Original Article

A study on awareness toward the early detection of breast cancer on nursing staff in civil hospital, Ahmedabad, Gujarat, India

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Abstract

Background: **Breast cancer accounts for about 20% cancers in Indian women. The nurses can play an important role in educating women through specially designed educational programme in the clinical setting, as well as through community out reach strategies that suit our social & cultural settings.**

Objective: The purpose of this study was to know the knowledge, attitude & practices of nursing staff towards the early detection of breast cancer.

Method: A cross sectional study was carried out in civil hospital Ahmedabad during September 2008. 250 nurses were selected out of total staff of 1000 nurses. Data was collected by pretested questionnaire. Data entry and analysis were done in Epi info version 3.4

Results: The results of the study indicated that 74% of the nurses knew that early detection of breast is possible.71% of the nurses would like to go for early detection by mammography. Only 7.2% of nurses had undergone investigation for early detection. 96% of nurses want information regarding the breast cancer and most them by the mean of seminar and workshop.

Conclusion: Though knowledge regarding early detection was satisfactory but practice was very poor. There is need to create awareness & periodic screening.
Key words: breast cancer, early detection

Introduction

Breast cancer is easier to treat if early diagnosed. For that reason, some experts recommend that women over age 20 perform a monthly breast self examination to look for new lumps and other changes[1]. The self breast examination has some limitations, but it has definite role for early diagnosis in country like India and however, one should not forget the importance of regular breast examinations by doctor or screening by mammogram.

Breast cancer accounts for about 20% cancers in Indian women. It is a more common than cancer cervix in the developed as well as in developing countries[1]. In past 20 years, breast cancer incidence in the world has a dramatic increase of 50-100%, which strongly supports the need for breast cancer prevention, and screening programmes[1].

The most programmatic solution to early detection lies in breast cancer education of women. Nurses constitute a special group having characteristics most suited for disseminating breast cancer information to the women[2].

The nurses can play an important role in educating women through specially designed educational programme in the clinical setting, as well as through community out reach strategies that suit our social & cultural settings. In addition they constitute an important source of information within their social networks[3]. Since the nurses have a major influence on the behavior of our women, they need to be knowledgeable themselves about breast cancer risk factors and the importance of early detection through screening.[1]

The aim of this study was to objectively assess the awareness among nursing staff in civil hospital Ahmedabad towards the early detection of breast cancer.

Material & methods:

A cross sectional survey was conducted in civil hospital Ahmedabad in September 2008.

As civil hospital Ahmedabad is the biggest hospital of Asia having nursing staff of around 1000 (including male nurses). Nurses have shift duty in the morning, afternoon & in the evening.

The target population comprised of female nurses working in the different department. Nurses who have previous history of breast cancer were excluded form the study. By considering 30% of total staff, sample size was turn out to be 300 by stratified random sampling; out of them 50 were non response. After taking oral consent from the participants data were collected by using predesigned & pretested proforma by personal interview. The questioner contained various aspects of knowledge, attitude and practices related to self breast examination. Thus collected data were analyzed with use of Epi info version 3.4

Result

The mean age (standard deviation) of female registered nurses in present study was 40.65± 9.8 years. All the nurses had received basic level nursing education of general nursing diploma. Ninety-nine (91%) percent of the nurses in the study correctly identified breast cancer as a non communicable disease and more than 90% nurses had opinion that breast cancer is the most common cancer in females (Table 1).

Table 1: Knowledge about most common cancer in female

Knowledge about most common cancer in female (n=250)	Frequency	Percent
Breast	229	91.6
Uterine	25	10
Cervical	23	9.2
Don't know	18	7

80% nurses opined that not breast fed to the baby is the risk factor for breast cancer while 60% have opinion of radiations is the reason for breast cancer (Table 2).

Table 2: Knowledge about risk factors for breast cancer (n=250)

Knowledge about risk factors for breast cancer (n=250)	Frequency	Percent
No breast feeding	197	78.8
Radiation	145	58
Alcohol	132	52.8
Unmarried	106	42.4
Family history	102	40.8
Old age pregnancy	94	37.6
Obesity	86	34.4
Old age marriage	83	33.2
Old age	68	27.2
Fatty diet	51	20.4
Don't know	3	1.2

Knowledge regarding methods & benefits of early detection of breast cancer shown in

Table 3: Knowledge regarding methods & benefits of early detection of breast cancer

Knowledge regarding methods of early detection (n=185)	Frequency	Percent
Mammography	72	38.9
Self examination	58	31.4
Don't know	46	24.8
Symptoms	24	12.9
Biopsy	1	0.5
Early detection can reduce mortality (n=185)		
Sure	150	81.08
Mostly	31	16.75
No	2	1.01
Early detection can give better treatment (n=185)		
Yes	183	98.91
No	1	0.5

\Out of total almost **65.6% nurses had information for early detection of breast cancer out of them around 18% gets it through books/posters or via hospital exposure (Table 4). Out of total nurses 92.8% nurses had** practiced regarding investigation for early detection of breast cancer.

