

## Knowledge of Breast Self-Examination among LHV's and Female Nursing Students of KP

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### Abstract

### Original Research Article

**Background:** BSE is cheap and non-invasive method of breast cancer detection. Breast cancer is most common cause of death in women worldwide. Early diagnosis can lead to effective treatment and improves the quality of life. **Objective:** This study was performed with aim to determine the knowledge of LHV's and undergraduate female students of BSN regarding Breast Self-Examination. **Method:** This is cross sectional study, was performed on 58 LHV's and undergraduates students of BSN of RCN, PHI and RTI. Data was collected by using a self-adopted questionnaire and was analyzed by SPSS software (version 22). **Results:** Among 58 students, (53.4%) participants have good knowledge, 44.8% have excellent knowledge and 1.7% has poor knowledge. (51) 87.9% were practicing BSE, (2)3.4% were not practiced it and the remaining 8.60% were missing. There is no significant association between variables. There is good breast self-examination awareness in students. **Conclusion:** BSE is cheap and noninvasive tool to identify any abnormality in breast and also help to detect early sign of breast cancer. Teaching nursing students regarding BSE helps them to receive gain more knowledge and to disseminate the information in community in future.

**Keywords:** BSE, breast cancer, women.

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## INTRODUCTION

Breast cancer starts when cells in the breast begin to divide and go in an abnormal way. Furthermore, the term breast cancer refers to a malignant tumor that is developed from cell in the breast. Breast cancer starts when cells in the breast begin to divide and go in an abnormal way. About 1(12%) in 8 women in the United States are reported to have developed breast cancer over the entire life [1].

Breast cancer is one of the leading causes of death in Pakistan. It is about 100 times frequent among women as compared to men [2]. It is the most common invasive cancer in women, and the second main cause of cancer death in women, after lung cancer [3]. Cancer is classified into various stages according to size and spread of tumor to lymph nodes or other parts of the body. The stages are briefly given below:

Stage 0: It is known as ductal carcinoma. The cells are limited to duct.

Stage 1: At this stage, tumor is up to 2cm, and it has no affected surroundings.

Stage 2: The tumor is 2cm across, and it has started affecting the nearby nodes.

Stage 3: The tumor is up to 5cm across, and it may be spread to some lymph nodes.

Stage 4: The cancer is spread to other organs especially liver, brain or lungs.

The exact cause remains unclear, but there are some risk factors which lead to breast cancer. Age, genetics, dense breast tissue, estrogen exposure, alcohol consumption, radiation exposure and hormonal therapy might be one of the causes for cancer [4].

Identification of breast cancer at an early stage is of great importance that helps in decreasing morbidity and mortality rate. A 95% survival rate can be achieved when breast cancer is identified with early stage [5].

A self-breast examination is a method that is performed by a female to identify any abnormal changes in the breasts (e.g.) tumor, lump or cyst. It can be performed every month and it helps women to become familiar with the size, shape and texture of her breast.

Women who perform breast self-examination had more perceived benefits than women who do not perform it. Breast Self-examination (BSE) provides a relatively simple, low cost method of early detection that can be performed more frequently than mammography or clinical examination. Monthly BSE has been reported to be effective in detecting the early symptoms of breast cancer which, in turn, greatly reduces mortality from breast cancer [6].

Breast cancer has been considered as a major health problem in females, because of its high incidence in recent years. Due to the role of breast self-examination (BSE) in early diagnosis and prevention of morbidity and mortality rate of breast cancer, promoting student knowledge, capabilities and attitude are required in this regard. Although, American Cancer Society do not recommend SBE as a powerful screening measure for diagnosis of breast cancer [7], it still can increase the awareness about BC and alert the women and the physician about the need to perform more advanced screening measure, especially women with positive family history of breast cancer [8]. Study conducted in Korea by about knowledge, attitude and practice of obstetric nurses in relation to breast cancer and self-breast examination resulted that 99% participants thought self-breast examination is important; however, only 58.9% practiced self-breast examination [9]. The nurses who had the knowledge of self-breast examination were found superior in attitude and practice to those who had no knowledge.

Clarke and Savage reported that BSE can be taught by a variety of professionals including nurses, physicians, trained peer educators, researches and graduate students without major differences. Heyman *et al.* found that a program of instruction improved the abilities of nurses to teach SBE to their patients [10]. A study in Southeastern Iran Shows that Only 21.6% of women had good knowledge about BSE. Research on female health care workers in Tehran about the subject matter shows that 63% of the participants know about BSE and in Turkey more than half of the nursing and midwifery students had sufficient information about BSE. In Ilorin Nigeria, 95.6% of respondents were aware of BSE, 66.5% of Sudanese students know about BSE.

