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## Knowledge, Attitudes, and Practices Surrounding Breast Cancer Screening in Educated Appalachian Women

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**Purpose/Objectives:** To determine how and what women learn about breast cancer and screening practices and which factors influence women's breast cancer screening practices.

**Design:** Descriptive analysis of questionnaire data collected at the time of enrollment in a clinical trial.

**Setting:** Breast care center of a mid-Atlantic academic health sciences center.

Sample: 185 women in a predominantly Appalachian, entirely rural state.

**Methods:** Participants completed the Modified Toronto Breast Self-Examination Inventory and questions related to personal mammography practices at the time of enrollment before randomization in a longitudinal clinical intervention study.

**Main Research Variables:** Women's demographics, knowledge of breast cancer screening practices, adherence to breast cancer screening guidelines, and motivation, knowledge, and practice proficiency surrounding breast cancer screening.

**Findings:** These educated women had knowledge deficits about breast cancer, breast cancer risk factors, and screening guidelines, particularly the timing and practice behaviors of breast self-examination. Women who had received healthcare and cancer-screening instruction by healthcare providers, including advanced practice nurses, had greater knowledge of breast cancer and detection practices.

**Conclusions:** Women still have knowledge deficits about breast cancer, breast cancer detection, and personal risk factors. In addition, some educated women in this study failed to practice breast cancer screening according to current guidelines.

Implications for Nursing: Practitioners must continue to remind and update women about breast disease, and women's cancer-screening practices must be reinforced. All levels of providers should improve their rates of performing clinical breast examinations with physical examinations. Nurses, who greatly influence women's health care, must remain current in their knowledge of breast disease, screening, and treatment.

n 1980, the American Cancer Society published its first set of guidelines for cancer-related checkups in asymptomatic people. Among these recommendations were routine mammography, clinical breast examination (CBE), and breast self-examination (BSE) aimed at early detection of breast cancer (Smith, Mettlin, Davis, & Eyre, 2000). Since that time, intensive education campaigns have been launched to increase women's awareness and knowledge of this breast healthcare triad and women's engagement in early breast can-

## **Key Points...**

- ➤ Women, even those with high levels of education, have knowledge deficits about breast cancer, breast cancer risks, and recommended age-appropriate breast cancer screening.
- Some educated women in this study failed to practice recommended age-appropriate breast cancer screening.
- Healthcare providers must improve their rate of performing clinical breast examination with women's physical examinations.
- Women were more knowledgeable about breast cancer and breast cancer screening if they had been taught by healthcare professionals.

cer detection activities. The National Breast and Cervical Cancer Early Detection Program (NBCCEDP), funded by the Centers for Disease Control and Prevention, is an example of a grassroots-level community outreach program aimed at bringing breast and cervical cancer education and screening services to underserved women. NBCCEDP, initiated as a pilot program in 1991 in several U.S. states, targeted older women, women with low incomes, and women in racial and

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