



# HHS Public Access

Author manuscript

*J Obstet Gynecol Neonatal Nurs*. Author manuscript; available in PMC 2013 October 26.

Published in final edited form as:

*J Obstet Gynecol Neonatal Nurs*. 2012 September ; 41(5): 627–637. doi:10.1111/j.1552-6909.2012.01348.x.

## Findings from Focus Groups Indicating what Chinese American immigrant women think about breast cancer and breast cancer screening

Frances Lee-Lin, Usha Menon, Lillian Nail, and Kristin F. Lutz

### Abstract

**Objectives**—To explore beliefs of Chinese American, immigrant women related to breast cancer and mammography.

**Design**—Qualitative description with semi-structured focus groups.

**Setting**—Metropolitan Portland, Oregon.

**Participants**—Thirty eight foreign-born Chinese women, age 40 and older, in five focus groups.

**Methods**—Focus group discussions in Chinese were audio taped, transcribed, and translated into English. Using a process of directed content analysis, group transcripts were coded for themes based on the discussion guide.

**Results**—Three main themes emerged from the analysis: knowledge and beliefs; support, communication, and educational needs; and access to care. Subthemes included beliefs such as barriers and facilitators to screening and perceptions about personal breast cancer risk. Several women were profoundly affected by the negative breast cancer-related experiences of relatives and friends. Some common myths remain about causes and treatment of breast cancer.

**Conclusions**—Although Chinese American immigrant women share beliefs with other minority women in the United States, some culturally-related barriers such as alienation due to cultural reasons for not sharing diagnosis with anyone and beliefs about the efficacy of Eastern versus Western medicine may affect adherence to screening and treatment. Facilitators included being told to get the test and getting screened for the sake of the family, while erroneous information about the cause of breast cancer such as diet and stress remained. Primary care providers such as advanced practice nurses should take into account culturally driven motivations and barriers to mammography adherence among Chinese American immigrant women. Provider-client interactions should involve more discussion about women's breast cancer risks and screening harms and benefits. Such awareness could open a dialogue around breast cancer that is culturally

---

Corresponding Information, Frances Lee-Lin, PhD, OCN, CNS, Oregon Health & Sciences University, 3455 SW US Veterans Hospital Road, Portland, OR 97007, leelinf@ohsu.edu.

Disclosure The authors report no conflict of interest or relevant financial relationships.

Callouts:

- #1: Of all ethnic groups in the United States, Asian American women consistently have the lowest rates of mammography screening.
- #2: Many women have been touched by breast cancer, either through first-degree family members who died of breast cancer or with a personal history of breast problems.
- #3: Many Chinese immigrant women thought having a mammogram once in their lifetimes was sufficient to detect breast cancer.

sensitive and non-threatening to the patient. Information may need to be tailored to women individually or targeted to sub-ethnic groups rather than using generic messages for all Asian immigrant women.

### Keywords

Breast cancer; Chinese Immigrant women; Health beliefs; Focus groups

The mortality and morbidity-related benefits of early detection of breast cancer, the most commonly diagnosed cancer among Asian American (AA) women, are not equally distributed among women of various ethnic minority groups. It is well known that regular screening greatly reduces breast cancer mortality. However, breast cancer screening rates in the past 1–2 years for the majority of AA women ranged from 36% to 67% (Centers for Disease Control & Prevention, 2006; Chen, Diamant, Pourat, & Kagawa-Singer, 2005; Hiatt et al., 1996; Lee-Lin & Menon, 2005; Wu & Ronis, 2009; Yu & Wu, 2005), which is far less than Healthy People 2020 projected goal of 81% (U.S. Department of Health and Human Services, 2012). Asian American women have a lower incidence of breast cancer than White women, but the annual incidence rate has declined slower for AA women than White women (0.8 % vs. 2.2%; American Cancer Society [ACS], 2009). The breast cancer annual death rate has also declined at a slower rate for AA women (0.6% vs. 1.9% for White women; ACS, 2009).

Asian Americans constitute the fastest-growing ethnic group in the United States. A 162% increase in the AA population between 2008 and 2050 is projected, as compared with a 44% increase in the U.S. population as a whole over the same period (U.S. Census Bureau, 2010). If the growth trend continues, AAs will comprise 9–10% (40.6 million) of the U.S. population by 2050 (U.S. Census Bureau, 2004; 2010). Cancer continues to be the leading cause of death for AA women in the U.S. (Intercultural Cancer Council [ICC], 2004).

Nearly 70% of AAs are foreign-born (Reeves & Bennett, 2004). Because first-generation AA immigrants are known to retain their native cultural beliefs about health and health behavior (Lee & Pacheco, 2004), they are least likely to have had a mammogram compared to other ethnic groups in the United States (ACS, 2009; Wu & Ronis, 2009). Asian-born immigrant women are more likely to be diagnosed with breast cancer at later stages when chances of a cure are lower (Hedeem, White, & Taylor, 1999). Early detection through regular screening mammograms is the most effective way to decrease morbidity and mortality from breast cancer.