In a study conducted on Beliefs and Behavior of Saudi Women in the University of Tabuk towards Self-Breast Examination practice shows that only (7.8%) practiced BSE regularly each month in the past year, and (9%) is intended to perform BSE monthly in future[11].

A cross-sectional descriptive study was carried out on "Breast Self-Examination Knowledge and Practice among Newly Diagnosed Patients of Carcinoma Breast" at Outpatient department of General surgery in Pakistan Institute of Medical Sciences,

Islamabad. One hundred ninety-one patients were included in the study, Result showed significant relationship ( $p < 0.05$ ) between knowledge and practice of BSE with age, marital status, education level, living area and socioeconomic status [12].

The nurses and LHV's have a role for health promotion and nature of the nurse client relationship that provides opportunities for health education. LHV's and Nurses students require much information as possible about women's health behaviors for development of effective health programs such as self-breast examination.

If nursing professionals were aware of importance of doing BSE then they may give information or education in Primary Health Care services. This will allow women to know the normal and abnormal changes of breasts and help in early detection of breast cancer and will decrease the mortality rate of women due to breast cancer and there will also decrease in disease burden on government.

## METHODOLOGY

### Study design

Cross sectional study was conducted to assess the knowledge of BSE among LHV's and female nursing students.

### Study setting

The study was conducted in three academic settings of Peshawar KPK: Public Health Institute (PHI), Regional Training Institute (RTI) and Rehman College of Nursing (RCN). These institutes provide education to LHV's and nursing students.

### Study population

Study population included LHV's and female nursing students.

### Sample technique and size

Convenient sampling method was applied to obtain target sample from selected institutes. The sample size was 60.

### Inclusion and exclusion criteria

Only female students present in the classes during data collection and want to participate in the study were included.

### Data collection tool

A questionnaire was adopted from study about Knowledge and beliefs of breast self-examination and breast cancer among market women in Ibadan [13]. It included questions based on knowledge of BSE. The data collection process was carried by female students of nursing during their research training course of academic phase.

**Ethical consideration**

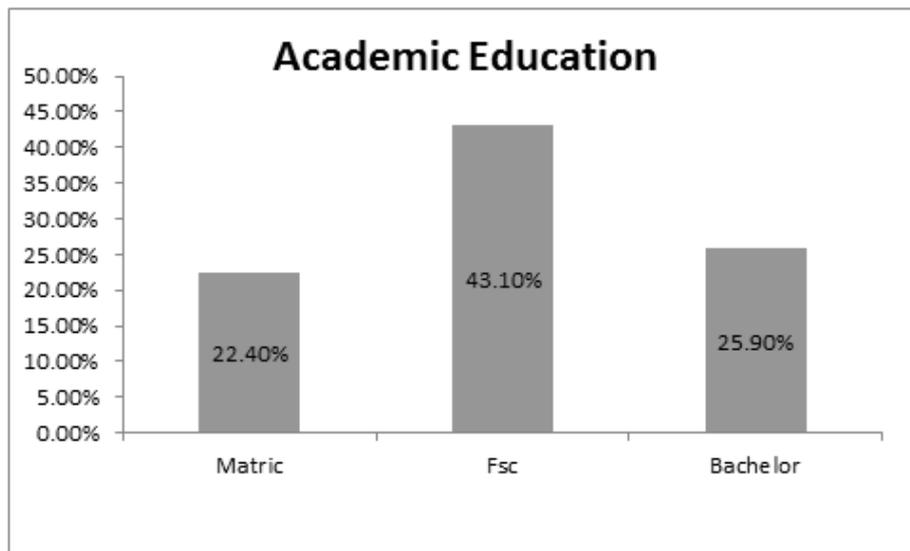
Approval for data collection was obtained from the director/ principles of selected institutes. Written consent was also obtained from students as mentioned above, anonymity and confidentiality is assured.

**RESULTS**

Total 58 subjects were participated in the study. Among which [15] 25.9 % were married (38

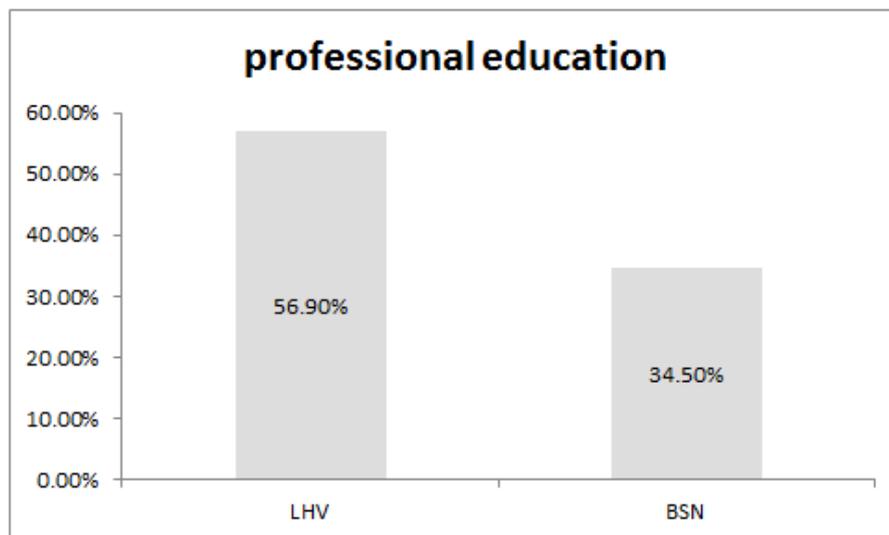
65.5% were unmarried while [5] 8.6% did not mention their marital status.

