Breast Cancer Detection:
Knowledge, Attitudes, and Behaviors
of Women From Pennsylvania

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Purpose/Objectives: To assess relationships among breast cancer detection behaviors and selected variables in healthy women.

Design: Correlational study.

Setting/Sample: A sample of 1,000 women was selected randomly from the 16,500 members of the General Federation of Women's Clubs of Pennsylvania. Respondents (N = 538; 54% response rate) were predominately white, well educated, lived in urban areas, and had an average age of 60 years.

Methods: Mailed packets with a professionally designed, scannable survey instrument that included questions related to detection behaviors, a risk index, health behaviors, attitudes, and knowledge.

Main Research Variables: Breast cancer detection behaviors: mammography, clinical breast examination (CBE), breast self-examination (BSE). Structural/demographic variables: age, education, residence, knowledge of breast cancer and detection methods, teaching history, encouragement, and risk index (family/medical history). Predisposing variables: susceptibility, benefits/barriers, confidence, social norms and influence, and general health motivation.

Findings: Women reported moderate/high adherence to recommendations for early detection of breast cancer. Mammography behavior was predicted by older age, being encouraged by a doctor or nurse, and greater risk. CBE predictors were greater knowledge and risk along with greater benefits, social norms, and health motivation. BSE behavior was predicted by having had BSE technique checked, greater knowledge, greater risk, decreased barriers to BSE, and higher health motivation.

Conclusions: Common predictors of breast screening behaviors include risk (family/medical history), knowledge, and general health motivation.

Implications for Nursing Practice: Educational efforts can be designed specifically to influence variables related to compliance with early breast cancer detection behaviors.

Key Points . . .

➤ Tailored educational recommendations can be developed from exploratory research findings in a specific population.

➤ Mammography, clinical breast examination, and breast self-examination may be predicted by different sets of factors.

➤ Because risk of breast cancer (family/medical history) commonly predicts all three recommended breast cancer detection behaviors, women routinely should be taught their personal risk of breast cancer, which includes their age and family and medical history.

➤ Increasing women's knowledge of breast cancer and screening behaviors and enhancing their general health motivation may influence their practice of breast cancer detection behaviors.

screening behaviors for women age 50 and older (U.S. Department of Health and Human Services [USDHHS], 1990).

Recommended screening methods include mammography, clinical breast examination (CBE), and breast self-examination (BSE). For women 50 years old and older, annual mammography and CBE are recommended (ACS, 1998; National Cancer Advisory Board [NCAB], 1997; U.S. Preventive Task Force, 1998). Controversy has existed regarding recommended mammography screening for women between the ages of 40 and 49 (ACS, 1998; Feig, 1995; NCAB; NIH, 1997) because of the decreased sensitivity of mammography in younger women (Baines & Miller, 1997). All women in this age group should have annual CBEs.

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Breast cancer is a major concern to women in the United States, with more 192,200 women projected to be diagnosed with invasive disease in 2001 (American Cancer Society [ACS], 2001). Because of the strong association among screening, early detection, and survival, the National Institutes of Health (NIH) aims to improve breast cancer