



ENVIRONMENTAL FACTORS INFLUENCING ARAB QATARI WOMEN'S BREAST CANCER SCREENING: HEALTH CARE PRACTITIONERS' PERSPECTIVE

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Abstract

Breast cancer, the most common cancer among Arab women in Qatar, significantly affects the morbidity and mortality of Arab women largely because of delayed diagnosis related to low participation rates in breast cancer screening (BCS). To understand the reasons for the low participation rates, a critical ethnographic study was conducted with 15 health care practitioners in Qatar. Thematic analysis of the interview data resulted in identification of environmental factors influencing participation in BCS: (a) gender friendly health care services, (b) lack of a national BCS protocol, (c) time constraints, (d) deficiencies in the patient health records system, (e) cost for mammograms, and (f) transportation. A recurring theme across the factors was that, from the perspective of health care practitioners, Arab women's health cannot be understood in isolation from the environment in which they live. Interventions that promote BCS practices must address the contextual factors that impact health of the population.

Keywords: breast cancer: prevalence, screening and prevention; Arab Qatari women's health; Middle East; ethnography

Introduction

Breast cancer is the most common cancer in Qatar (Supreme Council of Health, 2011, 2014). The estimated age-standardized cancer incidence rate in 2012 was 46.1 per 100,000 women whereas other cancers fell below 15.5/100,000 (International Agency for Research on Cancer [IARC], 2012). In the same year, the breast cancer mortality rate in Qatar was 11.2/100,000 (IARC, 2012). This is lower than the average mortality rate (18.6/100,000) of the East Mediterranean region (IARC, 2012) or that of Canada (13.9/100,000) but is slightly higher than its neighbouring countries, Bahrain (11.1/100,000) and United Arab Emirates

(10.5/100,000). Evidence suggests that screening and early detection of breast cancer at an early stage play an important role in reducing cancer morbidity and mortality (American Cancer Society [ACS], 2015; World Health Organization [WHO], 2006). However, many of the women in the Middle Eastern countries die from late-stage breast cancer largely because of delayed diagnosis of the disease (WHO, 2006, 2010). Qatar Cancer Society (2015) states 98% survival rate from breast cancer if detected at an early stage; however, 58% of breast cancer cases were detected at late stages in the gulf area. Aside from death, underutilization of BCS programs can result in adverse effects on health and well-being including social distress, psychological suffering and malfunctioning, reduced performance, and emotional hardship to individuals and caregivers (ACS, 2015; Bener et al., 2009). As well, it can increase medical and health care costs that could be reduced with early detection, care, and treatment (ACS, 2015; WHO, 2006). According to a recent study in Qatar (Donnelly et al., 2012), 13.8% of the participants performed monthly breast self-examination (BSE), 31.3% had an annual clinical breast examination (CBE), and 26.9% of women of 40 years of age or older had an annual or a biannual mammogram. These rates are very low compared to Canada and European countries, where BCS rates were reported as ranging between 70% and 85% (WHO, 2008). There is a gap in the statistics data available. Post-diagnosis life expectancy rates per different cancer stages and the proportion of Arab Qatari women, diagnosed at each stage, who did/did not have screening would have been valuable in making clear connection between the low BCS rates and advanced breast cancer at diagnosis. These are potential inquiries for future studies.

To understand and describe the factors influencing underutilization of BCS among Arab Qatari women, a team of researchers in Qatar explored factors influencing Arab women's BCS practices from perspectives of women, men, and health care practitioners. In this article, we report findings from a Master of Nursing thesis study, which was a part of the larger study. We conducted a critical ethnographic study with 15 health care practitioners (HCPs) to answer the research question: What are the factors, from HCPs' perspectives, that influence BCS practices among Arab women living in the state of Qatar? HCPs were targeted for the interview because they play a crucial role in examining breast cancer and recommending cancer screening, and they offer insider views of services, programs, policies, and the broader health care system in Qatar. Ethical approval was obtained from the relevant ethics boards.

