

Barriers to Perform Early Screening and Practice of Breast Self-Examination among High Risk Young Adults

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Abstract

Background: Breast cancer is to be one of the crucial public health problems around the globe. The major issue is that lack of knowledge of breast cancer symptoms has usually been related with patient slow in asking medical relive resulting in decreased survival.

Aims and Objectives: To investigate the barriers to perform early screening of Breast Self-Examination (BSE) among high risk young female.

Materials and Methods: This study was conducted among 70 female medical students aged between 18–23 years. They were recruited for this study after meeting inclusion and exclusion criteria. The semi structured pretested questionnaire was used to gather the data information.

Results: The mean age was 18 years and (Body Mass Index) BMI was 21.01. In total sample, 32(45%) of the student had performed BSE, 38(55%) have not performed and unaware about the significance of BSE. Nearly half the students 37(53%) stated that they never felt the need to do BSE because they don't know how to do it and around 25(35%) stated due to absence of symptoms.

Conclusion: In summary, most of the young females were preferred individualized method for overcome barriers to screen BSE than other method.

Keywords: Breast cancer; Breast self-examination; Early screening; High risk young adults

Introduction

Prevention is the excellent choice to outfit the increasing epidemic of breast cancer. In view of this, screening, early detection and public health awareness programs are foundation [1]. More than 90% of cases of breast cancer can be detected by women themselves, stressing the importance of Breast Self-Examination (BSE) as the key breast cancer detection mechanism [2]. The problem is that poor awareness of breast cancer symptoms has usually been associated with patient delay in seeking medical help resulting in reduced survival. There is a paucity of literature on removing barriers to breast screening among high risk young adults.

Breast cancer is to be one of the crucial public health problems around the globe [3]. There is an increase rates, in the developed world decreased in the developing countries like Asia, Middle East, and Africa [4]. Therefore, primary prevention and early diagnosis of breast cancer are vital. One of the major difficulties regarding breast cancer is lack of patients' awareness [5]. Limitation in screening of breast self-examination and mammography investigations is the principal issues.

Breast cancer is more prevalent malignancy and entitled the second leading cause of cancer deaths after lung cancer in Saudi Arabia [6]. Previous studies have reported lack of knowledge about breast cancer and its early detection which have a negative impact on the practice of breast self-examination among female [7]. This cancer transfer socio-economic, emotional, and public health consequences. Breast cancer incidence rates in Arab women have increased during the last 24 years, but women are still being diagnosed with Breast Cancer at more advanced stages of the disease [8].

Aims and Objectives

To study the knowledge and practice for removing barriers to breast

screening among high risk student population.

Materials and Methods

A cross sectional study was conducted in the Departments of Physiology, Chennai Medical College Hospital and Research Centre (SRM Group), Tamil Nadu, India.

Study design

Prior permission for the study was taken from the institutional scientific advisory committee and human ethics committee. After taking written informed consent, 70 subjects pursuing medical science courses were recruited for the present study after meeting inclusion and exclusion criteria. The study was conducted over a period of 12 months during 2015-16.

• Inclusion criteria:

1. Family history of breast cancer.
2. Age between 18-23 years.

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Exclusion criteria:

1. Family History of other cancer (except breast, ovarian & cervical cancer)
2. Those who were not willing to participate
3. Drug Usage

Procedure

Analytical cross-sectional study was conducted in department of physiology, in a tertiary care teaching hospital. After getting approval from institutional ethical committee, data collection were done by using self-administered questionnaires. The subjects were selected by simple randomized sampling method based on family history, pre tested structured questionnaire. It consists of demographic data, practice of breast self-examination, reasons and barrier to perform BSE. The descriptive data were presented as frequencies and percentages. Statistical analysis was carried out by using IBM SPSS version 21.

The following parameters were used for data collection:

Self-administered questionnaires:

- A. Knowledge on early warning signs of breast cancer
- B. Knowledge about breast self-examination
- C. Practice of breast self-examination
- D. Barriers to perform breast self-examination practice

Anthropometry

1. BMI is calculated by the formula $Weight (kg) / \{Height (m)\}^2$.
2. Obesity was assessed using BMI cutoff standard criteria; BMI between 18.5 and 24.9 is considered normal, 25 to 29.9, overweight, and equal to or higher than 30, is considered obese.
3. Waist to Hip Ratio (WHR).

Statistical Analysis

The data were entered in Microsoft Excel. Statistical analysis was carried out by using IBM SPSS version 21. Both descriptive and inference statistical analysis was used to analyse the data.

The descriptive data were presented as frequencies and percentages. All the statistical analysis was carried out at 5% level of significance and p value ≤ 0.05 was considered as significant.

Result

A cross-sectional and pre tested structured questionnaire study was conducted among 70 young women. It consists of demographic data, practice of breast self-examination, reasons and barrier to perform BSE.

