Reviving Nurses’ Role as Health Educators; Breast Cancer in a Developing Country.

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ABSTRACT
Aim: Early breast cancer detection is essential and can only be achieved both by the dissemination of knowledge and breast cancer awareness campaign. Firstly, health care professionals ought to ensure a sound structure of Breast Cancer Awareness Program (BCAP), secondly, they must ensure to direct it towards the communities. This study aims to explore the potential role of nurses as first line health care providers aiding in BCAP. Materials and Methods: This Cross-Sectional descriptive pilot tested study was conducted in four major hospitals and neighboring health centers in the eastern province of Saudi Arabia between February - August 2015. Designed structured questionnaires hard and soft copies were utilized to cover demographic data, high-risk factors, knowledge and attitudes towards breast cancer. The sample includes randomly selected 490 female nursing staff and students. Results: Response rate was 90%. Age ranged between 19-59 years with a mean of 28.06 years (SD=6.4). Of the 490 responders, 447 were hospital nursing staff while 43 were health center staff. High-risk group accounted for 101 (20%). Their low total score in general knowledge, management, and knowledge of the treating physician were 46.8%, 36.8% and 27.7%. While encouraging scores of 64.74%. Were recorded in attitude and behavior towards BCAP these results show that their limited knowledge did not deter them from the obligation towards health education. Conclusion: Need for breast cancer awareness programs (BCAP) cannot be overemphasized. In culture based communities, women healthcare professionals are the potential candidates for successful breast health education. Nurses, in particular, may be the ideal task force in BCAP. Their readiness and easy approachability facilitate communication. The role of well-trained nurses in health education through audit courses and well-designed workshops will impact positively on BCAP.

Keywords: Health education, Breast cancer, Response rate, Nurses

INTRODUCTION
Due to the passionate nature of women, their ancient role as caregivers was recognized thousands of years ago. Catholic women played major roles in health and healing in medieval and early modern Europe. Convent nuns provided free nursing care for the poor[1,2]. Following the rise of Islam from the 7th century, Arabic medicine developed and advanced in the region and an Islamic tradition of nursing begun. Their dedication to work had
landed them a significant place in conservative societies as traditional midwives. Like Catholic women, Muslim nurses started as caregivers for the poor and women, however, their work had inevitably expanded to care for the injured when the wars erupted[3].

Despite the fact that breast cancer was uncommon in the past, yet it was discovered by the Pharaohs over 3500 years ago due to its visible symptoms.[4] Currently, breast cancer is the most common cancer among females worldwide[5]. Its incidence has increased globally over the last two decades affecting younger females as compared to the west[6-10].

Early detection depends on propagation of knowledge and dissemination of information through health education. If executed successfully it can impact positively by potentiating awareness and correcting misconceptions in culturally driven communities. In developed countries, it has proven to be effective and contributed to promoting early detection and treatment for cure.[11]

Community and general nurses are the primary teams among health care professionals who are easily approachable and may act as the potential health educator[12]. Targeting this sector as health educators potentiate their important role in educating women. The desired initial step is to assess their background knowledge and attitudes prior to the preparation and participation in conducting Breast Cancer Awareness Programs (BCAP).

MATERIAL AND METHODS

This Cross-Sectional descriptive pilot tested study was conducted in four major hospitals and neighboring health centers in the eastern province of Saudi Arabia between February - August 2015. According to availability randomly approached target sample included 490 female nursing students and nursing staff. Designed structured questionnaires hard and soft copies were utilized to cover demographic data, high-risk factors, knowledge and attitudes towards breast cancer. Data collected, coded and analyzed using statistical package for social science (SPSS) version 19.

RESULTS

The response rate was 90%. Age ranged between 19-59 years with a mean of 28.06 year (SD 6.4). Of the 490 responders, 447 were hospital nursing staff while 43 were health center staff. High-risk group accounted for 20% (101). Their total score in general knowledge, management, and knowledge of the treating physician were 46.8%, 36.8% and 27.7% (Table I, II,III).

These low scores may be attributed to either the suboptimal theoretical undergraduate teaching that fails to integrate knowledge with actual relevant practice or due to the lack of recognition of nurses and health education providers. Their promising potential as educators was well portrayed in the scores obtained in their attitudes and behaviors towards BCAP of 64.74% (Table IV). Underestimation of this sector of the population deprives the community form an army of easily accessible health educators.

DISCUSSION

Breast cancer is the most common cause of cancers related morbidity and mortality among female worldwide[13]. Health professional’s role as educators helps disseminate knowledge leading to a reduction in morbidity and mortality of the disease.[14]

Breast Cancer Awareness programs (BCAP) are focused educational programs structured and tailored to fit individual cultures. Their target is focused and directed towards mass public health education on breast cancer. Programs include basic knowledge on breast cancer, early detection methods, risk factors, treatment options, prevention, support groups and workshops on self-breast examination (SBE). Medical staff being the potential community health educators, they promote cancer control activities either in their workplace while they attend to patients or in the field as they directly participate as instructors in the BCAP[15].

