

Health Behaviors, Disparities and Deterring Factors for Breast Cancer Screening of Immigrant Women - A Challenge to Health Care Professionals

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Background: This literature review was made to provide comprehensive understanding of health disparities as well as factors and barriers to cancer screening of immigrant women in multicultural societies.

Methods: Published articles from 1990-2013 were searched using databases such as CINAHL, MEDLINE, PubMed and Science Direct showing evidence of contributing factors and barriers to breast cancer screening practices of immigrant women in developed and developing countries. Based on the inclusion criteria, a total of 45 qualified articles were included in the review process.

Results: Articles included were quantitative and qualitative, written in English for publication, and subjects were middle-aged, married immigrant women. The identified influential factors and barriers that prevent immigrant women from cancer screening were categorized as individual, socio-cultural and behavioral factors. Socioeconomic status, education level and knowledge, availability of health insurance and acculturation were among the individual factors. Presence of social support and recommendation from health care professionals were strongly associated with compliance with cancer screening. Cultural beliefs and practices as well as behavioral factors were among the barriers that deter women from participating in cancer screening.

Conclusion: To alleviate the negative factors and barriers that affect the participation of high-risk immigrant women, a client-centered assessment and intervention approach with specific regard to cultural beliefs and practices should be considered by health care professionals. Joint effort of individuals, community, health care professionals and government institutions are recommended to further address the continuous rise of breast cancer mortality worldwide.

Key Words: Breast cancer, Mammography, Immigrants, Barrier, Disparities

INTRODUCTION

Over the years, international migration has been rising steadily, with almost 232 million people, approximately 3% of the total world population, moving and living outside

their countries of origin. Approximately 59% of immigrants come from developed regions of the world. The United States of America, known as the home of immigrants, is the leading destination with 45 million immigrants and this number is rising steadily, making it a highly multiethnic and multicultural society. Because of the increasing number of foreign-born individuals, women account for nearly 50% of the total population of immigrants in America [1].

Due to the steadily increasing number of migrating women, the incidence rate of cancer affecting women has gained

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special attention from health advocates with breast cancer as the most commonly diagnosed both in the developed and less developed countries of the world. According to the World Health Organization (WHO) report, approximately 508,000 women died of breast cancer in 2011, and 58% of deaths occurred in less developed countries [2]. The incidence rate of breast cancer, particularly in Asian and African countries, has been steadily increasing over the years and is quite distressing since a majority of cases are diagnosed in the late stages.

Worldwide, extensive efforts have been made to facilitate surveillance, and to establish health education campaigns against breast cancer and guidelines for breast cancer screening and early detection. As per recommendation by the American Cancer Society, women over 20 years of age should know how and when to perform Breast Self-Examination (BSE), have a clinical breast examination every 3 years for women in their 20s and 30s, every year for women 40 years and above and have a yearly mammogram once reaching 40 and continuing as long as in good health [3]. The use of mammography, a breast imaging technique, is the most common secondary preventive method that can detect breast cancers at an early stage. Mammography has been widely used as a screening procedure for asymptomatic women, diagnostic purposes and monitoring of high-risk individuals.

Despite efforts made to facilitate cancer screening and early diagnosis, breast cancer remains a burden to society. Previous studies showed that breast cancer screening practices are widely affected by personal, social, cultural and behavioral factors, which include but not limited to age, educational level, income, and access to health care services, role of health care professionals, and health beliefs and practices regarding breast cancer. Many international studies have explored and established significant factors affecting breast screening practices of women in their respective countries; however, limited research exists on the health disparities of immigrant women, particularly cancer screening as well as significant barriers that deter them from seeking health care related to breasts. Miller et al. showed that immigrant status as well as the level of acculturation is associated with an increased incidence of breast cancer among immigrants [4]. In an integrative review of barriers

to cancer screening among American women, lack of information, mammography resources, socio-demographic status, ethnicity and lack of physician referral are significant factors that deter women from breast cancer screening [5]. Furthermore, in an integrative review on the factors influencing mammography among Canadian women, Hanson et al. showed the recommendation of a health care provider for a screening test was a significant factor for women to engage in positive health behavior. However, the role of ethnicity as well as beliefs related to mammography such as pain, radiation and embarrassment are deterring factors that prevent women from receiving a mammogram [6]. Generally, the rate of mammography screening has been estimated to be the lowest among Asian-American and Hispanic women [7]. Furthermore, the Australian Institute of Health and Welfare report showed that migrant women from North Africa, Middle East and East Asia had significantly lower mammography rates [8].

