

Men's knowledge and attitude towards breast cancer in Saudi Arabia

A cross-sectional study

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ABSTRACT

الأهداف: تحديد معلومات الرجال وموقفهم تجاه الكشف المبكر عن سرطان الثدي.

الطريقة: أُجريت هذه الدراسة المقطعية المستعرضة في العيادات الخارجية في مستشفى جامعة الملك عبدالعزيز، جدة، المملكة العربية السعودية. شملت الدراسة 550 مشارك ممن اختيروا عشوائياً، ولقد طلب منهم ملء الاستبيان بدون ذكر الاسم وبشكل خاص. تضمن هذا الاستبيان كلاً من: المعلومات الديموغرافية، ومستوى المعلومات التي يملكها الرجال حول سرطان الثدي، بالإضافة إلى مصدرها، والمعتقدات والممارسات فيما يتعلق بسرطان الثدي مثل الفحص الذاتي وتصوير الثدي بالأشعة، والصعوبات التي قد تمنع المرأة من الكشف المبكر.

النتائج: أشارت نتائج الدراسة إلى أن معدل الاستجابة قد كان 90.9%. وكانت غالبية الرجال من الموظفين (63.2%). وأظهرت الدراسة بأن مصدر المعلومات قد كان الأطباء (43.4%)، تليها الإنترنت (40.4%) ثم وسائل الإعلام (30.4%). ولقد بينت الإجابات بأن أعراض سرطان الثدي الأكثر شيوعاً هي وجود كتلة في الصدر (36.6%)، تليها تغير حجم الثدي (26%)، والألم (20.2%)، بينما لم يكن 24% من الرجال على اطلاع بأعراض سرطان الثدي. ولقد ظن حوالي 13% بأنه يجب استئصال الثدي مع جميع حالات الإصابة بسرطان الثدي. ولقد كان 57.6% على معرفة بأهمية الفحص الذاتي من أجل الكشف المبكر عن سرطان الثدي، ولم يعرف حوالي 90% بأهمية التصوير الإشعاعي للثدي.

خاتمة: أظهرت نتائج هذه الدراسة بأنه لا بد من وجود الحملات التثقيفية والتوعية الموجهة إلى الأزواج والرجال بشكل عام، بالإضافة إلى ضرورة تثقيفهم لتشجيع زوجاتهم وأسرهم للانخراط في حملات الفحص الدوري والكشف المبكر.

Objectives: To identify men's knowledge and attitude towards early detection of breast cancer.

Methods: This cross-sectional study was conducted at the outpatient clinics of King Abdulaziz University Hospital, Jeddah, Kingdom of Saudi Arabia. Five hundred and fifty participants were selected by systemic randomization.

The distributed questionnaire included: demographics, knowledge and its source on breast cancer, beliefs and practice regarding breast self-examination (BSE), mammography, and difficulties that may prevent women from seeking medical help. The questionnaire was filled anonymously and in private.

Results: The response rate was 90.9%, and most were employees (63.2%). Physicians represented 43.4% of the source of knowledge, followed by the internet (40.4%), and last, the media (30.4%). Breast mass was the most common symptom (36.6%), followed by change of breast size (26%) and pain (20.2%), while 24% did not know the symptoms of breast cancer. Approximately 13% believed that all cases of breast cancer ended with mastectomy. Only 57.6% were aware of the importance of BSE in early detection of breast cancer, and approximately 90% did not know the importance of mammography.

Conclusion: Awareness campaigns aimed at husbands and men in general are to be strongly considered. They should encourage their wives and families to enroll in awareness and screening campaigns.

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Breast Cancer is the most common cancer among females in Saudi Arabia. According to the Saudi Cancer Registry (SCR), breast cancer ranked first among women as it represented 26% of all newly diagnosed female cancers in the year 2007.¹ Early detection of breast cancer is the key for better cure and survival, but in Saudi Arabia and other Arab countries, late stage presentation is not common.² A major socio-cultural barrier against breast screening and early detection of breast cancer in many traditional societies is that men control women's decisions and actions.³ A variety of noneconomic barriers that impede early detection include cultural, ethnic beliefs, and taboos. Failure to recognize these obstacles can doom the success of any cancer care program, even when adequate resources are provided.⁴ The objective of this study was to identify men's knowledge and attitude towards early detection of breast cancer.

Methods. This cross-sectional study was conducted at King Abdulaziz University hospital (KAUH) outpatient clinics, Jeddah, Kingdom of Saudi Arabia. The study was approved by the research ethical committee. Five hundred and fifty participants were selected by systematic randomization. Participants were men who attended the KAUH outpatient clinics with their female relatives on 2 randomly selected days per week from 8 a.m. to 12 p.m. for 2 months (January and February 2011). The participants consented verbally and were requested to fill out a questionnaire, which included; demographic data, knowledge (and its source), beliefs and practice regarding breast self examination (BSE), attitude and practice towards mammography, in addition to difficulties that may prevent them from seeking clinical examination. Inclusion criteria were males who are willing and agreed to participate in the study. Exclusion criteria were females and males who were not willing to participate. Out of 550 questionnaires distributed, only 500 questionnaires were returned. Data were entered into a computer and analyzed.

