

Effect Of Pictorial Health Warnings On Tobacco Usage – A Cross Sectional Study

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ABSTRACT

BACKGROUND: Pictorial health warnings on cigarette packages are a prominent and effective means of communicating the risks of smoking. They have broad reach in penetrating all sections of society. A specific health warning placed on tobacco product packages is considered an effective and low-cost method for increasing the knowledge and awareness among the community. Health awareness brings benefits at both the global and community levels.

OBJECTIVE: To explore the awareness of pictorial warnings on tobacco products among cigarette smokers in the urban and rural field practice area of a medical college in Karnataka.

MATERIALS AND METHODS: The study population comprised of 200 patients who were smokers in the age group of 20-80 years and had the smoking habit for a duration of more than six months and were attending the outpatient department of the rural and urban health centre. The study period was for two months. Data collection was carried out using a semi-structured questionnaire and included demographic details, health-related issues of smoking, awareness about pictorial warning, and willingness to quit smoking.

RESULTS: Smoking was more among the middle age group (64%) in both urban and rural area. 46.5% smokers had the habit duration of smoking of more than 10 years. Neither their age, literacy, or socio-economic status had any influence on their awareness about pictorial warnings on the usage of tobacco products by the smokers. However, a majority of them, 48% from urban and 52% from rural background, acknowledged that such powerful warnings were necessary and mandatory on tobacco products to help reduce smoking and quit smoking.

CONCLUSION: A positive response was shown by the general population for the implementation of pictorial warnings on tobacco products. A majority of the people strongly agreed for strong pictorial warnings which were diluted by government notifications in year 2008(2). Hence, this study substantiates that smokers exhibited a positive response for inserting strong pictorial warnings on tobacco products and making it mandatory by law.

KEY WORDS: Cigarette Smoking, Pictorial Warnings, Smoking cessation

Introduction

The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing around 6 million people a year. Nearly 80% of more than 1 billion smokers worldwide live in low- and middle-income countries where the burden of tobacco-related illness and death is heaviest. Tobacco users who die prematurely deprive their families of income, raise the cost of health care and hinder economic development (3).

Graphic warnings can contribute to a break in the

chain of disease transmission by persuading smokers to initiate steps not only to protect themselves but also to decrease the effect of passive smoking. Warning labels on tobacco products provide an effective way of communicating the consequences of tobacco use(4). It is a cost-effective way to disseminate information to the public on the dangers of smoking and benefits of quitting.

Display of pictorial warnings on tobacco products was one of the legislative measures taken under The Cigarettes and Other Tobacco Products Act (COTPA) enacted in 2003, intended to discourage the consumption of tobacco(5).

The Government of India (GOI) launched the National Tobacco Control Programme (NTCP) in 2007. Nearly 8-9 lakh people die every year in India due to diseases

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related to tobacco use and as per the report of Indian Council of Medical Research (ICMR), nearly 50% of cancers in males and 25% cancers in females in India are directly attributed to tobacco use. India is party to the WHO Framework Convention on Tobacco Control (FCTC) and is hence committed to implementing all provisions of this international treaty(6).

Though the World Health Organization (WHO) in 2009 had urged the government to include pictorial warnings on all tobacco packages(7), only 42 countries, representing 19% of the world's population, have met the best practice for pictorial warnings, which includes the warnings in the local language and cover an average of at least half of the front and back of cigarette packs and most of these countries are interestingly low- or middle-income countries.

Limited literature exists which reveal the effectiveness of pictorial health warnings on tobacco products in India among the lower strata of society. Hence, this study has been taken up to determine the effect of pictorial warnings on tobacco products among smokers in our field practice area. Studies carried out after the implementation of pictorial package warnings in Brazil, Canada, Singapore and Thailand consistently show that pictorial warnings significantly increase people's awareness of the harms of tobacco use(8,9).

Materials And Methods

Study Design: A hospital based cross sectional study was carried out among patients attending the outpatient department of Rural and Urban health training centre under a Medical college teaching hospital in Karnataka. Only male patients aged between 20-80 years with atleast a six months' history of smoking in the past were considered as the study population. Using the non probability sampling technique, a total of 200 patients (100 each from urban and rural)who attended the outpatient department in the month of November - December 2016 were selected and interviewed.

After obtaining verbal consent, data was collected

through interview method using a semi-structured questionnaire. The Questionnaire comprised of 18 questions categorised into 4 areas namely socio-demographic details, details of tobacco use, awareness on pictorial warnings and support for implementation of pictorial warnings on tobacco packs.