In this review article we investigated the personal, social, behavioral as well as cultural aspects affecting breast cancer screening and the deterring factors preventing access to health care services of foreign-born individuals migrating to various regions of the world. Specifically, this paper aims to determine the outcomes of available literature and further explore the knowledge and attitude towards breast cancer screening, health beliefs and practices against breast cancer and the role of health care professionals and quality of health care systems in promoting the health status of immigrant women. This review aims to provide a comprehensive understanding of the health care behaviors affected by numerous factors including culturally-based health beliefs and practices of immigrant women towards breast cancer, and to establish guidelines for health care professionals to improve health care delivery systems worldwide.

MATERIALS AND METHODS

1. Research design

This review article examined relevant quantitative, qualitative and mixed method studies aimed at identifying and characterizing the health behaviors and relevant factors preventing immigrant women from seeking health care and engaging in cancer screening practices available in their

respective communities.

2. Data collection

Two strategies were utilized in the search for relevant articles on breast cancer screening practices of immigrant women. First, the following databases were searched: PubMed, MEDLINE, CINAHL and Science Direct that include systematic reviews, integrative reviews, descriptive-correlational and qualitative studies. Second, the reference list of retrieved articles was also utilized to identify relevant articles for the present review. Approximately 250 articles published from 1990-2013 related to breast cancer screening practices of women from different countries were searched. The following keywords were used to facilitate article

searching: breast cancer screening, mammography, clinical breast examination (CBE), breast self-examination (BSE), immigrant women, Asian-American women, Filipino-American women, Korean-American women, Chinese-American women, Vietnamese-American women, Indian-American women, Mexican-American women, African-American women, Arab-American women, Iranian-American women, Turkish women, Hispanic women, Latinas, cultural beliefs, barriers, deterring factors and influencing factors.

In this review article we used the following inclusion criteria: immigrant women living for more than 5 years in a foreign country, reproductive age, breast cancer screening practices such as BSE, CBE or mammography and published articles in English. Out of 250 articles, a total of 45 studies