The AA population is culturally and linguistically diverse, representing more than 25 ethnicities and languages. Chinese Americans are the largest subgroup (23.7%) and have one of the oldest immigration histories in the United State (ICC, 2004; McCracken et al., 2007). Sixty-four percent to 75% of Chinese Americans are foreign-born (mainland Chinese, 64%; Taiwanese, 75%; Keegan, Gomez, Clarke, Chan, & Glaser, 2007). The majority of Chinese immigrants are from China, Taiwan, and Hong Kong. Breast cancer is the leading cancer and is among the top three cancer causes of death for Chinese American women (Miller, Chu, Hankey, & Ries, 2008). The rates of having at least one mammogram in the last two years ranged from 53% to 61% for Chinese American women (Lee-Lin & Menon,

2005; Yu & Wu, 2005; Wu & Ronis, 2009; McCracken et al.). In a previous descriptive study of 100 Chinese American immigrant women in Portland, Oregon, only 48.5% had obtained a mammogram in the last year (Lee-Lin, Menon et al., 2007). The Portland metropolitan area includes a diverse population of AAs. In Oregon, Asians represent 3% of the population (U.S. Census Bureau, 2000), with the largest subgroup being Chinese. Breast cancer is the most common cancer and the number one killer of AA women in Oregon (Oregon State Cancer Registry, 2012).

The purpose of this qualitative descriptive investigation (Sandelowski, 2000; 2010) was to explore and better understand the beliefs of Chinese American immigrant women about breast cancer and breast cancer screening to inform the development and revision of an educational intervention for later testing in a randomized controlled trial.

## Review of Literature

A number of barriers and facilitators to breast cancer screening have been identified among Chinese American women. Barriers included forgetting, pain, lack of time, absence of symptoms, and limited ability to communicate in English (Lee-Lin & Menon, 2005; Lee-Lin, Menon et al., 2007). Facilitators included having a regular health care provider, being specifically told by the provider to have a mammogram, and having health care insurance coverage (Lee-Lin & Menon; Lee-Lin, Menon et al.). Chinese American women tend to underestimate their risk of getting breast cancer and therefore undervalue the importance of mammography (Lee-Lin, Menon et al.). Furthermore, cultural beliefs about cancer also affect Chinese American women's health behaviors. Some Chinese people believe cancer is contagious (Wong-Kim, Sun, & DeMattos, 2003; Kwok & Sullivan, 2006) and identify breast cancer as a taboo subject and an indication of bad luck (Wong-Kim, Sun, Merighi, & Chow, 2005; Kwok & Sullivan; Facione, Giancarlo, & Chan, 2000). Some believe breast cancer is a curse and that they can avoid breast cancer by positive thinking, following a healthy diet, and having a balanced life (Kwok & Sullivan; Liang, Yuan, Manedlblatt, & Pasick, 2004).

A sense of fatalism was evident in the literature. Chinese American women do not generally think about screening for the early detection of cancer, instead, they trust in fate and destiny (Liang et al., 2004; Liang et al., 2007; Kwok & Sullivan, 2006). All these beliefs are reflected by Chinese women living in the United States and Australia, but little is known specifically about Chinese immigrant women regarding beliefs in breast cancer and mammography screening. Some Chinese immigrants attributed the breast cancer illness to the stress of their migration experiences (Kwok & Sullivan, 2006; Wong-Kim et al., 2005). Currently, researchers have not identified differences in beliefs and screening behaviors of U.S.-born and Asian-born Chinese American women. Immigrants' cultural beliefs regarding breast cancer and screening may delay early detection of cancer and treatment (ACS, 2009; Lee & Pacheco, 2004; Wu & Ronis, 2009). In addition, many cross-cultural studies lack theoretical frameworks and valid and reliable measures (Lee-Lin & Menon, 2005). Additional knowledge is needed to study beliefs of Chinese immigrant women based on a theoretical foundation. Focus groups are a commonly used qualitative methodology where the goal of the research is exploratory. Focus group methodology was used to help better

understand the beliefs associated with breast cancer and screening for mammography among Chinese immigrant women.

## Theoretical Framework

The development of focus group discussion topics were guided by the Health Belief Model (HBM), a commonly used conceptual framework emphasizing individual health beliefs in the study health behavior change (Janz, Champion, & Strecher, 2002), including a few studies of AAs (Lee-Lin, Menon et al., 2007; Lee-Lin, Pett et al., 2007; Schulmeister & Lifsey, 1999; Tang et al., 2000; Yi, 1994). Within the context of breast cancer screening, the HBM suggests that a woman is more likely to participate in cancer screening if she believes that she is susceptible to breast cancer, cancer is serious, has positive outcomes with screening (benefits) and few obstacles (barriers), has high confidence in her ability to obtain a screening test (self-efficacy) and has adequate knowledge (Champion, 1999). A number of HBM variables are believed to influence cancer screening beliefs and practices, such as perception of susceptibility and perceived benefits or facilitators and barriers (Champion).

A semi-structured interview guide was designed to elicit information specific to the variables from the HBM that were included in the planned educational program. Discussion foci included exploring participants' awareness of and knowledge about breast cancer risk and screening for breast cancer; beliefs related to breast cancer risk and screening breast cancer screening; family/social support specific to breast cancer risk and screening; perception of provider communication; and information sharing with community regarding breast health education and breast cancer screening.

## Methods

### Sample and Setting

The target population for the study was Chinese immigrant women in the Portland metropolitan area. After obtaining approval from the Institutional Review Board, flyers were posted in Asian community centers and churches. A research assistant and the first author attended community events and meetings to announce the study and recruit participants. Recruiting participants from various Chinese churches and activity groups of Asian community centers allowed us to include women of diverse Chinese backgrounds (i.e., immigrants from China, Taiwan, Vietnam, and Hong Kong) to maximize heterogeneity. To be eligible to participate, a woman had to be a foreign-born Chinese female, 40 years or older (due to the ACS mammography recommendation guideline; ACS 2009), with no history of breast cancer and able to understand/read Chinese. Foreign born Chinese were defined as those who immigrated to the United States and self-identified as Chinese or Chinese American.