Nurses as the more accessible members of the healthcare staff can play an important role in awareness of the community as they are the largest group of health professionals and the closest to the patients.[16, 17] Both literacy and illiteracy play a major role in perceiving health education. Reported series in our communities have shown that highly educated participants had a higher erroneous response regarding the fatal outcome of breast cancer, potential risk factors, and screening mammography.[18]

Contrary to developed countries, it has been noted that women in our societies are not ready to participate in these activities reflected by their poor attendance in formal lectures, their resist to the knowledge of cancer which continue to perceive as a stigma.[19] Misconceptions may easily co-exist with an education which makes it more convincing and plausible to those perceiving it. This is further compounded by the wide emergence of traditional or alternative medicine which is considered by many a better option compared to the classical therapy with its known complications. It is also important to note that with the widespread globalization, countries became increasingly multicultural, thus importing inherited cultural values and practices which may pass to their new communities.[20]

Our study shows that nurses in Eastern province have poor overall knowledge about breast cancer presentation, referral, and option of management. Harboring a risk factor did not enhance their knowledge. Reports from the western region of the kingdom, Turkey, and Ethiopia have shown similar results.[21, 22]
(Table I): knowledge of participants regarding the screening method, risk factor and clinical picture

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of correct answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>• When you perform self-breast examination?</td>
<td>120 (24.48%)</td>
</tr>
<tr>
<td>• Which age of groups will you advised for screening mammograph?</td>
<td>219 (44.69%)</td>
</tr>
<tr>
<td>• Is breast cancer the comments malignancy among women?</td>
<td>393 (80.2%)</td>
</tr>
<tr>
<td>• Are early menarche and late menopause considered as a risk factors for developing breast cancer?</td>
<td>273 (55.71%)</td>
</tr>
<tr>
<td>• Is the increase in women age carries a potential risk for developing breast cancer?</td>
<td>324 (66.12%)</td>
</tr>
<tr>
<td>• Is a breast pain a symptom of malignancy?</td>
<td>308 (62.86%)</td>
</tr>
<tr>
<td>• Does a mobile well defined breast mass in a 40 years old female carries a lower risk of malignancy?</td>
<td>149 (30.4%)</td>
</tr>
<tr>
<td>• What is a significant nipple discharge?</td>
<td>322 (65.71%)</td>
</tr>
</tbody>
</table>

**Total score** 46.8%

( Table II ) knowledge of participates regarding the management of the disease.

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of correct answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If you diagnose a patient with suspicious breast mass whom will you refer the patient to?</td>
<td>162 (33%)</td>
</tr>
<tr>
<td>• What are common treatment options for patients with malignant mass?</td>
<td>189 (38.57%)</td>
</tr>
<tr>
<td>• What is the preferred breast cancer stage for breast conserving surgery?</td>
<td>191 (38.97%)</td>
</tr>
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</table>

**Total score** 36.8%

(Table III) Behavior on referring patients

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of correct answer</th>
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<tbody>
<tr>
<td>Referring patients to the correct specialty:</td>
<td></td>
</tr>
<tr>
<td>• let the OPD receptionist decide</td>
<td>58 (11.3%)</td>
</tr>
<tr>
<td>• Direct the patient to the oncologist</td>
<td>176 (35.91%)</td>
</tr>
<tr>
<td>• Direct the patient to the Surgeon</td>
<td>162 (33.06%)</td>
</tr>
<tr>
<td>• Direct the patient to the Gynecologist</td>
<td>92 (18.77%)</td>
</tr>
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</table>

**Total Score** 24.76%
Female nurses may play a major role as a source of dissemination of information to women. However, only less than one-third of nurses had reasonable knowledge of the disease and claimed that they acquired it from the undergraduate curricula. Other reports from Singapore and Pakistan has shown that nurses had higher knowledge, however their risk awareness was lacking, and the screening attitude was low as compared to nurses who worked in specialized breast units. Delay in the presentation may be due to the wrong referral to the specialized clinics. Our study confirmed the confusion in referring patients with the overall score of 27.7%

In communities where structured BCAP are lacking, BSE may be the only available screening method. Despite the low performance in this study, our nurses have shown superiority 60% of nurses showed full awareness of the importance of SBE yet only 24.48% performing it timely as compared to the western region of the kingdom which reported only 4% on timely examination. However, when compare the performance of other countries with similar background and culture to more developed countries as Jordan and the United Arab Emirates to Australia and Korea regarding nurses performed BSE monthly reported results are 21%, 22.8%, 37% and 61.5% respectively. This certainly indicates that developing countries in particular conservative breast cancer awareness among nurses score low in knowledge, yet their attitude remains commendable in their readiness to participate in BCAP. The notion: Nurses are a task force service provider rather than educators should be corrected. Directing special attention towards utilizing this dynamic group for community educational purposes will give a positive impact on the community. The inclusion of health education in the undergraduate curricula is mandatory to provide high standard performance.

CONCLUSION

The need for breast cancer awareness programs cannot be overemphasized. In culture based communities, women healthcare professionals are the potential candidates for successful breast health education. Nurses, in particular, may the suitable task force in BCAP. They are more approachable and can communicate easily with women, however, structured, comprehensive educational audited courses and regular workshops will enhance their knowledge and performance as their important role will impact positively on BCAP.

REFERENCES

14. shadia A, Yousif, breast cancer awareness among Saudi nursing students, JKAU:med.sci. 2010 17 (3); 67-78,


