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ASSESSMENT OF KNOWLEDGE ABOUT BREAST SELF – EXAMINATION AMONG ADULT YOUNG FEMALES

Samar Y Omer[1]*, Nuha M E Agabna[2], Sania A I Shaddad[3]

[1]Master Student at the University of Medical Sciences and Technology.

[2]Supervisor Dept. of Basic Sciences (pharmacology), Faculty of Dentistry University of Khartoum.

[3]Collaborator Prof. of Pharmacology. Faculty of Medicine, University of Khartoum.

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***Corresponding Author**
Samar Y Omer
Master Student at the University of Medical sciences and Technology.

ABSTRACT

Screening for early detection of diseases is an important public health principle. Breast Self Examination (BSE) is a process whereby women examine their breasts regularly to detect any abnormal changes to seek prompt medical attention. It is cost effective especially in poor countries. This study aims to assess knowledge about BSE among young female students. This is cross sectional study including 200 students residing in a university campus aged 17-30 years. Data was collected through a structured questionnaire and analyzed statistically using SPSS. Results showed the majority were 17-21 years aged undergraduate students, of the population 66% were studying in non-medical colleges. 40% did not know that breast cancer is a leading cause of death among women. Moreover, 54% never heard about methods of breast cancer screening. Only 31% were aware of breast self examination, and just 9.5% knew how to perform BSE. Media specially TV and radio were the common source of information. Positive correlation was found between knowledge about BSE and family history of breast cancer, level of education and perceived benefit from the process.

KEYWORDS: Breast self examination, breast cancer, screening, young females.

INTRODUCTION

Breast cancer is a global health concern and a leading cause of morbidity and mortality among women. It is the most common female cancer in both developing and developed countries, with most cases occurring in the latter regions, where age-standardized rates are

three times higher than in developing countries[1] It is also the leading cause of cancer death in women between the ages of 15 and 54 years[2,3] Every thirteen minutes a woman dies from it and every three minutes, a new case of breast cancer is diagnosed. The incidence and mortality of breast cancer are increasing in Africa and Asia[4] Locally , in Sudan it is the commonest cancer in women accounting for 29-34% of all cancers.[5,6]

Breast cancer appears to be a heterogeneous group of diseases. It was formerly believed to be a localized disease originating and disseminating in a progressive fashion starting with benign disease, then atypia, progressing to carcinoma in situ, followed by invasive carcinoma, and metastasis[7]. As a consequence, radical surgery was advocated as the treatment of choice. The theory that breast cancer was a systemic disease from the start led to breast-conserving surgery and adjuvant therapy being heavily utilized. However, the current understanding is that the natural history of breast cancer is highly complex and many prognostic factors will play a role in determining the prognosis and outcome, and the natural history of the disease[7]

Breast cancer is most easily and effectively treated in its early stages. Survival rates drop dramatically when women present with advanced cases regardless of the setting; therefore, a primary strategy for reducing breast cancer mortality is increasing the proportion of cases that are detected during the early stages of the disease[8]. Medical advance have shown that one-third of all cancers are preventable and a further one-third, if diagnosed sufficiently early, is potentially curable.[9]

One potentially important strategy in reducing breast cancer mortality is the use of screening to achieve earlier detection of cancer. This is very important because an excellent prognosis is directly associated with the stage at which the tumor is detected and how localized the lesion is. The main methods of screening involve mammography, physical examination of the breasts by a physician or qualified health workers or clinical breast examination (CBE), and breast self- examination (BSE).

Breast self –examination (BSE) is a non-invasive adjuvant screening method for detection of early breast cancer. It is a useful tool specially when mammography screening is not available as in rural and poor urban areas.[10] The direct monitoring costs include health education and outreach activities associated with training the trainers, providing information to the target population, offering scientific and diagnostic information to health care

providers, and educating the general public regarding the benefits of early detection and use of breast self-examination[11]

Breast Self-Examination refers to a woman being aware of the normal look and feel of her breasts and looking for changes in size or shape of the breasts, the presence of lumps, skin dimpling, redness, discharge or unusual pains[12] Breast self – examination, should be carried out once monthly, between the 7th and 10th day of the menstrual cycle. Regular BSE is cost-effective, convenient, private and simple method that does not require specific equipment.[13]

For younger women, BSE is often the only method that is available to them to detect abnormal changes at an early stage due to the inaccuracy and ineffectiveness of other screening tests, and due to their greater breast tissue density[14] Therefore, it is important that young women are targeted for educational programmes that provide information breast health and increase awareness, promote BSE.[15]