### Procedures

For this study, focus group interviews were chosen as the qualitative data collection method. Focus group methods are well suited to this study because of their ability to generate an understanding of participants' beliefs and experiences (Morgan, 1998) and capture group perceptions of meaning, health, and illness (Kamberelis & Dimitriadis, 2005; Wilkinson,

1998). Forty four women from the Asian community centers and churches were invited to participate and were given an informational study flyer. All of them agreed to participate in focus groups to share their perceptions about breast cancer and breast cancer screening. Subsequently 38 of these women attended one of five focus groups consisting of six to nine participants per group. In keeping with the exploratory nature of this project, no a priori sample size was proposed.

Focus groups lasting two hours were held at one of two conveniently located Asian community center sites. Prior to the group discussion informed consent was obtained followed by completion of a demographic data form. All focus groups were audiotaped. The moderator used an interview guide designed to elicit information that would verify or add to educational messages for a future randomized controlled trial (RCT). The five previously described objectives from the HBM were incorporated into the interview guide. Three focus groups were conducted in Mandarin (moderated by the first author) and two in Cantonese (moderated by a community leader). The first author was also present to address any questions that arose during the Cantonese language groups. The first author has worked with the Asian community in Portland, Oregon for the past eight years. She has an extensive background in cancer nursing, teaching, training, and management experiences. She also has conducted several focus group discussions, community assessments, translations, and educational interventions with Asian Americans. The community leader, trained as an educator and counselor, speaks both Mandarin and Cantonese fluently, and has a graduate degree in counseling. She has worked with the Asian community center for the past seventeen years. Lunch and a small incentive (\$20 gift card) were provided to each participant following the focus group.

## Data Analysis

**Framework for analyzing data**—The purpose of the study was not to generate theory but to verify themes and variables previously identified in research with Asian women. In general, and with Chinese American women in particular, the themes resulting from this study held true thereby confirming variables that we needed to include in a future targeted education program based on the HBM. As such, the focus group interviews were designed to gain insight into the perspectives of immigrant Chinese American women on breast cancer screening and risks in order to describe their perceptions and compare them to the existing literature. Consequently, interview transcripts were analyzed for key concepts and variables along the lines of the five focus areas in the HBM. The use of a more deductive, theory-directed approach to content analysis that is more structured than conventional content analysis is considered a form of directed content analysis (Hsieh & Shannon, 2005). The primary purpose was to identify key variables to include in a subsequent educational intervention.

Data analysis was conducted from the perspective of identifying key themes and issues related to the five focus areas listed earlier. Although in a more inductive qualitative design, thematic areas may be left open to emerge from the readings of the transcripts. In this instance, the specific intent was to verify variables identified in previous research and

identify possible new issues among Chinese American immigrant women in the Portland region.

**Data analysis techniques**—Audio-recorded focus group discussions were transcribed verbatim in Chinese and translated into English by two bilingual Chinese Americans, one for Mandarin and one for Cantonese. Both have served as translators for the local Chinese American community for many years. The English transcripts were further verified and checked against the Chinese versions by the first author and another bilingual Chinese American health care provider educated in the United States. The translation process was guided by three principles (Lee-Lin et al., 2008) to have content equivalence to the original materials, to ensure the content was understandable and meaningful, and to make the written expression elegant and appropriate in the proposed language. The translation team met to discuss discrepancies and establish consensus on translations to ensure the clarity and accuracy of the data.

A coding scheme was developed by the authors based on the focus group discussion guide described above. The authors coded the English translation for the first focus group independently then met to discuss discrepancies and to agree on the best codes to improve consistency. Data from each focus group were coded by two authors independently, the coding was compared, and consensus on the best coding was achieved. The codes for each focus group interview were then compared across transcripts, enabling the research team to identify key themes that appear to influence mammogram completion and best represent participants' understanding of risks. This peer debriefing (Lincoln & Guba, 1985) also helped ensure rigor in the process of developing the codes. This process was repeated for all five focus group transcripts. In this way, data were reduced from coded conversation segments and organized under the five questions used to guide the focus group discussions.

To further ensure consistency among the coders, the final coded transcripts were then reviewed by an independent consultant with an extensive background in qualitative data analysis. This process provided an external audit of our analysis helping to assure the confirmability and dependability of the findings (Lincoln & Guba, 1985). Trustworthiness was further assured by the first author checking the English translations against the Chinese transcriptions. Credibility of analysis was assured by triangulation of analysts (having two coders review each transcript) and peer debriefing methods (Lincoln & Guba). Although no overall percentage of agreement was calculated using statistics such as a Cohen's kappa, there was less than 10% disagreement between coders within each focus group.

## Results

### Description of the sample

As shown in Table 1, the mean age of the 38 participants was 61.7 years (range 40 to 84, SD= 10.9). The majority (71%) immigrated from mainland China. Most of the women were married (66%) and approximately one third were widowed (29%). Almost half of the participants (45%) reported a college or higher degree, while 47% reported less than high school education. Most (82%) reported no employment outside the home. Of those who



reported income, 79% had annual household incomes less than \$30,000. Data about the length of time since immigration were not collected.