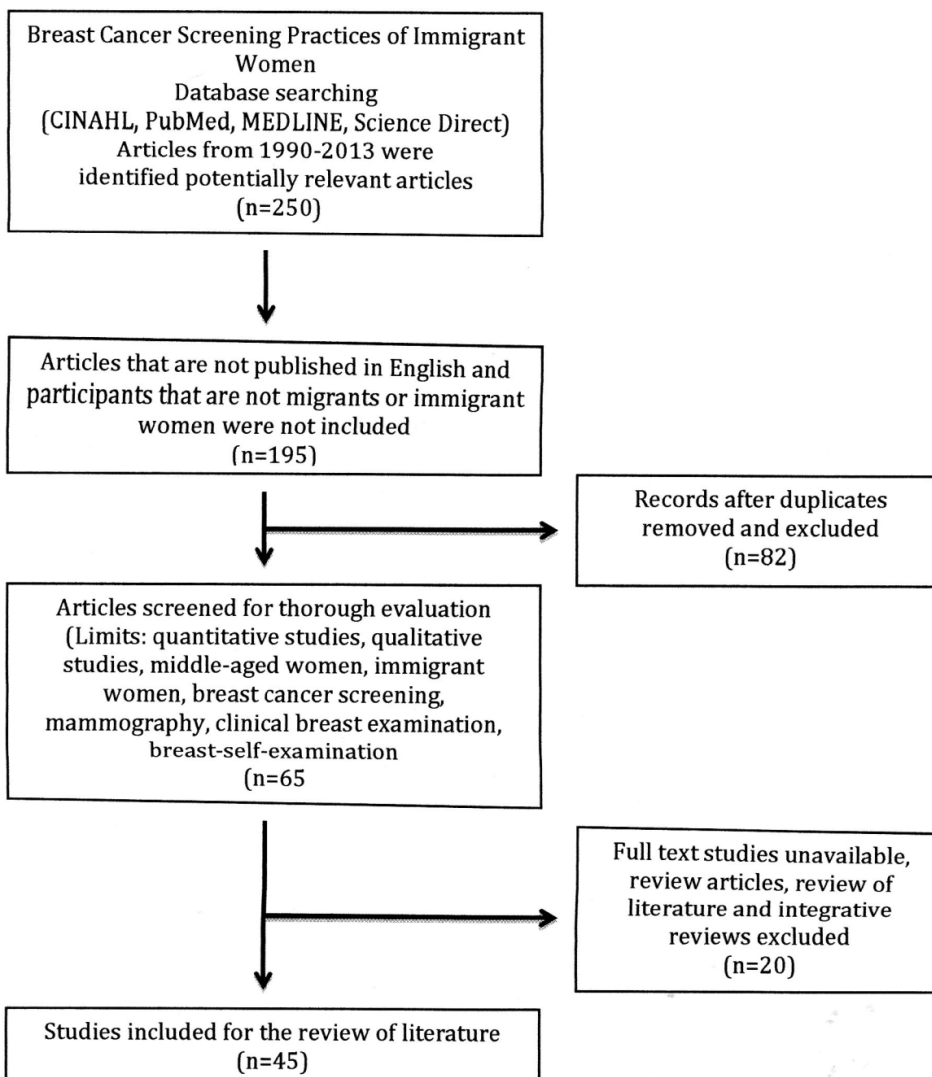


Fig. 1. Flow diagram for study selection.

were selected as relevant for the review process. Fig. 1 shows the search and selection process for the relevant studies.

3. Data analysis

The articles reviewed and the relevant factors identified were classified into four major components: individual/personal, social, behavioral and cultural factors. For the individual factors, age, marital status, educational level, income, family history of breast cancer and length of stay in the foreign country were considered as influencing factors for health care practices among women. For the social factors, belonging to a particular group, organization or ethnicity, ability to speak a foreign language, access to health care services and support of significant others, community leaders and the role of health care providers when treating foreign patients were considered to have an effect on the compliance of immigrant women. Regarding the cognitive-behavioral factors, positive and negative attitudes towards breast cancer screening were explored in the review process. Cultural factors, particularly health beliefs and practices as well as family structure and religious affiliations were further explored as significant influencing factors that would motivate or prevent immigrant women from cancer screening available in their respective community.

RESULTS

Among the increasing number of immigrants in the United States, Asian-Americans continue to be the fastest growing racial/ethnic group. The incidence rate of breast cancer among Asian-American immigrants was found to be lower compared with Native Americans; however, immigration status and adopted western lifestyle are significant factors in the increasing incidence of breast cancer, with most cancers diagnosed in the later stages [4].

To further understand the influencing factors affecting compliance of immigrant women in breast cancer screening, the following factors and barriers were thoroughly explored in the international literature published over the years.

1. Individual/personal factors

Numerous studies have supported that the demographic characteristics of women in terms of age, education, employment, availability of health insurance and length of immigration status can significantly affect the adherence of immigrant women to breast cancer screening practices. The majority of immigrant women 40 years of age and older, less educated and who have recently moved to a foreign country are less likely to receive a mammography screening [9-14], which can be attributed to the lack of information related to the purpose and procedure of breast cancer screening. In previous qualitative studies on perspectives of breast cancer screening, key informants have expressed that younger women with education and access to the Internet can easily obtain information related to cancer screening. In addition, immigrant women with health care insurance are more likely to receive constant reminders and information from their primary care provider related to available health care services [15]. Conversely, immigrant women who have recently moved might be limited in understanding the available health care services due to language or communication barriers and their proximity to health care services, as they often live in rural areas. Moreover, limited resources such as funds and health care insurance for individuals who have just moved to a foreign country can be factors preventing screening [16]. Typically, these women will prioritize the basic necessities such as food, shelter, clothing and education for their family members over health matters and consequently, ignore their own needs including health care [17-20].

