

# Knowledge, attitude and practice regarding breast self examination among female health personnel

Shrestha S<sup>1</sup>, Shrestha R<sup>2</sup>, Parajuli P<sup>3</sup>, Rana Khagi B<sup>4</sup>, Bhandari B<sup>5</sup>

<sup>1</sup>Santoshi Shrestha (Pradhan), Assistant Professor; <sup>2</sup>Roshanee Shrestha, Assistant Professor; <sup>3</sup>Puspa Parajuli, Assistant Professor, Kathmandu Medical College Public Limited; <sup>4</sup>Bina Rana Khagi, Assistant Professor, Lalitpur Nursing College, Lalitpur, Kathmandu; <sup>5</sup>Buna Bhandari, Assistant Professor, Tribhuvan University Institute of Medicine, Maharajgunj, Kathmandu.

## Abstract

**Background:** The knowledge, attitude and practice of Breast Self Examination is an important method of prevention of breast cancer which helps to detect the changes in early stage and delay seeking medical care. So female's knowledge, attitude and practice of Breast Self-Examination play a crucial role in the safeguard of their health.

**Objectives:** To assess the knowledge, attitude and practice regarding Breast Self Examination among female health personnel working in Kathmandu Medical College and Teaching Hospital.

**Methodology:** A cross-sectional study was conducted among 320 female health personnel to assess the knowledge, attitude and practice regarding Breast Self-Examination working in Kathmandu Medical College and Teaching Hospital using self administered structured questionnaire. Descriptive and inferential statistics was used to analyze the data using SPSS 16 Version.

**Results:** The findings revealed that the majority 232 (72.5%) of the respondents had average level of knowledge, 70 (21.9%) had poor level of knowledge and only 18 (5.6%) had good level of knowledge respectively. On the other hand, majority of the respondents 304 (95%) had good attitude whereas only 16 (5.0%) had poor attitude regarding Breast Self Examination. There was statistically significant association between knowledge and age, ethnicity and marital status ( $p < 0.05$ ). Attitude was associated with age, religion, profession and level of education ( $P < 0.05$ ). There was very weak correlation ( $r = 0.094$ ) between knowledge and attitude.

**Conclusion:** The study concluded that there was average level of knowledge regarding Breast Self Examination. Female's attitude towards Breast Self-Examination was positive though the practice was poor. Breast Self Examination is one of the most important techniques for screening and diagnosis in early stages. Therefore, the study highlights the need for educational programs to create awareness regarding Breast Self-Examination.

**Key words:** Attitude, Breast cancer, Breast self examination, Health personnel, Knowledge, Practice.

## INTRODUCTION

Today, cancer is one of the most serious diseases threatening human life, and therefore global burnout is gradually growing<sup>1</sup>. Breast cancer is the top cancer in women, both in the developed and in the developing world. The incidence of breast cancer is increasing in the developing world due to increased life expectancy, increased urbanization, and the adoption of western lifestyles. It is estimated that, worldwide, over 508,000 women died due to breast cancer in 2011<sup>2, 3</sup>.

Several risk factors for breast cancer have been well documented; however, for the majority of women with breast cancer, it is not possible to identify specific risk factors<sup>4,5</sup>. Nevertheless, some risk reduction might be achieved with prevention. World Health Organization (WHO) promotes breast cancer control within the context of comprehensive national cancer control programmes that are integrated into non communicable diseases and other related problems. Comprehensive cancer control involves prevention, early detection, diagnosis and treatment, rehabilitation, and palliative care<sup>6</sup>.

Breast Self Examination (BSE) is an important screening practice and a simple, economical, and noninvasive method for early detection of breast cancer. The best way to save female lives is to increase their awareness of the potential harms of breast cancer, to raise their level

### Address for correspondence

Ms. Santoshi Shrestha (Pradhan)  
Assistant Professor, Department of Nursing  
Kathmandu Medical College  
Sinamangal, Kathmandu  
E-mail: santushr@gmail.com, santushr@yahoo.com

of awareness about early warning signs, risk factors, and early detection procedures for this disease<sup>7</sup>.

BSE is an ideal, safe, effective and cost free method, which every woman can do at her leisure time with little training. BSE helps women to find their breast cancer at early stage<sup>8</sup>.

The five-year survival rate is 90% in the first stage, 75% in second stage, 50% in the third stage and <10% in the fourth stage of breast cancer. It is one of the simplest and most important health programmes to promote early detection. Regular BSE can identify any abnormal changes in breast. Early diagnosis affords a better chance of survival and better prognosis. At present a simple inexpensive and early implant for the detection of breast cancer is BSE<sup>9</sup>.