Background Literature

Various factors have been known to influence BCS practices of Arab women living in the Middle Eastern countries. At the individual level, older age, low self-efficacy, embarrassment, fear of pain and of positive test results, lack of knowledge about benefits of early screening and its methods, lack of perceived risk for developing breast cancer, and perceived inconvenience, have been shown to be barriers (Amin, Al Mulhim, & Al Meqihwi, 2009; Azaiza & Cohen, 2008; Elobaid, Aw, Grivna, & Nagelkerke, 2014; Habib, Salman, Safwat, & Shalaby, 2010;

Renganathan et al., 2014). Conversely, level of education, knowledge about BCS, perceived susceptibility to the disease, fear of suffering and dying because of breast cancer, positive family history, positive perceptions of breast health, having medical examinations when healthy, beliefs about personal responsibility for health, and living in an urban area have been identified as facilitators (Bener et al., 2009; El Bcheraoui et al., 2015; Othman, Kiviniemi, Wu, & Lally, 2012; Ravichandran, Al-Hamdan, & Mohamed, 2011).

Sociocultural/psychosocial factors such as religion and culture-specific beliefs, values, and norms of health and illness have been shown to play a pivotal role in shaping women's utilization of BCS services. Sociocultural barriers identified in the literature include perception of cancer as punishment/a test devised by God and as a disease with no cure and equivalent to death, sociocultural norms and expectations such as concealment of sexuality and modesty as virtuous qualities for women, perception of women's bodies as private property of the husband, women's dependency on male family members for transportation, conceptualization of breasts as wrong and immoral, social stigma and isolation, and fears of loss of the social role, of gossip, and of burdening family members (Azaiza, Cohen, Awad, & Daoud, 2010; Azaiza & Cohen, 2008; Cohen & Azaiza, 2010). However, it is also noted that some Middle Easterners hold an contrasting view regarding the connections between God's will and tests regarding life, death, health, and illness, wherein they are perceived as facilitators to BCS by encouraging responsibility for one's own health through self-care and utilizing health services (Azaiza & Cohen, 2008; Cohen & Azaiza, 2010).

Health care systemic factors have been shown to increase perceived barriers to BCS practices. Hierarchical power relationships between physician and patient, lack of physician guidance, ineffective clinician-client communication, unavailability of female physicians, lack of public transportation, inadequate distribution of screening centers resulting in lack of access by people living in remote regions, costs involved with mammogram or seeing a doctor have been found to impede accessibility of BCS services (Amin et al., 2009; Azaiza & Cohen, 2006, 2008; Azaiza et al., 2010; Baron-Epel, Granot, Badarna, & Avrami, 2004; Bener et al., 2009; Habib et al., 2010; El Bcheraoui et al., 2015; Ravichandran et al., 2011; Soskolne, Marie, & Manor, 2007). Where it was accessible, effective clinician-client communication, physician's recommendation for and referral to cancer screening, supportive social milieu, and free or subsidized medical services were found to facilitate BCS practices (Bener et al., 2009; Othman et al., 2012).

To date, literature reporting how Arab women, and especially the Arab Qatari population, view and participate in BCS practices and why they seldom engage in them have focused primarily on individual psychosocial factors. The less visible but equally significant environmental factors, such as social and health care systems, are explored less. Comprehensive understanding of these environmental factors is imperative to address the complex, unique BCS experiences of Arab women. Such understanding will better inform health care practice, policy and research, interventions, and theory development tailored to the context of Qatar, thereby

potentially contributing to Arab women's health and well-being. Therefore, the purpose of this sub-study was to investigate from the HCPs' perspective, the factors that influence BCS practices among Arab women living in Qatar.

Methodology

Using an ecological perspective as a theoretical framework, we sought understanding of the human health phenomenon within the broadest context that encompasses physical, social, interpersonal, cultural, historical, and political contexts, as well as other social determinants of health (Richard, Gauvin, & Raine, 2011). Within its underlying assumption of the unitary nature of person-with-environment and the reciprocal interaction between the two, both individual and environment are targets of health promotion (Glanz & Bishop, 2010; Golden & Earp, 2012). It is our stance that without effecting systemic changes and creating environments conducive to health, interventions that focus on individual responsibility alone would be ineffective, costly, and unethical.

We used critical ethnography as the method of inquiry to understand the phenomenon through the narrated perspective of people whose experiences were embedded within the specific culture, history, power relations, practice, and language of the Qatari women (Carspecken, 1996). By uncovering the insiders' perspectives, we can contribute to changes in social and health care conditions that support health for all including those who are of different social, cultural, and/or ethnic backgrounds. To design the research, we referred to the work of Phil Carspecken (1996) who developed an extensive and sophisticated account of this method.

