sikhism 4 (4%) and Buddhism 4(4%). The data also gave us a clear picture of type of family respondents belonged to more than half of the participating respondents 65 (65%) belonged to nuclear type of family, followed by joint type of family 29 (29%) and lastly followed by extended type of family 6(6%). The study also revealed that more than

half of the respondents 64(64%) were dwelling in urban areas as opposed to 22 (22%) in semi urban and 14 (14%) in rural areas. The data revealed that majority of the participating students were unmarried 92 (92%) while only 8 (8%) were married. In terms of monthly income majority 49 (49%) of students were having monthly income between INR 30,000-50,000 followed by 24 (24%) between INR 50,000-70,000 while 16 (16%) had monthly income between INR 10,000-30,000 while only 11 (11%) had monthly income of INR 70,000 or above. The data also revealed important information regarding history of cancer in respondents' family, majority of the selected students 80(80%) had no history of cancer in their families while only 20(20%) had history of cancer in their families.

Table 2: Data pertaining to knowledge regarding early detection of breast cancer

Knowledge level	Range of Score	Respondents		Summary Statistics
		Frequency (f)	Percentage (%)	
Poor Knowledge	Below 10	63	63%	Mean: 10.01 Median: 9 SD: 3.10 Min: 5 Max: 20
Average Knowledge	10-19	35	35%	
Good Knowledge	20 and above	2	2%	

Table-II contains information regarding knowledge among respondents regarding early detection of breast cancer

The data showed that majority 63(63%) scored 10 or below 10 thus according to knowledge scoring technique they had poor knowledge regarding the topic of early detection of breast cancer. While 35(35%) scored between 10-19 and thus had medium or moderate knowledge regarding this subject. Very few 2(2%) out of 100 selected sample scored 20 or above and had good knowledge regarding early detection of breast cancer.

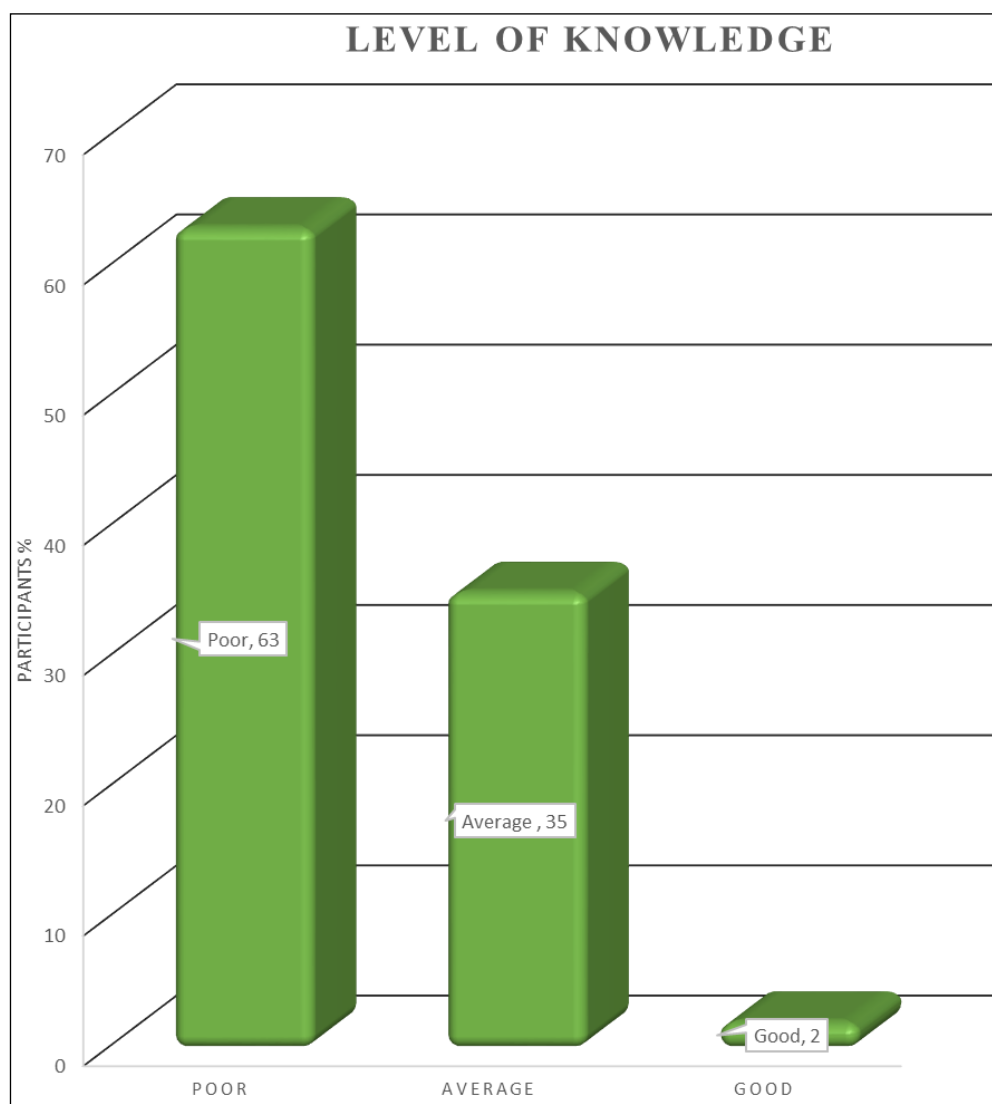


Fig 1: Graph Showing Level of Knowledge in Participants Regarding Early Detection of Breast Cancer