## METHODOLOGY

A cross sectional study was conducted to assess the knowledge, attitude and practice regarding Breast Self-Examination among 320 female health personnel including nurses, doctors and dentists working in different department of Kathmandu Medical College and Teaching Hospital. The study was carried out from January 2016 to June 2016. Ethical approval was taken from the institutional review board. Written informed consent was taken from each respondent. All the female health personnel were included who were available during the study.

Cross sectional study design was used to collect the data using non purposive sampling methods with self-administered structured questionnaire among 320 working female health personnel. The questionnaire consist of three sections (36 items on knowledge, 12 items on attitude, and 7 items on practice). The level of knowledge score is categorized on the basis of three sections which include Good, Average and Poor. The scores above 75% denote good level of knowledge, above 50% to 75% denote average level of knowledge and below 50% denote poor level of knowledge respectively. For knowledge items the answer is single response, for attitude items, 3-point Likert scale (Agree, undecided and disagree) and for practice (Yes, No) option was applied.

Data was edited, coded and analyzed by using Statistical Package for social Sciences (SPSS) 16 version. Categorical variables were described using frequency distribution and percentages. Continuous variables were expressed

by means and standard deviations. Chi-square test was used for analysis of association between demographic and other variables with knowledge, attitude and practice of BSE. Pearson's correlation coefficient was used to see the correlation between knowledge and attitude. P-value of <0.05 was considered statistically significant.

## RESULTS

The findings of the study reveals that, the majority of the respondents 147 (46%) were between the ages of 20-25 years, most of them 285 (89%) were of Hindu religion whereas 176 (55%) were married. The majority of the respondents 136 (42%) have completed bachelor level, 124 (39%) have passed certificate level, 54 (17%) have completed masters level and only 6 (2%) have completed PhD level. Regarding working experience more than half of them 169 (52.81%) had 1-3 years working experience followed by 92 (28.75%) 3-6 years 24 (7.5%) had 9 years working experience. Almost (94.7%) had no history of breast cancer patients in family where as only 17 (5.3) had history of breast cancer patients in family.

Two third of the respondents 232 (72.5%) had average level of knowledge, followed by 70 (21.8%) had poor level of knowledge and only 18 (5.6%) had good level of knowledge (Table 1).

Most of the respondents 304 (95%) had positive attitude where as only 16 (5%) had negative attitude regarding BSE (Table 2).

Most of the respondents 290 (90.63%) performed BSE where as only 30 (9.37%) respondents do not perform BSE. Regarding correct steps of BSE more than half of them 161 (55.52%) were doing incorrectly where as only 129 (44.48%) were doing correctly of step I. more than one third of respondents (83.79%) were using correct methods of step II. Whereas more than half were 170 (58.63%) using correctly the step III and more than half 148 (51.04%), were doing correctly the steps IV and 82% were following correct steps of V. (Table 3).

There is significant association exist with age, ethnicity and marital status with knowledge of Breast Self-Examination among female health personnel. (Table 4).

There is significant association with age, religion, profession and level of education regarding attitude with demographic variables respectively. (Table 5).

**Table 1: Knowledge level of the respondents regarding Breast Self Examination (n= 320)**

Knowledge level of the respondents	Respondents	
	Frequency	Percentage
Good level of knowledge (More than 75%)	18	5.6
Average level of knowledge (50% to 75%)	232	72.5
Poor level of knowledge (Less than 50%)	70	21.9
Mean $\pm$ SD	20 $\pm$ 3.722	

**Table 2: Attitude of the respondents regarding Breast Self Examination (n=320)**

Attitude	Respondents	
	Frequency	Percentage
Positive attitude (More than (50%))	304	95
Negative attitude (Less than 50%)	16	5.0

**Table 3: Practice of the respondents regarding Breast Self Examination (n=320)**

Characteristics	Category	Frequency	Percentage
Perform BSE	Yes	290	90.6
	No	30	9.37
Frequency of BSE	Monthly	74	25.5
	Half Yearly	66	22.75
	Yearly	150	51.72
<b>Following correct steps of BSE</b>			
Step I	Correct	129	44.48
	Incorrect	161	55.52
Step II	Correct	243	83.79
	Incorrect	47	16.21
Step III	Correct	170	58.63
	Incorrect	120	41.37
Step IV	Correct	142	48.96
	Incorrect	148	51.04
Step V	Correct	238	82.07
	Incorrect	52	17.93

**Table 4: Association between Knowledge and demographic variables**

Characteristics	Category	Level of Knowledge			P value
		Good	Average	Poor	
Age	20-25 years	3	106	38	0.040
	25-30 years	10	76	23	
	30-35 years	2	33	8	
	35-40 years	3	17	1	
Religion	Hindu	18	208	59	0.158
	Christian	0	7	6	
	Others	0	17	5	
Ethnicity	Brahmin	8	73	8	0.013
	Chhetri	5	62	25	
	Newar	5	57	27	
	Others	0	39	10	
Marital status	Married	14	116	46	0.045
	Unmarried	4	114	24	
	Divorced	0	2	0	

Table 4 cont ...

