

Breast Cancer Awareness among Healthcare Professionals - 2 Decades later: An Observational Review

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Abstract

Based on a follow up update on a previous study performed 2 decades earlier (Ann SM; 2000; 20(2): 135-136). Portraying alarming results on knowledge and attitudes on breast cancer among healthcare professionals from and university hospital. This review aims to explore the current performance of healthcare professionals towards breast cancer awareness in a potentially developed era.

Materials and Methods: This Cross-Sectional pilot tested study was conducted at a university hospital targeting all healthcare professionals between June 2017 - December 2017. Designed structured questionnaires were directly distributed to cover demographic data, high-risk factors, knowledge and attitudes towards breast cancer. The target population was 600.

Results: The total respondents were 532(88%). Age ranged between 19-59 years with the mean age of 28 years. These where 200(37%) final year medical students, 118(22%) interns, 60(11%) residents 22(4%), specialist 30(5%), 28(5%) consultants, and 74(13%) nurses. High risk group accounted for 120(23%) of all participants.

The highest scores were obtained from the younger group of staff, the interns\students (91%, 97%) as compared to the specialist\consultant categories (75%, 82%). Nurses unexpectedly had shown lower scores in knowledge (71%) which may suggest that the practical education in nursing practice supersedes knowledge in special fields.

High risk group did not show significant difference in the overall knowledge scores (84%) yet, they scored higher in attitudes towards BCAP (94%).

Conclusion: The necessity for (BCAP) cannot be overstated. The impressive and remarkable improvement of breast cancer awareness coupled with the availability and readiness of human resources assist in the planning, implementing and setting guidelines and strategies for breast cancer early detection programs. It can be declared that our community is equipped with knowledgeable medical staff, who can perform adequately run Breast Cancer Awareness Programs.

Keywords: *Breast cancer; Awareness programs; Health education*

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Introduction

Breast cancer remains the concern of all women globally [1]. Its estimated annual number of cases diagnosed globally with breast cancer exceeds 1 million and this number is expected to increase to 1.5 million by the end of the decade because of the major increase in the reported cases from countries with limited resources [2].

Breast cancer is the most common cause of cancers related morbidity and mortality among female worldwide [3]. Health professional's role as educators helps disseminate knowledge leading to a reduction in morbidity and mortality of the disease [4]. The increased prevalence of breast cancer over recent years coupled by scarcity of known proven means for breast cancer prevention has alerted women to seek medical advice randomly. In our communities the long recognized fact that breast cancer is characterized by young age and delayed presentations continues to be alarming [5].

The important topic "Breast cancer awareness among health professionals" revives the role of the health professional as a community doctor. It focuses on the wide scope of physician's contribution to breast cancer care starting from the community as health educators to fulfilling their final task of patients' management. Community based cancer education requires intervention at many levels that address the fundamental causative contributing issues to the myriad of health disparities [6].

Materials and Methods

This Cross-Sectional pilot tested survey was conducted at a university hospital targeting all healthcare professionals between June 2017-December 2017. Designed structured questionnaires were directly distributed to cover demographic data, high-risk factors, knowledge and attitudes towards breast cancer. The target population was 600 in number.

The survey aimed towards Demographic data, job category, knowledge on the subject of breast cancer, risk factors, questions on Breast Self-Examination (BSE), encouragement of mammography screening and participation on Breast Cancer Awareness Program (BCAP).

Random distribution of questionnaires was performed via direct contact based on ease of access and availability of the staff. Data collected, coded and analyzed using statistical package for social science (SPSS) version 19.

Results

The total respondents were 532(88%). Age ranged between 19-59 years with the mean age of 28 years. These were 200(37%) final year medical students, 118(22%) interns, 60(11%) residents 22(4%), specialist 30(5%), 28(5%) consultants, and 74(13%) nurses. High risk group accounted for 120(23%) of all participants.

Table 1 summarizes the response to seven basic questions on knowledge concerning breast cancer. The highest scores were obtained from the younger group of staff, the interns\students (91%, 97%) as compared to the specialist\consultant categories (75%, 82%). This may be attributed to the wide horizon of retained general knowledge prior to specialization in more refined fields. Nurses unexpectedly had shown lower scores in knowledge (71%) which may suggest that the practical education in nursing practice supersedes knowledge in special fields.

