Original Article

Community and Public Health Nursing
Vol. 4 No. 1, January - April 2019
DOI: http://dx.doi.org/10.21088/cphn.2455.8621.4119.2

Assessment of Knowledge on Breast Cancer among Antenatal Mothers at Mamandur Rural Health Centre, Kancheepuram District

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How to cite this article:
M. Hemamalini, Tamilselvi, Ogu Glory Adaugo. Assessment of Knowledge on Breast Cancer among Antenatal Mothers at Mamandur Rural Health Centre, Kancheepuram District. Community and Public Health Nursing. 2019;4(1):11-16.

Abstract

Breast cancer is a major public health issue and most commonly diagnosed for women worldwide. Breast cancer accounts for 22.9% of all cancer in women. It is estimated nearly 1.7 million new cases of cancer occurred worldwide in 2012. This represents about 12% of new cancer cases and 25% of all cancers in women. The objective of the study was to assess the level of knowledge on breast cancer among antenatal mothers. The study was conducted at mamandur SRM rural health centre, Kancheepuram district. A total of 50 samples were selected using non-probability purposive sampling technique. The tool used for the study comprises of 2 sections, section A- Demographic Data (which includes: age, religion, type of family, educational status, area of residence, income) and section B- a structured questionnaire developed by the investigator which indicates 25 questions to assess the level of knowledge on breast cancer among antenatal mothers. The findings of the study revealed that 32 (64.0%) of antenatal mothers had inadequate knowledge, 18 (36.0%) of antenatal mothers had moderate knowledge and none of them are having adequate knowledge. Therefore adolescent girls and women of all age group must be able to recognise the signs and symptoms of breast lump to facilitate rapid identification and transport of patient to the hospital.

Keywords: Breast cancer; Knowledge; antenatal mothers; diagnosis; referral.

Introduction

Breast cancer is a leading cancer among the women worldwide with more than 5, 40,000 new cases each year. Over 40% of these cases are in the developing countries. Breast cancer is the second leading cause for death worldwide and fifth most common cancer in India. According to the population based tumour registry cell of the Indian medical research in New Delhi, breast cancer constitutes about 12% of all cancers detected in Delhi and about 24% of all cancer in women. Breast cancer is the most common invasive cancer in females worldwide. It accounts for 16% of all female cancers and 22.9% of invasive cancers in women. 18.2% of all cancer deaths worldwide, including both males and females are from breast cancer.

Breast cancer rates are much higher in developed nations compared to developing ones. There are several reasons for this, with possibly life expectancy being one of the key factors- breast cancer is more common in elderly women; women in the richest countries live much longer than those in the poorest nations. The different lifestyles and eating habits of females in rich and poor countries are also contributory factors, experts believe.

According to the National Cancer Institute, 232,340 female breast cancers and 2,240 male cancers are reported in the USA each year, as well as about 39,620 deaths caused by the disease.

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Recived on 19.09.2018, **Accepted on** 16.10.2018

Antenatal mothers who will be exposed to direct education on breast cancer and breast self-examination have the capacity to teach the breast self-examination to others in ways that are satisfying to them. The nurse might be the best source to health to such antenatal mothers. This chain reaction is promising and there may be a group of women who are equipped for early detection of breast cancer and who are capable of influencing and training other women about self-examination. This type of education by the nurse can spread health messages much faster in the community.

Breast cancer is a major public health issue and most commonly diagnosed for women worldwide. Breast cancer accounts for 22.9% of all cancer in women. It is estimated nearly 1.7 million new cases of cancer occurred worldwide in 2012. This represents about 12% of new cancer cases and 25% of all cancers in women. Breast cancer is hormone related, and the factors that modify the risk of this cancer when diagnosed premenopausal and when diagnosed postmenopausal are not the same.

National cancer institute (2010) [16] reported that 13.2% of women in US will develop breast cancer. Breast cancer is a growing problem in India with estimates as high as1 in 22 women predicted to develop the disease, while the breast cancer rate much higher in the united states 1 in 8 women. Environment health stated that Canadian researchers found that certain jobs especially those that bring the human body into contact with possible carcinogens and endocrine disrupters are linked to a higher risk of developing breast cancer.

