

## BREAST CANCER AWARENESS CAMPAIGN: WILL IT MAKE A DIFFERENCE?

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**هدف الدراسة :** زيادة الإحصائيات لسرطان الثدي عند النساء صغيرات السن و في مراحل متقدمة من المرض أدت إلى انتباه بعض النساء لمراجعة الأطباء بصورة عشوائية. ومن الملاحظ أنه لا توجد إستراتيجية واضحة لبرامج الاكتشاف المبكر لسرطان الثدي ولذا كانت هذه الدراسة لاستدراج المدرسات للمساعدة لنشر الوعي.

**نتائج الدراسة :** عمدت هذه الدراسة التي أجريت بمنطقة الخبر 2005 لتثقيف المدرسات عن طريق ندوات و ورش عمل كان عددها سبعة و احتوت على 100-150 مدرسة. و قد أجريت عملية استفتائية قبل و بعد الندوة. كانت الاستجابة عالية و قد بين الاستفتاء (القبلي): نتيجة مؤيدات الفحص هو 5%, و 14% مؤيدات للأشعة). قلة المعلومات عن سرطان الثدي كما تبين أن هناك معلومات مغلوطة متداولة.

الاستفتاء البعدي بين(مؤيدات الفحص 45%, مؤيدات الأشعة 45%). و هناك 10% من النساء لا يرين أي داعي للاجتهد.

**الخلاصة :** يجب أن توضع إستراتيجية واضحة للاكتشاف المبكر لسرطان الثدي في المجتمعات, خاص المدارس و الكليات و تجنيد المدرسات لحث الطالبات على الفحص المبكر.

**الكلمات المرجعية :** سرطان الثدي ، التوعية

**Objective:** The increased prevalence of breast cancer in recent years characterized by young age and delayed presentation has alerted women to randomly seek medical advice randomly. Breast cancer awareness programs are scarce and when available function on a very limited scale. In an attempt to increase cancer awareness among women, school teachers were targeted as missionaries to the community. The purpose of this study was to assess the efficiency of the breast cancer awareness campaign mounted by the author.

**Material and Methods:** This survey was undertaken in 2005 with school teachers in Al Khobar district, Eastern Province of Saudi Arabia as the target. A breast cancer campaign was designed with lectures and workshops and delivered to school teachers in seven separate sessions. Each session was attended by 100-150 female teachers selected by their administration. Pre and post workshop questionnaires were distributed to assess knowledge of cancer symptoms, risk factors, attitudes towards breast self-examination (BSE), mammography, and common misconceptions.

**Results:** The majority demonstrated minimal basic background knowledge on breast cancer, methods of conducting BSE or the need for mammography. The pre workshop questionnaires showed that 5% agreed and performed BSE, 14% thought that mammography may be needed, while 81% did not think any of these modalities were necessary. Post workshop questionnaire demonstrated positive results, 45% agreed to perform BSE, 45% agreed to the need of mammographic screening while 10% still did not see the necessity of these procedures and refused the knowledge or the search for asymptomatic lesions.

**Conclusion:** In order to succeed, breast cancer programs should be structured and implemented on a wide scale preferably tailored to fit individual communities. School teachers as educators help to convey the message to a large sector of the population by enhancing the knowledge of the younger generation on the necessity and the importance of early detection of cancer.

**Key Words:** Breast cancer, awareness.

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## INTRODUCTION

The prevalence of breast cancer in our part of the world has increased over recent years, affecting population which is younger than found in the West.<sup>1</sup> The estimated annual number of cases diagnosed globally exceeds one million and this number is expected to rise to 1.5 million by the end of decade because of the major increase in the number of cases in countries with limited resources.<sup>2</sup>

The current situation is grave. Patients continue to present with an average size tumors of 4-6cm if not with ulceration and distal metastasis. Unfortunately, wide scale structured programs are scarce or non-existent in developing countries and when available function on a very limited scale. Breast cancer awareness programs (BCAP) should be designed to assist in prevention and early detection in order to improve the outcome and decrease the morbidity of late presentations. Until then, increased awareness among the educated, such as school teachers, will help to broaden the scale of health education in communities, by relaying this vital message of early detection of breast cancer .

## MATERIAL AND METHODS

This survey was undertaken in 2005 with school teachers in the Al Khobar district, Eastern Province of Saudi Arabia as the target. A breast cancer awareness program was designed and presented to school teachers in seven separate sessions. Each session was attended by 100-150 female teachers selected by the Directorate of Education, Eastern Province of Saudi Arabia. The data collection tools included a pre-tested pre workshop questionnaire which included variables such as: knowledge of cancer symptoms, risk factors, attitudes towards breast self examination(BSE), mammography, and common misconceptions. This was followed by lectures on breast cancer awareness, methods of early detection, correction of misconceptions, methods of healthy life-style and hormonal replacement therapy, followed by model demonstration on BSE. The same questionnaire was then redistributed at the end of program to evaluate the impact of the campaign on the knowledge, and skills of the participants.

## RESULTS

The total number of attendees was 756; their response rate to the questionnaire was 100%. This could be explained by the pre-registration of the

teachers in their affiliated schools to attend the program and by the fact that they formed captive population. Their ages ranged between 22-57 years. The majority had minimal background knowledge on the methods of conducting BSE or the need for mammography (Table 1).