Recruitment of Participants

Using purposive and snowballing sampling techniques (Speziale & Carpenter, 2010), we recruited 15 participants from three primary health care centres that provided women's health care services in the State of Qatar. The estimated sample size was restricted to 15 because of time constraints. Eligibility criteria included health care practitioners (physicians, nurses, and social workers) who: (1) could speak English and (2) provided direct, hands-on care to Arab women in Qatar. Participants with various ethnic backgrounds were invited thereby acknowledging multiculturalism among HCPs who work in Qatar. Using these criteria, managerial administrators in the institutions informed potential participants about the study. Potential participants then approached the first author face to face on site if they wished to volunteer to be study participants. The first author provided them with details of the study and gave them the opportunity to ask questions and voice concerns. Participants were assured that their participation was voluntary, that they had the right to withdraw from the study at any time without fear of repercussions, and that confidentiality would be kept by using codes and pseudonyms. Informed consent was obtained from each participant prior to data collection. There were 16 eligible participants in total; however, one participant withdrew prior to completing the first interview because of a language barrier. Recruitment was halted when the first set of

interviews with 15 participants were completed.

Data Collection

Prior to the first interview, the first author made brief, informal observations as a “complete observer” (Oladele, Richter, Clark, & Laing, 2012, p. 6) to get to know the physical environment and to elicit themes, issues, and areas that might need exploration during the interview (Hardcastle, Usher, & Holmes, 2006). The observations lasted a maximum of a half hour at each site. Then, the author met with the participants for face-to-face, in-depth interviews, which comprised the main data collection method. The questionnaire included broad, open-ended, and nondirective questions such as, “What do you think influences the ways in which Arab women practice BCS?” and “Why do you think some women go for CBE/mammogram while others do not?” After the first interviews, seven participants were interviewed again for “member checks” (Carspecken, 1996, p. 89), in which a researcher’s preliminary interpretation of the data is returned to the participants for further dialogue, comment, and validation (Cook, 2005). The interviews were conducted at a time and place convenient for participants. The first interviews were 30 – 60 minutes long; the second interviews were 20 – 30 minutes each. All interviews were conducted in English, audio-taped with consent, and transcribed verbatim to preserve the participants’ intended meaning. Field notes were completed and reviewed to check for researcher biases. The data were checked repeatedly for confirmability by going back and forth between data collection and analysis to establish rigor and trustworthiness (Hardcastle et al., 2006; Morse, 2015a).

Data Analysis

We undertook data analysis and data collection simultaneously. We utilized NVivo 9, a data analysis software, to create a tree of themes and subthemes. The raw data were read repeatedly line-by-line to acquire a sense of the whole text and to be immersed in the data. Significant statements and recurrent patterns were extracted, meanings of each significant statement were formulated and compared within and across transcripts, and recurrent patterns were categorized into clusters of cultural themes (Speziale & Carpenter, 2010). The research team discussed collaboratively the categorization of themes. Data saturation was met (Morse, 2015b). All of the seven participants who participated in the second interview validated the initial interpretation of the data and confirmed that it reflected accurately their perspectives. Then, we merged all sets of data into the categorized themes and compared the analysis for linkages to existing literature that best elucidated the phenomenon.

Findings

The health care practitioners (HCPs) had clinical experience in women’s health ranging from 5 to 25 years with an average of 13.6 years. Six of the participants were physicians, two were head nurses, six were staff nurses, and one was a social worker. The participants were from

Qatar, Egypt, India, Iran, Sudan, Jordan, and Bulgaria. Of the 15 participants, 2 were male; 12 were Muslim. The themes that emerged from the data analysis were environmental factors that impacted Arab women's breast cancer screening (BCS) practices and included gender friendly health care services, lack of a national BCS protocol, time constraints, deficiencies in the patient health records system, costs for mammograms, and issues with transportation.