Statistics

Statistical analysis was done using SPSS software v.20. Data were analysed using descriptive and inferential statistics.

Results

The study has attempted to reveal the awareness levels of 200 participants, 100 each from rural and urban area with respect to pictorial warnings on tobacco products. About 30% of the participants in rural area were in the age group of 20-40 years and 36% were in the age group > 40 years from urban area. The proportion of participants educated above tenth grade was more in the urban (52%) as compared to the rural area (31%). About 83% of these respondents were above the poverty line in urban area and the same was 45 % in the rural area.

Smoking was the most common form of tobacco use among both rural and urban population (89% and 93%). Among them, regular smokers were 79% and 65% respectively and about 46.5% of them were into the habit for more than 10 years. The most common reason given for being a chronic smoker was stress. The mean cigarettes smoked per day was 10.2 per day.

When enquired about pictorial warnings displayed on cigarette packets, only 7% of rural and 12% of urban smokers had not noticed the warnings. Around twenty seven percent of respondents, (34% rural and 21% urban smokers)had noticed the text displayed on pictorial warnings.However, only 49% of them who had noticed had understood the pictorial warning. Majority of the urban smokers (80%) understood the picture displayed to be related to lung cancer compared

to their counterparts (67%). More number of urban smokers said that red was the most attractive colour followed by black for use in these pictorial warnings.

About 48% urban and 52% rural smokers had attempted to quit smoking in the past and the desire to quit further improved after reading the pictorial warnings. Sixty percent of urban and 44% rural smokers opined that the warnings should be more powerful. The proportion of smokers who felt that it was mandatory by law to display pictorial warnings on tobacco products were 58% among urban and 46% among rural smokers. Also, overall 60% of respondents acknowledged that such powerful warning were a necessity.

In this study conducted among 200 smokers, multivariate analysis was attempted to explore whether there was influence of smoker's age, literacy, socioeconomic status and duration of smoking on awareness about pictorial warnings on tobacco usage. It was found that there was no statistical significance between the mentioned factors and knowledge about pictorial warnings on tobacco usage.

Table 1. Selected Characteristics of the Respondents Included in the Study Analyses

Smokers vs awareness on pictorial warnings on tobacco products	Urban(%)	Rural(%)
Smoke form	93	89
Smokeless form	7	11
Regularly	65	79
Occasionally	32	13
Quit	3	8
Duration (>10Years)	42	51
Reason (Stress)	40	47
Frequency(<10 /day)	60	46
Money spent (<50 Rs)	78	86
Noticed Pictorial Warnings	57	63
Text	21	34
None	12	07
Understood the warning	44	54
What was the warning		
Lung Cancer	80	67
Oral Cancer	14	4
Ulcers	6	15
Eye Catching Colour		
Red	48	41
Black	37	24
Tried to quit habit due to pictorial warning	48	52
Should these warnings be more powerful		
Yes	60	44
No	10	18
Should the law mandate pictorial warnings on tobacco products		
Yes	58	46
No	21	15

Table 2. Multivariate analysis showing awareness about pictorial warnings on tobacco products among urban smokers

Urban	Pictorial Warnings Seen	Pictorial Warnings Not Seen	Odds Ratio (OR)	Confidence Interval (CI)
AGE(in yrs)				
20-40	40(54.05%)	34(45.95%)	1.606	0.635 - 4.063
>40	17(65.38%)	9(34.62%)		
LITERACY				
<higher secondary	26(54.16%)	22(45.84%)	1.249	.565-2.761
>higher secondary	31(59.61%)	21(40.39%)		
SES				
APL	51(61.44%)	32(38.56%)	2.922	0.984-8.677
BPL	6(35.29%)	11(64.71%)		
DURATION OF TOBACCO				
<10 YEARS	33(56.89%)	25(43.11%)	1.010	0.453 - 2.253
>10 YEARS	24(57.14%)	18(42.86%)		

Table 3. Multivariate analysis showing awareness about pictorial warnings on tobacco products among rural smokers

Rural	Pictorial Warnings Seen	Pictorial Warnings Not Seen	Odds Ratio (OR)	Confidence Interval (CI)
AGE(in yrs)				
20-40	16(66.7%)	8(33.3%)	0.810	0.308 - 2.131
>40	47(61.8%)	29(38.2%)		
LITERACY				
<higher secondary	43(62.3%)	26(37.7%)	1.09	0.455 - 2.656
>higher secondary	20(64.5%)	11(35.5%)		
SES				
APL	30(66.7%)	15(33.3%)	0.750	0.330 - 1.706
BPL	33(60.0%)	22(40.0%)		
DURATION OF TOBACCO				
<10 YEARS	31(63.3%)	18(36.7%)	0.978	0.434 - 2.203
>10 YEARS	32(62.7%)	19(37.3%)		

