

# Mammography Screening of Chinese Immigrant Women: Ever Screened Versus Never Screened

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**E**arly breast cancer detection through regular mammography screening reduces morbidity and mortality (American Cancer Society [ACS], 2013). In the United States, Asian Americans (AAs) are the fastest-growing ethnic group, and breast cancer is the most commonly diagnosed cancer for women in this population. However, AA women's mammography rates are well below the national Healthy People project goal of 81% and consistently lower than rates for all other U.S. ethnic groups (ACS, 2013; Gomez et al., 2013; HealthyPeople.gov, 2015; Partnership for Prevention, 2007).

The target population for this study, Chinese Americans (CAs), is the largest of the AA subgroups (Humes, Jones, & Ramirez, 2011). Similar to other AA women, CA women have much lower rates of mammography screening than the general population. Several studies in the past 30 years have reported on breast cancer screening among CA women (Lee-Lin & Menon, 2005). The mammogram use and adherence rates have been reported in three different ways in the literature: at least once in a lifetime, mammogram in the past year, and mammogram in the past two years. For CA women, 12%–86% of women reported having had a mammogram at least once in their lifetimes (Lee, Lee, & Stewart, 1996; Lee-Lin et al., 2007; Tang, Solomon, & McCracken, 2000; Tu et al., 2003; Yu, Kim, Chen, & Brintnall, 2001), and 49%–61% reported having had one mammogram within the past one to two years (Lee et al., 1996; Lee-Lin et al., 2007; Tang et al., 2000; Tu et al., 2003; Yu, Seetoo, Tsai, & Sun, 1998; Yu & Wu, 2005). These rates are much below the national targeted goal of 81%.

CA immigrant women have higher breast cancer incidence than their counterparts living in Asian countries, and data from 1990–2008 indicate that CA women experienced a statistically significant 1.2% annual increase in breast cancer (Gomez et al., 2013). Cultural beliefs may influence screening behaviors among CA immigrant women. In a focus group study

**Purpose/Objectives:** To compare the differences in mammogram completion rates over time between Chinese American women with and without a history of mammogram screening.

**Design:** Secondary analysis of a randomized, controlled intervention study.

**Setting:** Metropolitan areas of Portland, Oregon.

**Sample:** 300 foreign-born Chinese immigrant women aged 40 years or older. Of these, 83 women (28%) had never had a mammogram.

**Methods:** Participants who had not been screened with a mammogram within the past 12 months were randomized into either an education group or a control (brochure) group. All participants completed a baseline survey, which was administered again at 3, 6, and 12 months.

**Main Research Variables:** Mammography history, breast cancer knowledge, perceived risks, susceptibility, benefits, and common and cultural barriers.

**Findings:** Women who had never been screened were less likely to have insurance, a regular healthcare provider, or to have been instructed to have a mammogram. Postintervention in the education group, mammogram completion was not significantly different between those with or without a history of screening ( $p = 0.52$ ). In the control brochure group, significantly more women with a history of screening had a mammogram ( $p = 0.03$ ).

**Conclusions:** Practitioners must be aware of differential effects of education on mammography cancer screening based on women's history of screening.

**Implications for Nursing:** Print material may not be as effective with women who have never been screened with a mammogram. Targeted approaches based on such understanding has the potential to decrease the breast cancer screening disparity among Chinese immigrant women.

**Key Words:** mammography screening; Chinese immigrant women; cancer screening education; breast cancer screening

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assessing perceptions of health, illness, and cancer screening knowledge and beliefs of 54 CA women aged 50 years or older, zero women mentioned the