Gender Friendly Health Care Services

Twelve out of fifteen participants suggested that the well-woman clinic (WWC) program was a facilitator in promoting BCS because it was geographically, financially, and culturally accessible. WWC is a community-based program offered in primary health care centres in all communities. It is staffed by female HCPs and offers a range of health promotion and illness prevention education, screening, and referral services for free. Gender appropriateness was highlighted as a major strength of the program because services offered by female HCPs could reduce feelings of shame, embarrassment, and guilt during examinations that require exposure of body parts. Participants explained, "[Qatar] is a Muslim country. For that, if she is a virgin, [even female HCPs] cannot touch her. So, absolutely no male doctors in well-woman clinics"; "In well-women clinics, [we do] complete examination [on women's body, including] breasts, lymph nodes, axillary, and pelvic area. In our society, it is better to have [female HCPs]." Participants noted that Arab women were more participatory in care with female HCPs than with male HCPs. The shortage of female physicians was one of the main concerns among participants in suburban areas because women rejected CBE or discussion of BCS offered by male physicians. Participants suggested that active recruitment of female HCPs in women's health services would be essential to encourage Arab women's BCS practices.

Lack of a National BCS Protocol

At the time of the interview, there was no national BCS protocol. Although the recommended guidelines for BCS published by the Qatar Breast Cancer Screening clinic and the Qatar Cancer Society existed, not all participants were aware of them. There were discrepancies in ways to access the guidelines and in following them. For example, participants' responses varied about the age for an initial screening mammogram. The discrepancies in knowledge and practice across HCPs might have resulted in inconsistent BCS referral and underutilization of BCS among women. Some physicians stated that they did not always refer women for mammograms unless women asked first or complained of pain. Furthermore, only a couple of participants were aware of nation-wide BCS campaigns such as the Pink Hijab Day and the Annual Breast Cancer Awareness Walk that began in 2008. It seems as though the BCS efforts failed to involve HCPs. This calls for the need to develop a national, population-based BCS protocol and to communicate it to the front line HCPs to reinforce their provision of consistent and needed care for all women in Qatar.

Time Constraints

The issue of time constraints was another obstacle frequently discussed among physicians. They stated that the primary health centres were run on a walk-in basis and that each physician saw about 50 to 60 patients a day over a period of 9 hours – “it is not enough time even to make simple examinations. [It goes] too fast, but we must complete [examination for] all patients.” A physician said that, on average, she saw each patient for about 7 to 10 minutes; the time was not enough to do any health promotion work while she had “a block of patients outside” waiting to see her. So her service would mainly entail acute illness crisis management. This was a shared experience among other physician participants. They believed that they had a significant role in examining “[health] other than presented complaints, any family history or risk factors, and address them” and were concerned that many women were not aware of BCS. A physician said, “Four out of five patients [who] see me say ‘nobody told me anything [about BCS] before.’” However, she did not have “time to explain about it, guidelines and tests, to explore the conditions and circumstances of [the client], to persuade and help her to [get a mammogram].” Insufficient time hindered physicians’ work. In WWCs which were run by appointments, where 15 to 20 minutes was allocated for each client, time was not an issue. This barrier needs attention because physicians are the gatekeepers to the health care system which includes BCS.

Deficiencies in the Patient Health Records System

The next barrier discussed by participants pertained to patient health records: their deficiencies and difficulties in accessing them in a timely manner. Eleven out of fifteen participants stated that it was not uncommon to see incomplete health records, consultation, and referral notes, missing invaluable information that could otherwise inform them about women’s health needs. Sometimes patients were not a reliable source of information because some women might not disclose family history of diseases that are shunned in the society, such as cancer and mental illness. Without complete records, the need to make a referral might be unclear even though there are risk factors. At the time of data collection, patient health records were stored in paper form, except for some investigation results from the Hamad Medical Corporation (the central national health institution in Qatar) which were accessible online. Paper documentation limited efficiency of their work. First, it takes time to find needed information. “Our health centre is very busy. So it’s not easy to search for mammogram history [gesture: flipping through every paper in the chart]” Second, it impedes communication between HCPs at different facilities. “Communication is cut out. When I give a referral letter, there’s no feedback! So the patient goes and we lose [the results/information].” “Right now each health centre is working alone as an island. Unless there are systems that keep relationships among different health centers, it is difficult to work as a team.” Currently, BCS relies on women to self-present, missing many women at risk, and failing to monitor and evaluate clinical and diagnostic outcomes. HCPs stressed the importance of overcoming these barriers. A couple of them

recommended development of an electronic, computerized system for thorough record keeping, swift accessing, and effective exchange of information and communication. The suggestion was welcomed by the rest of the participants interviewed later on.

