

Original Research Article

Knowledge regarding breast self-examination among middle aged women of Uttarakhand

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ABSTRACT

Background: Breast self-examination involves the women herself looking at the mirror and feeling each breast for possible lumps and distortion or swelling. It is seen that more than 10% to 20% breast cancer is detected by breast self-examination.

Methods: A descriptive cross-sectional study was conducted to assess knowledge regarding breast self-examination among middle aged women in a selected community setting of Uttarakhand. A total of 62 samples were selected through systematic randomized sampling technique. A structured knowledge questionnaire was administered through interview technique to assess the knowledge.

Results: Most of the (49%) women had poor knowledge regarding breast self-examination. There was significant association between age of the samples, education status, family income and previous information regarding breast self-examination with knowledge score.

Conclusions: The study concluded that there was inadequate knowledge regarding breast self-examination among middle aged women in Uttarakhand. There is a need for educational programs to create awareness and improve knowledge regarding routine breast self-examination.

Keywords: Breast self-examination, Knowledge, Middle aged women, Uttarakhand

INTRODUCTION

Breast self-examination involves the women herself looking at the mirror and feeling each breast for possible lumps and distortion or swelling.¹ A breast self-exam is the routine examination done by females of their own breasts to find any abnormal growth or changes that are alarming and need medical consultation to treat. It is seen that more than 10% to 20% breast cancer is detected by breast self-examination. It is important for females to do BSE regularly to prevent breast cancer.² Cancers in the women aged (15-65 years) tend to be more aggressive which is a cause of concern as this denotes the need for educative and awareness programs targeting younger members of the society, as early as 18 years, to

implement early practices of breast self-examination (BSE) into their lifestyle.³

Monthly regular breast self-examination is an easy, cheap examination accessible to all women. It is effective, reliable, non-invasive screening method that does not require any special tool and can be performed quickly. Breast self-examination acquires added importance of women aged 20-60 due to their very infrequencies of routine clinical examination and mammography especially all women aged 20 and above should perform breast self-examination monthly, 5-7 days after the end of their menstruation, if premenopausal, same day of every month. Monthly breast self-examination has been reported to be effective in detecting

the early symptoms of breast cancer and early detection in turn greatly reduces the mortality rate.⁴

METHODS

The study is a descriptive cross-sectional survey carried out among middle aged women of Nunawala village of Uttarakhand in July 2022. A total of 62 middle aged women who were in the age group of 40-65 years were selected through systematic randomized sampling technique.

Inclusion criteria

The inclusion criteria included middle aged women who understood Hindi language and were willing to participate in the study.

Exclusion criteria

Women who are severely ill during data collection time and those who were not available at the time of data collection were excluded from the study.

The tool included sociodemographic profile of the samples and self-structured questions related to knowledge regarding purpose, technique, frequency and importance of performing breast self-examination. Validity of the tool was established by experts in the field of medical surgical nursing, obstetrics and gynecological nursing and community health nursing. Reliability of the tool was established by test-retest method and r value obtained was 0.9 (Cronbach's alpha). The tool was translated to Hindi language with the help of expert. Pretesting was done on 10 samples. Written consent was taken from each sample before data collection. Data was collected through face-to-face interview technique. The data was analysed by using descriptive and inferential statistics.

RESULTS

Sociodemographic characteristics of the study participants

As depicted in Table 1, the study enrolled 60 middle aged women. Of these majority 58% were in the age group of 53-65 years and 42% were in the age group of 40-65 years. Among these 26% women had no formal education. 82% women were married while 18% were widow. Most 56% of women had nuclear family.

Husbands of most of the women had formal education 73% while 27% had no formal education and most of them were self-employed (53%). Most the women had a monthly family income less than Rs. 20,000 (56%). Majority of the women did not hear about breast self-examination previously (81%).

Table 1: Sociodemographic characteristics of the study participants N=62.

Demographic variable	Frequency	Percentage
Age		
40-52	26	42
53-65	36	58
Education		
Formal	46	74
Non formal	16	26
Marital status		
Married	51	82
Widow	11	18
Family type		
Joint	27	44
Nuclear	35	56
Husband's education		
Formal	45	73
Non-formal	17	27
Family income		
<20k	35	56
>20k	27	44
Husband's occupation		
Employed	29	47
Self employed	33	53
Previously heard about BSE		
No	50	81
Yes	12	19

Knowledge regarding breast self-examination

The total score of the knowledge questionnaire was 23. The lowest range of scores was 4 and the highest range of score was 18. The mean and standard deviation of knowledge score was 9.16 and 4.046 mean percentage for the knowledge score was 50.5%.