The age of the participants' was 19-53 years. The mean was 29.21 with S.D 11.364. According to academic education 22.40% participants were matriculated, 43.10% were intermediated and 25.90% were bachelors as shown in the paragraph below:



**Fig-1**

Regarding professional education 56.90% were LHV students and 34.50% were undergraduate students of BSN.



**Fig-2**

In motherhood (14) 42.1% have their children and (39) 67.2% have no children.

Among all the participants, 87.9% were performing BSE, 3.4% were not performing. The

participants were categorized in to poor, good and excellent categories based on their knowledge regarding SBE.

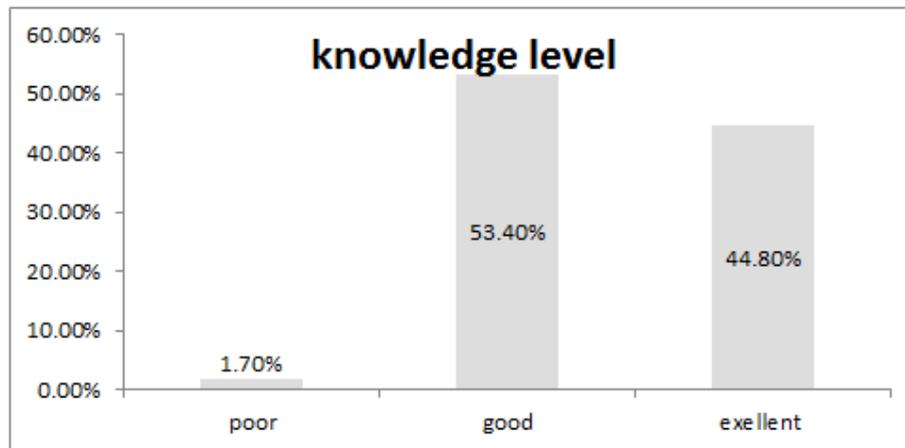


Fig-3

Those who have their children are 24.10% and those who have not children is 67.20%. Mean score in the knowledge part of the questioner is  $1.701 \pm 10.02$ .

ANOVA, T test and regression were applied to identify any significant association between variables but no significant association was noted.

## DISCUSSION

The study was aimed to identify the knowledge of BSE among LHV and female nursing students. The knowledge score of this study shows that (53.4%) participants have good knowledge, 44.8% have excellent knowledge and 1.7% have poor knowledge. A study in Nigeria shows that 45.7% of the population has good knowledge [13]. Study on female students in Erbil Medical Technical Institute in Kurdistan Region -Iraq found that only 4.3% of the participants had a good level of knowledge, and only 6% had a good level of practicing BSE [14].

The practice of Self Breast examination in this study shows that (51) 87.9% were performing BSE and those who were not performing BSE were 3.4% and the remaining 8.60% were missing and most of the participants reported that they had heard about BSE, and nearly half of them have good knowledge about BSE. This result is similar to another study conducted in the University of Tabuk at Saudi Arabia where (95.5%) reported that they have heard about BSE from different sources like TV, radio and newspaper etc [15]. A research carried out among female undergraduate students in a higher teachers training college in Cameroon regarding awareness of breast cancer and breast self-examination shows that 47% of the subjects who knew about breast cancer had heard about breast self-examination (BSE). Majority ( $n = 47$ , 32.9%) did not know how often BSE should be performed while [16].

Current study result regarding practicing of BSE is also similar to another study conducted on

obstetric nurses in Korea in 2011 by Kim and Park. They suggested that 58.9% practiced self-breast examination. Furthermore a study was carried out in Jordanian university female students and were assessed using regression analysis which showed positive relationship between confidence and BSE performance.

## CONCLUSION

BSE is a cheap and noninvasive tool to identify any abnormality in breast and also help to detect early sign of breast cancer. Teaching nursing students regarding BSE helps them to receive gain more knowledge and to disseminate the information in community in future.

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