The Effect of an Educational Intervention on Promoting Breast Self-Examination in Older African American and Caucasian Women

Robin Y. Wood, EdD, RN, Mary E. Duffy, PhD, FAAN, Selma J. Morris, MEd, and Jennifer E. Carnes, FNP

Purpose/Objectives: To test the efficacy of innovative, age- and race-sensitive, self-monitored, video breast health kits in increasing knowledge about breast cancer risk and screening and breast self-examination (BSE) proficiency.

Design: Quasi-experimental pretest and post-test design.

Setting: Dual-site study in community-based settings in the Northeast and Southeast United States.

Sample: 328 women (206 in the intervention group, 122 in the control group) aged 60 or older; predominantly African American (77%); mean education of 10.8 years; annual income below $10,000 (50%).

Methods: Individual pretest and post-test interviews conducted by nurses at two-week intervals assessed knowledge about breast cancer risk and screening and BSE proficiency as demonstrated on vested breast models. Intervention subjects used video breast health kits in ethnic editions designed for the study. Control subjects received educational pamphlets.

Main Research Variables: Dependent variables were knowledge about breast health and BSE proficiency measured by demonstration of inspection and palpation skills and detection of lumps in a simulation model.

Findings: Three multiple analyses of covariance revealed statistically significant differences in outcome variables between the intervention and control groups.

Conclusions: The intervention was effective in increasing knowledge about breast cancer risk and screening and BSE proficiency in this sample of older women.

Implications for Nursing: These and other educational interventions designed specifically for age and race sensitivity may enhance cancer screening with vulnerable populations. Future studies with more diverse multicultural groups are needed to improve understanding of how to best influence breast health behaviors of older women.

Breast cancer is the most common cancer diagnosed among women in the United States. The American Cancer Society (ACS) estimates that 203,500 new cases of invasive breast cancer will be diagnosed in 2002, with 39,600 women dying from the disease (ACS, 2002). Despite increasing incidence rates, breast cancer mortality rates decreased from 1992–1996, with the largest decrease occurring in younger women. The decline in mortality rates is attributed largely to screening rates for this population is poor provider instruction. Women older than 65 represent greater than half of all new breast cancer cases (Vanderford, 1999). Although older women are at greater risk for developing the disease, they are less likely to be screened routinely. One factor related to low screening rates for this population is poor provider instruction. Older women do not know they are at the highest risk for breast cancer or are not directly instructed by providers to offer an alternative to traditional, labor-intensive, provider instruction. Clients who have been preeducated in screening issues and how to perform breast self-examinations will be better prepared to understand the nurse-provider instruction and recommendations made during primary care visits.

Key Points . . .

- In the United States, breast cancer screening rates are lowest for older women even though the risk of breast cancer increases with age. Caucasian women have the highest incidence rates of breast cancer, but African American women have the highest mortality rates.
- Because elderly and minority populations are difficult to access and influence for screening, nurses must design innovative and sensitive educational programs targeting these vulnerable consumers.
- Video modeling, specifically targeting high-risk groups by age and ethnicity, conveys desired attitudes and behaviors to the targeted population and personalizes its learning.
- Self-instruction programs, such as the video breast health kit, offer an alternative to traditional, labor-intensive, provider instruction. Clients who have been preeducated in screening issues will be better prepared to understand the nurse-provider instruction and recommendations made during primary care visits.

The risk of breast cancer increases dramatically with age. Women older than 65 represent greater than half of all new breast cancer cases (Vanderford, 1999). Although older women are at greater risk for developing the disease, they are less likely to be screened routinely. One factor related to low screening rates for this population is poor provider instruction. Older women do not know they are at the highest risk for breast cancer or are not directly instructed by providers to...