Discussion

The present study was conducted to elicit the awareness regarding pictorial warnings on tobacco packs among rural and urban health centres areas. Majority (64%) of the participants were in their middle age with 46.5% of them having a history of smoking for more than 10 years. Majority of them used tobacco in smoked form. Similar findings were observed in a study conducted in India by Raute et al and Shastri (10,19,20). Similar results have also been reported from a study conducted among the smokers in Shimla (10).

A recent experimental research study conducted in

Canada had found that increasing the size of pictorial warnings from the current size of 50% of the principal display area to 75%, 90% and 100% enhanced their impact among adult smokers, youth smokers, as well as 'vulnerable' youth non-smokers (11,12). The same observations were made from a study in Australia, where pictorial warnings currently cover 90% of the front and 30% of the back of packs (13). Here in our study, 30% rural participants opined that coverage of warning label should be 50% whereas 40% urbanites felt it should be 80%.

In a randomised control trial conducted by Schneider et al. (2011), one group of 44 adult smokers were made to view only the written warnings and another similar group were made to view corresponding pictorial warnings (14). This study reported that pictorial warnings were associated with a significantly higher motivation to quit. Pictorial warnings were also associated with higher fear intensity. Here, in our study also the effect of pictorial warnings (43% among urban and 51% among rural smokers) on intention to quit was higher than for plain text messages (14% among urban and 10% among rural smokers). A combination of text and picture messages were said to be a must and some participants suggested text in red as red represented danger whereas literature says that contrasting colours such as black lettering on white background were the easiest to read and increased comprehension (15,16). Our study also showed that red colour would be more 'eye catching'. Further, 45% of urban smokers and 40% of rural smokers wished that the warning label should be two-sided.

A study conducted in China in 2008 had found that smokers were significantly more likely to rate pictorial warnings as more effective than text warnings for motivating smoking cessation and for preventing smoking among youth (17). The current study also supported the evidence that 52% urban smokers and 48% rural smokers were willing to reduce the habit and quit. Almost all the study participants had noticed the pictorial warning but only one third of them had observed the text and among them only 50% had

actually understood it. The present study rules out the influence of socio-demographic factors on awareness of pictorial warnings. A study in Davangere city, Karnataka, among people aged 15 years and above had also showed that there was no statistical significance between education of the person and awareness about addiction and impact of pictorial warnings on tobacco products to quit the habit (18).

However, since the study was hospital based and had been carried out in a small population for a short period of time, the results obtained could have occurred by chance, and cannot be applied to the whole population. In the future, population-based surveys should be done in rural areas of India where knowledge about the ill-effects of tobacco are most needed. This will help identify other factors which can improve the awareness of effects due to smoking.

Conclusion

The present study revealed that the youngsters in the selected sample were less habituated to smoking and majority of the middle-aged participants were smokers from urban and rural areas. Health warnings on cigarette packages provide smokers with universal access to information on the risks of smoking. Our study showed that people from the lower strata of society are still lagging behind in understanding these health warnings and the intention to quit smoking is positive among those who understood it. It is time for both the government and health professionals to work together and address these factors among the public, especially among the growing citizens of India.

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Assessment Of Knowledge, Attitude And Practice Towards Breast Self-Examination Among Female Healthcare Workers In Nelamangala Taluk

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ABSTRACT

BACKGROUND: Breast cancer is the most common cancer in women worldwide. It accounts for 27% of all cancer cases among women in India. In developing countries, the majority of cases are diagnosed in the later stages which are difficult to treat. Breast self-examination is one of the most important methods in the early detection of Breast cancer.

OBJECTIVE: To assess the knowledge, attitude and practice regarding breast self-examination among female healthcare workers of Nelamangala Taluk.

METHODS: A cross sectional study was carried out between August to November 2016 among 123 healthcare workers from Nelamangala Taluk to assess their level of knowledge, attitude and practice of BSE. A multi-stage random sampling technique was used and each respondent was given a pre-tested semi-structured self-administered questionnaire.

