

Preliminary results of a cross-sectional community based survey: breast cancer screening amongst Arabic women living in the State of Qatar



Dr. Tam Truong Donnelly, Dr. Rajvir Singh, Dr. Al-Hareth Al-Khater,
Dr. Mohamed Ghaith Al-Kuwari, Dr. Nabila Al-Meer, Dr. Salha Bujassoum Al-Bader, Dr. Mariam A. Malik



Background

- Breast cancer is the most common cancer among women in Qatar.
- Data from the Gulf Centre for Cancer Registration (GCCR) for breast cancer incidence from 1988-2002 showed the age standardized incidence rate of 35.5/100,000 for Qatar.
- Data from the IACR (2008) showed breast cancer incidence rates had risen in 2008 and showed the age standardized incidence rate of 38.1/100,000 for Qatar, the fifth highest in the Middle Eastern region, after Jordan (47/100,000), Kuwait (47.7/100,000), Bahrain (49.8/100,000) and Lebanon (55.4/100,000).
- Mortality rates have been found to be proportionally high compared to developed countries that have more favorable survival rates (WHO, 2008).
- Early detection of breast cancer through regular screening activities such as breast self examination (BSE), clinical breast examination (CBE) and mammography, improvement of the quality of the screening activities and enhanced treatment has been found to decrease morbidity and mortality rates.
- The stage of diagnosis is an important prognostic factor and breast cancer detected at an early stage appears to have a high chance of responding successfully to treatment.
- Arabic women are often diagnosed at advanced stages of breast cancer.
- Although data seems scarce, low participation rates in breast cancer screening activities have been found amongst Arabic women.

Objective & Research Questions

This study investigates the Arabic women's participation rate in breast cancer screening activities, their knowledge about breast cancer and its screening methods, barriers and facilitators to participation, and their view on the appropriateness and availability of the current breast cancer screening programs.

Research questions:

1. What is the participation rate of Arabic women on breast self examination, clinical breast examination, and mammogram?
2. To what extent are Arabic women's cultural knowledge and values, knowledge of breast cancer and its screening, socioeconomic status, and social support networks, associated with their breast cancer screening behaviors?

Methods

- Convenient sampling was used to recruit female participants from 7 different health care settings in urban and semi-urban Qatar during the period March-July 2011.
- Method of data collection: using structured questionnaires, face-to-face interviews were conducted with 1063 Arabic women aged 35 and living in Qatar >10 years.
- Data analysis was done using statistical program SPSS version 18.

Preliminary results

	N (%)
Knowledge of mammography	446 (42%)
Knowledge of CBE	780 (73.4%)
Knowledge of BSE	308 (29%)
Actual basic knowledge of breast cancer screening*	139 (13.1%)

* Actual basic knowledge of breast cancer screening entails only those women who displayed knowledge of all three categories and qualified for all answered as stipulated in table 2

Questions used as indicator for the variable 'Actual basic knowledge of Breast Cancer Screening'	Answers that indicate participant has some basic knowledge
In Qatar, what age does the screening program suggest that women should start having mammograms?	40-50
How often does the screening program suggest that women should have a screening mammogram?	Once a year Twice a year
Have you ever heard of an exam where a doctor or a nurse examines a woman's breast to feel for a small lump that could be an early sign of breast cancer?	Yes
Have you ever heard of women performing breast self-examination at home?	Yes
Do you know how to examine your own breast?	Yes

Participation rate in breast cancer screening activities	Practiced at appropriate time* N(%)	Practiced at some point N(%)	Participant Never practiced N(%)
Breast Self Examination (BSE) (N=1059)**	110 (10.3%)	327 (31%)	622 (58.7%)
Clinical Breast Examination (CBE) (N=1062)***	331 (31.1%)	120 (11.3%)	611 (57.6%)
Mammogram (only women aged ≥40) (N = 696)	189 (26.9%)	85 (12.2%)	422 (60.9%)

* Although breast cancer screening guidelines are being revised to reflect Qatar's health context and to meet the need of cancer care for women, appropriate times in this study indicate BSE Monthly; CBE for women aged ≥ 35 within the last 1-2 years; mammogram for women aged ≥ 40 within the last 1-2 years

** 4 participants did not answer this question

*** 1 participant did not answer this question

Preliminary results continued

Variables	Category	OR	95% CI	P value
BSE practice				
Education husband	University	3.16	0.72-13.98	0.13
Participant's BSE knowledge	yes	8.08	4.67-13.9	0.001
CBE practice				
Participant understands doctor	yes	1.93	130-2.84	0.001
Participant's knowledge of breast cancer screening	yes	4.43	2.77-7.09	0.001
Facilitator CBE	yes	1.46	1.02-2.09	0.004
Barrier CBE	yes	0.42	0.30-0.61	0.001
Participant's CBE awareness	yes	47.07	14.78-149.9	0.001
Mammogram practice				
Barriers for planning a mammogram	yes	0.64	0.43-0.96	0.03
Participant understands doctor	yes	2.11	1.28-3.47	0.003
Participant's knowledge of breast cancer screening	yes	2.10	1.26-3.45	0.004
Mammogram knowledge				
Education participant	University	2.71	1.40-5.24	0.003
Education husband	University	2.41	1.20-4.87	0.01
Barrier planning mammogram	yes	0.49	0.36-0.67	0.001
Facilitator mammogram	yes	1.93	1.43-2.60	0.001

Table 5. Questions used as indicator for the variable 'Barriers for not planning mammogram' (N=1057)*

