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STUDY OF KNOWLEDGE OF BREAST CANCER AND ITS EARLY DIAGNOSTICS IN FEMALE TERTIARY HEALTH WORKERS

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ABSTRACT

OBJECTIVE- To study the knowledge of breast cancer, early detection methods and whom to consult after detecting abnormality among female tertiary health workers.
METHOD- This is a descriptive cross-sectional study of 70 female health workers age group more than 20 years carried out at various hospitals after taking consent.
RESULT- Being majority of young married doctor respondents, below the age of 40 years (81.4%) study was conducted, almost all the respondents are aware of breast cancer, 69 (98.5%). Majority of them got information from media (77.1%), followed by seminars (64.2%) and books (62.8%). Only 15.7% of respondents had a positive family history of breast cancer. Most participants were aware of BSE and thinks its useful tool (74.3%) but doesn't know about proper timing and method for BSE. They have been taught BSE (58.5%) out of which majority were taught by teachers (51.5%). 41.4% and 60% of respondents knew that BSE should be done monthly and should start after age of 20 respectively. One

respondent has discovered an abnormality. Respondents are relatively less aware about BSE 28 (40%). 45 (64.3%) and 16 (22.9%) think that BSE should be done by a doctor and trained nurse respectively. The level of awareness of sonomammography was high among respondents- 43 (57.1%), but only 8 (11.43%) had undergone sonomammography, because of 'not of proper age' 27 (38.57%).
CONCLUSION- Practice and attitude of breast cancer screening should be promoted among health workers and the general population.

KEY WORDS-
Breast self-examination (BSE)
Clinical breast examination (CBE)
Sonomammography

INTRODUCTION

A wide variety of diseases affect the breast ranging from benign to malignant. Benign breast diseases are more common than the malignant ones. [(1)] carcinoma however is the most typical malignancy in several countries. [(2)(3)(4)] Patients with breast lesions could complain of breast pain, breast lump, nipple discharge, nipple retraction, skin disease or eczema of the areola (in Paget's disease). Breast lump that is one of the most common types of breast lesion and is detected by: breast self-examination (BSE), clinical breast examination (CBE), and sonomammography. Early detection and prompt treatment have shown good results and are responsible for long survival in patients with carcinoma. [(5)(6)] Sonomammography, CBE are used for screening for early detection of carcinoma. Cancer screening tests play a polar role in reducing breast cancer-related mortalities. The American Cancer Society (ACS) recommends CBE and sonomammography for the early detection of carcinoma.[(7)] According to ACS recommendations, females should be aware of normal consistency of their breasts and should report to health care workers if there is any change in the consistency.[(8)(9)] Women should know the perks of BSE from their early 20s.The ACS has discarded BSE as an accurate marker as it doesn't increase the survival rate.[(10)] However, BSE appears to be a vital substitute accessible in rural areas wherever access to CBE and sonomammography is tough and would possibly still discover carcinoma early enough for treatment which might be offered to prolong women's lives and cut back suffering. For average-risk women in their 20s and 30s, they are suggested to go for CBE as a part of a periodic health examination, in the 40s CBE is used as an adjunct to radiological screening (mammography). The underlying premise for carcinoma screening is that it permits for the detection of breast cancers before they become palpable. It is proved according to different trials that screening-detected breast cancers are related to reduced morbidity and mortality. This study aims at assessing the knowledge, awareness and opinion of female staff working in a hospital.

MATERIALS AND METHODS

Study design
This is a descriptive cross-sectional study of female medical staff carried out at various hospitals.
Study population
The study population consists of female health workers of age group of more than 20 years.
Sampling procedures
Female health workers were included after taking consent. Convenience sampling was done to obtain the sample size.
Instruments and Data collection

A structured, pre-tested questionnaire was the tool of data collection, which contains information regarding the sociodemographic characteristics, knowledge of breast cancer, knowledge and practice of BSE, CBE and sonomammography.

OBSERVATIONS AND RESULTS

This study was conducted on 70 participants who were asked about 40 questions each from which 35 questions were found adequate for analysis. Studies have been done on knowledge, attitude, and practice of breast cancer screening in health workers of a tertiary health care centre.