RESULTS: All the healthcare workers interviewed had heard about BSE, 95(77.25%) of them knew that BSE helps in early detection of breast cancer but only 66 (53.65%) of them knew how to do BSE and only 28(22.8%) of them were performing BSE regularly. Seventy eight (63.5%) healthcare workers were not practicing BSE as a majority 40 (32.52%) of them did not know how to do the BSE.

CONCLUSION: The study showed that knowledge and practice of BSE among healthcare workers was inadequate. There is a need for awareness programs to educate healthcare workers about BSE as it helps in the early detection of breast cancer.

KEYWORDS: Healthcare workers, Breast self-examination, Knowledge, Attitude.

Introduction

Breast cancer is the most common cancer in women worldwide. It accounts for 27% of all cancer cases among women in India. During the year 2012 in India, 144,937 women were newly detected with breast cancer and 70,218 died of breast cancer. So roughly, in India, for every 2 women newly diagnosed with breast cancer, one ends up succumbing to the condition (1). The incidence is increasing in the developing world due to increase in life expectancy, urbanization and adaptation of western lifestyle (2). Breast cancer is distinguished from other types of cancer by the fact that it occurs in a visible organ and can be detected and treated at an early stage (3).

Recommended preventive techniques to reduce breast cancer mortality and morbidity include breast self-examination (BSE), clinical breast examination (CBE), and mammography (4). CBE and mammography require hospital visit and specialized equipment and expertise whereas BSE is an inexpensive tool that can be carried out by women themselves at their convenience (5). BSE benefits women in two ways: women become familiar with both the appearance and the feel of their breast and can detect any changes in their breasts as early as possible (6). Forty percent of diagnosed breast cancers are detected by women who feel a lump upon self-examination; hence, conducting a regular breast self-exam is very important (7). Healthcare workers are the one who provide information to general public for the improvement of knowledge and attitude and can motivate females in the community to comply with recommended breast cancer screening practices. Throughout the world, healthcare workers have been identified to be important components in cancer

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prevention programmes while gaps have been identified and recommendations made for improvement (8).

Very few studies have been conducted in India among women to study awareness and compliance with breast-self-examination. Hence, this study attempts to assess the level of knowledge, attitude, and practice regarding self-breast examination among healthcare workers in Nelamangala, Taluk Bengaluru.

Materials And Methods

Sample Size Estimation: A pilot study was conducted to estimate the sample size. Out of 10 PHCs, 3 PHCs were selected randomly and the data was collected by administering a semi-structured questionnaire to all the 30 healthcare workers who were present during the visit. Upon data analysis, we found that 76.6% of the workers knew that monthly BSE is necessary. With 10% relative precision, the sample size was calculated by using the formula $4pq/d^2$. The sample size arrived at was 122.3 and was rounded off to 123.

Sampling Method: The sampling method employed was multi-stage random sampling. There are 10 PHCs under Nelamangala Taluk and the total staff were 279. Out of 10 PHCs, 5 PHCs were selected randomly (apart from the 3 PHCs taken for pilot study) and healthcare workers were selected by probability proportion to size to achieve the sample size of 123.

Data Collection Technique: The study data was collected from 123 healthcare workers from these selected 5 PHCs of Nelamangala Taluk using the pre-tested semi-structured self-administered questionnaire (9). Data was collected from those workers who were present during the visit. The questionnaire consisted of both close ended and multiple choice questions regarding knowledge, attitude (by using a 3-point Likert Scale) and practice of BSE.

Data Analysis: Fully completed questionnaires were collected and the data was entered in MS Excel. Data was analysed to generate descriptive statistics. The results are presented in the form of tables and graphs as appropriate.

Results

Majority of the respondents (47.15%) belonged to the age group of 31-40 years. 120 (97.56%) of them belonged to the Hindu religion and 68 (57.39%) of them had completed their high school education. Out of 123 respondents, 22 (17.88%) were health assistants (HA), 49 (39.83%) were ASHA workers and 52 (42.28%) were Anganawadi workers (AWW). (Table 1)

Table 1. Socio-demographic profile of the participants

VARIABLES	N=123(%)
AGE	
21-30	21(17.07%)
31-40	58(47.15%)
41-50	28(22.76%)
51-60	16(13.01%)
RELIGION	
HINDU	120(97.56%)
MUSLIM	3(2.44%)
EDUCATION	
HIGH school	68(57.39%)
PUC/diploma	37(30.43%)
Graduate	15(9.56%)
Professionals	3(2.60%)
DESIGNATION	
Health assistants	22(17.88%)
ASHA	49(39.83%)
AWW	52(42.28%)

Out of the 123 participants, 112 (91.05%) had heard about breast cancer while 95 (77.25%) were aware that BSE helps in early detection of breast cancer. (Table 2)

Table 2. Knowledge of the participants about breast cancer.

