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STUDY TO EVALUATE THE KNOWLEDGE AND PRACTICES OF NURSES ABOUT BREAST SELF-EXAMINATION (BSE) TO SCREEN FOR BREAST CANCER, IN ELMAK NIMER UNIVERSITY HOSPITAL

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ABSTRACT

The frequency of breast cancer makes it an important health issue. Breast screening is a form of secondary prevention aimed at reducing mortality from the disease, as early detection is essential to breast cancer survival. Nurses must play an active role in creating breast cancer awareness through education and empowerment. They therefore need to have a sound knowledge base and adequate practical skills in the field of breast cancer prevention. The purpose of this study was to determine the current knowledge, skills and awareness of breast self-examination, of nurses. This study was conducted to explore nurse's BSE efficacy, BSE practice .The sample size was (60) nurses drawn from (160) total nurses of the hospital by using simple random sampling. Data were collected by administering self-report questionnaires. (86.3%) of nurses had performed the BSE practice. Nurses who performed BSE, most (91.1%) subjects perform BSE of in every month as was recommended by ACS, (2007). Nursing represents a significant professional resource that can help facilitate positive changes through health education strategies.

Keywords:
Nurse, breast, cancer, examination.

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1. INTRODUCTION

Cancer is a disease process that begins when an abnormal cell is transformed by the genetic mutation of the cellular DNA. This abnormal cell forms a clone and begins to proliferate abnormally, ignoring growth-regulating signals in the environment surrounding the cell. The

cells acquire invasive characteristics, and changes occur in surrounding tissues. The cells infiltrate these tissues and gain access to lymph and blood vessels, which carry the cells to other areas of the body. This phenomenon is called metastasis (cancer spread to other parts of the body). Cancer is not a single disease with a single cause; rather, it is a group of distinct diseases with different causes manifestations, treatments, an prognoses. [1]

Breast cancer is a malignant tumor that starts in the cells of the breast. Malignant tumor is a group of cancer cells that can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. The disease occurs almost entirely in women, but men can get it, too. [2]

Among women breast cancer is the most frequently diagnosed cancer and the leading cause of cancer death worldwide. About 1.3 million new cases and 465,000 deaths from breast cancer are projected to occur in 2007 and he 5 year survival rates vary widely across countries from about 30% in sub-Saharan countries to 45% in parts of south east Asia to more than 80% in the North America depending on the availability of screening and treatment services (Parking and Bray, 2006). The breast cancer incidence rates are highest in the economically developed countries in North America, western and northern Europe, Australia, New Zealand and Israel. Low rates are found in Africa and Asia. [3]

Breast cancer incidence is lower in Sub-Saharan African countries than in developed countries, African women are more likely than women in the developed world to be diagnosed at later stages of the disease and, thus, are more likely to die from it. This is due to the lack of awareness by women, accessibility to screening methods, and availability of African-based research findings that would influence decision making at the governmental level. This descriptive study was undertaken to shed light on the type, stage and age distribution of breast cancer at diagnosis in women living in central Sudan encompassing al-Gezira, Blue Nile, White Nile, and Sennar States. Cases comprised 1255 women from central Sudan diagnosed with breast cancer and referred to and treated at Institute of Nuclear Medicine, Molecular Biology, and Oncology, from January 1999 to December 2006. Data revealed that 74% of the women were <50 years old or premenopausal. Invasive ductal carcinoma was the most common pathology (82%) and women presenting with stage III or higher tumors that had already metastasized, while ductal carcinoma in situ was the least prevalent (0.5%) finding. Estrogen and progesterone receptors expression were performed on a limited number of samples and the overwhelming majority of cases were observed to be negative for estrogen and progesterone receptors expression. [4]

Breast self-examination (BSE) involves checking your breasts to help detect breast problems or changes. Breast self-examination involves checking your breasts for lumps or changes while standing and lying in different positions and while looking at your breasts in a mirror to note any changes in their appearance Breast self-exam (BSE) is an option for women starting in their 20s. Women should changes to their health professional right away. [5] The breasts are an integral part of a women's femininity and identity, yet many still choose not to examine them regularly It should be mandatory for every woman to examine her breasts on a monthly basis. Most breast cancers (over 90%) are found by women themselves, and there is a need to optimize their chances of doing so the breasts should be examined at the same time of the month. For premenopausal women, the ideal time is ten days after the menstrual period as breasts are least

tender at that time. Post-menopausal, a woman should examine her breasts at the same time of the month, every month. Breast self-examination must be incorporated as a routine monthly occurrence and should take at least fifteen to twenty minutes. Woman must be educated to examine breasts in front of a mirror, lying down, and in the shower. Women need to become familiar with what their breasts normally feel and look like in order to be able to detect any abnormalities.

Upon inspection, standing in front of the mirror, one should look for any changes in the normal look of the breasts, such as dimpling, rash, discoloration, size difference or nipple discharge. To make changes in breast appearance more easily noticeable, the woman must inspect her breast with her arms at her sides, arms overhead, firmly pressing hands on hips, and bending forward at the waist.