Questions used as indicator for the variable 'Barriers for not planning mammogram' (N=1057)*	Frequency N (%)
Which of the following are reasons for you to not plan on having a mammogram?	
Might be painful/uncomfortable	Yes 205 (19.4%)
Fear of finding out you might have cancer	Yes 126 (11.9%)
Fear of gossip	Yes 34 (3.2%)
Embarrassment	Yes 142 (13.4%)
It won't do me any good	Yes 88 (8.3%)
Doctor hasn't suggested/recommended it	Yes 432 (40.9%)
Have to work	Yes 150 (14.2%)
I do breast self-examination	Yes 99 (9.4%)
I had a breast exam from a doctor or a nurse	Yes 74 (7%)
My husband/male family members are not supportive of the idea	Yes 11 (1%)

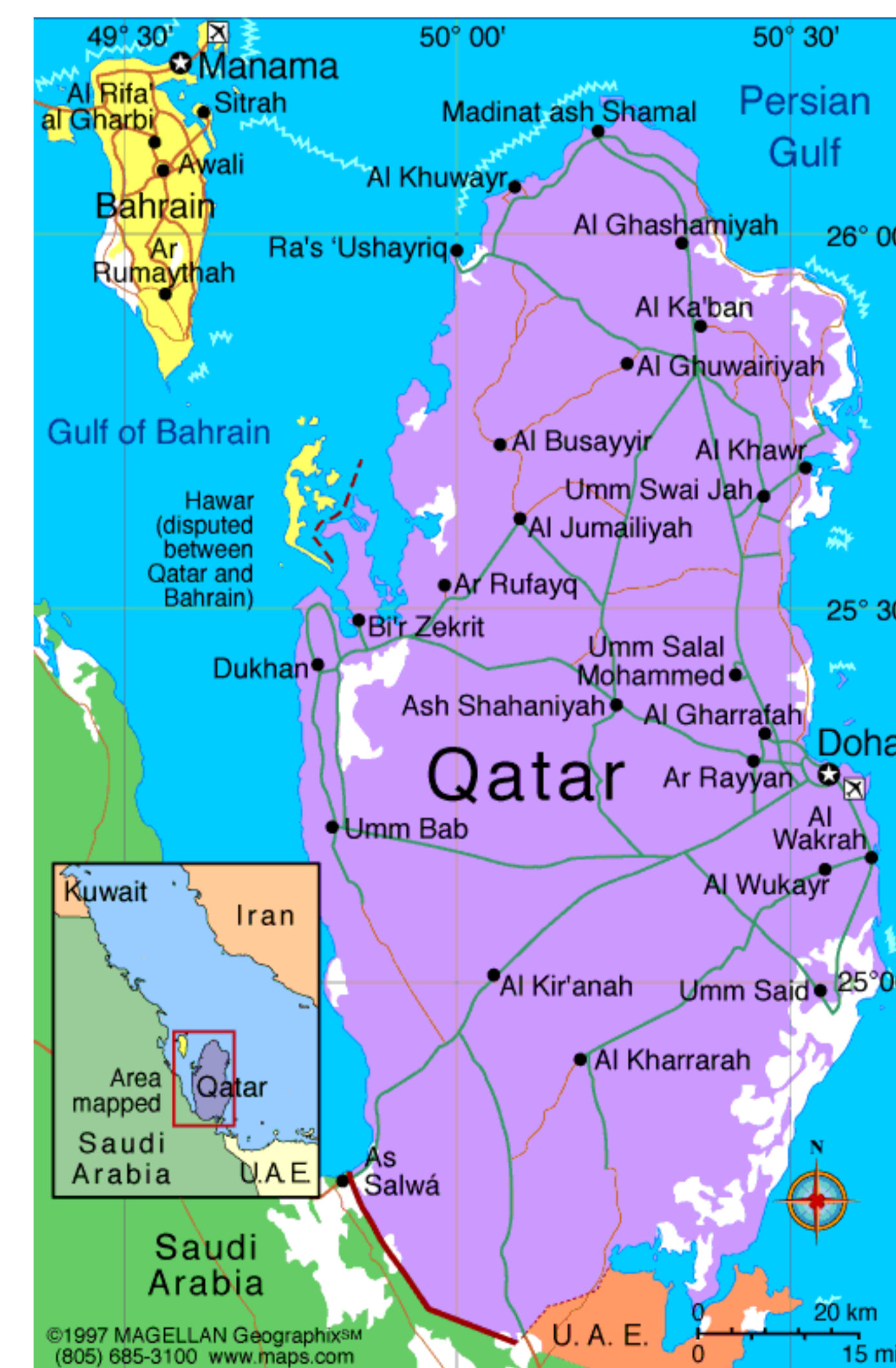
*6 Participants did not answer these questions

Conclusion

Alarmingly low participation rates of breast cancer screening activities amongst Arabic women were found. Although some basic levels of knowledge were evidenced, these seem not sufficient to encourage women to participate in screening activities. In addition, barriers and facilitators such as for example doctor's recommendations, screening as part of a regular routine exam, family member's or friends' recommendations, having to work, embarrassment, the fear of finding out one may have cancer, the worry screening activity might be painful and not knowing where to go for screening, seem to play a role in the screening behavior of Arabic women.

Some other factors that influence Arabic women's screening behavior were also identified. Level of education of participant and her husband, was found to be a predictor of mammography knowledge, yet not of screening practice. Understanding the doctor, having basic knowledge of breast cancer screening and experiencing barriers and facilitators were found to be important predictors of screening behavior.

The barriers and facilitators require more in depth investigation in order to develop a culturally appropriate intervention program aimed to increase breast cancer screening uptake thus decrease breast cancer morbidity and mortality rates among Arabic women.



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