Costs for Mammograms

About half of the participants identified free or low-cost mammograms subsidized by the government as a facilitator. Mammograms are free for Qatari nationals. Non-Qataris (all people who are born, live, and/or work in Qatar but do not have Qatari citizenship) pay 100 riyals annually to renew the health care insurance card. With the card, a mammogram costs 50 to 100 riyals (A loaf of bread was about 10 riyals = \$2.60 USD at the time of data collection). No HCP was certain about the exact cost for mammograms. Whereas some participants believed that "50 riyals [was not] too much in the Gulf area, [especially considering] it is not done everyday," others believed that the cost could be a barrier. A nurse shared her view:

Many people don't have enough money. Some of them don't even have money to pay for medication [that] costs only 2 to 5 riyals. (Then 50-100 riyals can be a lot.) Yes! . . . [For example, when a woman wants to have a mammogram] husband will ask, 'Why? Do you have a problem?' She will say, 'No, only to check.' Then the husband will say, 'I pay 100 [riyals] for check-up? I don't want to pay.'

In situations where finance is a concern, especially if the woman and/or her husband do not understand the importance of BCS, the cost can be a barrier even if it is subsidized. Many non-Qataris (age of 15 and older) who comprise 90% of the population in Qatar work at poor paying jobs (Qatar Statistics Authority, 2010) and might be uninsured. Whether cost for mammograms was interpreted as a barrier or a facilitator, all participants agreed that mammograms should be free for all women to reduce and eliminate disparities experienced in breast health and cancer screening.

Transportation

Participants identified lack of access to health services by public transportation as a barrier. Not only was there limited public transportation such as bus (there is no train), the barrier was magnified by cultural expectations and norms about virtuous women. They explained that Muslim women are not allowed to ride in a public bus or taxi because being in a vehicle with a non-family male was considered improper in Islamic culture. A nurse explained:

It is something religious, cultural, and traditional. Ladies should not be in a taxi [where] she will be alone with a strange man in the car. It is very bad to take a taxi alone. Some [families] allow it only in urgent [cases] but mostly not. Some families have a driver in their house. They know the driver. But women still will take their children or a maid with them in the car. Even my father will not allow me to ride a taxi to come to work.

Although more women drive now than in the past, many still depend on husbands or male relatives for driving. The WWCs open only for half a day usually in the morning when most men are at work. Consequently, woman without a means of transportation or a willing family member to drive them would not be able to access them. Accessing government funded health services like subsidized mammograms might be particularly challenging for women living in suburban or rural areas because of the need to acquire family approval to go into the city and dependency on male relatives for transportation. From the HCP participants' perspectives, this access barrier needs to be reduced for successful BCS promotion interventions. However, no participant could suggest any remediation for this barrier perhaps because this barrier is deeply seated in the realm of cultural and religious beliefs and traditions.

Recommendations from the Participants

Aside from the major findings described, several other recommendations to improve BCS rates were put forth by some of the participants.

1. Create a role of breast health educator, who can travel to different health facilities to teach colleagues and women. Thirteen out of fifteen participants advocated for nurses in the new role because they were already actively involved in health education in the WWC. As well, some physicians and nurses supported educating and training nurses to perform CBE so that more women can be examined and the pressure on physicians can be reduced.
2. Provide HCPs with knowledge and skills support for BCS through workshops, courses, and training. They asserted that support should not be limited to updating knowledge/information and hands on skills, but should include cultural sensitivity and communication skills necessary for patient education and counselling.
3. Have the mammogram results readily accessible by the physician so that they can follow-up on the results and ensure continuation of care.
4. Develop reminder services for mammograms that are usually scheduled one to two years apart to improve initial screening and return rates.
5. Invest in long term health promotion efforts because it takes a long time to see their results. Systematic long term planning would be essential for sustained change. At the time of data collection, the WWC program was being offered half a day per week, instead of monthly as it had been in the past. This demonstrates growing health promotion efforts that support Arab cultural and traditional values, beliefs, and norms.

