The Effect of a Couples Intervention to Increase Breast Cancer Screening Among Korean Americans

Eunice Lee, PhD, RN, Usha Menon, PhD, RN, Karabi Nandy, PhD, Laura Szalacha, PhD, Frederick Kviz, PhD, Young Cho, PhD, Arlene Miller, PhD, RN, and Hanjong Park, PhD

Breast cancer is the leading cancer among Korean American (KA) women (Miller, Chu, Hankey, & Ries, 2008). The incidence of breast cancer in all Asian women, including KA women, has been much lower than for Caucasian women in the United States. However, the incidence noticeably increases as the length of residence in the United States increases, a phenomenon that is potentially related to adopting a more Western lifestyle (Deapen, Liu, Perkins, Bernstein, & Ross, 2002; Ursin et al., 1999). Invasive breast cancer among KA women almost doubled from 1988 (26 per 100,000 women) to 1997 (45 per 100,000 women), but the rates for African American and Hispanic populations remained about the same (Deapen et al., 2002).

Literature Review

Although the American Cancer Society ([ACS], 2014) recommends that women aged 40 years or older receive a mammogram every year, only 22%–39% of KA women reported having a mammogram in the past year (Choi et al., 2010; Lee, Fogg, & Sadler, 2006; Wu & West, 2007), and 34%–57% of KA women reported having one in the past two years (Juon, Kim, Shankar, & Han, 2004; Lee et al., 2006; Lee, Ju, Vang, & Lundquist, 2010). Those rates are far below the mammography screening rates for all other ethnic groups in the United States, which ranged from 63%–68% (Centers for Disease Control and Prevention [CDC], 2012). The U.S. Preventive Services Task Force (USPSTF, 2009) recommends mammography every other year for women aged 50 years or older. Many organizations, including the National Cancer Institute and National Institutes of Health, have acknowledged the USPSTF guidelines but have not endorsed them. Because those new guidelines do not have widespread support, the authors chose to follow ACS’s recommendation of annual mammography screening for women aged 40 years or older for the current study.

Purpose/Objectives: To assess the efficacy of Korean Immigrants and Mammography—Culture-Specific Health Intervention (KIM-CHI), an educational program for Korean American (KA) couples designed to improve mammography uptake among KA women.

Design: A two-group cluster randomized, longitudinal, controlled design.

Setting: 50 KA religious organizations in the Chicago area.

Sample: 428 married KA women 40 years of age or older who had not had a mammogram in the past year. The women and their husbands were recruited from 50 KA religious organizations.

Methods: Couples were randomly assigned to intervention or attention control groups. Those in the KIM-CHI program (n = 211 couples) were compared to an attention control group (n = 217 couples) at baseline, as well as at 6 and 15 months postintervention on mammogram uptake.

Main Research Variables: Sociodemographic variables and mammography uptake were measured. Level of acculturation was measured using the Suinn-Lew Asian Self-Identity Acculturation Scale. Researchers asked questions about healthcare resources and use, health insurance status, usual source of care, physical examinations in the past two years, family history of breast cancer, and history of mammography.

Findings: The KIM-CHI group showed statistically significant increases in mammography uptake compared to the attention control group at 6 months and 15 months postintervention.

Conclusions: The culturally targeted KIM-CHI program was effective in increasing mammogram uptake among nonadherent KA women.

Implications for Nursing: Nurses and healthcare providers should consider specific health beliefs as well as inclusion of husbands or significant others. They also should target education to be culturally relevant for KA women to effectively improve frequency of breast cancer screening.

Key Words: breast cancer; clinical trials; mammography; Korean American; prevention; detection


The increase in breast cancer rates among KA women coupled with low screening rates suggest the need for effective, culture-specific interventions, but little scientific