## Main Themes

The participants' responses were analyzed according to the five focus areas of the HBM. These focus areas were then condensed and organized into three main themes that were consistent across the focus groups: knowledge, beliefs, and experiences; support, communication, and educational needs; and access to care and treatment seeking behavior (see Table 2 for a summary of themes, sub-themes, and sample participant comments). Informational redundancy occurred across the focus groups. Many women had been touched by breast cancer, either through first-degree family members who died of breast cancer or with a personal history of breast problems such as calcification or inflammation.

## Knowledge, Beliefs, and Experiences

**Reasons for having and not having a mammogram**—Facilitators for women having mammograms included reminders from health care professionals or community service centers, having insurance or free mammography, perceived better health, desire for early detection, and family support or responsibilities. Recommendations and reminders from health care providers and community service centers were key facilitators for Chinese American immigrant women to obtain a mammogram because “Chinese American women tend to trust the authority and respect the knowledge of a medical doctor.” Statements such as, “I did my first mammogram because my doctor asked me to” and “I do my mammogram every year, since my doctor reminds me” were common, further exemplifying the power of professional guidance and the value of reminder notices from health care providers. Community organizations also played an important facilitating role: “The Service Center reminds me, then I will go.” A sense of responsibility to family was another facilitator identified by the majority of participants. Participants who were mothers had mammograms for early detection and better survival, stating, “I felt like I no longer have right to die (sic) because she [my daughter] was very little.”

On the other hand, cost was a significant barrier to mammography screening for uninsured women. Comments such as, “We had four females in the family, should we not eat so that all can do mammography?” convey the complex choices that women made regarding prioritizing mammography screening. Participants also faced cultural barriers such as limited English ability, superstition, and modesty issues. Many women had heard stories about lumps not being detected by a mammogram, which made them question the sensitivity of mammography: “She did a mammogram one to two months before and it was normal, then a month later she felt it [a breast lump] in the shower.” A majority of women emphasized the importance of breast self-examination (BSE) to detect changes in their breasts because having a normal mammogram does not guarantee healthy breasts (i.e., no breast cancer). This finding was surprising, given the ongoing public health focus on mammography screening. Only one woman expressed concern in performing BSE, stating, “I never knew how to do a breast self-exam well. I would scare myself by thinking I have something abnormal but actually there was nothing abnormal.” The reliance on BSE is concerning because mammograms are generally held to be the most effective tool in

detecting breast cancer early. Additionally, in order for BSE to be effective it must be performed accurately raising concerns about the BSE procedures these women might use if they were not educated on the proper technique.

Lack of knowledge and confusion about mammography screening guidelines were also heard from the group (the focus group discussions took place before the announcement of the 2009 U.S. Preventive Services Task Force [USPSTF] recommendations on screening for breast cancer, USPSTF, 2009). Many women did not know the importance of having a mammogram regularly and annually; some thought that having a mammogram once in their lifetimes was sufficient. Additionally, women from mainland China expressed a different viewpoint about cancer screening. In China, screening “does not mean everyone gets to be examined. It is selecting a group of people to do the examination.” Women further stated, “If I have been selected, I will go. If not, it is not a big deal.” When they had no symptoms, having a mammogram was viewed as unnecessary and “troublesome.”

**Causes and Risks of Breast Cancer**—Chinese American immigrant women expressed many beliefs about genetics, diet, life style, stress, breastfeeding, and taking hormones related to breast cancer risk. While some beliefs about the causes and risks of breast cancer were accurate, many erroneous beliefs were expressed during the focus groups. Diet was extensively discussed as a factor that could decrease or add to breast cancer risk. For example: “Some said because Asian American women eat a lot of tofu [they have a lower risk]. Eating soy bean may help.” Stress and negative emotions were endorsed as causes of cancer by many women: “Breast cancer may be caused by the stress of daily life or by eating fast foods” and “I’ve had a few co-workers in Canton who were divorced from their husbands, or their husbands were having affairs, their wives in general have the disease [breast cancer].” Increasing age was erroneously considered by a number of participants to decrease the risk of breast cancer: “Women in their 30s and 40s have higher chance [of getting breast cancer]” and “Women in their old age won’t have breast cancer.”

**Past negative experiences influencing current behavior**—Participants shared many compelling stories about past negative experiences related to diagnosis of breast cancer and treatment:

The cancer treatment [of my mother] left me feeling brutalized. Seeing how my mother was negatively affected by the treatment, I started to question the necessity (worthy or not) of going through the treatment...I think it is so brutal. After (surgery), she could not lift her arm, and she felt ugly. She was only 50 something, and she didn’t feel good about herself. Then I also was hesitant; was the surgery really necessary?

I will not do the surgery nor will I do the chemotherapy. I had a friend that had cancer, her husband was a surgeon, and her son was very rich. He suggested for her to do the surgery but not do the chemotherapy. Then, she did the surgery. Her lymph nodes already had cancer cells, so she wanted to do the chemotherapy. She wanted to live. I encouraged her; her husband and her son both agreed to chemotherapy. She...spent several millions of dollars...and endured the agony of chemotherapy. I was scared even hearing about what she had to go through.



Finally, her liver had cancer cells as well. I heard a lot of situations all happened after the surgery; the patients' abdomen became huge, and then they die.

Her illness was aggressive and progressed quickly. When I visited her, she was already been sick for a few months; cancer cells caused ulceration through her whole breast. She had to clean up the ulceration, use gauze, also orally take painkillers; after that, she dozed off. This cycle of events repeated itself for few months like this; so I think it was very terrible.