SN	QUESTIONS	YES	%
1	HEARD ABOUT BREAST CANCER	112	91.05%
2	COMMON CANCER IN INDIA	99	80.48%
3	BSE HELPS IN EARLY DETECTION	95	77.25%
4	EARLY DIAGNOSIS HAS GOOD PROGNOSIS	98	79.67%

The knowledge regarding the risk factors of breast cancer was poor; however, the knowledge that breastfeeding reduces the risk of breast cancer was known to 73.13% of them. (Table 3)

Table 3. Knowledge of the participants about risk factors for breast cancer.

SN	RISK FACTORS OF BREAST CANCER	YES	NUMBER (%)
1	HEREDITARY	21	17.07%
2	BREAST FEEDING DECREASES THE RISK	90	73.17%
3	OBESITY INCREASES THE RISK	30	24.39%
4	LATE PREGNANCY INCREASES THE RISK	37	30.08%
5	NULLIPARITY INCREASES THE RISK	28	22.76%

Among the 123 participants, all of them (100%) had heard about BSE and the source of information for a majority (43.9%) of them was training programs. 77 (66.60%) of them knew that it is necessary to do the self-examination every month; however, only 66 (53.65%) of them knew how to perform BSE. (Table 4)

Table 4. Knowledge of the participants about Breast Self Examination.

SN	QUESTIONS	YES	%
1	HEARD ABOUT BREAST SELF EXAMINATION	123	100%
2	SOURCE OF INFORMATION		
	a) TRAINING PROGRAM	54	43.9%
	b) MEDIA	12	9.7%
	c) SCREENING PROGRAM	28	22.8%
	d) Others*	29	23.6%
2	NECESSARY TO DO EVERY MONTH	77	66.60%
3	KNOW HOW TO DO BSE	66	53.65%

*Others – Friends, colleague, family members.

113 (91.8%) respondents had a positive attitude towards BSE and stated that it is necessary, 45 (36.5%) of them had done BSE before and among them 22 (17.88%) of them to examine their breasts regularly. 78 (63.4%) of them had not done BSE earlier because a majority of them (32.52%) did not know how to perform a BSE. 10 respondents (8.1%) had the attitude to not develop breast cancer in future while 58 (47.15%) opined that BSE is embarrassing and 59 (47.97%) of them stated that it is a good practice. (Table 5)

Table 5. Attitude of the participants Towards Breast Self Examination

QUESTIONS	NUMBER (%)
BSE is necessary *	
Agree	68(55.3%)
Strongly agree	45 (36.6%)
Disagree	10(0.8%)
Have you done BSE before	
If yes, why?	45(36.5%)
I might have breast cancer in the future	12 (9.7%)
To examine my breast regularly	22 (17.8%)
Doctors’ advice	11(8.9%)
Because of alarming symptoms	02(1.6%)
If no, why?	78(63.4%)
I don’t know how to do	40(32.52%)
I don’t have any symptoms	26(21.13%)
I am scared of being diagnosed with breast cancer	2(1.62%)
I can never have breast cancer	10(8.1%)
What is your opinion on BSE?	
Embarrassing	58(47.1%)
Painful	6(4.8%)
Good practice	59(47.9%)
Whom do you inform when u suspect breast cancer	
a)Friends/ relatives	16(13%)
b)Doctor	71(57.7%)
c) a and b	16(13%)

***Three-Point Likert Scale**

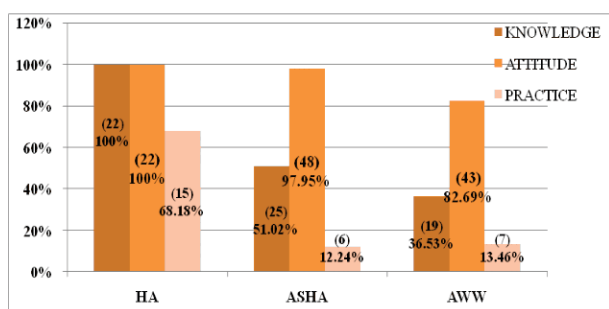
Even though 45 (36.5%) of them had practiced BSE only 28 (22.76%) of them were practicing BSE every month and a majority 20 (16.2%) of them were performing it within 5 days after menstruation each month. Out of the total 123 healthcare workers only 62 (50.40%) had advised the community regarding the practice of BSE. (table 6)

Table 6. Practice of BSE among the study participants.

