Abstract

Objective: The purpose of this study was to identify and investigate the knowledge and practice of breast self-examination (BSE) with the influencing factors on its compliance among female nurses.

Methods: This study was conducted between January and December 2002 on 80 female nurses from Prince Rashid Military Hospital, Jordan. The questionnaire contained items on the demographic characteristics of the respondents, knowledge of breast cancer, attitudes toward BSE and questions regarding the practice of BSE. The survey was conducted on a voluntary basis.

Results: Out of 80 subjects, 42 (52%) performed BSE. Approximately 30% of those who performed BSE said they learned BSE during their work experience. A significant relationship was found between higher levels in work experience and BSE practice. Except for age, no
significant relation was found between the socio-demographic factors and BSE practice. The sample showed strong belief in breast lump as a causing factor of breast cancer and had significant correlation with BSE practice.

**Conclusion:** Positive correlation was found between nursing work experience and their practice in BSE as working nurses. Studies like these can enhance the knowledge regarding BSE among nurses and other medical professionals. (Rawal Med J 2007;32:31-33)

**Key Words:** Breast, self examination, cancer.

**INTRODUCTION**

Breast Cancer is easier to treat the earlier it is found. For that reason, some experts recommend that women over age 20 perform a monthly breast self examination (BSE) to look for new lumps and other changes. There is evidence that women who correctly practice BSE monthly can detect a lump in the early stage of its development, and early diagnosis has been reported to influence early treatment and to yield a better survival rate.\(^1\) If BSE is performed monthly, 3-5 days after menstrual period, when breasts are the least tender and lumpy, recent estimates suggest that screening by breast examination has a sensitivity of 54% and a specificity of 94%.\(^2\) In some countries, the cost of screening mammography are considered to be high and policy makers are
considering implementing screening programs based on clinical breast examination rather than mammography.  

It was found that mortality had fallen by 31% after 6-years for women aged 40-70 at the beginning of the trial. Unfortunately, despite the benefits of regular BSE, few women actually examine themselves; in fact, majority does not even know how to do BSE and opinions conflict about the value of BSE. The aim of this study was to investigate the knowledge and practice of BSE and the factors influencing its compliance among female nurses.

METHODS

This study was conducted between January and December 2002 on female nurses working at Prince Rashid Military Hospital, Jordan. Out of a total of 170 female nurses working there, 80 agreed to participate in this study and voluntarily filled a questionnaire. The questionnaire was designed to provide description of the knowledge and practice of performance BSE. The socio-demographic factors, medical history and the Interrelationships between these variables, knowledge of breast cancer, attitudes toward BSE and questions regarding the practice of BSE were also included.
RESULTS
The age ranged from 18-40 years with mean of 29 years and BMI was 24. There were more single women (60 %) in the study. A total of 42 (52%) women performed BSE and 13 (30%) performed it regularly (table 1). A significant relationship was found between higher levels in nursing work experience and BSE practice as 60-80% of subjects believed that presence of masses (breast lumps), family history of breast cancer and nipple discharge are the causative factors for breast cancer (table 2). Eight subjects (10 %) believed that, usage of contraceptives, using breast creams, direct sun exposure, obesity and ovarian pain are the breast cancer causing factors.

Table 1. Characteristic of the study population.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>frequency</th>
<th>(%)</th>
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<tbody>
<tr>
<td>Married</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>Unmarried</td>
<td>48</td>
<td>60</td>
</tr>
<tr>
<td>BSE</td>
<td>42</td>
<td>52</td>
</tr>
<tr>
<td>Learned about BSE by work experience as a nurse</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Family history of BC</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>Regular menstrual cycle</td>
<td>68</td>
<td>85</td>
</tr>
<tr>
<td>Feeling breast pain</td>
<td>25</td>
<td>31</td>
</tr>
</tbody>
</table>

The most frequently endorsed steps in BSE were examining breasts in front of a mirror, or during bath, examining breasts while lying down, and feeling for a lump, hard knots, nipple discharge, or breast thickening. The
least frequently endorsed step was looking at breasts in the mirror with hands on thighs. Over all, the majority of subjects knew most of the recommended steps.

**DISCUSSION**

More than 50% of the total breast cancer diagnosed annually is found in premenopausal patients, creating the need to initiate breast cancer screening programs in this population. These measures include BSE, which is inexpensive, non-invasive, involves little time and physical energy, is simple and doesn’t depend on professional help. However, the effectiveness of BSE remains controversial. It is argued that significant number of women find masses when they are bathing or dressing, and BSE once a month may contribute to a women’s heightened awareness of what is normal for her. Various factors influence recommendation But in one study, it was shown that 81% of women first noticed symptoms themselves.

**Table 2. Breast cancer beliefs and significance for practicing BSE.**

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family history of breast cancer</td>
<td>4(5)</td>
</tr>
<tr>
<td>Breast mass</td>
<td>56(70)</td>
</tr>
<tr>
<td>Nipple discharge</td>
<td>40(50)</td>
</tr>
<tr>
<td>Breast pain</td>
<td>20(25)</td>
</tr>
<tr>
<td>Ovarian pain</td>
<td>16(20)</td>
</tr>
</tbody>
</table>
It is possible that by knowing how to do a more thorough BSE they could find breast cancer of smaller sizes. This in turn may lead to an improved prognosis. Medical professionals have knowledge of the causes of diseases and have learned to recognize the warning signs of the disease when present in their patients. It seems, however, that these professionals don’t always recognize the signs of their own illness.  

Nurses are aware of the importance of the early detection of breast cancer for successful treatment and one’s BSE ability is strongly correlated to BSE practice in the general population. In one study, Budden reported that 96% of the nursing students performed BSE during a year but only 46% had practiced regularly as once per month.  

A study from Iram among female health care workers showed that, more than 70% of subjects had knowledge regarding BSE and had strong belief on its beneficial affects but only 6% of them was performing BSE regularly.  

It is well documented that beliefs and behavior surrounding breast cancer vary with several factors such as ethnicity, age education and socioeconomic status. Self-efficacy theory and behavioral self -
regulation theory suggest that the most important predictor of a highly specific behavior (such as be BSE) is the individual’s own confidence in performing the behavior.\textsuperscript{13} Our study showed that there is a strong belief that breast mass is a causative factor of breast cancer, which was reflected on its significant correlation with BSE practice. The result of this study suggest that, for nurses, if more emphasis of BSE occurs in the work place and in undergraduate and postgraduate courses, teaching of BSE to clients may be increased. Also, the provision of BSE educational programs is necessary to increase nurses’ knowledge, confidence, performance, and teaching of BSE.

REFERENCES