Discussion

In this article, we presented an understanding of systemic factors that HCPs identified as influencing Arab Qatari women's utilization of BCS. Unique to this research was the opportunity

to examine the factors from the perspective of the HCPs. Many of the factors that HCPs raised as impeding BCS, for example costs and remoteness of mammogram facilities, having to rely on male family members for driving, and lack of a national screening protocol, coincide with the findings of earlier studies conducted with Arab women in Israel (Azaiza & Cohen, 2008; Baron-Epel et al., 2004), Palestine (Azaiza et al., 2010), and Saudi Arabia (Amin et al., 2009). In this study, the transportation barrier seemed to exist regardless of whether the women lived in urban or suburban areas. The distance from WWCs and the subsidized mammogram facility, limited means of transportation thereby creating a reliance on husbands as drivers, and social expectations such as reticence about women driving, prohibition about a woman travelling alone in a car with a man who is not her husband were barriers that pertained to transportation and subsequently low BCS participation. Although many women drive now in Qatar, such social expectations are still prevalent and influence women's decisions on health practices. Consistent with the previous studies, the participants of this study agreed strongly that availability of WWCs and female HCPs in women's health services were facilitators. Embarrassment with exposing breasts, being examined by male physicians, and unavailability of female physicians have been described in many articles as central barriers to having CBE (Amin et al., 2009; Azaiza & Cohen, 2008; Bener et al., 2009). The overlap in the findings of this study and the previous studies adds to the existing evidence that BCS is a contextualized experience within a specific environment.

In the participants' narratives, time constraint was highlighted as a particular challenge in promoting BCS with women. This finding is congruent with a previous study in Saudi Arabia (Al-Amoudi, Sait, & Abduljabbar, 2010), in which physicians' perceptions and practices regarding CBE and mammograms were explored. In that study, 37.9% of the physician participants did not perform CBE because of lack of time. 78.4% of the physicians carried out CBE only when there was a complaint; 10.3% on patient request (Al-Amoudi et al., 2010). Similarly, in our study, a number of physicians indicated that they would not always offer CBE/mammogram mainly because of insufficient time. The failure of HCPs to facilitate participation in BCS poses a serious concern because its recommendation by physicians has been a strong predictor of participating in BCS in several Arab countries; 94% of Arab Qatari women participants indicated that they would have a mammogram if their physicians recommended it (Al-Amoudi et al., 2010; Donnelly et al., 2012, 2013; Soskolne et al., 2007).

Unique to this study was the finding that deficiencies in patient health records and paper documentation system were barriers to BCS. This barrier is not only specific to informed BCS care, but also limits the HCPs' abilities to refer women to appropriate BCS services and to collaborate with other HCPs at different health institutions. As some participants put forth, an electronic documentation system might alleviate the technical barrier and improve overall quality of health care services including BCS. The benefits, risks, and challenges of adopting an electronic documentation system would be an area for future inquiry for health care quality improvement and policy development.

Arab women's BCS practices are influenced by multiple layers of contextual factors such as culture, religion, tradition, gender, health care, and social structure (Hwang et al., 2015). Understanding this complexity of factors brings attention to the need for a broader lens in practice to embrace the wholeness of health and illness experiences. An ecological perspective can provide a framework for praxis by providing a tool for connecting human experiences and context. HCPs can listen for, recognize, and acknowledge various contextual challenges experienced by women and be cognizant of their impact on health and how their own attitudes, demeanor, and relationships with women might influence women's BCS practices. HCPs can do this by building trust and by working collaboratively, flexibly, and empathetically with women. Furthermore, HCPs can advocate women's health by offering information on BCS and making physical examinations and referrals as recommended in the BCS guidelines. The role of the HCPs in engaging women in BCS cannot be overemphasized.

An ecological perspective can be the framework for change in the health care system by emphasizing a shared, mutual responsibility for health between the consumers and the providers of health care, programs, and policies to promote and sustain health. The health care authorities can increase utilization of BCS by leveraging existing facilitators. First, the WWCs can be expanded and advertised vigorously to invite diverse groups of women to health promotion and illness prevention activities. Second, public campaigns can be advertised in collaboration with leaders of other sectors to reach more people. Third, female HCPs can be retained and recruited actively in women's health and primary health care services, especially in suburban regions. Finally, free mammograms can be offered to all women who live in Qatar. In this study, some HCPs indicated that cost, even if it were largely subsidized, could add to perceived barriers to deter women's and their husbands' decisions on BCS because health might not be a priority for families with low income. Costs can mean wage loss from unpaid time off of work for screening and social costs that might come with a cancer diagnosis (Hunleth, Steinmetz, McQueen, & James, 2016). The socioeconomic factors have been found to influence Qatari women's BCS activities (Donnelly et al., 2015). According to a literature review on BCS interventions in Arab countries (Donnelly & Hwang, 2015), successful interventions have involved free mammograms plus individualized assistance. Given the magnitude of breast cancer related mortality in Qatar, perhaps free mammograms with tailored assistance might increase participation in BCS.