These powerful statements conveyed strong emotional responses to the stories women had heard or experienced that made a significant negative impact on their decisions regarding screening and treatment for breast cancer. The feeling that women with breast cancer died in spite of treatment further dissuaded them from obtaining a mammogram for early detection. Significantly, more women thought breast cancer was a terminal disease rather than a treatable illness. As a result of this misperception, they would choose not to have treatment because they believed that they were going to die, that no one could help them, and that nothing could be done to prevent it.

### **Support, Communication & Educational Needs**

#### **What women look for from health care providers, family, friends, and others—**

It was striking that women assumed their lack of symptoms or personal risk was the reason providers did not address breast cancer risk with them: “[The] doctor wouldn’t talk to you about your risk if he thinks you have no problem. Every time I do the exam, he doesn’t talk much.” They looked for information from health care providers and women with breast cancer experiences to make decisions about treatment. They were eager to learn about breast health information and viewed cancer prevention and screening as an important health goal: “Prevention is more important than treatment.” Another important and emphatic message from the participants was that health care providers did not take time to discuss the risks of getting breast cancer. Other unmet needs were language translation and transportation.

Many women expressed their need for emotional support from family members and friends if they had a positive screening test or a breast cancer diagnosis: “Of course I would tell my family first. I would discuss with them the next step--who should I see in the hospital and what to do,” and “I will tell my husband and children because I need their encouragement.” In contrast, other women were reluctant to burden family members if they were faced with positive screening or a breast cancer diagnosis: “Your parents would be too old that you don’t want them to be worried” and “If you want your husband and children worry about you, then they won’t have time to devote to the society. If I will die anyway, why bother to leave so much pain to other people as well?”

**Cultural beliefs, shame, and isolation impede disclosure—**Women expressed different perspectives on sharing information with family members. While some women sought to protect their family from the burden of a breast cancer diagnosis, others wanted family support and assistance with decision making. Cultural beliefs regarding stigma and shame were described as a barrier to publically sharing a cancer diagnosis or positive screening result:

Some people may be superstitious...they do not want other people [to] know that their families have this kind of problem [breast cancer]. For a mother, she may be afraid that if other people knew that she has breast cancer then no one would want to marry her daughter.

As explained by another participant, feeling alone or possessing misperceptions about surgical treatment also influenced women's decision to share information with others:

I will face the problem by myself because no one can help me. I will choose to live with the cancer. I will not do the surgery because 9 out of 10 women die after three months of the surgery.

These women would rather bear the burden themselves than tell other people about the diagnosis, suggesting the influence of misperceptions, misinformation, and cultural beliefs.

### **Access to Care & Treatment Seeking Behavior**

**Seeking care in the home country versus the United States**—Some study participants who were uninsured or underinsured shared stories about seeking preventive care or treatment in their home country (China or Taiwan) because of the high cost of health care in the United States: "Government subsidized medical care in Taiwan is good...medical skills in Taiwan are quite good...very responsive and efficient." When experiencing symptoms or serious illness, they would rush back to their home countries for diagnosis and treatment. However, one participant expressed concern about not being sure what to do when problems occurred with the prescribed treatment for a chronic condition (e.g., pulse rate was too low with blood pressure or heart medications). Since her primary health care provider in the home country was not readily available for consultation, she was uncertain about the best course of action and resorted to self-care in the United States.

**Use of Eastern medicine to treat cancer**—Many Chinese American women expressed interest in using Eastern medicine to treat or to prevent illness; they believed that it is "milder" than Western medicine. Although cost and lack of providers limited this option for them, one participant described:

I like to use Chinese medicine; however, it is difficult to continue that practice in the U.S. You have to pay by yourself here. Also, highly qualified Chinese medicine doctors are hard to find. In China, the common practice is that for a minor illness [one] just sees a Chinese medicine doctor and gets some Chinese medicine to take, but if surgery is needed, we would still go for a Western doctor.

While many of the women were interested in using Eastern medicine, they shared both positive and negative stories about cancer patients who were treated with Eastern medicine.

## **Discussion and Implications**

### **Implications for Practice**

Findings suggest that Chinese American immigrant women in the Portland, Oregon area experience many similar barriers as other minority communities to breast cancer screening such as health care costs, transportation, limited English language ability, lack of

communication with provider, lack of knowledge, and erroneous beliefs about causes and risks of breast cancer. Importantly, they also have some culturally-related barriers such as alienation due to cultural reasons for not sharing diagnosis with anyone, and beliefs about the efficacy of Eastern versus Western medicine as demonstrated in the literature (Kwok & Sullivan, 2006; Lee-Lin & Menon, 2005; Liang et al, 2004; Tang, Solomon, & McCracken, 2000; Wang et al., 2009; Wong-Kim et al., 2003; Wu, Hsieh, & West, 2009; Wu & Ronis, 2009). Listening carefully to a client's story can help primary care providers tailor information to women individually rather than using generic messages for all Asian women. Women from mainland China appear to have a different viewpoint about cancer screening. They may not know when mammography is recommended in the United States. Education and a mammography recommendation from the health care provider may be even more important for this group of women. In addition, the misconception that a large proportion of women with breast cancer die of the disease despite treatment contributed to the reasons women did not have a mammogram for early detection. Providers need to assess knowledge and past experiences of newly diagnosed breast cancer patients and provide treatment education and support accordingly.