QUESTIONS	NUMBER (%)
Do you regularly (every month) perform BSE?	
YES	28(22%)
When do you normally perform BSE?	
A regular day of each month	4(3.2%)
Within 5 days after menstruation	20(16.26%)
Not on a regular day of each month	4(3.2%)
Have you had a breast examination in the last 3 years	
Yes	55(44.7%)
Have you advised BSE to others	62(50.4%)

All the healthcare workers had heard of BSE. Out of 22 HA, all of them knew the method of performing the BSE and had a positive attitude towards it but only 15 (68.18%) of them were practicing it. Out of 49 ASHA workers, 25 (51.02%) had the knowledge, 48 (97.95%) had positive attitude but only 6 (12.24%) were practising it. Out of 52 AWW, 19 (36.53%) had the knowledge, 43 (82.69%) had good attitude but only 7 (13.46%) were practicing it. (Figure 1)

Figure 1. Comparison Of Knowledge, Attitude And Practice Of BSE Among Different Categories Of Healthcare Workers.



Discussion

Breast cancer is the most common type of cancer affecting women worldwide and its prevalence is increasing particularly in developing countries where the majority of cases are diagnosed in late stages. The low survival rates in less developed countries can be explained mainly due to the lack of early detection programs resulting in a high proportion of women presenting with late-stage disease, as well as by the lack of adequate diagnosis and treatment facilities (2).

Very few studies have been conducted in India related to breast self-examination among healthcare workers. Due to the lack of an international standardized questionnaire on KAP of BSE, the questionnaire used in this study has been obtained from a study done by Sujindra and Elamurugan (2015) on knowledge, attitude, and practice of breast self-examination among female nursing students (9).

In this study, it is found that 112 (91.05%) of the study subjects had heard of breast cancer whereas in the study

conducted by Sujindra and Elamurugan, 2015 (9), it was reported that all of them (100%) had heard of breast cancer, 99 (80.48%) of them knew that it is common in India which was consistent with the study done by Sujindra and Elamurugan, (2015). Here, 95 (77.25%) were aware that BSE helps in early detection of breast cancer while the earlier study had reported 89.2% of participants having awareness. Knowledge regarding the prognosis was good in our study which reported that 98 (79.67%) of them knew that early diagnosis had a good prognosis. Knowledge regarding risk factors of breast cancer was poor. However, the knowledge that breast feeding reduces the risk of breast cancer was high at 73.17%.

A majority (91.8%) of them had a positive attitude towards BSE and is in line with that reported by Sujindra and Elamurugan, 2015 who had reported it at 93.3%. In our study, 36.5% of them had done BSE earlier out of which 17.8% examined their breasts regularly. Performing SE out of fear of developing breast cancer was found to be true among 9.7% in this study compared to 84.4% in the study done by Sujindra and Elamurugan, 2015. In spite of having good knowledge about it, 47.1% of them stated that it was embarrassing to perform it; however, the study by Sujindra and Elamurugan, 2015, had reported this at 5%. However, 47.9% of them had a positive opinion about BSE stating that it is a good practice. Among our respondents, 63.4% had not performed a BSE earlier and a majority of them (51.3%) did not know how to perform a BSE.

In this study, 22% of them were performing BSE regularly each month and 16.26% of them were performing it within 5 days after menstruation. However, in the study by Sujindra and Elamurugan, 2015, 33.3% of them were practicing regularly and 63.3% of them were performing it on any day of the month. Almost half of the healthcare workers (50.4%) had advised others to perform BSE.

Conclusion

BSE is one of the most effective preventive health behaviour for the early detection of breast cancer. In our study, a majority of the healthcare workers had a positive attitude towards BSE; however, their

knowledge and practice have to be improved among ASHAs and AWWs by providing them training programs. Healthcare workers, being health advisers, need to be educated about breast cancer, BSE and other early detection methods so that cancer burden and late presentation of patients can be reduced with the corresponding improvement in outcome and survival. Evidence says that women who correctly practice BSE monthly are more likely to detect a lump in the early stage of its development, and early diagnosis has been reported to influence early treatment to yield a better survival rate (5).

Limitations

The study was conducted among a small sample of healthcare workers and we could not possibly include all healthcare workers from the given geographical area.

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