Health care decision makers can mitigate barriers to BCS in several ways. First, they can dedicate sufficient time for HCPs to incorporate BCS examination and recommendation into their daily practice. As well, they can collaborate with the education sector to reinforce a complete physical examination that includes breast examination in the medical education curricula (Al-Amoudi et al., 2010). Second, they can reduce accessibility barriers through equitable geographic distribution of health care and human resources and through outreach interventions such as a mobile screening facility that goes door-to-door and group transportation to the screening facility (Baron-Epel et al., 2004; Wilf-Miron et al., 2010). Diverse screening modalities can encourage women to access services otherwise hard to access by offering

alternatives for preferred sites and times and by addressing issues with traveling and stigma. Outreach services coupled with education programs have been effective in facilitating BCS in the Middle Eastern countries (Donnelly & Hwang, 2015). Finally, decision makers can bridge the gap in the current services by developing systematic screening invitations and reminder services for women which, according to Cardarelli (2010) and Wilf-Miron et al. (2010) have been successful in increasing mammogram rates. The recommendations provided by the participants indicate that a sustainable BCS program requires structural changes and organizational support. Currently, a national protocol for BCS is being developed.

Limitations and Future Directions

The findings of this study are not generalizable to other groups of HCPs due to the purposive sampling method and the nature of the qualitative design. The perspective of the participants in this study does neither represent the perspective of all HCPs in Qatar nor that of Arab women. We acknowledge that our findings are only one snapshot of many possible realities that could be different from other groups and societies. Furthermore, some participants were not Muslim. Their narratives might reflect stereotypical assumptions of Arab women/culture/system based on personal experiences, backgrounds, and biases. Even though we put forth much effort to preserve meanings intended by probing, clarifying, summarizing, and validating through member checks, language and cultural differences between the researcher and the participants might have altered some of the meaning constructions. Future studies can involve a researcher with an Islamic cultural background, who is fluent in both English and Arabic, to help overcome such differences. The transferability of findings can be further validated through replication of the study with other Middle Eastern populations, including Arab women in North America. Finally, this research could be extended to include other cancer screenings such as cervical cancer in Qatar.

Conclusion

Breast cancer is the most common cancer for women in Qatar partly because of delayed diagnosis of the disease. In this study, through the HCPs' perspective, we explored the influence of environmental factors that might help explain why BCS was underutilized by women. Without interviewing HCPs, the insider view of how the BCS system works, i.e., the overall program and services, workplace conditions, policies and the larger health care system, might have remained uncovered. This perspective is unique to these participants and is not specific to the Qatari women's experience. The findings of this study demonstrate that Arab Qatari women's health-related decisions and behaviours were influenced by health care and social factors. Although the well-women clinic provided female friendly health care services to women, providing opportunities for BCS education and screening, chances of accessing BCS screening services still depended largely on the individual women's choice and the attending physician's ability to examine and make a referral. Time constraints in examining patients and deficient health records

in the absence of a national BCS protocol limited the HCPs' ability to advocate for women's BCS. Finally, cost for mammograms and lack of public transportation were discussed as barriers for women to accessing available BCS services.

The findings of this study are of great importance in HCPs' practice, including nursing, as HCPs must recognize, understand, and respond to the challenges encountered by people who need to access BCS services and achieve a higher level of health and well-being. A deeper understanding of the phenomenon and the Qatari context will enhance HCP's competence and readiness to address the complexity and uniqueness of the Qatari environment and Qatari women living in the environment. We hope these research findings assist in planning future BCS interventions, improving BCS policies, and decreasing morbidity, mortality, illness complications, and overall health care costs associated with breast cancer.

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