Table 3: Data pertaining to association of knowledge and selected demographic variables:

Variables	Knowledge Score			F Value One-way ANOVA	p-value
	N	Mean	Std. Deviation		
Age (Years)					
17-19	22	9.59	2.59		
20-22	41	9.65	3.05	3.49	0.019 (S)
23-25	25	11.60	3.26		
Above 25	12	8.66	2.83		
Religion					
Hindu	71	9.91	3.01		
Muslim	15	10.26	2.78	2.94	0.024 (S)
Sikh	4	14.50	3.87		
Christian	6	8.50	2.66		
Buddhism	4	8.50	2.64		
Type of Family					
Nuclear	65	10.21	3.19	0.435	0.649 (NS)
Joint	29	9.68	3.09		
Extended	6	9.33	2.06		
Place of Residence					
Urban	64	9.93	2.73	0.194	0.824 (NS)
Semi-Urban	22	10.36	4.39		
Rural	14	9.78	2.39		
Marital Status					
Married	8	8.37	2.13	2.45	0.12 (NS)
Unmarried	92	10.15	3.14		
Monthly income					
10,000-30,000	16	9.43	2.68		
30,000-50,000	49	10.26	3.32	0.372	0.774 (NS)
50,000-70,000	24	10.08	3.37		
70,000 and above	11	10.01	2.06		
History of cancer					
Yes	20	9.05	3.04	2.42	
No	80	10.25	3.23		0.122 (NS)

(p<0.05-Significant level, S: Significant, NS: Non-Significant)

Table-III represents association between knowledge of the respondents with selected demographic variables. Significant association was found between level of knowledge Age and Religion according to the data analysed while no significant association was found between level of knowledge and other demographic variables i.e., Type of family, Place of residence, Marital status, Monthly income and History of cancer.

Summary

- Majority of the samples 41 (41%) were between the age of 20-22 years.
- Majority of samples 71 (71%) practiced Hinduism
- Majority of samples 65 (65%) belonged to nuclear family.
- Majority of samples 64 (64%) resided in urban settings.
- Majority of samples 92 (92%) were unmarried.
- Majority of samples 49 (49%) had monthly income between INR 30,000-50,000.
- Majority of samples 80 (80%) had no previous known history of cancer.
- The findings show mean value of 10.01 and median value of 9 of level of knowledge regarding early detection of breast cancer.
- The study shows there is a significant association between level of knowledge age and religion.
- The study also shows there is no significant association between level of knowledge and other demographic variables including Type of family, Place of residence, Marital status, Monthly income and history of cancer.

Conclusion

In this study the level of knowledge regarding early detection of breast cancer among female students, majority 63% had poor knowledge regarding the topic while 35% had average knowledge only 2% of the participating candidates had good knowledge regarding early detection of breast cancer. The data was collected with the help of self-prepared questionnaire. Analysis and interpretation were done according to objectives of the study. A bar diagram was prepared to present the data.

References

1. *Breast cancer - Risk factors and prevention.* (2022, May 24).
2. Cancer.Net. <https://www.cancer.net/cancer-types/breast-cancer/risk-factors-and-prevention>
3. *Breast cancer - Risk factors and prevention.* (2022, May 24).
4. Cancer.Net. <https://www.cancer.net/cancer-types/breast-cancer/risk-factors-and-prevention>
5. *Breast cancer overview: Causes, symptoms, signs, stages & types.* (n.d.). Cleveland Clinic. <https://my.clevelandclinic.org/health/diseases/3986-breast-cancer>
6. *Breast cancer.* (2021, March 26). WHO | World Health Organization.
7. <https://www.who.int/news-room/fact-sheets/detail/breast-cancer>
8. Glideadmin. (2022, February 22). *Hormone therapy.* National Breast Cancer Foundation. <https://www.nationalbreastcancer.org/breast-cancer-hormone-therapy>
9. *Various types and management of breast cancer: An overview.* (2010, April). PubMed Central (PMC). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3255438/>
10. Ann Marriner Tomey. *Nursing Theorists and their work*, Missouri: Mosby, 2006.
11. Publication.
12. Abuja R. *Research Methods*. Jaipur: Rawat Publications, 2006.
13. Bare, Brenda G. *Brunner and Suddath's text book of medical surgical nursing*, Philadelphia: Lippincott publication, 2005
14. Basavanthappa BT. *Nursing research* New Delhi Jaypee Brothers medical publishers (P) Ltd., 2003.
16. Best J. *Research in Education*. New Delhi: Prentice Hall of India Pvt Ltd., 1995.