Table 4: Source of information received previously for early detection of breast cancer

Information taken before (n=250)	Frequency	Percent
Yes	164	65.6
No	86	34.4
Mode by which information received (n=164)		
Books/ poster	31	18.9
Hospital exposure	28	17.1
Health care provider	19	11.5
Media	16	9.7
Seminar/ conference	12	7.3

Out of total study subjects 91 (49.2%) nurses were believe that they were exposed to one or another risk factor for breast cancer in which radiation (42.85%), age (40.66%), obesity (39.66%), no breast fed to baby (29.67%) shown in Table 5 and table 6. 72% of total nurses had knowledge that early detection of breast cancer is possible.

Almost 40% of the nurses had knowledge about mammography, as a method of early detection of breast cancer while very few were knowing about self breast examination (31.4%) & biopsy (0.5%) majority of nurses have opined that early detection of breast cancer can surly reduce mortality (81.08%) & can give better treatment (98.91%).

Table 5: Belief of exposure to risk factor

Belief of herself at risk (n=250)		
No	123	49.2
Yes	91	36.4
Why herself at risk (n=91)		
Radiation	39	42.85
Age	37	40.66
Obesity	36	39.56
No breast feeding	27	29.67
Polluted food	24	26.37
Family history	15	16.48
History of breast disease	13	14.28
Old age marriage	13	14.28
Old age pregnancy	12	13.18
Un married	2	2.19

Table 6: Willingness & knowledge about detection

Willing for early detection (n=250)	Frequency	Percent
Yes	237	94.8
No	13	5.2
Methods for early detection (n=237)		
Memography	169	71.4
Self examination	163	68.7
Doctor	109	45.9
Don't know	52	21.9
Reasons of early detection (n=237)		
Better treatment	164	69.2
Prevent condition to be worst	162	68.35
Reduced complication	96	40.51
Reduced mortality	82	34.6
Want information (n=250)		
Yes	241	96.4
No	9	3.6
Methods by which information want (n=241)		
Telephone	15	6.2
Doctor	102	42.3
Books/ literature	133	55.2
Seminar/ workshop	187	77.6

In this study 65.6% of total nurses had taken information regarding early detection of breast cancer through books/posters (18.9%), hospital experience (17.1%), and health care providers like doctors (11.5%), media (9.7%) or seminar / conference (7.3%)

Discussion

To date, the etiology of breast cancer is uncertain and adequate primary prevention is not possible. Thus early detection measures remain the first priority. More than 50%of the total breast cancer diagnosed annually is found in premenopausal patients[1], creating the need to initiate breast cancer screening programs in this population.

Nursing profession is very important for self-carefulness to be able to recognize the signs of their own illness. In this study

majority of nurses knew that breast cancer is most common cancer in female.

The important resources of dissemination of breast cancer knowledge to women are the health-care professionals, educational institutions and media. Among the healthcare professionals, female nurses comprise the group most suited for this purpose.

Studies in the developing countries show diverse results ranging from poor to good knowledge about breast cancer. Among the Nigerian nurses, about half were well-informed of two out of five risk factors[4]. Sixty percent Iranian nurses correctly identified family history as a risk factor for breast cancer, while smaller proportions knew about other risk factors[5]. Breast cancer risk factor knowledge among nurses is important so that they can provide appropriate screening recommendations to women with a high risk profile, especially in the Pakistani context where breast cancer screening is not a national phenomenon. Most of the nurses in our study were able to correctly answer the general breast cancer questions which included risk factor questions.

Conclusion & recommendations:
Breast self examination is an examination that should be perfect for nurses. They have the knowledge of the clinical signs of breast cancer and of the examination technique; nurses can promote monthly breast self examination by supporting realistic beliefs about screening and cancer as well as demonstrating BSE, especially among married women. And they can do it themselves without consulting a physician.

Furthermore, they are especially aware of the importance of the early detection of breast cancer for a successful treatment. It has been shown that confidence in one's early detection ability is strongly correlated to early detection practices in the general population.

Though awareness regarding early detection of breast cancer among nursing staff of civil hospital Ahmedabad is satisfactory but to create more awareness need to give education in form of seminar/conference to use their services in preventive strategies and breast cancer screening should be done periodically.

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