An Intervention to Increase Mammography Use by Korean American Women

Young H. Kim, RN, PhD, and Linda Sarna, RN, DNSc

Purpose/Objectives: To test the effectiveness of a community-based intervention to increase mammography screening for Korean American women.

Design: Quasi-experimental, pre-/post-test, three-group design.


Sample: 141 Korean American women, aged 40–75, who had not had a mammogram in the previous 12 months.

Method: Two Korean churches were selected randomly to be study sites that would provide health screening programs. The study included an experimental group that would have access to a peer-group educational program and low-cost mammography, a group that would have access to low-cost mammography alone, and a control group. Participant-focused strategies were used to involve Korean American women from the community.

Main Research Variables: Mammography use, breast cancer screening attitudes, and knowledge.

Findings: Women in the experimental program had significantly improved attitudes and knowledge about breast cancer screening. Mammography use in the experimental group (87%) was not significantly different from that in the mammography-access-only group (72%). Both interventions proved to be more effective than no intervention at all (control group = 47%).

Conclusions: An educational program that includes participant-focused research strategies and access to low-cost mammograms resulted in higher levels of screening.

Implications for Nursing: Community-focused interventions can increase rates of cancer screening among Korean American women.

Breast cancer is the most commonly diagnosed cancer and the second leading cause of cancer deaths among Asian and Pacific Islander women in the United States, with an incidence rate of 97.2 and a mortality rate of 12.5 per 100,000 (American Cancer Society, 2003). The most effective means of controlling morbidity and mortality from breast cancer is through early detection with regular screening mammography. Ziegler et al. (1993) reported that Asian American women had substantially higher rates of breast cancer than women in their homelands, and the risk and incidence of breast cancer increased with duration of United States residence. Ethnic and cultural values that affect attitudes about cancer screening must be considered in a cancer-control program.

Korean Americans and Breast Cancer Screening

Korean Americans are the fifth largest subgroup among Asian and Pacific Islander women in the United States (U.S. Department of Commerce, 1997). Los Angeles County in California has the largest population of Korean Americans living in the United States (U.S. Department of Commerce). Korean American women fall significantly short of the National Cancer Institute’s year 2000 goal of regular screening of 80% of the age-eligible women for breast cancer (Maxwell, Bastani, & Warda, 1998). Numerous other studies have reported on the low breast cancer screening rate among Korean American women: 55% in the Behavioral Risk Factor Survey (Centers for Disease Control and Prevention, 1997), 58% by Han, Williams, and Harrison (2000), and 50% by Kagawa-Singer and Pourat (2000). The results of the Behavioral Risk Factor Survey distributed in Alameda County, California, showed that Korean American women aged 50 and older are more than four times less likely to have had a mammography than women from California who are not Korean American (Centers for Disease Control and Prevention). The breast cancer screening goal of the U.S. Department of Health and Human Services (2001) for the year 2010 is to have 70% of women aged 40 and older receive a mammography within the preceding two years (U.S. Department of Health and Human Services).

Sarna, Tae, Kim, Brecht, and Maxwell (2001) reported that the majority of Korean American women, both recent immigrants and those living in the United States for many years, had low levels of participation in cancer screening. Although considerable efforts have focused on the development of breast cancer screening programs among women in general, few of these have focused on Korean American women. Many ethnic

Key Points...

- Developing a culturally acceptable intervention to promote breast cancer screening requires investigators to collaborate with the target community.
- A peer-group educational program facilitated by Korean American breast cancer survivors and an oncology nurse practitioner significantly can improve breast cancer-related knowledge and attitudes.
- Provision of low-cost and easily accessible mammograms is central to increasing breast cancer screening among Korean American women in an urban community.