Conversely, Avci has stated immigrant women's educational level greatly affects their health seeking behavior, meaning the higher the educational level, the greater the willingness to engage in regular physical examination and screening of one's own body [21]. However, this result contradicts the study by Kagawa-Singer and Pourat indicating that despite the higher level of education, better income and available health insurance coverage among the majority of Asian immigrant women, they still have lower rates of breast cancer screening and are commonly diagnosed with later stages of breast cancer compared with the native women [22]. Moreover, marital status of immigrant women is a

significant factor for the adherence to breast cancer screening practices. Generally, their spouses or partners do not encourage cancer screening due to privacy and sensitivity issues [15]. These findings are important for the health care providers to further explore the health care behaviors of high-risk immigrant women.

In terms of adherence to cancer screening regardless of age, education and employment status of immigrant women, the presence of family history of breast cancer has been a strong influential factor for women to engage in screening practices. This is consistent with the increased rates of breast cancer detection among women with a familial breast cancer history resulting in higher compliance and willingness for mammography screening [21,23,24]. Furthermore, women who have experienced complications are more likely to engage in further screening and treatment [15].

2. Social factors

For an individual who is living in a foreign country with limited resources and lack of familiarity with the system within the community, a strong support system is vital for their well-being. For immigrant women, particularly Asian women, strong family ties and support are paramount. Without the presence of an immediate family member, the availability of a support system with community leaders or belonging to certain groups or organizations is beneficial.

Social support can have a positive or negative influence on health care behavior, particularly regarding health screening [19,25]. Allen et al. showed that women who had a strong social support system were influenced positively to receive a mammogram [26]. Furthermore, the adherence to screening practices and positive health care behavior of the support group of women including colleagues in the workplace, friends and their families can motivate and encourage women to engage in screening practices, especially if they are perceived as an acceptable health care practice [27,28]. However, in a study examining barriers to breast cancer screening, some women tended not to undergo mammography due to a strong influence from their friends and because their husbands did not consent [29,30].

The role of physicians and other health care providers serves as an alternative and the most influential support system of patients seeking health care, particularly new

immigrants with lower social influence. In an integrative review in Canada, one of the most influential factors for women to engage in health screening behaviors, particularly a mammography was the recommendation of the health care provider [6]. Conversely, numerous studies showed that absence of referral from health care providers is a common barrier for most women to undergo breast cancer screening [5]. Women also perceived that physicians have the tendency not to provide information to individuals belonging to a lower social class or different ethnic group. There is evidence of stereotyping among many health care professionals towards immigrant women who are perceived as powerless, less educated and passive [31,32].

3. Acculturation, cognitive- behavioral and cultural factors

Acculturation, the process in which a cultural or ethnic group adopts the beliefs and behaviors of another group, has been shown in several studies as a significant factor for immigrants to adhere with health screening particularly breast cancer screening [13]. One example is the language. Several studies on the role of language among immigrants have shown that language proficiency can be influential or a barrier for immigrant women's adherence to breast cancer screening. Moreover, the length of residency in a particular country affects their compliance with health screening practices. Women are believed to more likely engage in health screening if they have resided for several years in a foreign country [33-41].

Culture is determined and affected by the values, beliefs, customs, traditions and lifestyles learned and shared from one generation to another, and serves as a way of life for common people and guides their decision making [42]. Cultural perspectives of immigrant groups greatly influence their compliance to available health care and cancer screening. Intrinsic cultural beliefs and practices of a majority of immigrants are usually a deterrent for engaging in breast cancer screening. Some of the beliefs and practices are related to fatalism where women have the idea that cancer leads to death. Religious affiliations and cultural practices can have a strong influence on people, which leads to breast cancer being perceived as a form of curse and therefore women avoid screening with the belief that their

religion will save them. Women may be fearful that a cancer diagnosis may cause them to be ostracized and worry about the stigma and shame since they associate breast cancer with wrongdoing. Furthermore, the concept of privacy is highly valued by a majority of immigrant women who do not want to be examined by a male physician [15,19,25,30,43].