High risk group did not show significant difference in the overall knowledge scores (84%). Despite the difference in scores in this knowledge assessment between individual categories, there was no significant difference in the overall score (Table 2).

Questions	Consultant	Specialist	Residents	Interns	Students	Nurses	Total
Prevalence of breast cancer?	70%	76%	81%	90%	92%	65%	79%
Timing for Self breast examination	84%	90%	93%	95%	100%	80%	92%
Ideal Age for screening mammography?	75%	87%	90%	95%	98%	77%	87%
What is the risk of early menarche and late menopause?	60%	71%	75%	84%	98%	52%	73%
Is the increase age carries a potential risk?	86%	85%	89%	97%	99%	81%	89%
Is breast pain a symptom of malignancy?	81%	85%	93%	89%	98%	76%	87%
Does a mobile mass in a 40-years-old female carries a lower risk of malignancy?	75%	80%	85%	90%	96%	70%	82%
Total Score%	75%	82%	86%	91%	97%	71%	83%

Table 1: Knowledge.

Knowledge	Consultant	Specialist	Residents	Interns	Students	Nurses	Total
Low risk	75%	82%	86%	91%	97%	71%	83%
High risk	76%	83%	86%	93%	97%	70%	84%

Table 2: Knowledge low risk vs. high risk.

Table 3 summarizes the response to basic questions on attitudes concerning breast cancer where five questions were analyzed. Again the Interns\students had more enthusiastic attitudes towards participation in BCAP (94%, 95%).

The high-risk group had a higher precautionary, deterrent attitudes and approach towards breast cancer (94%) than the low risk group (83%) (Table 1).

Questions	Consultant	Specialist	Residents	Interns	Students	Nurses	Total
Would you advise regular self-examination	60%	66%	71%	80%	82%	65%	70%
Would you encourage breast cancer screening	94%	90%	93%	100%	100%	80%	92%
Would you participate in BCAP	45%	67%	70%	100%	100%	80%	77%
Would you encourage BCAP	90%	91%	95%	94%	98%	52%	86%
Would you encourage High risk group to regular visits	86%	85%	89%	97%	99%	81%	91%
Total	75%	79%	83%	94%	95%	71%	83%

Table 3: Attitudes

Attitudes	Consultant	Specialist	Residents	Interns	Students	Nurses	Total
Attitudes Low risk	75%	79%	83%	94%	95%	71%	83%
Attitudes High risk	85%	87%	90%	100%	100%	88%	91%

Table 4: Attitudes low risk vs. high risk

Discussion

Health education continues to pose a challenge to the health care system in developing countries and countries with limited resources. Evaluation of health professionals' knowledge and attitudes towards breast cancer care is of fundamental importance in order to promote public awareness and correct misconceptions for implementation of cancer control activities.

These activities encourage to endorse treatment for cure, reduces patients' suffering, and certainly minimizes the financial burden incurred by management of delayed presentations.

Unfortunately, developing countries continue to face resource limitations that challenge the objective of improving breast cancer outcomes by early detection, diagnosis and management [7].

The primary healthcare physicians are the first line of health care provision. They are well trusted easily accessible staff compared to secondary and tertiary center physicians where the need of prior scheduled appointments is mandatory. However, the crowded primary healthcare facility are not equipped as an educational early detection facilities with special waiting areas or qualified staff to educate women as they attend the set up. In addition, physicians with limited updated knowledge on breast cancer information fail to adhere or advise early detection methods. As members of the community they may share some of the inherited misconceptions and occasionally may pass on erroneous information as true medical facts.

With the rapid evolution of the technology, the improvement in media circulation, the expanding market of cable television and the overwhelming advancement of the internet, the information on breast cancer has become an unwrapped accessible knowledge in all communities. The vast development in the field of breast cancer with at the pathophysiologic mechanisms, the bimolecular markers levels, the targeted drug design has left the developing countries way behind struggling infringe the proper knowledge and attitudes towards the disease [8].