Next, the woman needs to lie down and palpate the breasts. She should lie on her back with a pillow placed under the right shoulder. The right hand must be placed behind the head. The flat surfaces of the three middle fingers of the left hand (medically known as the volar surface of the hand) must be used to palpate the right breast. The breast should arbitrarily be divided into four quadrants and a sub-areola (beneath the nipple and areola) region to ensure a complete, systematic approach to Examination.

All five regions of the breast must be palpated using small, circular motions and pressing firmly. The nipple should be squeezed gently to assess if there is any discharge, especially in non-lactating women. The woman needs to be educated on the necessity of palpating the axillary tail (of Spence) and the axilla itself as part of a complete breast examination. This entire process must be repeated using the right hand on the left breast.

The entire process of breast self-examination must be demonstrated and explained to all women by health care professionals who are proficient in teaching and demonstrating it. To increase understanding, graphic representations may enhance verbal explanations and should therefore be available in pamphlet or poster form. [6]

2. MATERIAL AND METHODOLOGY

The methods and material of this study will be presented in three main designs as follows:

Technical Design
Technical design of the study includes Study design, study area, setting, study population, and tools of data collection

Study design
Descriptive, cross-sectional workplace-based study, to assess knowledge and practice form nurses regarding breast self-examination.

Study area
The study area is Elmek nimir university hospital at Shendi city , river Nile state , Sudan , which is located north of Khartoum about 176 Kg , and 110 km south to Eldamer, the capital of River

Nile State; with a total area about 14596 Km2. The total populations of Shendi 'locality' are about 197589.   116713 of whom are live in rural areas and 80876 in urban centers, most of population are farmers. Shendi University was established in early 1990s and stands as a landmark institution in Higher Education

Study time
This study was conducted during the period which extends from August 2012 to November 2012

Study population
Include Elmak Nimir nurses whom practiced to the general words and units and enrolled in the hospital for at least three months before the starting of the study.

Sample techniques
Simple random sampling. The sample was taken from nurses practiced in elmak nimer hospital and we were cover about 60 nurses

Data collection tools
The data was collected by questionnaire designed by researcher based on reviewing of literature, it consists of three sections; the first section was designed to collect data about personal characteristics of nurses. The second was designed to collect data about knowledge of nurses regard breast self-examination and the third one collect

In this study the data was collected in one week By check list about proper breast self-examination. The collected data, organized, categorized, tabulated in tables using frequencies and percentage. After collecting data will be analyzed by using Computer through SPSS program

Ethical consideration
Agree consent   from Elmek Nimir hospitals administer was obtained prior the study and verbal consent was obtained from all participants in selected hospital.

3. RESULT

Table 1: Personal and socio-demographic characteristic of the participant in Elmak Nimir Hospital

	Variables	frequency	percent
Age of study population	20-30 years	43	71.7
	31-40 years	14	23.3
	above 40	3	5.0
	total	60	100.0
Educational levels	Bachelor	50	83.3
	Post graduate	10	16.7
	Total	60	100.0

	Single	29	48.3
Marital status	Married	29	48.3
	Divorced	1	1.7
	Separated	1	1.7
	Total	60	100.0
Family history of breast cancer	yes	11	81.7
	no	49	18.3
	Total	60	100.0
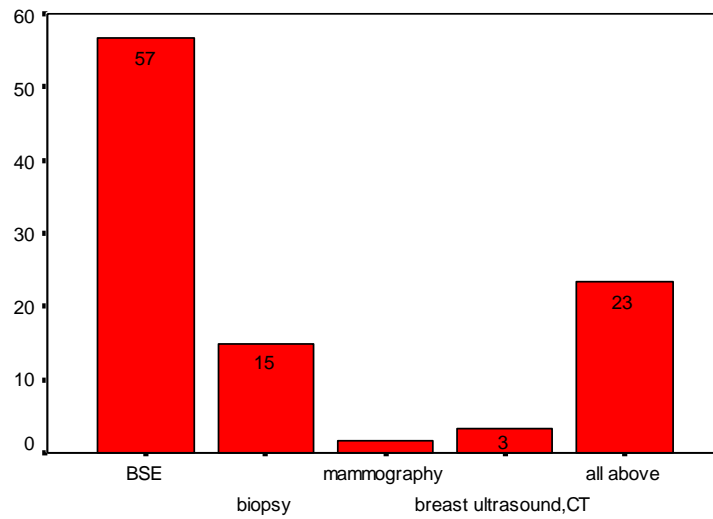
Figure 1: Present nurses knowledge regarding the method used for early detection of breast cancer.
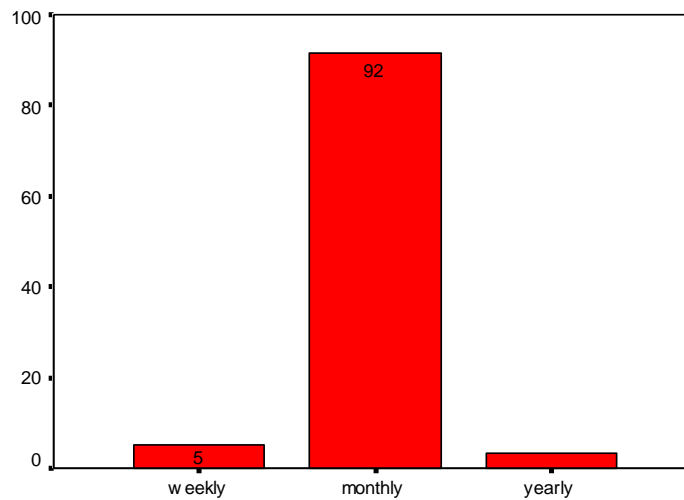
Figure 2: The practicing of breast self-examination amongst the participants nurses in Elmak Nimir hospital

