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Knowledge, Attitude and Practice Regarding Breast Cancer and Screening Among Female Health Workers at Birat Medical College Teaching Hospital .

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ABSTRACT

Introduction: In Nepal, breast cancer is the second most common cancer amongst women.

Objectives: The objective of this study is to analyze the knowledge, attitudes and practices of health care female professional regarding breast cancer and screening.

Methodology: A cross sectional study was done among the female healthcare workers in the department of Medical Oncology from 1st November 2021 to 1st December 2021. Purposive sampling technique was applied for sampling. After consent , questionnaire set regarding the research was provided to the female care professionals. The interview was conducted under the supervision of matron of nursing department. The collected data were analyzed with the help of SPSS Statistic software.

Results: One hundred seven female healthcare professionals participated the study during the study time period. The mean age of them was 25.25 years (20-45 years).55% of them had high level of knowledge regarding risk factors of breast cancer .88% of them had high level of knowledge regarding symptoms of breast cancer .75% of them had good knowledge regarding breast cancer treatment modalities. 69% of them were aware that screening helps in prevention of breast cancer amongst which 61% participants agreed for screening themselves for breast cancer . 72% of them were involved in self breast examination .A total of 4.6% of them were unaware of mammograms and 93.4% had never undergone mammogram.

Conclusion : Present study demonstrated a good knowledge regarding breast cancer but poor practice regarding breast cancer screening methods among the female health care workers at Birat Medical College Teaching Hospital.

INTRODUCTION

Breast cancer is the fourth most common cancer and one of the leading cause of cancer-related deaths in women globally.[1] In Nepal, breast cancer is the second most common cancer amongst women and placed a substantial burden on the Nepalese healthcare system.[2] According to GLOBOCAN 2020, an estimated 1973 new breast cancer cases were diagnosed in Nepal in 2020, with an age-standardized rate (ASR) of 13.9 new cases per 100,000 women, while 1049 fatalities in women occurred, with an ASR of 7.7 fatalities per 100,000 women.[3]Common risk factors associated with breast cancer include obesity,oral contraceptive pills,alcohol intake ,sedentary lifestyle , family history etc.[4] The incidence of breast cancer has decreased in developed countries which is mainly due to increased awareness and effective screening employed in these countries.[5] However in poor and developing countries it is not so.[6] Screening of breast cancer can be done easily by breast self examination , clinical breast examination and mammogram.[7]Having good knowledge and awareness will help in ensuring control of the disease.

METHODOLOGY

A cross sectional study was conducted in the department of Medical Oncology from 1st November 2021 to 1st December 2021. Ethical approval was obtained from Institutional Review Committee (IRC) Reg. No 735/ 2020 prior to data collection.

Female Health Care Professional were catagorised into three groups as doctors , nursing staffs and allied healthcare givers like dietitian , physiotherapist, outpatient attendant ,Health assistant etc. Breast cancer includes cancer of breast arising from ductal and alveolar epithelium. Screening method includes breast self examination , clinical breast examination and mammogram .

Inclusion criteria : All female healthcare professional who were either doctor , nursing staffs and allied healthcare workers working at Birat Medical College Teaching Hospital during the study period and who were willing to give consent for the study.

Exclusion criteria :Non compliant.

Purposive sampling technique was applied for sampling.All the female health care professionals fulfilling inclusion criteria from 1st Nov 2021 to 1st Dec 2021 were enrolled in the study.. Preformed proforma comprising of questionnaire were utilized for data generation. Questionnaire were developed from previously published studies after an in-depth literature review and then validated through two experts each from oncology .This questionnaire was developed through an online search based on literature review, content validation and establishment of reliability.

After consent ,questionnaire set was provided to the female care professionals which include sociodemographic details , knowledge regarding breast cancer , attitudes regarding breast cancer and practices regarding screening .Participants' knowledge of breast cancer was assessed by listing questions related to risk factors, obesity, cigarette smoking, and other vulnerable factors in women. For each item, the participants were asked to choose one of the three options: "Yes," "No," or "Don't know."

Participants' attitude was assessed by asking them to rate each of the following statements on a 5-point Likert scale: (1) carcinoma of the breast is highly prevalent and is a leading cause of deaths in Nepal (2) any young woman including you can acquire breast carcinoma;(3) carcinoma of the breast cannot be transmitted from one person to another; (4) screening helps in prevention of carcinoma of the breast; and (5) will you screen for breast cancer? Respondents will be asked to choose one of the following options for each of the statements listed above: "strongly agree," "agree," "neither agree nor disagree," "disagree," or "strongly disagree." For ease of presenting results, responses for "strongly agree" and "agree" and for "disagree" and "strongly disagree" will be combined.