Among 62 middle aged women, 49% had poor knowledge, 40% had average knowledge and 11% had good knowledge regarding breast self-examination (Figure 1).

Table 2: Mean, standard deviation, median, range of knowledge score regarding breast self-examination.

variables	Maximum score	Range of score (min/max)	Median	Mean±SD	Mean %
Knowledge scores	18	4-18	10	9.16+4.046	50.5

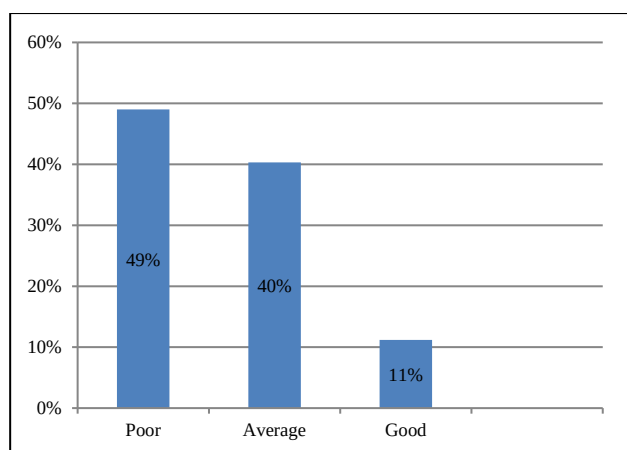


Figure 1: Knowledge score of middle-aged women regarding breast self-examination.

Association of knowledge score regarding breast self-examination with selected demographic variables

Significant association found between knowledge score and selected variables such as educational status of participants, family income and previously heard about BSE.

Table 3: Association of knowledge scores with their selected variables.

Demographic variable	Below median <10	Above median ≥10	χ^2	P value
Age				
40-52	14	12	1.574	0.2096
53-65	25	11		
Education				
Formal	38	08	4.497	0.0340*
Non formal	09	07		
Marital status				
Married	24	27	0.203	0.6523
Widow	06	05		
Family type				
Joint	12	15	0.104	0.7468
Nuclear	17	18		
Husband's education				
Formal	22	23	0.017	0.8976
Non-formal	08	09		
Income				
<20k	21	14	4.340	0.0372*
>20k	09	18		
Husband's occupation				
Employed	16	13	0.583	0.4451
Self employed	15	18		
Heard about BSE				
No	05	07	5.367	0.0205*
Yes	38	12		

df= 1; p<0.05

DISCUSSION

The study evaluated the knowledge of middle-aged women regarding breast self-examination. The maximum score of the knowledge questionnaire was 18 and the range of score was between 4-18, median was 10, mean value was 9.16, standard deviation was 4.046 and the total mean percentage is 50.5%. The findings of the study revealed that 49% of the participants had poor knowledge score, 40% had average knowledge score and 11% had good knowledge regarding breast self-examination. The study outcome was supported by the cross-sectional study conducted by Osman et al to assess the knowledge, attitude and practice of breast self-examination among female detainees in Khartoum, Sudan. The study revealed that majority (66.3%) of participants had poor knowledge about breast self-examination.⁵

The study findings revealed that there was significant association between knowledge score and selected variables such as educational status of participants, family income and previously heard about BSE. These findings were supported by a study conducted by Marahatta et al. Knowledge and practice of breast self-examination among women of reproductive age in Butwal sub metropolitan city. The study revealed that there was a significant association between knowledge and demographic variables such as marital status, monthly household income and level of education.⁶

This study also has several limitations. Since this study was limited to only middle-aged women of selected community area, the sample size is relatively small and may not be representative of all females of that age group; hence, it is recommended to conduct further studies using larger sample size.

CONCLUSION

Despite the limitations, the study highlighted the need for creating awareness regarding regular breast self-examination. Community awareness activities, preventive and educational programmes are needed to improve the knowledge level among women regarding breast cancer and regular BSE. The study concluded that there are still some areas that needs to be improved. The special focus can be done in the area of breast self-examination techniques by educating each women regarding steps of breast self-examination as many women found problems in carrying out sequential steps.

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