Breast cancer constitutes 13-35% of all female cancers, with an added dilemma of the young age where mastectomy is the most commonly performed procedure [9].

Misconceptions may easily co-exist with 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 ease of travel countries are becoming increased multicultural, thus incoming population from different nations, with different backgrounds tend to import inherited cultural values and practices which may passed to their new communities [10].

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 [11].

Contrary to what was expected from the highly educated medical personnel in the previous study carried out a decade ago showed that health professionals were then not qualified to carry out the community health education task [1].

Encouraging results from the current study has prompted increased activities at the hospital level by stressing on BCAP in the undergraduate curriculum, and carrying out structured community programs within the local area.

Contrary to our results, reports from Singapore has shown that nurses had high knowledge about the disease yet, their risk awareness was lacking, and the screening attitude were low as compared to nurses who worked in polyclinics for the national breast cancer program [12,13]. Pakistani women are reluctant to visit male healthcare professionals for conditions related to breast, female nurses play a major role as a source of dissemination of information to women. Yet only one third of nurses had good knowledge on the disease [14]. Generally researchers perceive the importance of BSE as a reliable early detection method in countries with limited resources, yet, nurses in different settings showed limited knowledge and irregular performance of BSE [15].

Knowledgeable nurses claimed that they acquired early detection information from college curriculum [16]. In Nigeria physicians showed inadequate knowledge and low referral attitudes towards women which impacts negatively on early detection strategies [17,18].

According to the WHO press release in 2003, stated due the establishment of structured Breast Cancer Awareness Programs (BCAP) carried out by trained professionals in the United States, United Kingdom and France, mortality rates has decreased or remained stable for the past 20 years despite the increased breast cancer prevalence [19].

BCAP in our communities are sporadic, interrupted individualized efforts carried out by enthusiastic health professionals functioning at a small scale, with limited resources and results. The lack of breast clinics with established protocols on cancer early detection in Primary Health Care Centers further compound the problem. In order to provide a positive impact in the community it is important to assess, educate and encourage all health providers' participation in establishing successful breast cancer awareness programs. The primary goal of BCAP is to promote and develop awareness among members of the society at large on the methods of early detection which plays a major role in the management of breast cancer. It has been stated that to establish a structured and effective cancer health education program at least 70% of the target population must accept the invitation to participate if a screening program is to significantly reduce mortality [20].

The United States health system has dedicated great attention to early detection and prevention of cancer and its implementation has to some extent improved patient's outcome. However, there are growing concerns over failure to detect early stage breast cancer has led communities across the United States to participate in the breast cancer awareness month program, which mobilizes public and private institutions, particularly the media to reach a large audience each October. Evaluation of cancer registries in the United States have shown increased detection of *in-situ* and local cancer during the quarter that included the October [21].

Reports conducted from different parts of the kingdom of Saudi Arabia has shown a similar lower level of breast cancer awareness and delayed outcomes [22].

This study attempts to assist in the planning, implementing, and evaluating the knowledge and attitudes of healthcare professionals which will aid in setting guidelines and strategies for breast cancer early detection programs in the developing communities.

Marked discrepancy between the knowledge, practice of BSE and mammographic screening among women was demonstrated in a number of studies [23].

School teachers as educators are targeted to dispense the correct information. In a study performed in the Al khobar area of the Eastern Province of Saudi Arabia. Marked benefits were achieved with Pre and Post workshop evaluations. This positive result dictates the importance and the necessity of continuous education and awareness programs [24].

The promising results from the current study shows marked enhancement in the attitudes towards breast cancer and improvement in basic knowledge of the disease. Breast Cancer Awareness programs (BCAP) are focused structured educational programs that are tailored to fit individual cultures. Properly trained medical staff promotes cancer control activities either in their work place while they attend to patients or in the field as they directly participate as instructors in the BCAP.

Conclusion

Healthcare professionals are the corner stone of planning, implementing, setting guidelines and strategies for breast cancer early detection programs in our community. Since the enthusiasm of the healthcare professionals towards educational programs is surfacing it is high time to utilize their readiness in promoting well-tailored BCAP that can fit own communities.

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