Participants' practices were assessed by asking specific questions about practices regarding breast cancer screening. Healthcare workers were asked whether they had heard of breast self examination, clinical breast examination, mammogram. and whether they believe it is a useful tool for early detection of breast cancer.They were further asked whether they had undergone any of the tests, at what interval they get it done, steps to be taken if any abnormality was found mammogram, and reasons if they had not undergone screening tests. Questionnaire was also enquired about whether mammogram is a painful test. For each item, the participants were asked to choose one of the three options: "Yes," "No," or "Don't know."

The data collection was conducted successfully in a friendly environment under the supervision of matron of nursing department. The collected data were analysed by using descriptive statistical methods such as frequency, percentage and mean with the help of SPSS Statistic software.

RESULTS

One hundred seven women that participated completed the study during the study time period.[Table 1]The mean age of the women was 25.25 years (20-45 years).Only 37% of the women were married .Only 14% women participants were doctor , 77% were nursing and rest were allied professional.Almost 95% women participants were Hindu religion of which 84% women were non –vegetarians.

Table 1: Baseline Characteristics of Study Participants (N = 107)

Characteristics	Numbers (N)	Percentage(%)
Mean age(years)/ (Range)	25.25(20-45)	-
Marital Status		
Married	40	37.38
Unmarried	67	62.62
Education		
Intermediate	47	43.92
Bachelor	45	42.05
Master	15	14.03
Profession		
Doctor	15	14.01
Nursing	83	77.57
Allied	09	8.42
Religions		
Hindu	102	95.32
Muslim	03	2.80
Christian	02	1.88
Diet		
Non-vegetarian	90	84.11
Vegetarian	17	15.89
Districts		
Morang District	59	55.14
Sunsari District	35	32.71
Other Districts	13	12.15

55% women had high level of knowledge regarding risk factors of breast cancer .88% women had high level of knowledge regarding symptoms of breast cancer. 75% women had good knowledge regarding breast cancer treatment modalities

Table 2: Participants responses to questions related to knowledge of Breast Cancer (N=107)

Questions	Yes Response (%)	No Response (%)
Breast cancer occur in Females only	53.27	46.73
Breast Cancer risk factors includes :		
Family history only	35.51	-
Smoking only	4.67	-
Alcohol only	4.67	-
Breast feeding	-	100
ALL except breast feeding	55.15	
Breast cancer common symptoms includes		
Change in shape, size only	7.47	
Pain only	0.93	
Change in colour only	0.93	
Presence of dimple only	1.8	
ALL as above	88.87	
Breast Cancer Treatment includes:		
Surgery only	21.49	-
Chemotherapy only	2.80	-
Radiation only	0	-
Hormonal Only	0	-
Target therapy only	0	-
ALL as above	75.71	-

Majority of women had good attitude regarding breast cancer .48% women were aware that any young women can acquire breast cancer in their lifespan.69% women were aware that screening helps in prevention of breast cancer .61% women participants agreed for screening themselves for breast cancer[Table 3] .

Table 3.Participants attitudes towards Breast Cancer and Screening (N=107)

Questions	Strongly Agree Response(%)	Agree Response(%)	Neutral Response(%)	Disagree Response(%)	Strongly Disagree
1.Carcinoma of the breast is highly prevalent and is a leading cause of deaths in Nepal.	56.07	32.71	3.75	0.93	6.54
2.Any young woman including you can acquire breast carcinoma.	48.59	36.45	5.62	8.41	0.93
3.Carcinoma of the breast cannot be transmitted from one person to another.	68.22	14.95	4.69	4.67	7.47
4.Screening helps in prevention of carcinoma of the breast .	69.15	24.30	1.86	2.83	1.86
5.Will you screen for breast cancer ?.	61.68	24.30	12.16	0.93	0.93

Regarding practice , majority of women were actively involved self breast examination for screening however only minority of women were involved in clinical examination by doctor for screening. 72% of women participants were involved in self breast examination among which more than 50% were involved in monthly self examination .Only 18% women had undergone clinical breast examination by doctor for screening of breast cancer[Table 4].