Table 1: Socio-demographic data of respondents

Variables	
Age (years) (n = 70)	**n**
20-29	35
30-39	22
40-49	1
50-59	10
60-69	2
Marital status (n = 70)	
Single/never married	31
Married	39
Widowed	0
Highest educational level (n=70)	
Primary school completed	0
JSS completed	0
SSS completed	1
Tertiary school completed	0
No formal education	2
Others	67
Occupation (n = 160)	
Doctor	17
Nurse	9
Pharmacist	0
Laboratory staff	2
Office staff	9
Ward maid	1

Cleaner	9

A majority of the respondents in this study belong to the younger population. Majority of respondents are below the age of 40 years with 81.4%. Majority of respondents are Doctors making up the majority; 24.4% and nurses, office staff and cleaners making 12.8% each. Majority of respondents are married, 55.7%.

Table 2: Respondents' knowledge of breast cancer

Variables	
Ever heard of breast cancer (n=70)	**n**
Yes	69
No	1
Sources of information about breast cancer* (n=70)	
Books	44
Media	54
Hospital	41
Lecture	35
Conference/seminar	45
Friends	41
Have any of your relatives been diagnosed with breast cancer? (n=70)	
Yes	11
No	59
If yes, which relative? (n=52)	
Mother	0
Aunt	5
Sister	3
Cousin	3
Other relative	41

*Multiple response

Almost all the respondents are aware of breast cancer, 69 (98.5%). Majority of respondents got information about it from media (77.1%), followed by seminars (64.2%) and books (62.8%). Only 15.7% of respondents had a positive family history of breast cancer.

Table 3: Respondents' knowledge of breast self-examination

Variables	
Ever heard of BSE (n = 70)	**n**
Yes	52

No	18
Is BSE a useful tool for early detection of breast cancer? (n = 70)	
Yes	51
No	19
Have you been taught how to do BSE? (n=70)	
Yes	41
No	29
If yes, who taught you? * (n = 51)	
Parents	26
Teacher	36
Doctor	32
Nurse	16
Friend	6
Others	19
At what age should BSE be started? (n = 70)	
From puberty	10
From 20 years	42
No idea	18
How often should BSE be done? (n = 70)	
Weekly	4
Monthly	29
Yearly	9
No idea	28
What is the best time to do BSE? (n = 70)	
During menstrual flow	8
A week after period	29
During pregnancy	10
During feeding	7
No idea	34
BSE should be done by (n = 52)	
Doctor	32
Trained nurse	16

The individual	14
BSE is done by* (n=25)	
Inspecting the breast in the mirror	5
Feeling the breast with the hand	20
Feeling the armpit with the hand	0
Doing ultrasound of the breast	0
Sonomammography	0

*Multiple responses.

Most participants were aware of BSE and thinks its useful tool for early detection of breast cancer (74.3%). They have been taught BSE (58.5%), out of which majority were taught by teachers (51.5%) followed by doctors (45.7%) and parents (37.1%). Only 41.4% and 60% of respondents knew that BSE should be done monthly and should start after age of 20 respectively. Majority doesn't know about proper timing and method for BSE.

Table 4: Respondents' practice of breast self-examination

Variables	**n**
If you discover any abnormality during BSE, what will you do? * (n = 65)	
Do some lab tests	0
Pray over it	0
See a doctor	60
Other	5
Benefits of BSE* (n = 65)	
Familiar with breast texture	12
Early detection of breast cancer	50
Detection of abnormal changes	20
A good breast exercise	4
Do you practice BSE? (n = 70)	
Yes	41
No	29
If yes, how often? (n = 43)	
Weekly	9
Monthly	3
Occasionally	13
Rarely	18

If you have been practicing BSE, have you ever discovered any abnormality in your breast? (n = 46)	
Yes	1
No	45
If yes, what did you do? (n = 44)	
Prayed over it	0
Saw a doctor	30
Did nothing	1
Other	13
Do you think BSE is a good practice? (n = 17)	
Yes	52
No	8

*Multiple responses. BSE-Breast self-examination

Reasonable numbers of respondents claim that they do BSE 41 out of 70 – 58.5%. 9 (12.8%) stated that they did it weekly. While 13 (18.6%) said occasionally and 18 (25.7%) stated that they do BSE rarely. Out of them only 1 has discovered an abnormality. Out of 70 respondents 52 (74.3%) think that BSE is good practise and they 60 (85%) will see a doctor if they found any abnormality.