In Sudan breast cancer accounts for about one-fifth of all treated cancers and is the most frequent malignancy seen[6] This might partly reflect awareness bias, as breast masses or ulcerated lesions are readily evident to the patients themselves. A major challenge to the treatment of cancer in Sudan, is that most patients present with advanced-stage disease. A total of 78% of Sudanese breast cancer patients have stage III or IV disease (TNM classification) when they first seek medical treatment.[5] In these stages, treatment may often involve multiple modalities, including surgery, radiotherapy, chemotherapy, and hormone therapy, and has a markedly diminished chance of success. Therefore, there is an urgent need for better early detection of cancer in Sudan to make treatment more effective, less costly, less invasive, and more accessible and acceptable to patients.

OBJECTIVES

To assess the level of knowledge and practice of breast self- examination among young girls.

METHOD

This was a cross sectional descriptive study conducted at Daoud Abd Allatif residence for university students. A convenient sample of 200 students was randomly selected. Data was collected by questionnaire.

RESULTS AND DISCUSSION

The sample studied ranged from 17-30 years, 45% were aged 17-21 years, 40% were 22-26 years. Nearly two thirds (66%) were studying in non-medical colleges. The majority of respondant came from educated families (58.5%) judged by university level education for both parents. Regarding economical status 64% were middle economic status.

The greatest majority (88%) had no first degree relative with a history of breast cancer (BC). However about 40% indicated that they had a relative diagnosed with BC. The degree of relationship with cancer patients has an impact on screening behavior; close relation could predict higher risk perception and more vigilant screening practice.[16]

Regarding the population's perceptions about breast cancer, more than a quarter of the respondents (39.5%) did not believe that breast cancer can be inherited. 40% did not know that breast cancer is a leading cause of death among women. 54% were ignorant about methods to screen for breast cancer.

Concerning knowledge about the screening methods, 16% stated breast examination by a doctor, BSE 15%, mammography 3.5% and 2.4% for ultrasound. This poor knowledge reflects lack of educational programmes. A study conducted in Sudan 2013 reflects similar results.[17]

When investigating the population's awareness about BSE only 31% were aware of it. 20% knew that the examination should be done following the menstrual cycle, 17% knew that it should be performed monthly. These results are not far from those of a study conducted in India in a semi urban area.[18]

The media especially television and radio were the most commonly cited source of information by the respondents who had some knowledge about BSE. Positive relation was found between knowledge about breast self examination and level of education ($p = 0.045$), family history of breast cancer ($p = 0.001$) and perceived benefit from the process ($p = 0.001$).

Screening to detect cancer at an early stage is of vital importance. A number of initiatives were developed to aid early detection and improve treatment outcomes,[19] however, more effort should be made. Positive outcomes are warranted as documented by Abuidris.[20]

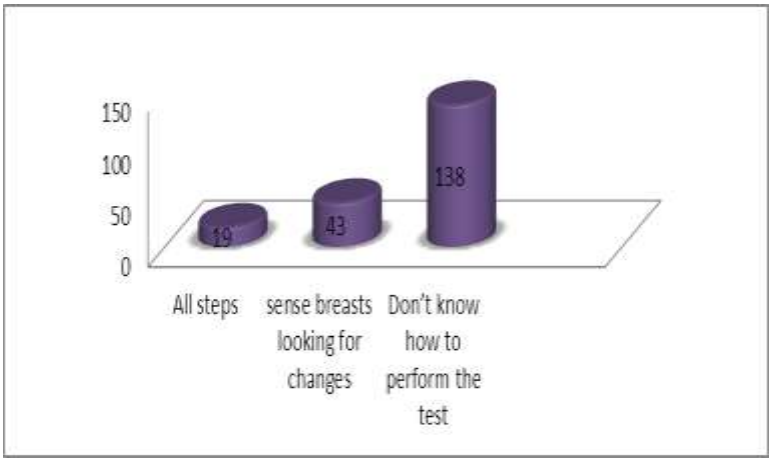

Figure (1): Knowledge of breast self-examination steps.

Table (1): Knowledge about frequency of performing breast self-examination.

	Frequency	Percent
Every week	1	0.5%
Every month	34	17%
Every 6 months	27	13.5%
Don't know	138	69%
Total	**200**	**100%**

Table (2): Knowledge about the time of performing breast self-examination.

Time of the test	Frequency	Percent
Between the 7th and 10th day of the menstrual cycle.	40	20%
In the middle of the month.	17	8.5%
At the end of the month.	5	2.5%
Don't know.	138	69%
Total	**200**	**100%**

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