

## Original Article

## BREAST SELF EXAMINATION AWARENESS AND PRACTICES AMONG LADY HEALTH WORKERS

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**Objective:** To find out the awareness and practices regarding breast self examination (BSE) among the lady health workers of Tehsil Arifwala, Dist. Pakistan, Punjab.

**Methods:** A cross sectional study was conducted to find out the awareness and practices of Breast self examination among the lady health workers of Tehsil Arifwala, district Pakpattan, Punjab. 300LHW's fulfilling the inclusion criteria were selected through consecutive sampling technique. Information was collected regarding awareness and practices of BSE through interview on questionnaire covering all variables. The BSE practices of LHW's were determined on two criteria:

1. No. of BSE steps performed (categorized as 'average' for performing >2 steps and 'below average' for performing one or two steps.
2. Interval of BSE (categorized as 'correct' for regular monthly interval and 'incorrect' for >1 month interval.

Data was entered and cleaned using Epi data 3.1 and analyzed using Epi info 3.5.1

**Results:** Mean age of participants was  $32.06 \pm 7.8$  years. Majority were married (79%), rural dwellers (64.3%), had job experience upto 5 years (55.3%) and were educated above middle (53.7%). Majority 280 (93.3%) were aware of breast self examination but only 80 (28.5%) were practicing it. Out of 80 who were performing BSE, 34 (12.1%) were practicing BSE at correct interval and only 46 (16.4%) were practicing average steps. Significant relationship was found between the age and awareness while higher levels of job experience had a significant relationship with BSE practice.

**Conclusion:** The awareness level of LHW's regarding BSE was relatively high as compared to their practices of BSE. As the LHW has a direct link with the community, there is a need to organize training courses for LHW's regarding correct BSE practices. Special emphasis should be paid to timeliness and steps of the procedure so she can provide proper information to community for early detection of breast cancer.

**Key words:** BSE: Breast self examination, LHW: Lady health worker, CA breast: Breast cancer

### Introduction

Breast cancer is a global health issue and a leading cause of death among women internationally<sup>1</sup>. With 1 million new cases in the world each year, it is the commonest malignancy in women and comprises 18% of all female cancers.<sup>2,3,4</sup> Breast cancer incidence rates are increasing in most regions of the world, especially in the developing nations.<sup>5</sup>

The incidence of breast cancer in Pakistani women is higher than the women in neighboring countries like India and Iran.<sup>1,6</sup> Around 90,000 cases are estimated to occur annually with a resultant 40,000 deaths each year.<sup>7</sup> Reasons for increase in incidence of breast cancer in the developing world include increased life expectancy, urbanization and adoption of western lifestyles. Although some risk reduction might be achieved with prevention, these strategies cannot eliminate the majority of breast cancers that develop in low- and middle-income countries where breast cancer is diagnosed in very

late stages. Therefore, early detection of breast cancer via screening methods is the cornerstone for improving outcome and long term survival.<sup>8</sup> Currently there are three methods of breast cancer screening recommended by American Cancer Society and National Cancer Institute 1991. (a) Breast self examination (BSE) (b) Clinical Breast examination (C) mamm- ography<sup>9,10</sup> As facility of mammography is not readily available to each and every women in Pakistan and is expensive as well, therefore Breast Self Examination is more convenient and can be done easily by the females themselves. Therefore, females should be given the proper knowledge and awareness of breast self examination as it is very easy to perform at home and can be helpful in the diagnosis and treatment of breast cancers at an early stage.<sup>11</sup> There are five steps of breast self examination which include observation of any change in skin, any discharge from nipples and gentle palpation of both breasts in standing and sitting postures.

As recommended by American Cancer Society and National Cancer Institute, all the five steps should be practiced at correct interval i.e., every month. According to WHO, women older than 20 years should perform monthly breast self examination after their periods have ended. Postmenopausal women should perform the breast self examination on the same day of each month<sup>12,13</sup>.

Majority of Pakistani breast cancer patients present late due to lack of availability of screening tools and lack of awareness. Lady health worker is a community based care provider attached with national programme for family planning and primary health care. She holds a pivotal role in providing correct information to the females in the community. In our socioeconomic set up the only feasible solution to promote early detection of breast cancer is to create breast cancer and BSE awareness among female population through health education by LHWs. Evidence indicates that if diagnosed early through methods of breast cancer screening the cure rate may increase up to 97%<sup>14, 15</sup>. However the Lady health worker Programme has not yet launched training courses of LHW's regarding importance of performing correct steps of BSE at monthly interval. Hence the LHW in Pakistan is lagging behind in providing correct information of BSE to the community.