Table 1

Questions	Results of Pre-workshop questionnaire (%)	Results of post workshop questionnaire (%)
Cancer symptoms:		
Nipple changes	68	97
Bloody nipple discharge	58	94
Breast mass	97	97
Risk factors:		
Early menarche	22	97
Late menopause	30	97
Obesity	40	97
Abnormal genes	77	100
HRT	88	97
1 <sup>st</sup> pregnancy after the age of 35	33	98
Methods of early detection:		
Necessity of SBE	5	45
Necessity of mammography	14	45

The pre-workshop questionnaire showed that 5% knew and performed BSE, 14% agreed to accept mammography, while 81% (Figure 1) did not think any of these modalities were necessary. There were many misconceptions. These included the false belief that only symptomatic patients had cancer, breast manipulation and mammography increased the risk of cancer in all ages, no family history of breast cancer meant immunity against cancer. Post program questionnaire results were positive in that, 45% realized the importance of BSE and agreed to perform it, 45% agreed to mammographic screening while 10% still did not see the necessity of these procedures and rejected the knowledge or disclosure of asymptomatic lesions (Figure 2).

## DISCUSSION

The total annual reported number of cases diagnosed with breast cancer globally exceeds 1 million and this number is expected to increase to 1.5 million by the end of decade.<sup>2</sup> Breast cancer education continues to pose a challenge to the health care system in developing countries and countries with limited resources. Community-based cancer education requires intervention at

many levels that address the fundamental causative contributing issues to the myriad of health disparities.<sup>3</sup> It was once believed that the incidence of breast cancer varied in different ethnic groups. High figures have been reported from North America and Europe, but significantly lower figures from the Middle East. Compared to the data on western societies, breast cancer in this part of the world forms the highest relative frequency of all cancer types. It is also being diagnosed in much younger women.<sup>4</sup> The nature of health education information is significantly different in developing countries where preventive and early detection strategies are not stressed as they are in the more developed regions. Evaluation of public awareness, attitudes and misperception is of fundamental importance for the implementation of cancer control activities.

Contrary to international reports, this study has demonstrated the limited knowledge and skills of our participants documented by the low score in attitudes towards SBE ((5%) and Mammography (14%) in the pre-program questionnaire. In comparison, a survey conducted for European women showed that 73% had reasonable knowledge on hormonal replacement therapy, its benefits and risks.<sup>5,6</sup> It has also been reported that in a primary health care setting, older women had poorer knowledge than younger women but were equally likely to appreciate the benefits of mammography.<sup>7</sup>

In our set up, and due to the cultural background, women belonging to the reproductive age group are resistant to the knowledge of cancer, refuse to call it by its name and have misconceptions passed on to them from previous generations. Indeed, education plays a major role in the ease with which information is disseminated, yet it can act as an obstacle when misconceptions predominate. Reported series in our communities have shown that highly educated participants had higher erroneous responses to the fatal outcome of breast cancer, potential risk factors and screening mammography.<sup>8</sup>

The scarcity of known proven means for breast cancer prevention prompts more reliance on the methods of early detection to improve patient outcome. Although screening mammography is not a perfect diagnostic tool, it remains the best means of early detection of breast cancer. It detects 95% of all breast cancer.<sup>9</sup>

In this current study, the large number (81%) of negative results could be explained by the preexisting misconceptions coupled with existing

barriers hindering women from BSE or mammography screening such as; lack of physician recommendation, lack of knowledge about the need for early detection, difficulties in facility access and fear of cancer detection. Women's anxiety is further exaggerated by the medical controversies regarding the efficacy of BSE and mammography.

Other infrequently used modality of screening directed towards a subset of patients is genetic testing. It has been adopted in developed countries in high risk groups, yet even in these advanced health systems, only one third of the high risk patients were moderately aware of genetic testing for breast cancer risk.<sup>10,11</sup> Contrary to our patients' belief that family history is the sole cause of cancer, it has been estimated that cancer occurs only in 5-10% in hereditary situations caused by mutated genes.<sup>12,13</sup>

The United States health system has focused great attention to early detection and prevention of cancer and its implementation has to some extent improved patient outcome. However, 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 programs, which mobilize 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.<sup>14</sup>

Some authors advocate that copying the practice of the United States, perceived as "state of the art" may be ill-suited for global use.<sup>2</sup> This statement is valid, each society must tailor its health education programs with the social, educational status and needs of the community in mind. In our communities, the implementation of these programs is of paramount importance. The provision of female staff as general practitioners, surgeons, radiology technicians and health educators will help to remove major obstacles and facilitate access in order to improve outcome. Annual awareness events may help refresh knowledge and remind the target population about their community tasks.

The primary goal of BCAP is to promote and develop awareness in members of the society at large about the methods of early detection, which play a major role in the advanced treatment of breast cancer. 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.<sup>4</sup>

In our series, 90% showed a readiness to participate, which is a step in the right direction. Despite improvement in the responses to the post-workshop questionnaire, it was not the best and the fear of detecting cancer still haunts women. A second phase survey needs to be attempted to evaluate the extent of recall for the same group.

Utilization of the media facilitates and encourages the participation of the population by making breast cancer information readily available in simple language. Many institutions have taken this opportunity to use the media and the internet to avail themselves of millions of references to breast cancer.<sup>15</sup>

In conclusion, the need for breast cancer awareness programs (BCAP) cannot be overemphasized. Health education is essential and should be recommended to all sections of the population to encourage methods of early detection and correct misconceptions.

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