Table 5: Respondents' knowledge and practice of clinical breast examination

Variables	**n**
Ever heard of CBE? (n = 70)	
Yes	28
No	42
Is CBE a useful tool for detection of breast CA? (n=70)	
Yes	29
No	37
Do not know	4
CBE should be done by* (n = 70)	
Doctor	45
Trained nurse	16
The individual	3
Other	10
No Idea	5
CBE should be done using* (n = 70)	

Ultrasound	9
Sonomammography	36
Hand	18
Other	19
No idea	5
How often should CBE be done? (n = 70)	
Daily	9
Weekly	0
Monthly	7
Yearly	17
When abnormality is found on BSE	11
No idea	26

BSE=Breast self-examination, CBE=Clinical breast examination

*Multiple responses

Awareness of CBE is also slightly low among the respondents compared to developed countries- 28 (40%). From them 29 (41.4%) knew that CBE could be used for detection of breast cancer. 45 (64.3%) and 16 (22.9%) out of 70 think that BSE should be done by a doctor and trained nurse respectively. Most of the respondents do not know how CBE is done as 9 (12.8%) thought it is done using ultrasound, 36 (51.4%) thought CBE is done using sonomammography machine and another 24 (34.3%) have no idea. Furthermore, only 17 (24.3%) of the cases recognized that CBE should be done yearly while the rest have other incorrect responses.

Table 6: Respondents' knowledge and use of sonomammography

Variables	**n**
Ever heard of sonomammography? (n = 70)	
Yes	43
No	27
Is sonomammography a useful tool for early detection of breast cancer? (n = 70)	
Yes	43
No	0
Do not know	27
At what age should sonomammography be started? (n = 70)	
From puberty	14
From 20 years	1

From 40 years	20
After menopause	6
No idea	29
How often should sonomammography be done? (n = 70)	
Weekly	0
Monthly	0
Yearly	8
Every 3 years	1
When a lump is found on BSE or CBE	23
No idea	38
Have you ever done sonomammography? (n = 70)	
Yes	8
No	62
If no, why not? * (n = 60)	
Not old enough	27
Financial constraint	6
Sonomammography not available	4
Other	25

*Multiple responses

The level of awareness of sonomammography was generally high among respondents- 43 (57.1%) and same knew that sonomammography could be used as a tool for early detection of breast cancer. But only 8 (11.43%) had undergone sonomammography at least once. Others who haven't undergone sonomammography are not of proper age 27 (38.57%), 6 respondents have financial issues, while for 25 (35.7%) respondents there are some other reasons. In addition, 20 (28.57%) of the respondents noted that sonomammography should be commenced from the age of 40 years and above while the rest responded inappropriately. Similarly, only 8 (11.43%) of the respondents knew that sonomammography should be done yearly.

DISCUSSION

1**.** A majority of the respondents in this study belong to the younger population. Majority of respondents are below the age of 40 years with 81.4%. Majority of respondents are Doctors making up the majority; 24.4% and nurses, office staff and cleaners making 12.8% each. Majority of respondents are married, 55.7%.

2. Almost all the respondents are aware of breast cancer, 69 (98.5%). Majority of respondents got information about it from media (77.1%), followed by seminars (64.2%) and books (62.8%). Only 15.7% of respondents had a positive family history of breast cancer.

3. Most participants were aware of BSE and thinks its useful tool for early detection of breast cancer (74.3%). They have been taught BSE (58.5%), out of which majority were taught by teachers (51.5%) followed by doctors (45.7%) and parents (37.1%). Only 41.4% and 60% of

respondents knew that BSE should be done monthly and should start after age of 20 respectively. Majority doesn't know about proper timing and method for BSE.
4. Most respondents say that they do BSE 41 out of 70 – 58.5% and 9 (12.8%) stated that they did it weekly. Out of all only 1 has discovered an abnormality, while 52 (74.3%) thinks that BSE is good practise and they 60 (85%) will see a doctor if they found any abnormality.
5. Respondents are relatively less aware about CBE than developed countries- 28 (40%). 45 (64.3%) and 16 (22.9%) out of 70 think that BSE should be done by a doctor and trained nurse respectively. Most of the respondents do not know how to do CBE. Only 17 (24.3%) of the cases recognized that CBE should be done yearly while the rest have other incorrect responses.
6. The level of awareness of sonomammography was generally high among respondents- 43 (57.1%) and same knew that sonomammography could be used as a tool for early detection of breast cancer. But only 8 (11.43%) had undergone sonomammography at least once. The major reason behind not undergoing sonomammography was 'not of proper age' 27 (38.57%). 20 (28.57%) of the respondents noted that sonomammography should be commenced from the age of 40 years and above. Only 8 (11.43%) of the respondents knew that sonomammography should be done yearly.

CONCLUSION

Prevalence of the knowledge about breast cancer and its screening techniques are low in health workers also. Practice and attitude of breast cancer screening should be promoted among health workers and the general population. Sonomammography which is still the gold standard of breast cancer screening must be promoted for knowledge and benefit of the health workers and then the general population.

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