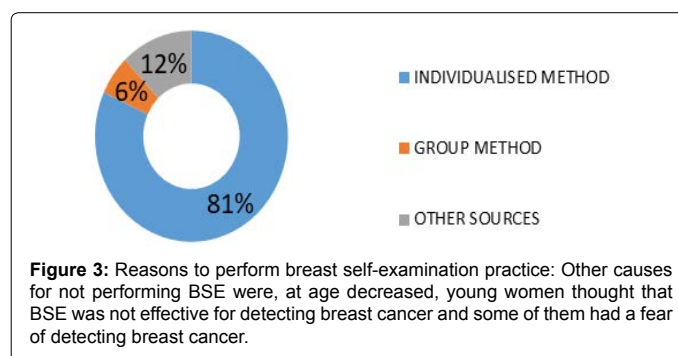
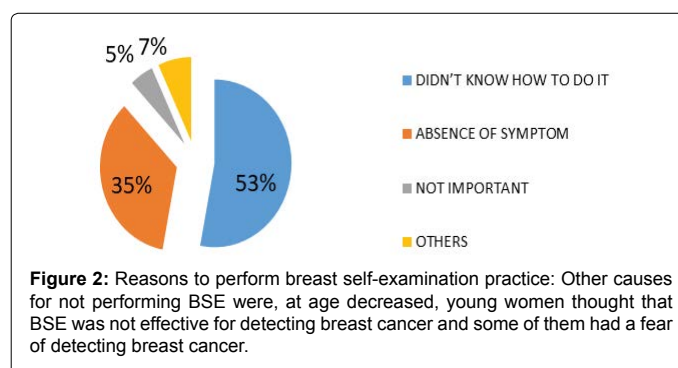
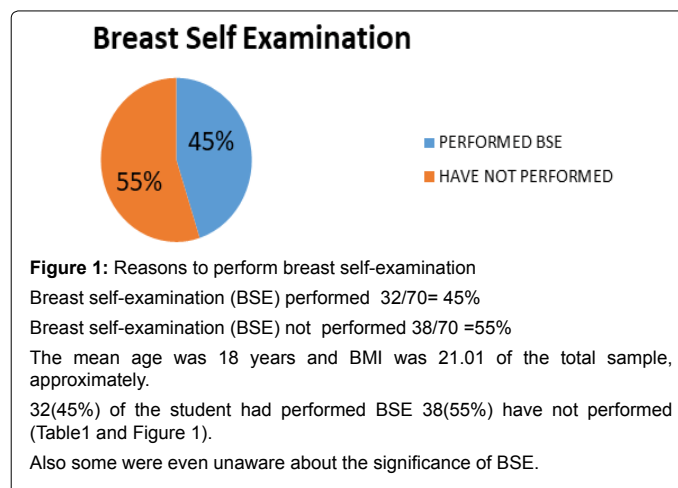
I. Practice of breast self-examination-Questions	Response	N (32)	%
1. Reason to perform BSE	Fear of breast cancer and other diseases	22	69
	Family history of Breast cancer		
	Unusual appearance of the breast	6	18.75
	Others	4	12.5
2. Frequency of BSE performance	Daily and weekly	2	6.25
	Monthly	11	34.37
	Yearly	2	6.25
	Occasionally	17	53.12

Table 1: Reasons and frequency to perform breast self-examination.

Our study results were showed in the form of tables (Tables 1 and 2) and figures (Figures 1-3) as follows.

Questions	Response	N (70)	%
1. Reasons not perform breast self-examination practice	I don't think it is important	3	4.2
	I don't know how to do it	37	52.85
	I don't have any symptom	25	35.7
	I know I can never have breast cancer	0	0
	Others	5	7
2. Barriers to perform breast self-examination practice:	lack of privacy	6	8.5
	Pressure of work	12	17
	Doubt about its effectiveness	3	4.2
	Absence of symptom /diseases	35	50
	Forgetfulness	14	20

Table 2: Reasons and barriers to not perform breast self-examination practice.



Discussion

Primary and secondary prevention of breast cancer, it is vital to identify high-risk young adults [9]. Primary prevention: The unmodifiable risk factors like, familial, personal, and age for breast cancer cannot be changed. Early introduction of regular exercise, reduction of weight are programme that can reduce the chance to cancer progression. Secondary prevention: Mammography Screening is recently the best available technique to diagnose breast cancer at an early stage. Based on solid evidence, formal instruction and encouragement to perform BSE leads to breast biopsies and diagnosis of most of the benign breast lesions [10]. This highlights the importance of promoting breast cancer awareness among young college students.

Nevertheless, the majority of the parameters investigated in this study depicts that relatively low measures in regard to medical students, which may be a predictor for the general population. Most of the previous studies have assessed the awareness levels among various counties, but most of these studies used parameters other than the variables employed in the presence study like various methods were available and to be advised appropriate method to perform BSE. The previous studies have reported that, the need for young women to be regularly taught BSE will increase their self-confidence and positive mentality [11]. Few controversies still persists about BSE remains an important technique for early screening and detection of breast cancer [12,13].

However, multiple studies were conducted in this context almost all of them recollect for implementing awareness strategies to increase the level of awareness among general population [14,15]. A significant number of women present with advanced stages of the disease due to inadequate information, knowledge and awareness of early screening measures. Previous studies showed lack knowledge about breast cancer screening, and few women performed screening for early detection purposes [16,17].

Conclusion and Recommendation

This study revealed that educating the youth on breast cancer is a potential strategy for dissemination of information and their knowledge to other female family members and friends in the society. In conclusion, most of the students preferred individualized method for removal of barriers to perform BSE than other method like breast model for teaching BSEs. Mothers and sisters should take responsibility and play a vital role in teaching of BSE of their girls and check regularly any pathology on their breast. Overall, our objectives could urge the healthcare providers and educationists to rethink their strategy of imparting knowledge to young adult on early diagnosis of breast cancer.

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