Global cancer statistics (2016) indicate that United States, India and china account for almost one third of the global breast cancer burden. Persistent efforts over 40-50 years in the US have resulted in a large proportion of women presenting in early stages and there has been a consistent decrease in the death rates due to breast cancer, even though the incidence of breast cancer is rising steadily.

World health organisation (2016), breast cancer is the most common cancer among women worldwide, claiming the lives of hundreds of thousands of women each year and affecting countries at all levels of modernization.

Shekhar Salkar (2010) said that one case per day is been recorded and it is the highest in India, it is 35 cases per one lakh population in Goa as against 23.3% in Delhi, 21.9% in Chennai and 21.1% in Mumbai. The incidence is found to be the highest among affluent and literates and different minorities in different states for a variety of reasons.

Dr Rebecca H. Johnson (2015) said that breast cancer in young women is a significant issue, 7% of all female cancer is diagnosed in women under 40 years age. Young women with breast cancer face significant and unique challenges, including a higher likelihood of biologically aggressive treatment and long term treatment related toxicities and unique psychosocial concerns.

P.K. Julka (2011) reported that breast cancer has overtaken cervical cancer to become the leading site of cancer in metro cities and is expected to double with the relative proportion ranging from 21.7%-28.7%. A recent study of breast cancer risk in India revealed that 1 in 28 women develop breast cancer during her life time. This is higher in urban areas being 1 in 22 in life time compared to rural areas.

Prevention is better than cure but no one knows the exact cause of breast cancer or how to prevent it. Since 90% of breast cancer are discovered by self-breast examination. Breast examination is a free cost health practice and it can be practice and it can be practiced by both young and old women. Most women are rejecting.

Medical care if they have lump in the breast because women are unwilling to show their breast to others, even health provider.

Recent studies show there is a need to increase knowledge of antenatal mothers about the risks of breast cancer and early detection. Lack of knowledge about this might have been due to insufficient education programs for breast health awareness.

Research Methodology

Quantitative approach and descriptive research design was adopted for the present study. The variables included for the study were study variable and demographic variables. Knowledge on breast cancer was the study variable and the demographic variables comprises of Age, religion, type of family, socio-economic status, income, area of residence, number of pregnancies, educational status. The study was conducted at SRM primary health centre mamandoor, Kancheepuram district. Population of the study includes antenatal mothers who came for antenatal check-up in SRM primary health centre mamandoor, Kancheepuram district. Population of the study includes antenatal mothers who came for antenatal check-up in SRM primary health centre mamandoor, Kancheepuram district. Total sample size was 50 who fulfilled the inclusion criteria. Non probability purposive sampling technique was adopted.

Description of the Data Collection Tool

The tool consists of 2 parts.

Section A

Structured questionnaire to elicit the demographic variables consists of age, religion, type of family, socio-economic status, income, area of residence, number of pregnancies, educational status.

Section B

A structured Questionnaire was used to assess the knowledge of breast cancer among antenatal mothers who came for antenatal check-up at SRM rural health centre mamandoor. The tool consisted of 25 questions regarding breast cancer, meaning, risk factors, clinical manifestation, screening, management and prevention of breast cancer.

The content of the tools were established on the basis of opinion of the community health nursing experts. Suggestions were given and they were incorporated in the tool to proceed for data collection.

Reliability of the tool to assess the level of knowledge on breast cancer among antenatal mothers was established by using re- test method and its correlation coefficient r- value is 0.82. This correlation coefficient is very high and hence considered reliable or assessing the level of knowledge on breast cancer among antenatal mothers in mamandoor.

Ethical Consideration

The study was approved by dissertation committee of SRM college of Nursing, SRM University, kattankulathur kancheepuram district. Permission was obtained from the Dean in charge, SRM college of Nursing and informed consent was obtained from each participant for the study before starting data collection. Assurance was given to the subjects that anonymity of each individual would be maintained and they are free to withdraw from the study at any time.