Table 4: Participants response to practice regarding Breast Cancer screening (N=107).

Questions	Yes Response (%)	No Response (%)
1.Have you ever done breast examination for breast cancer ?	72.89	27.11
2. If Yes then		
Monthly	53.84	-
6 Monthly	32.05	-
Once A year	14.11	-
3.If No then causes are		
Not Required	51.72	
Ashamed	10.34	
Not Trained	6.91	
Do not have time	31.03	
4.Have you ever done clinical breast examination by doctor ?	18.69	81.31
5. If yes then		
6 monthly	65	
Once a year	35	
6.If No then causes are		
Not Required	79.31	
Ashamed	0	
Do not have time	20.69	
No female doctor available.	0	
7. Have you ever heard of Mammogram ?	95.32	4.68
8. Have you ever done Mammogram ?	6.54	93.46
9. If yes then		
6 monthly	71.42	
Once a year	28.58	
Twice a year	0	
10, If No then causes are		
Not Required	84	
Ashamed	02	
Mammogram not available	0	
Do not have time	12	
Expensive	02	
Painful.	0	

A total of 4.6% of women participants were unawareof mammograms and 93.4% had never undergone mammogram. The major barrier to mammogram screening were not required(84%) , do not have time(12%) and being ashamed (2%).

DISCUSSION

Most patients with breast cancer in Nepal present at advanced stages leading to high morbidity and mortality which is of highly concern. Causes of being diagnosed at late stages are lack of awareness ,lack of proper screening and lack of proper medical facilities available.The awareness of breast cancer plays an important role in early detection and prevention of the disease, and medical college plays an important role of contact inbetween patients and healthcare workers within thehealthcare system. An increase of knowledge about breast cancer screening methods to health care workers will lead to increase in awareness amongst patients and families in a society that leads to early intervention and diagnosis of breast cancer as well as increased survival.[8]

Our study showed a high-level of knowledge regarding breast cancer ,its risk factors and symptoms in general among healthcare workers. Our findings can be compared with a previous study in India that showed more than half of women were aware of breast cancer.[9]This high level of knowledge could be due to their health related professional backgrounds.Majority of them were nursing and doctors in profession.This verify quality medical education system in Nepal.

Clinical breast examination is one of themethod for breast screening. We have very low rate of screening by clinical breast examination.The results from our study can be comparedwith previous studies in Saudi Arabia that found that few of women in Abha .[10]Even we had very low practice of mammogram as screening method.Our findings were similar to previous studies that indicateda low percentage of women have had a mammogram.[11]The AmericanCancer Society offer mammograms as screening method at the age of 40 years old.[12] In this study, majority of healthcare workers were at the age of 20-25 years and only few were above the age of 40 years. In Nepal, We don't have the national as well as regional policy of providing free mammogram to the populations for screening of breast cancer. Besides , Mammogram is available only in few specialized centers which is expensive in nature.

In the present study, the main source of information about breast cancer was from health care centers . These findings have led us to use social media through healthcare workers to help increase the knowledge of breast cancer screening methods and to encourage the population to perform these methods. A study in Nepal in 2008 demonstrated that Breast self examination could be regarded as tool to aid primary prevention strategies for breast cancer [13] Thus, for early detection of breast cancer in Nepal, awareness and breast self-examination should be promoted through media as well as through health personnel in various settings .The Oncological Society of Nepal usually host an annual event to raise the awareness regarding of breast cancer during International Breast Cancer Awareness Month during October.[14] Proper warning signs regarding breast cancer should be explained along with the screening methods to healthcare workers for maximum benefits .[15]

CONCLUSION

In the present study, we observed that the majority of female

healthcare workers in Birat Medical College demonstrated a good knowledge and attitude regarding breast cancer however they still have poor screening practice regarding clinical examination and mammogram.. Additional effort should be put forth through women's healthcare providers,hospitals and government policies to increase the awareness of breast cancer screening through the importance of primary healthcare for early detection of breast cancer in the early stages.

LIMITATIONS OF THE STUDY: This study has some limitations. There was no available international standardized questionnaire to measure breast cancer knowledge, so we created the questionnaire based on available information from previous studies. The sample size was not large enough and the majority of participants were ≤45 years of age, which decreased the ability to generalize the research findings. This is a single centered research work only.

RECOMMENDATIONS: Breast cancer awareness and screening should be advocated in national guidelines and policies and strictly implemented.

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