Table 2: Distribution of the knowledge of nurses concerning the Risk factors of breast cancer.

Probability Of Breast Cancer	Increase		Decrease		No Effect	
	Frequency	%	Frequency	%	Frequency	%
Any benign breast disease	39	65	5	8.3	16	26.7
Post-menopausal hormonal replacement	48	80	6	10	6	10
Menarche before12years	29	48.3	10	16.7	21	35
Moderate alcohol intake(2-3drink/day)	40	66.7	5	8.3	15	25
Menopause at more than 55years	34	56.7	18	30	8	13.3
Age at first birth more than30 years or nulliparous	36	60	15	25	9	15
First degree relative with breast cancer	47	78.3	6	10	7	11.7
Obesity	42	70	7	11.7	11	18.3
Personal history of endometrial or ovarian cancer	50	83.3	7	11.7	3	5
Significant radiation to chest	52	86.7	4	6.7	4	6.7
Older age more than 40 years	48	80	6	10	6	10
Prolong for contraceptive pills	43	71.7	10	16.7	6	10
Personal history of breast cancer	55	91.7	10	16.7	6	10
Breast feeding	2	3.3	46	76.7	12	20

4. DISCUSSION

Nursing represents a significant professional resource for facilitating positive changes in breast cancer prevention strategies in elmak nemir hospital. . The sample was chosen in accordance with the requirements to meet the research objectives. The majority of the students female most of age between 20-30 years (71.7%). most nurse's qualification were (83.3%) baccalaureate. Work experiences were (38.3%) have 1-3 years Have equal percentage marital status & single (48.3%). More than tow third (76.7%) has in come 500-700 pound. number's family individual half (51.7%) have 1-4 persons

The questionnaire elicited information about the nurse's level of knowledge with regard to breast cancer definition signs & symptoms. Current screening method and knowing about breast self-exam half nurses (55%) define breast cancer cancerous growth the cell in the breast region grow abnormally that inhibits the tissue in the breast can invade nearby organs and tissue. above half

(63.3%) that nurses are effective in detecting breast cancer by clinically aware sing &symptom .lump hard knot or swelling ,change in the size or shape of the breast ,dimpling or puckering of the skin most (86.3%) of nurses had performed the BSE practice.

The frequency of breast cancer makes it an important health issue. Nursing represents a significant professional resource that can help facilitate positive changes through health education strategies. The findings of this study provided the researcher with baseline information about the level of breast cancer awareness among nurses this information may assist nurse educators to target and tailor education programs to equip nursing students with the knowledge and skills that will make them effective advocates in the crusade against breast cancer.

5. CONCLUSION

The role of the nurse in reducing breast cancer mortality focuses largely on educating and empowering women. This, however, remains dependent on the fact that they have the knowledge and skills to do so. The findings of this research indicate that the knowledge and skills of nurses regard to breast self-examination. This has important implications for nursing education and practice. As nurses are in an ideal position to play a positive role in increasing the awareness of the disease and encouraging prevention strategies among women, they should possess a thorough knowledge base of breast self-exam. Initially breast cancer screening program depend on breast self-examination the prompt reporting of breast symptoms are importing early detection message for women of all age

6. RECOMMENDATION

Nurses should be encouraged to get involved in breast cancer Preventative activities in underserved communities, as part of their community health practice. Prevention programmers can positively affect both cost control and mortality rates. Professional nurses should be regularly assessed for knowledge and skills relating to breast cancer prevention. Educational efforts are vital avenues through which nurses can learn more about the primary and secondary prevention of breast cancer encouraged by educators to be more 'breast aware'. This raised awareness may increase their value as advocates for breast cancer prevention in the community. Nursing education in breast cancer should be considered from a Primary Health Care (PHC) approach. It should place emphasis on the preventive and primitives aspects of breast cancer.

7. ACKNOWLEDGEMENT

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