Data Collection Proceedure

The investigator collected data at SRM rural health centre mamandoor, kancheepuram district according to the inclusion criteria and the investigator explained the objectives and method of data collection. Data collection was done within the period of one week. The data was collected during the day time. Self-introduction about the researcher and details about the study was explained to the samples and their content was obtained. The level of knowledge on breast cancer among antenatal mothers was assessed using the tools. The confidentiality about the data and finding were assured to the participants. The participants took 20 min to complete the tool and their cooperation was imperative. Descriptive and inferential statistics were used to analyse the collected data. Both descriptive and inferential statistics were used to analyse the data collected.

Results

Table 1: Frequency and Percentage distribution of demographic variables among antenatal mothers. N=50

Demographic variables		N	%
Age	19 -25 years	31	62.0%
	26 -30 years	18	36.0%
	31 -35 years	1	2.0%
Religion	Christian	4	8.0%
	Hindu	42	84.0%
	Muslim	4	8.0%
Type of family	Nuclear	26	52.0%
	Joint	24	48.0%
Educational status	Primary	14	28.0%
	High school	32	64.0%
	Higher secondary	2	4.0%
	Graduate	2	4.0%
Number of Pregnancy	One	16	32.0%
	Two	19	38.0%
	Three	11	22.0%
	>Three	4	8.0%
Area of residence	Urban	18	36.0%
	Rural	32	64.0%
Income	Rs 1590 -Rs 4726	21	42.0%
	Rs 4727 -Rs 7877	24	48.0%
	Rs 7878 -Rs 11876	5	10.0%
Socio-economic Status	Lower	11	22.0%
	Lower middle	20	40.0%
	Upper lower	4	8.0%
	Upper middle	15	30.0%

Table 1 depicts the frequency and percentage distribution of demographic variables among antenatal mothers.

Table 2: Frequency and percentage distribution of the level of knowledge on breast cancer among antenatal mothers N=50

Level of knowledge	No. of women	%
Inadequate	32	64.0%
Moderate	18	36.0%
Adequate	0	0.0%
Total	50	100.0%

Table 2 reveals that 64% of the antenatal mothers are having inadequate knowledge, 36% of the mothers are having moderate knowledge and none of them are having adequate knowledge

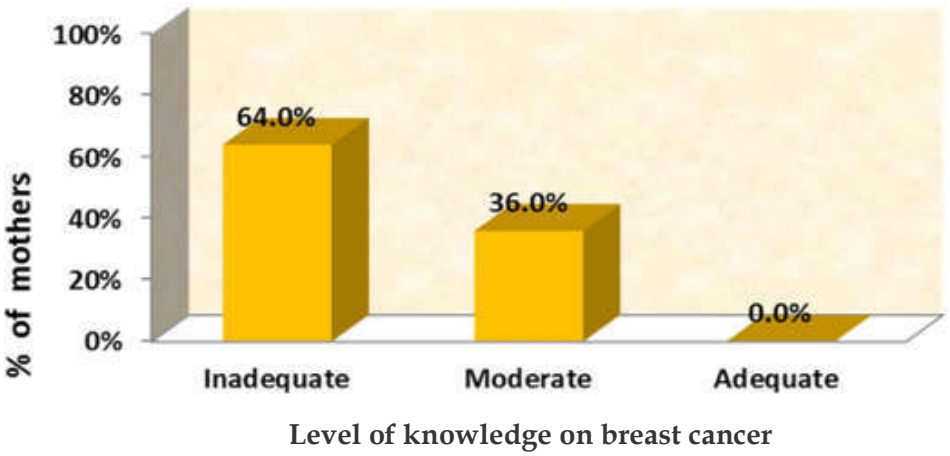

Fig. 1: Percentage distribution of level of knowledge on breast cancer among antenatal mothers.