The aim of this study was to determine the knowledge and practices of LHWs regarding BSE working in Tehsil Arifwala, for earlier detection of breast cancer.

## Materials and Methods

A cross sectional study was conducted among LHWs of Tehsil Arifwala, district Pakpattan, Punjab in July 2011. 300 LHW's fulfilling the inclusion criteria were selected through consecutive sampling technique.

The questionnaire consisted of sociodemo- graphic variables, knowledge and practices of BSE, Demographic variables of LHW's included age, education, rural or urban background, job experience, marital status,. Source of knowledge was also recorded. . The BSE practices of LHW's were determined on two criteria:

1. No. of BSE steps performed (categorized as 'average' for performing >2 steps and 'below average' for performing one or two steps.
2. Interval of BSE (categorized as 'correct' for regular monthly interval and 'incorrect' for >1

month interval.

Permission for carrying out the research was taken in advance from concerned authority . Informed consent was taken from every LHW included in the study. Data was collected through female interviewer who was trained to carry out the research process.

Data was entered and cleaned using Epi data version 3.1 and data was analysed using Epi info version 3.5.1. Frequency tables were generated for all possible variables. Means and other parameters of central tendency were calculated for quantitative data. Chi square was applied to find out deviation between categorical variables and statistical significance was decided at cutoff value of  $p < 0.05$ . The privacy and the confidentiality of the information was ensured and maintained.

## Results

In this study 300 Lady Health Workers of Tehsil Arifwala were interviewed. Lady Health Workers belonging to age group above 30 yrs were 59%. The mean age of LHW's was 32.066 years and standard deviation was 7.880. Most of LHW's 193 (64.3%) were with rural background and 239 (79.7%) were married. LHW's having above middle education were 161 (53.7%). Those LHW's having job experience up to 5 years were 166(55.3%). The mean job experience of LHW was 5.986 years and standard deviation was 3.5809 as shown in **table 1**.

The results showed that 280 (93.3%) LHW's were aware of BSE . Out of 280, only 34(12.1%) LHW's were practicing BSE at correct interval, whereas majority 246(87.9%) were practicing it at incorrect interval. Moreover, it was observed that only 46(16.4%) were at average level of practicing steps of BSE while majority 234(83.6%) were below average level of practicing BSE as shown in **table 2**

The comparison of awareness of BSE with age of LHW showed that among LHWs who were above 30 years 99.6% were aware, while those between 20-30 years, 88.6% were aware of BSE. P value was 0.012 which was significant. Comparison with job experience showed that among LHWs having job were doing BSE practices at correct interval. P value was 0.012 which is significant. However age, background, marital status and education of LHW were not significantly related with BSE practices.

## Discussion

Breast self examination (BSE) provides an

**Table-1:** Frequency distribution of Socio demographic characteristics of lady health workers n = 300.

Characteristics		Frequency	Percentage
Age Group	20-30 Years	123	41%
	Above 30 years	177	59%
Background	Rural	193	64.3%
	Urban	107	35.7%
Job experience	Upto 5 years	166	55.3%
	Above 5 years	134	44.7%
Marital status	Married	239	79.7%
	Unmarried	61	20.3%
Education of LHW	Uptomiddle	139	46.3%
	Above Middle	161	53.7%

**Table-2:** Awareness and Practices of Breast Self Examination Among lady health workers n=300.

Characteristics		Frequency	Percentage
Awareness	Aware	280	93.3%
	Unaware	20	6.7%
Practices at	Correct interval	34	12.1%
	Incorrect interval	246	87.9%
BSE Steps scoring	Average (>2 steps)	46	16.4%
	Below average	234	83.6%

**Table 3:** Comparison of Socio demographic characteristics with Knowledge of lady health workers regarding breast self examination. n = 280

Socio Demographic Characteristics	Awareness of BSE				P-value
	Yes Frequency	Percentage	No Frequency	Percentage	
Age Group 20-30	109	88.6	14	11.4	0.012
Above 30 years	171	96.6	06	3.4	
Background Rural	182	94.3	11	5.7	0.509
Urban	98	91.6	09	8.4	
Marital Status Unmarried	234	91.8	15	8.2	0.38
Unmarried	56	93.7	05	6.3	
Education of LHW Uptomiddle	154	90.6	07	9.4	0.133
Above Middle	126	95.7	13	4.3	
Upto 5 years	129	91.0	05	9.0	0.052
Above 5 years	151	96.3	15	3.7	

