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Knowledge and awareness regarding breast self-examination among female health workers in a rural block in Himachal Pradesh

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Abstract
Breast cancer is the second most common cancer among women in India. It is located at an easily identifiable site, because of which it can be diagnosed early and treated. AIM: this study was undertaken to assess the awareness of female health workers regarding breast cancer and breast self-examination (BSE). Material and method: a cross-sectional study was carried out in a rural block of Himachal Pradesh among 56 female health workers in the age group of 20-58 years through a structured questionnaire. Results: 46% of the women were in the age group of 41-50 years of age and all of them were educated. All of the study subjects were well aware of breast cancer, but only 71% were aware of the importance of early detection. Only 34 out of 56 women knew about breast self-examination and only 11 were practicing it. But none of the female health workers were aware of the proper technique and interval of breast self-examination. Hence, training programs are needed for female health workers to enhance their knowledge of BSE, which will increase awareness among rural women as well.

Keywords: Breast cancer, BSE, female health workers

Introduction
Breast cancer is one of the most common cancers among females. It is a major health concern, both in developing and developed countries [1]. breast cancer affects over a million women each year. Its site, which is easily noticeable is a reason for early detection and treatment [2].

Breast cancer is thought to be a disease of the developed world, but 50% of the cases are found in developing countries [3]. In India, breast cancer is the second most common cancer among females. Over 80000 cases are reported annually. In the present scenario, 1 in every 26 women are expected to be detected with breast cancer in their lifetime [4].

The factors associated with increased incidence are early menarche, late menopause, late age at first childbirth. Exogenous hormone replacement therapy and use of combined oral contraceptive pills are also a risk factor. Breast feeding exerts a protective effect [3, 5].

Other important risk factors for development of breast cancer are gender, age and genetics. Since, these factors are non-modifiable, regular screening is recommended to allow early detection and thus prevent death from breast cancer. Regular screening includes: 1) breast self-examination (BSE), 2) clinical breast examination and 3) mammography [6]. Early detection leads to 'down-staging' to stages that are more curable [7].

Breast self-examination is an important tool particularly in low resource settings where access to clinical breast examination and mammography is limited. Hence, knowledge of women regarding BSE, their attitude and practices plays a crucial role in ensuring early detection and timely cure of breast cancer.

Method of study
The present study was undertaken among female health workers in a rural health block of Himachal Pradesh. 56 female health workers between the age group of 20-58 years were included in the study. During the monthly meetings of these health workers, a cross-sectional study was undertaken in the months of May and June 2021. A pre-structured questionnaire was used to assess their knowledge, attitude and practices regarding breast self-examination. The opportunity to educate them regarding this was also used.

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Inclusion criteria
1) Female health workers between 20-58 years of age without any chronic disease.
2) Workers who were willing to participate in the study.

Exclusion criteria:
1) Women who had undergone mastectomy or had any other chronic medical condition.

Statistical analysis: was done using Open EPI software 2.0

Results
56 female health care workers were enrolled in the study after informed consent. The highest number of women were in the age group of 40-50 years of age. All of them were married and had one child at least. All of them were educated up to higher secondary level and above.

Table1: Demographic variables of the study group

Demographic variable	N (%)
Age (years)	
20-30	0
31-40	16 (28.46%)
41-50	26 (46.37%)
51-58	14 (25%)
Marital status	
Married	56 (100%)
Unmarried	0
Literacy level	
Illiterate	0
Higher secondary	12 (21.4%)
Graduate	40 (71.4%)
Post graduate	4 (7.1%)

Table 2 represents the awareness of the subjects towards breast cancer and breast self-examination. All 56 female health workers were aware of breast cancer. 71% of these were aware of the importance of early detection of breast cancer. But only, 34 women out of 56 were aware about breast self-examination. None of the study subjects knew all the steps of breast self-examination. When asked about practicing breast self-examination, only 11 women were practicing it, that too without complete knowledge of the method.

Table 2: Knowledge of breast cancer and BSE

Variable	N (%)
Aware of breast cancer	56 (100%)
Importance of early detection	40 (71%)
Breast self-examination	34 (60.7%)
Aware of all steps of BSE	0
Practicing BSE	11 (19.6%)
Practicing using correct method	0

Discussion
This cross-sectional survey was conducted among 56 female health workers of a rural block in Hamirpur district of Himachal Pradesh, with the aim of assessing knowledge about breast cancer and breast self-examination. Age wise distribution of respondents revealed that highest number of women were in the age group of 41-50 years of age (46.3%). These findings were different than the study conducted by Anita Punia in Haryana, where the study population was mostly 20-25 years of age [8]. All the women were working and were educated above higher secondary level. These findings were also different from other

studies [8, 9]. Out of 56 study subjects, all of them were aware of breast cancer, and 71% were aware of early detection. These numbers were much higher than the study conducted by Anita punia8. This difference is probably there because our study group comprises of educated health workers. In the present study 60% women were aware about BSE, which is higher than Kommula *et al.* [10]. Though no one in the present study was aware of the correct method of BSE, which is similar to studies by Punia [12] and Gupta [8].

19.6% women were practicing BSE, even without proper knowledge (on and off palpating their breasts during bath), which is significantly higher than Punia *et al.* [8].

Conclusion
This study highlights that though the grass root level health workers are aware of breast cancer, their knowledge on breast self-examination and its importance in detecting breast cancer early is limited. Only 60% of female health workers were aware of BSE that too through some state sponsored training program. Only 11 of the female health workers were practicing BSE, that too without any knowledge of the exact procedure. They were just palpating their breasts once in a while, during bathing. Since, the health care workers are lacking in proper knowledge of BSE and its importance, it is highly unlikely that they may be able to educate rural women in importance and procedures of BSE. Hence, there is need for educational programs for health care workers intensifying the need and importance with proper procedure of breast self-examination.

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