English ability was positively associated with mammography screening. Culturally sensitive and language-appropriate educational interventions are likely to improve mammography adherence among Chinese American immigrant women (Liang et al, 2009; Lim, 2010). Reminders for mammography screening should be in both Chinese and English languages, and interpreters should be available to assist if an English language barrier is identified. Lack of knowledge and confusion about mammography screening guidelines existed among this group of the Chinese American immigrant women, and communication with providers remains a barrier as do erroneous beliefs about causes and risk (increasing age decreases risk, increasing risk with skinny or divorced women). With the new USPSTF recommendations (2009) on screening for breast cancer (i.e., increased responsibility on women and providers to discuss need for and frequency of mammography especially for those less than 50 years), further education is urgently needed to avoid added confusion for women (Squiers et al., 2011). Providers should give specific advice to get a mammogram rather than depending upon self-initiated behavior.

For women who seek care periodically in China and Taiwan, better communication should be established between patients and their U. S. health care providers. For example, if providers were aware of such situations, they could encourage their Chinese American immigrant clients to obtain copies of their medical records to share with health care providers in the United States. Further, many Chinese American immigrant women may be overwhelmed by the health care system in the United States; assistance in navigating the health care system may be needed to reduce their isolation and confusion.

### Limitations

This small convenience sample was recruited exclusively from the Chinese community residing in the Portland, Oregon area and cannot be generalized to the entire population of such women in the United States. Information about the length of time participants had been in the United States was not gathered. These data would have been useful to determine

whether there were differences between recent immigrants' perceptions and those who have been in the United States for a longer time. Our findings pinpoint some underlying beliefs about breast cancer and provide a foundation for future intervention studies with Chinese American immigrant women and subsequent comparisons with other Asian subgroups.

## Conclusions

Our findings suggest that providers need to take time to discuss the risks for breast cancer with these women and provide screening recommendations for them, since women might otherwise assume that they are not at risk for breast cancer. Because misinformation about breast cancer risks and screening accuracy were common, client-provider interactions should include more discussion about women's specific risks and preferences, and mammography harms and benefits. Since language is often an important barrier to care, both verbal and written information should be available in patient's primary language. Because past negative experiences of other women influenced women's decisions to not have a mammogram, providers or supplemental health education personnel should provide education and information so as to decrease the negative emotional responses to new diagnosis and treatment. Nurses today play a vital role in preventive health care, especially with the rising number of advance practice nurses delivering primary care. These primary health care providers should be reminded continuously of their powerful position in increasing cancer screening adherence for all women.

To promote and improve access for uninsured and low-income women, proven programs such as the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) should be protected. Advocacy for new programs focused on the underserved that address the unique needs, beliefs, and values of different racial and ethnic groups, such as Chinese American immigrants, is urgently needed. Such efforts, along with recognition of cultural factors underlying screening behavior, may help lead to decrease in morbidity and mortality from breast cancer. As we discovered in our focus groups, community service centers may play an important role in cancer screening decisions. Leveraging the culture of racial and ethnic communities may well optimize the effect of interventions designed to increase screening (Fisher, Burnett, Huang, Chin, & Cagney, 2007). In this instance, cultural beliefs of Chinese American immigrant women could be woven into education and communication about regular screening for breast cancer. Our findings have been incorporated into an educational program that is currently being tested for efficacy in a 2-group randomized design.

## Acknowledgement

Funded by ACS Grant MRSMT-09-090-01-CPPB and NIH Grant 5 UL1 RR024140. The authors thank Drs. Carol Ferrans and Laura Szalacha for consultation and AHSC for participation.

## Biographies

Frances Lee-Lin, PhD, OCN, CNS, is an assistant professor in the School of Nursing, Oregon Health & Sciences University, Portland, OR.

Ushna Menon, PhD, RN, FAAN, is a Pamela Kidd Distinguished research professor in the College of Nursing and Health Innovation, Arizona State University and the Mayo Clinic Cancer Center, Phoenix, AZ.

Lillian Nail, PhD, RN, FAAN, is a professor and senior scientist in the School of Nursing, Oregon Health & Sciences University, Portland, OR.

Kristin F Lutz, PhD, RN, is an assistant professor in the School of Nursing, Oregon Health & Sciences University, Portland, OR.