Apart from the various perceptions towards breast cancer among diverse cultural groups, their orientation and knowledge concerning breast cancer screening, particularly mammography, are limited. Most of the immigrant women have limited knowledge regarding preventive health care measures and information on breast cancer screening. Several studies showed some women did not perceive the screening as important since they did not feel any symptoms, and did not have the time or interest since they considered other health problems as more important than breast screening. Some women had a painful experience during the mammography procedure while others were afraid of being exposed to X-rays [10,11,17,20,23,28,44-46]. Conversely, women who have received information and gained knowledge related to breast cancer screening such as mammography, clinical breast examination and monthly breast self-examination were 10 times more likely to engage in up-to-date cancer screening.

DISCUSSION

The increasing incidence of breast cancer affecting middle-aged women and ethnic minorities worldwide with diagnosis commonly made during the later stage of the disease has gained attention of the health care organizations and providers. Thus, considerable efforts have been initiated and implemented to promote early detection and screening to further reduce the mortality rates. Over the years, numerous studies related to contributing factors and specific barriers of women's compliance to breast cancer screening, both in developed and developing countries, have been documented and published. A review of approximately 45 articles related to influencing and deterring factors to breast cancer screening among immigrant women has brought comprehensive understanding of the cultural and ethnic diversity of perspectives to health care providers. To facilitate

compliance to cancer screening among the vulnerable groups of women residing in foreign countries, assessment of the needs and significant factors affecting personal, social, cultural orientation and health behaviors should be established first.

Given the relevant factors that affect women's compliance to cancer screening, particularly age, educational level, marital status, availability of health insurance and access to health care services, the importance of individualized and focused assessment should be made by health care professionals. Regular and up-to-date surveillance, recognition of high-risk groups such as those with a family history of breast cancer and identifying middle-aged women both in rural and urban areas should be conducted by a health care team with the help and assistance of community leaders or health workers. The level of understanding regarding cancer screening should not be limited to the age and educational level but to the extent of familiarity, exposure of women to information and how well they understand the importance of breast cancer screening. Moreover, health care providers should make an effort to involve the spouse of immigrant married women in cancer awareness campaigns by encouraging active involvement in the health screening of their partners. For immigrant women who have resided for a long period in a foreign country, and especially those who just emigrated, access to health care should be provided. For certain screening procedures such as mammography which can be costly for immigrants with low socio-economic status and without health insurance, a free-of-charge screening should be available through collaboration and networking for financial support from the government and non-government organizations. In some developed countries, a mobile health facility should be provided, making the screening and treatment available even in remote areas. To further increase the compliance of the immigrant women, an extra effort of personal visits or telephone contact can be made on an individual basis.

For most ethnic minorities and immigrants, community organizations where they can have a sense of belonging are considered a strong social support system and a majority of the immigrants respect the leaders of these particular organizations. Therefore, collaboration with the group leaders and community health workers are effective in reaching out

to their members who require regular breast cancer screening, with or without symptoms. Empowerment of community leaders through free training and health education with free health care services could be an effective method for increasing breast cancer awareness.

For health care professionals, the success of a patient-focused or client-centered approach in case management requires sensitivity to cultural values, beliefs and practices with respect to their individualities. Identification and classification of cultural health beliefs and practices accepted or maintained if harmless, negotiated or restructured, are an effective method to provide a culturally congruent and specific care [42]. A patient-centered and tailored approach of assessment and intervention with regular follow-ups through personal visits, telephone counseling and mailed letters as constant reminders can be an effective means to further increase compliance to breast cancer screening. Intensive health education campaigns, use of printed materials, utilization and access to media and social networking campaigns against breast cancer are among the efforts that can influence the knowledge and attitude of immigrant women towards cancer awareness [47].

CONCLUSION

After conducting a thorough review of literature on the relevant factors and barriers to breast cancer screening among immigrant women, the importance of providing a culturally congruent assessment and care for vulnerable groups of immigrant women is paramount. To further eliminate health disparities among ethnic minorities with low socioeconomic status, joint efforts of the individual, community leaders, health care professionals and government officials should be made. Initiating realistic programs to address the needs and concerns as well as promote breast cancer awareness campaigns for immigrant women with regard to individualities, equality and shared responsibility for health should be considered.

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