Table 3: Association between the level of knowledge on breast cancer among antennal mothers N=50

Demographic variables		Level of knowledge on breast cancer				Total	Chi square test
		Inadequate		Moderate			
		N	%	n	%		
Age	19 -25 years	25	80.6%	6	19.4%	31	X^2 =10.43 p=0.01** Significant
	26 -30 years	7	38.9%	11	61.1%	18	
	31 -35 years	0	0.0%	1	100.0%	1	
Religion	Christian	2	50.0%	2	50.0%	4	X^2=0.55 p=0.75
	Hindu	27	64.3%	15	35.7%	42	Not significant
	Muslim	3	75.0%	1	25.0%	4	
Type of Family	Nuclear	17	65.4%	9	34.6%	26	X^2=0.05 p=0.83
	Joint	15	62.5%	9	37.5%	24	Not significant
Educational Status	Primary	11	78.6%	3	21.4%	14	X^2=8.43 p=0.04* Significant
	High school	21	65.6%	11	34.4%	32	
	Higher secondary	0	0.0%	2	100.0%	2	
	Graduate	0	0.0%	2	100.0%	2	
Number of Pregnancy	One	12	75.0%	4	25.0%	16	X^2=1.61 p=0.65
	Two	12	63.2%	7	36.8%	19	Not significant
	Three	6	54.5%	5	45.5%	11	
	>Three	2	50.0%	2	50.0%	4	
Area of Residence	Urban	8	44.4%	10	45.6%	18	X^2=4.66 p=0.03* Significant
	Rural	24	75.0%	8	25.0%	32	
Income	Rs 1590 -4726	12	57.1%	9	42.9%	21	X^2=3.26 p=0.19 Not significant
	Rs 4727 -7877	15	62.5%	9	37.5%	24	
	Rs 7878 -11876	5	100.0%			5	
Socio-Economic Status	Lower	8	72.7%	3	27.3%	11	X^2=1.32 p=0.72
	Lower middle	11	55.0%	9	45.0%	20	Not significant
	Upper lower	3	75.0%	1	25.0%	4	
	Upper middle	10	66.7%	5	33.3%	15	

Table 3 reveals that there was significant association of knowledge with age, education and area of residence at p< 0.05 level

Discussion

The study reveals that the level of knowledge on breast cancer among antenatal mothers in SRM rural health centre mamandoor, among 50 samples 32 (64%) antenatal mothers have inadequate knowledge, 18 (36%) antenatal mothers have moderate knowledge and none of the antenatal mothers have adequate knowledge on breast cancer.

Similar study conducted by AR Isara and CI Ojedokun [2011] on knowledge of breast cancer and practice of breast self-examination among female senior secondary school students in Abuja, Nigeria. Two hundred and eighty seven students participated in the study. Their mean age was 16.5 Â±1.4 years. A greater proportion of respondents 163 (56.8%) had poor knowledge of breast cancer while 217 (75.6%) had poor knowledge of breast self-examination. Only 114 (39.7%) of the respondents knew that being a female was a risk factor for breast cancer and the least known risk factor were obesity and aging. The major source of information for breast cancer and BSE among the respondents was the mass media. Only 29 (10.1%) of respondents had practiced breast self-examination. Knowledge of breast self-examination was significantly associated with practice. This study revealed that female secondary school students have poor knowledge of breast cancer. A good proportion of them knew that breast self-examination could be used as a screening method for breast cancer but only few had practiced breast self-examination

The study finding was also supported by the study conducted by N.K. Irurhe [2012] [10] on knowledge and awareness of breast cancer among female secondary schools students in Nigeria. The study was a cross-sectional survey amongst students of three secondary schools in Nigeria. Each respondent was given a self-administered questionnaire. 194 (97%) heard of breast cancer before, 61 (30.5%) mentioned radio/television as the first source of information, Knowledge of respondents was low. In conclusion majority of the respondents had heard of breast cancer but the knowledge and understanding of the disease was very low.

Considerable health education or campaigns is needed to increase the public's awareness on breast cancer.

Conclusion

In conclusion, the present study findings revealed that majority 32 (64%) samples had inadequate knowledge and none of them had adequate knowledge and it was also found that significant association was established between the knowledge with age, educational status and urban area of residence.

However, breast cancer education will not be effective if directed only towards antenatal mothers. Therefore, individuals from adolescent to adult age group must be able to recognise the signs and symptoms of breast cancer to facilitate identification and transport of the patient to the hospital. Future studies are needed which focus on community surveys including both rural and urban populations. Efforts should be made to educate the public about breast cancer so that people can make more rational and beneficial health care decisions.

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