Profession	Nurse	15	192	61	0.107
	Doctor	3	34	4	
	Doctor (Dental)	0	6	5	
Level of Education	Certificate Level	3	92	29	0.310
	Bachelor	7	105	24	
	Masters	7	31	16	
	Phd Level	1	4	1	

**Table 5: Relationship of Attitude with demographic variables**

Variables	Category	Attitude of the Respondents		P value
		Positive attitude	Negative attitude	
Age	20-25 years	136	11	0.016
	25-30 years	107	2	
	30-35 years	43	0	
	35-40 years	18	3	
Religion	Hindu	274	11	0.011
	Christian	12	1	
	Others	18	4	
Ethnicity	Brahmin	87	2	0.461
	Chhetri	88	4	
	Newar	84	5	
	Others	45	5	
Marital status	Married	163	13	0.095
	Unmarried	139	3	
	Divorced	2	0	
Profession	Nurse	257	11	<0.001
	Doctor	41	0	
	Doctor (Dental)	6	5	
Level of Education	Certificate Level	116	8	0.034
	Bachelor	134	2	
	Masters	48	6	
	Phd Level	6	0	

## DISCUSSION

The study revealed that there was wide gap between knowledge and attitude regarding BSE. With the incidence of breast cancer rising, and also absence of any established breast screening in developing country, it becomes important to assess the knowledge, attitude and practice regarding BSE among female.

The present study showed that the majority of the respondents 72.5% had average level of knowledge and most of them 90.63% performed BSE which is supported by the study conducted to explore the knowledge and practice of nurses regarding BSE in the United Arab Emirates showed that the high proportion, 84.4% of the respondents, reported performing BSE. The results point out that the nurses have a satisfactory knowledge regarding BSE and this is shown in their practice of BSE<sup>10</sup>.

Likewise the study found that 90.63% performed BSE where as only 9.37% respondents did not perform BSE. In contrast to the study conducted in a group of 120 women in a rural area in western Turkey revealed that 59.1% of the participants indicated they had never performed BSE<sup>11</sup>.

One quarter of our study population were performing the BSE in monthly basis, 22.75% in half yearly and more than half performed BSE in yearly respectively. This is contrast with the study conducted in a age group (20-64 years) of 120 women in a rural area in western Turkey showed that 35% reporting performing BSE monthly, 12.5% performing it 6-monthly and 12.5% performing it yearly<sup>12</sup>.

There was statistically significant association between knowledge and age ( $p=0.040$ ), ethnicity ( $P=0.013$ ) and

marital status ( $p=0.045$ ). Moreover, the study showed around two third of them, 72.5% had average level of knowledge, 21.9 % had poor level of knowledge and 5.6% had good level of knowledge respectively. The majority of the respondents 95% had good attitude whereas only 5.0% had poor attitude regarding BSE. Among the respondents the majority 83.79% followed the correct II steps of BSE. There is very weak positive correlation between knowledge and attitude regarding BSE among health personnel.

The finding of the study was similar with the study conducted to investigate the knowledge, attitude and practice of BSE among female medical students in University of Lagos to assess the level of their knowledge about breast cancer, attitude and their practice of BSE. Most of the respondents, 85.8% knew how to perform BSE correctly. Only 65.4% of the respondents thought that BSE was necessary. 43.5% of the respondents said that the last time they performed BSE less than a year ago. Majority of the respondents, 69.6% preferred to perform BSE in the morning while 47.7% of the respondents preferred to carry out BSE in front of the mirror. The study

concluded that there was a high level of awareness of breast cancer and BSE among the respondents. Though their attitude towards breast cancer and BSE was fair the practice of doing Breast Self-Examination was poor<sup>13</sup>.

## CONCLUSION

The study concluded that there was average level of knowledge regarding BSE. Their attitude towards BSE was positive though the practice was poor. BSE is one of the most important techniques for screening and diagnosis in early stages. Therefore, the study highlights the need for educational programs to create awareness regarding BSE to increase practice. Sensitization campaigns using the audiovisual media and other programs designed to create awareness about BSE should be intensified in order to have regular practice in the prevention of breast cancer.

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