## References

- American Cancer Society. Breast cancer facts & figures 2009–2010. Atlanta, GA: American Cancer Society, Inc.; 2009.
- Centers for Disease Control & Prevention. Cancer-Breast cancer- Mammography. 2006. Retrieved October 24, 2006, from <http://www.cdc.gov/cancer/breast/statistics/screening.htm>
- Champion V. Revised susceptibility, benefits, and barriers scale for mammography screening. *Research in Nursing & Health*. 1999; 22:341–348. [PubMed: 10435551]
- Chen JY, Diamant A, Pourat N, Kagawa-Singer M. Racial/ethnic disparities in the use of preventive services among the elderly. *American Journal of Preventive Medicine*. 2005; 29:388–395. [PubMed: 16376701]
- Facione N, Giancarlo C, Chan L. Perceived risk and help-seeking behavior for breast cancer: A Chinese-American perspective. *Cancer Nursing*. 2000; 23(4):258–267. [PubMed: 10939173]
- Fisher TL, Burnett DL, Huang ES, Chin MH, Cagney KA. Cultural leverage: Interventions using culture to narrow racial disparities in health care. *Medical Care Research and Review*. 2007; 64(5 Suppl):243S–282S. [PubMed: 17881628]
- Hedeed AN, White E, Taylor V. Ethnicity and birthplace in relation to tumor size and stage in Asian American women with breast cancer. *American Journal of Public Health*. 1999; 89(8):1248–1252. [PubMed: 10432917]
- Hiatt R, Pasick R, Perez-Stable E, McPhee S, Engelstad L, Lee M, et al. Pathways to early cancer detection in the multiethnic population of the San Francisco Bay Area. *Health Education Quarterly*. 1996; 23(Suppl):S10–S27.
- Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qualitative Health Research*. 2005; 15:1277–1288. [PubMed: 16204405]
- Intercultural Cancer Council- Asian Americans & Cancer. Closing the gap. 2004 Jan-Feb. 2004. Retrieved from <http://www.iccnetwork.org/cancerfacts/cfs3.htm>
- Janz, NK.; Champion, VL.; Strecher, VJ. The health belief model. 3rd ed. San Francisco, CA: John Wiley & Sons.; 2002. *Health Behavior and Health Education*; p. 45-66.
- Kamberelis, G.; Dimitriadis, G. Focus groups: Strategic articulations of pedagogy, politics, and inquiry. In: Denzin, N.; Lincoln, YS., editors. *Handbook of Qualitative Research*. 3rd ed. Thousand Oaks, CA: Sage; 2005. p. 887-907.
- Keegan HM, Gomez SL, Clarke CA, Chan JK, Glaser SL. Recent trends in breast cancer incidence among 6 Asian groups in the Greater Bay Area of Northern California. *International Journal of Cancer*. 2007; 120:1324–1329.
- Kwok C, Sullivan G. Chinese-Australian women's beliefs about cancer: Implication for health promotion. *Cancer Nursing*. 2006; 29(5):E14–E21. [PubMed: 17006106]
- Lee, SM.; Pacheco, G. Office of Minority Health, U.S. Department of Health and Human Services Special Report. Washington, D.C.: 2004. *Cultural and language barriers to health and healthcare among Asian immigrant women*. 2004.
- Lee-Lin F, Menon U. Breast and cervical cancer screening practices and interventions among Chinese, Japanese, and Vietnamese Americans. *Oncology Nursing Forum*. 2005; 32:995–1003. [PubMed: 16136197]

- Lee-Lin F, Menon U, Pett M, Nail L, Lee S, Mooney K. Breast cancer beliefs and mammography screening practices among Chinese-American immigrants. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*. 2007; 36(3):212–221.
- Lee-Lin F, Pett M, Menon U, Lee S, Nail L, Mooney KJ, Itano. Cervical Cancer Beliefs and Pap Smear Testing Practices among Chinese-American Immigrants. *Oncology Nursing Forum*. 2007; 34(6):1203–1209. [PubMed: 18024347]
- Lee-Lin F, Menon U, Pett M, Nail L, Lee S, Mooney K. Measuring breast cancer and mammography screening beliefs among Chinese American immigrant women. *Western Journal of Nursing Research*. 2008; 30(7):852–868. [PubMed: 18515751]
- Liang W, Yuan E, Mandelblatt JS, Pasick RJ. How do older Chinese women view health and cancer screening? Results from focus groups and implications for interventions. *Ethnicity & Health*. 2004; 9(3):283–304. [PubMed: 15370001]
- Liang W, Wang JH, Chen MY, Feng S, Lee M, Schwartz MD, Mandelblatt JS. Developing and validating a measure of Chinese cultural views of health and cancer. *Health Education & Behavior*. 2007; 35:361–375. [PubMed: 17602102]
- Liang W, Wang JH, Chen MY, Feng S, Yi B, Madelblatt JS. Cultural views, language ability, and mammography use in Chinese American women. *Health Education & Behavior*. 2009; 36(6):1012–1025. [PubMed: 19233947]
- Lim JW. Linguistic and ethnic disparities in breast and cervical cancer screening and health risk behaviors among Latina and Asian American women. *Journal of Women's Health*. 2010; 19(6):1097–1107.
- Lincoln, YS.; Guba, EG. *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications; 1985. p. 187-220.
- McCracken M, Olson M, Chen MS, Jemal A, Thun M, Cokkinides V, Ward E. Cancer incidence, mortality, and associated risk factors among Asian Americans of Chinese, Filipino, Vietnamese, Korean, and Japanese ethnicities. *CA: A Cancer Journal for Clinicians*. 2007; 57(4):190–205. [PubMed: 17626117]
- Miller BA, Chu KC, Hankey BF, Ries LA. Cancer incidence and mortality patterns among specific Asian and Pacific Islander populations in the U.S. *Cancer Causes Control*. 2008; 19:227–256. [PubMed: 18066673]
- Morgan, DL. *The focus group guidebook*. Thousand Oaks, CA: Sage Publications; 1998.
- Oregon State Cancer Registry. *Cancer in Oregon, 2005*. Full report. 2012. Retrieved from <http://public.health.oregon.gov/DiseasesConditions/ChronicDisease/Cancer/oscar/arpt2006/Pages/index.aspx>
- Reeves, TJ.; Bennett, CE. *We the people: Asians in the United States, Census 2000 special Report*. 2004. Retrieved from <http://www.census.gov/prod/2004pubs/censr-17.pdf>
- Sandelowski M. Whatever happened to qualitative description? *Research in Nursing & Health*. 2000; 23:334–340. [PubMed: 10940958]
- Sandelowski M. What's in a name? Qualitative description revisited. *Research in Nursing & Health*. 2010; 33:77–84. [PubMed: 20014004]
- Schulmeister L, Lifsey DS. Cervical cancer screening knowledge, behaviors, and beliefs of Vietnamese women. *Oncology Nursing Forum*. 1999; 26(5):879–887. [PubMed: 10382186]
- Squiers LB, Holden DJ, Dolina SE, Kim AE, Bann CM, Reanaud JM. The public's response to the U.S. preventive Services Task Force's 2009 recommendations on mammography screening. *American Journal of Preventive Medicine*. 2011; 40(5):497–504. [PubMed: 21496748]
- Tang TS, Solomon LJ, McCracken LM. Cultural barriers to mammography, clinical breast exam, and breast self-exam among Chinese-American women 60 and older. *Preventive Medicine*. 2000; 31:575–583. [PubMed: 11071839]
- U.S. Census Bureau. *State and county quick facts 2000*. 2000. Retrieved from <http://quickfacts.census.gov/qfd/states/41000.html>
- U.S. Census Bureau. *U.S. interim projection by age, sex, race, and Hispanic origin, 2004*. 2004. Retrieved from <http://www.census.gov/ipc/www/usinterimproj/natprojtab01a.pdf>
- U.S. Census Bureau News. *Facts for features: Asian/Pacific American Heritage Month: May, 2010*. 2010, 3/2010. Retrieved from [http://www.census.gov/newsroom/releases/archives/facts\\_for\\_features\\_special\\_editions/cb10-ff07.html](http://www.census.gov/newsroom/releases/archives/facts_for_features_special_editions/cb10-ff07.html)



