Factors Related to Awareness of Breast Cancer Screening Activities Among Arab Women in Qatar

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BACKGROUND

Breast cancer is the most common cancer among women in the State of Qatar and the incidence rate is rising. Early detection through breast cancer screening (BCS) activities, which include breast self-examination (BSE), clinical breast examination (CBE), and mammography, has been shown to decrease mortality rates by 25–30% along with proper treatment. Previous findings indicate Arab women throughout the Middle East are often diagnosed with breast cancer at advanced stages and their awareness of breast cancer screening (BCS) services and participation rates in screening activities are “adequate” or low. Accurate and varied sources of information about breast health and BCS; such as from health care providers (especially physicians), mass media, and social networks; can positively influence women’s knowledge and practice of BCS.

Other facilitators of BCS behavior include receiving information about breast cancer or BCS from health care professionals (HCP), having a doctor’s recommendation, and having support from male relatives.

This is important to not only investigate factors that are related to participation levels in BCS, but their awareness levels of BCS and factors that may influence awareness among Arab women in Qatar.

STUDY AIMS

This study aims to gain information on Arabic speaking women’s awareness and practice of breast cancer screening, and discuss factors related to awareness of breast cancer screening (BCS) activities in Qatar. The primary outcomes measured for this paper include (a) awareness and participation levels of BCS activities among Arabic women living in Qatar, (b) their healthcare experiences, and (c) the relationship between Arabic women’s BCS awareness and selected demographic factors. We hypothesize that there is a relationship between Arabic women’s awareness of BCS and their socio-demographic characteristics or health care experiences.

METHODS

A multi-center, cross-sectional quantitative survey of 1,063 participants (87.5% response rate) female Qatar citizens and Qatar Arabic speaking residents. 35 years of age or older, was conducted from March 2011 to July 2011. To ensure representation of women living in various populated regions in Qatar, participants were recruited from hospital and health clinic settings in Doha, South of Qatar, and the West region.

Data collection was obtained from interviews using a structured survey questionnaire. Interviews were conducted in Arabic by seven female nurses fluent in English and Arabic.

- Descriptive statistics (mean, standard deviations for interval variables and frequencies) and Chi-square tests were performed to determine associations between dependent and categorical predictors.

- Multivariate logistic regression analyses was used to further assess the association of pre-selected factors related to healthcare experiences and socio-demographic characteristics with binary dependent variables (e.g., awareness of BCS, CBE, and mammography).

- Statistical significance levels were established at alpha = 0.05 level. Data analyses were conducted with SPSS version 23.

RESULTS

The study population was fairly homogeneous in terms of marital status (78.9% married) and religion (98.2% Muslim). Participants ranged from ages 35-82 years (M=64.9, SD=8.4) and 36.3% had a university education, 36.0% of the married participants’ husbands had a university education, and 65.9% were unemployed (69.3% of whom were homemakers).

- Less than half of participants were aware of the latest recommended BCS guidelines, and less than one-third practiced BCS according to the guidelines.

- The majority of participants wanted to know if they have breast cancer and would make an appointment if their HCP recommended it. Two-thirds of participants said their doctor was understandable.

- Less than one-quarter (24.4%) of the participants reported their doctors talked to them about breast cancer.

- Over half of all participants received BCS information from the media, their doctor, or family/friend. Slightly less than half received BCS information from another HCP (nurse, health educator).

- BCS awareness was related to age (40-49 years old), nationality, marital status, living area, education levels, employment status, and having an understandable doctor who talked to them about breast cancer.

Association between Selected Factors and BCS Awareness

<table>
<thead>
<tr>
<th>Predictors of CBE Awareness</th>
<th>Adjusted OR (95% CI)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Married)</td>
<td>2.51 (1.82-3.47)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Education Level of Participant’s Husband (n=896)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤Primary/Intermediate</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Secondary/Trade school</td>
<td>1.09 (0.70-1.71)</td>
<td>0.66</td>
</tr>
<tr>
<td>University</td>
<td>1.34 (0.84-2.14)</td>
<td>0.18</td>
</tr>
<tr>
<td>Employment Status of Participant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other HCP</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Doctor</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Family/Friend</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Doctor talked to participant about breast cancer</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Doctor is understandable</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

SUMMARY

A previous study on the same sample found that having BCS awareness was one of the strongest predictors for BCS practice. In the current study, participants were found to have:

- Mammography awareness (41.1%) and mammography (41.1%), education levels (26.9%, CBE 41.1%, mammography 26.4%) and participation rates (13.3% of participants reported performing a monthly BSE). 31.3% had a CBE within the last 1 year, 26.9% of participants 40 years of age or older had a mammogram done within the last 1-2 years.

- Participants were significantly more likely to be aware of BCS recommendations if they were married, they (or their husbands) had higher education levels, their doctor talked to them about breast cancer and was understandable, or if they received information about BCS from a variety of sources.

- CBE awareness was additionally associated with being 40-49 years old, while mammography awareness was associated with nationality (non-Qatari), living area (urban), and employment status (employed).

- Based on multivariate logistic regression analysis, BCS predictors included higher education levels (for women or their husbands), having a doctor who talked to them about breast cancer, or receiving BCS information from a doctor, family/friend, or media.

CONCLUSIONS

Low levels of awareness and participation rates in BCS among Arabic women indicate the need for awareness and compliance with the most recent breast cancer screening guidelines recommended in Qatar. Receiving information about BCS from health care professionals (especially physicians), the media, and family/friends are strong predictors of awareness and participation in BCS activities. In addition to doctor recommendations for BCS, emphasis should be put on increasing national screening guidelines for recommended practices, in addition to opportunistic national screening program, a more established national cancer registry, long-term research on breast cancer and BCS behaviors, and a multi-ethnic and multi-disciplinary approach of raising awareness of breast cancer prevention and compliance with national screening guidelines.

However, having awareness of breast cancer and its screening may not be enough. Additional research on other social determinants of health that may act as barriers or facilitators to screening practices is needed to further understand the complex factors that affect Arab women’s awareness of BCS and promote effective, long-term compliance.

REFERENCES