Statistical analysis. For data analysis, we utilized the Statistical Package for Social Sciences version 15 (SPSS Inc., Chicago, IL, USA). Percentages of different variables calculated included demographic characteristics, knowledge, attitude, and practice. We also used percentile values, central tendency (mean), and dispersion (standard deviation).

Results. The response rate to the questionnaire was 90.9%. Most the participants were employees (63.2%). University students (22.2%), supporting services workers (4.6%) and non-hospital individuals (10%) also participated. This study showed that 93.6% of participants had heard of breast cancer. Physicians

represented 43.4% of the source of their knowledge, followed by the internet (40.4%), and the media (30.4%) (Table 1). Breast mass was the most common symptom (36.6%) reported by the participants followed by change of breast size (26%), and pain (20.2%). Bloody discharge was reported by 14.8%, and axillary mass by 16.2%. Unfortunately, 24% of the participants did not know the symptoms of breast cancer (Table 2).

Approximately one third of participants (33.8%) believed that examination does not prevent the disease, and 17.4% believed that no treatment of cancer exists. Beliefs in treatment modalities of breast cancer showed that 13% of participants believed that all cases of breast cancer ended with mastectomy, while 60.2% believed that not all cases ended with mastectomy. Only 8% thought that chemotherapy always leads to death. Regarding the belief in non-medical treatments, participants considered reading the Quran (10.8%), drinking Zamzam water (14.4%), and consuming non-medicinal herbs (9.6%) as effective as medical treatments (Table 3). When the participants were asked regarding their attitudes when their wives were diagnosed with breast cancer, only 9.4% reported they would leave their wives, while the majority (90.6%) said they will never leave them (Table 3). Only 57.6% of participants were aware of the importance of BSE in early detection of breast cancer, and only 29.85% advised females in their families to perform breast examination. Approximately 90% of participants did not know the importance

Table 1 - Knowledge and knowledge source of breast cancer among the studied groups and its source (N=500).

Knowledge	No.	(%)
<i>Have you heard about breast cancer</i>		
Yes	468	(93.6)
No	32	(6.4)
<i>Source of knowledge</i>		
Physician	217	(43.4)
Friends	51	(10.2)
Support team	12	(2.4)
Traditional medicine	13	(2.6)
Media	152	(30.4)
Survivors	16	(3.2)
Nurses	12	(2.4)
Internet	202	(40.4)

Table 2 - Knowledge of the symptoms of breast cancer among the studied group (N=500).

Symptoms of breast cancer	No.	(%)
Change in size	130	(26.0)
Blood discharge	74	(14.8)
Change in areola	80	(16.0)
Pain	101	(20.2)
Breast (mass)	183	(36.6)
Axilla (mass)	81	(16.2)
I do not know	120	(24.0)

Table 3 - Beliefs regarding breast cancer and its treatment among the studied group (N=500).

Beliefs	n	(%)
Examination do not prevent	169	(33.8)
Disease is a punishment	14	(2.8)
Zamzam water recover the disease	72	(14.4)
Quran recover	54	(10.8)
No treatment	87	(17.4)
Chemotherapy leads to death	40	(8.0)
Herbal treatment is better	48	(9.6)
<i>Mastectomy is the treatment for all cases</i>	65	(13.0)
Some cases	30	(60.2)
I do not know	134	(26.8)
<i>The attitude of the husband if the wife got breast cancer</i>		
I will leave her	47	(9.4)
I will never leave her	453	(90.6)

Table 4 - Practice and knowledge regarding breast cancer of the studied groups (N=500).

Practice	n	(%)
<i>Do you know the importance of early breast self-examination</i>	288	(57.6)
Yes	212	(42.4)
No		
<i>Do you advise your family to undertake breast examination</i>	149	(29.8)
Yes	351	(70.2)
No		
<i>Causes that may prevent you from advising (breast examination)</i>	155	(31.0)
No causes	29	(5.8)
I am not convinced	110	(22.0)
Lazy	98	(19.6)
I do not know its importance	60	(12.0)
Fear		
<i>What is the importance of mammogram in breast cancer detection</i>		
Discovery of tumors	21	(4.2)
If it is not carried out it means late discovery	6	(1.2)
Discovery of small tumors	20	(4.0)
I do not know	453	(90.6)

of mammography in early detection (Table 4). Unfortunately, 19.6% of participants did not know the importance of BSE, so they did not advise females in their family to do so, while 31% did not mention a certain cause for not encouraging female relatives to perform BSE. Disbelief 5.8%, laziness 22%, and fear 12% were the most common reasons that prevented participants from advising their families to perform BSE (Table 4). Regarding the participants' knowledge of methods of early detection of breast cancer, only 26.2% saw mammography as the best method while, 46.6% and 21.8% of participants considered physician examination and BSE as the best methods. 21.4% of participants did not know the best methods of breast cancer diagnosis.

Discussion. Successful treatment of breast cancer depends heavily on early detection. Practicing surgeons and medical oncologists routinely see young women

presenting with large breast tumors in developing countries.⁵ These large tumors could be easily detected by BSE or by the husbands. However, poor health education plays a major role in the delay of cancer detection. In this study, most participating men were aware of breast cancer, and only a minority had never heard about it. Physicians, internet, and the media represented the major sources of their knowledge. Participant's knowledge of the symptoms and risk factors of breast cancer was limited, as approximately one quarter did not know any of the suggestive symptoms of breast cancer.

Unfortunately, literature that deals with men's knowledge of breast cancer in Saudi Arabia or other Arabic countries is not available to compare with the results of this study. The health care providers (HCP) were the major source of information of breast cancer as shown in this study, and this highlights their important role in early detection of breast cancer. In a previous study,⁶ breast examination was not included in routine physical examination, and only 11.3% of physicians routinely carried it out for their patients. It was also a serious and alarming finding that requesting a mammogram for females above 40 years of age was carried out only by 34% of physicians.⁶ Health beliefs have a great influence on perception of screening, diagnosis, and accepting medical treatment. In this study, approximately one third of men believe that examination of the breast and early detection of breast cancer is useless. It was found also that a considerable percentage of men believe that holy water Zamzam alone can cure breast cancer, and others believe that chemotherapy itself leads to death. These false perceptions and beliefs are consistent with the other findings of studies in minority groups like Hispanic and African American populations where the beliefs that traditional therapies (namely natural herbal remedies) are better than standard cancer treatments.⁷ Furthermore, in many male dominated societies, the women's social status is totally dependent on their roles as wives, mothers, and housekeepers.⁸ Females usually have a strong sense of family responsibility and they worry about their children and families, which contributes to the challenge in accepting screening. Women diagnosed with breast cancer cannot function as before diagnosis, and during the treatment period, they become physically and mentally exhausted and may become dependent on their husbands for help and care. Men are often unwilling or unable to cope with this, and many sick wives are eventually sent away or divorced. Many patients believe that a diagnosis of breast cancer means losing their role and their spouse. This issue is based on negative experiences and assumptions but not on proper studies or proven evidence based studies. In this study, when the participants were asked regarding

their attitude if their wives were diagnosed with breast cancer, the majority (90.6%) said they will never leave their wives, while 9.4% reported they would leave them. Although this might not be the case when it comes to reality, it shows that there is a positive attitude towards women with breast cancer. This indicates why some women try to delay the diagnosis and deny any signs of illness, let alone try to purposely detect the disease by screening. This barrier has also been identified in other studies.⁹ This issue in particular needs further studies to assess men's attitudes towards partners diagnosed with breast cancer. Men are also affected by their partner's illness. Men whose partners were diagnosed with breast cancer were 39% more likely to be hospitalized due to an effective disorder (major depression, bipolar disease, and other serious mood-altering conditions) compared with men whose partners were not diagnosed with breast cancer.¹⁰ This issue was not addressed in our study. Educating patients and their partners on the risk of mental health challenge, as well as providing appropriate depression screening for spouses and caregivers of cancer patients is warranted based on the above study.¹⁰ In this study, approximately half of the participants understood the value of BSE, but only half of them encouraged their family to perform BSE. The reported reasons behind not encouraging family members included laziness, fear and disbelief in its value, while most participants mentioned no specific reason.

Unfortunately, the importance of mammography in early detection of breast cancer and improving the cure rate was not clear to most participants. This is a very serious issue and needs to be addressed in future studies. Limited research is available on Arabic men in general and Saudi men in particular, which is a major obstacle to assess their knowledge, attitude, and encouraging partners to undertake BSE or seek medical advice for early detection of breast cancer. It is important to recognize and address all these barriers to increase the involvement of men in early female breast cancer detection. In some societies, without men's approval, encouragement, and support, their wives, sisters, daughters, and other female relatives will rarely seek medical advice. This is, unfortunately, the case in some Muslim cultures, in which men largely control women's health options and decisions. It is extremely important to understand that this is related to the cultural and traditional roles and regulations rather than to the true pure Islamic rules and ministry of health regulations governing these issues.^{11,12}

In conclusion, although the study has some limitations (small and educated population), it calls for further attention to spread awareness among men as they are partners and they need to be empowered

with knowledge. The same is correct for women with particular emphasis on educating them through religious and cultural authorities who play an important role in shaping women's perception and attitudes towards breast cancer, and the vital role of early detection in increasing survival rates. Therefore, we recommend directing the awareness campaigns towards husbands and men in general. They should be asked to encourage their wives and families to be enrolled in awareness and screening campaigns.

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