**Table 4:** Comparison of Socio demographic characteristics with Knowledge of lady health workers regarding breast self examination. n = 280

Socio Demographic Characteristics	Awareness of BSE				P-value
	Yes Frequency	Percentage	No Frequency	Percentage	
Age Group 20-30	25	8.3	146	91.7	
Above 30 years	09	14.6	100	85.4	0.1609
Background Rural	24	13.2	158	86.8	
Urban	10	10.2	88	89.8	0.591
Marital Status Unmarried	28	10.7	196	89.3	
Unmarried	06	12.5	50	87.5	0.890
Education of LHW Uptomiddle	22	9.5	132	90.5	
Above Middle	12	14.3	114	86.7	0.303
Upto 5 years	23	7.3	106	92.7	
Above 5 years	04	17.8	240	82.2	0.012

inexpensive method for early detection of breast tumors. Thus awareness and practices at correct and regular interval could protect women from morbidity and mortality due to breast cancer. This study was conducted among lady health workers of Tehsil Arifwala, district Pakpattan, province of Punjab to find out their awareness and practices regarding BSE. Relationship of sociodemographic factors with awareness and practices of breast self examination was also observed.

The mean age of participants in this study was 32.063 years which is comparable with the study of SI Gilani et al<sup>11</sup> (32.39 years). Whereas the mean age in a Nigerian study was 37.3 years<sup>16</sup>. Majority (64.3%) LHWs had rural background and most of them (79.7%) were also married. Most of the LHWs were having educational status above middle level (53.7%) although the required educational level for the recruitment of LHW is middle. The mean job experience of LHW in our study was 5.98 years. The marital status of LHW depicts the cultural practices of rural Pakistan where females get married at early age. The level of awareness of BSE among the participants in this study was 93.3% which was quite high and depicts their positive health behavior. It was also comparable to a Nigerian study in which the level of knowledge was 84.6%<sup>9</sup>. The practising of BSE in terms of correct interval (16.4%) and steps (12.1%) was alarmingly low in this group of LHW's. Also, comparable results were found in similar studies on health care workers in other developing countries like 39% Nigerian<sup>9</sup>, 6% Iranian<sup>17</sup> and 10% Egyptian<sup>18</sup> health workers were

practicing BSE monthly. However, higher results were observed in a study conducted in Holyfamily hospital, Rawalpindi in which 28.3% Pakistani females were practicing BSE. Most of these females were educated and urban residents.<sup>11</sup>

The proportion of LHWs (87.9%) who did not practice BSE properly, were either practicing BSE at 3 to 6 months interval or even a year. Similar was the finding in Nigerian health workers study<sup>9</sup> in which 50% workers practiced BSE as recommended monthly, some 11.25% practiced it quarterly, 22.55% practiced it every six months and the remaining ones practiced it occasionally 10% and annually 6.25%. Breast cancer Ireland society conducted a national survey and stressed that BSE should be performed at regular intervals and at same time every month so that the females know what is normal for them and can detect changes early.<sup>19</sup> It was found that increasing age, getting married, having above middle education and having job experience above five years, (p value 0.00006), were the factors which made the participants more knowledgeable, their performance of steps of BSE And its interval also improved. Therefore, a criteria for recruitment of LHW can be made by the Government that LHW should be married and educated up to matriculate. In studies performed in developed and developing countries, upon health personnel or the society, rates for BSE ranged from 6% to 95%.<sup>10,20-23</sup> In developed countries with a higher awareness for breast cancer, rates were higher.<sup>24</sup> The study revealed that health workers had awareness and do perform BSE, but the rates of those that do so

on a regular basis is low. This finding demonstrates the desire among this population to acquire correct knowledge regarding BSE. Also, this finding brings to light that if awareness and health education programs are conducted for LHW's, it might result in negative behaviors changing to positive healthy practices. BSE is an easily applied, cheap, and effective method for early breast cancer detection. It is vital to update LHW's with correct technique and interval of BSE so they impart correct knowledge to females.

## Conclusion

The results of this study demonstrate a disparity between high levels of knowledge of BSE compared

to a low level of practice among the lady health workers. Further, the practices are not proper as complete steps are not performed and not done at correct interval.

There is a need to organize training programmes for LHWs about BSE steps and correct interval so as to reduce the knowledge-practice gap. Considering the role that lady health workers may play in communicating health behaviors to the general public, planning health education interventions for this group of females is essential.

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