- U.S. Department of Health and Human Services. Healthy People 2020 objective target areas and page numbers. 2012. Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020/pdfs/HP2020Objectives.p>
- U.S. Preventive Services Task Force. Screening for breast cancer: U.S. preventive services task force recommendation statement. *Annals of Internal Medicine*. 2009; 151:716–726. [PubMed: 19920272]
- Wang JH, Mandelblatt JS, Lang WC, Yi B, Ma JJ, Schwartz MD. Knowledge, cultural, and attitudinal barriers to mammography screening among nonadherent immigrant Chinese women. *Cancer*. 2009; 115:4828–4838. [PubMed: 19645031]
- Wilkinson S. Focus groups in health research: Exploring the meanings of health and illness. *Journal of Health Psychology*. 1998; 3:329–348. [PubMed: 22021395]
- Wong-Kim E, Sun A, DeMattos MC. Assessing cancer beliefs in a Chinese immigrant community. *Cancer Control*. 2003; 10(Suppl)(5):22–28. [PubMed: 14581901]
- Wong-Kim E, Sun A, Merighi JR, Chow EA. Understanding quality-of-life issues in Chinese women with breast cancer: A qualitative investigation. *Cancer Control*, November. 2005; (Suppl.):6–12.
- Wu TY, Hsieh HF, West BT. Stages of mammography adoption in Asian American women. *Health Education Research*. 2009; 24:748–759. [PubMed: 19318524]
- Wu TY, Ronis D. Correlates of recent and regular mammography screening among Asian-American women. *Journal of Advanced Nursing*. 2009; 65:2423–2446.
- Yi JK. Breast cancer screening practices by Vietnamese Women. *Journal of Women's Health*. 1994; 3:205–213.
- Yu M, Wu T. Factors influencing mammography screening of Chinese American women. *JOGNN*. 2005; 34:386–394. [PubMed: 15890839]

**Table 1**

## Sociodemographics

Variable	N (%)	M (SD)
Age		61.7 (10.9)
Marital Status		
Married	25 (65.8)	
Single/Never been married	1 (2.6)	
Divorced	1 (2.6)	
Widow	11 (28.9)	
Birth Place		
Mainland China	27 (71.1)	
Taiwan	5 (13.2)	
Hong Kong	3 (7.9)	
Vietnam	3 (7.9)	
Education		
Elementary and less	5 (13.2)	
Complete middle school	13 (34.2)	
Complete high school	3 (7.9)	
College and higher	17 (44.7)	
Employment		
Full time	1 (2.6)	
Part time	6 (15.8)	
Not employed	31 (81.6)	
Annual household Income		
Less than 15K	18 (47.4)	
15–30 K	4 (10.5)	
30,001-50K	0 (0.0)	
50,001-75K	1 (2.6)	
75,001-100 K	1 (2.6)	
100,001 and higher	4 (10.5)	
Don't know/prefer not to answer	10 (26.3)	

**Table 2**

## Summary of focus group themes

Theme	Sub-themes	Sample participant comments
Knowledge, beliefs, and experiences	Reasons for having or not having a mammogram Causes of and risks for breast cancer Negative experiences that made women not want to know about a diagnosis	“The notice I received was in English. I did not understand... I didn’t know what was going on. I needed to find someone to explain to me. So, forget it.” “My mother died from breast cancer... My mom was a traditional woman. She kept things in her mind and never spoke up. When people get depressed, their immune system is weakened...[they] can easily get sick.” “The technician pressed so hard, caused pain for few days; and that is why I don’t want to do it anymore.”
Support, communication, and educational needs	What women look for from health care provider, family, friends, and others Cultural beliefs, shame, and isolation impede disclosure	“...I want to know how to prevent it, What are the signs and symptoms of breast cancer? I believe that every woman wants to know.” “Some women think that having abnormal mammogram result is a shame. My mom said that only you and your sister know [about my condition]; you cannot tell other people.”
Access to care and treatment seeking behavior	Seeking care in home country versus the U.S. Use of Eastern medicine to treat cancer	“The problem is that your doctor is in Taiwan; what should you do when problems come up? So I don’t know what to do.” “In our culture, Chinese medicine is milder, and Chinese will want to use it. They will rather use Chinese medicine until their illnesses are unable to control...”

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript