

Sociocultural Context of Mammography Screening Use

Kathleen M. Russell, DNS, RN, Susan M. Perkins, PhD,
Terrell W. Zollinger, DrPH, and Victoria L. Champion, DNS, RN, FAAN

Purpose/Objectives: To examine variations in cultural and health beliefs about mammography screening among a socioeconomically diverse sample of African American and Caucasian women and to identify which set of beliefs predicted mammography screening adherence.

Design: Descriptive, retrospective, cross-sectional study.

Setting: Community-based organizations and public housing.

Sample: 111 African American women and 64 Caucasian women, aged 40 years or older, with no history of breast cancer.

Methods: Telephone and in-person structured interviews were conducted. Items used previously validated scales based on the Cultural Assessment Model for Health and the Health Belief Model.

Main Research Variables: Race or ethnicity, education, income, personal space, health temporal orientation, personal control, fatalism, susceptibility, benefits, barriers, self-efficacy, and mammography screening adherence.

Findings: African American women were more fatalistic about breast cancer and perceived fewer benefits to screening. Mammography screening-adherent women were more future oriented, believed that they had less control over finding health problems early, had fewer barriers to screening, and experienced more physical spatial discomfort during the screening procedure than nonadherent women.

Conclusions: Several of the cultural beliefs were not significantly different by race or ethnicity. However, cultural and health beliefs were significant predictors of mammography screening.

Implications for Nursing: Theoretically based cultural beliefs are important to consider for behavioral interventions to increase mammography screening in African American and Caucasian women.

Despite improvements in the use of mammography screening (Blackman, Bennett, & Miller, 1999), African American women have a 32% higher breast cancer mortality rate than Caucasian women and are more likely to be diagnosed with distant-stage disease (Ghafoor et al., 2003; Jemal et al., 2005). To improve African American women's use of screening for early disease detection, the effects of culture on screening behavior should be considered (Ashing-Giwa, 1999). The purpose of the current study was to determine the relationship of selected cultural beliefs, health beliefs, and sociodemographic characteristics to mammography screening in a sample of African American and Caucasian women.

Previous studies have shown that health beliefs are related to variations in screening practices among women. Women are more likely to participate in mammography screening if they perceive increased susceptibility to breast cancer (Aiken, West, Woodward, & Reno, 1994; Champion & Miller, 1996), decreased barriers to screening (Aiken et al.; Champion & Miller; Champion & Springston, 1999; Holm, Frank, & Curtin, 1999), increased benefits of screening (Aiken et al.; Champion &

Key Points . . .

- ▶ The sociocultural context of mammography screening behavior in women needs further investigation.
- ▶ Health behavior models often lack theoretically based cultural concepts, thus limiting the prediction of mammography screening.
- ▶ Study results showed that African American and Caucasian women held specific cultural beliefs about mammography screening.

Miller; Champion & Skinner, 2003; Holm et al.), and increased self-efficacy or confidence in their ability to get screened (Savage & Clarke, 1996). However, Yarbrough and Braden (2001), in their review of studies of women from various racial and ethnic groups, found only low to modest correlations between health beliefs and screening. As a result, they recommended taking into account the sociocultural context of ethnic women in breast cancer screening behavior.

A few studies have examined cultural beliefs about mammography screening. Although study designs varied, lacked theoretical frameworks in survey research, and had methodologic limitations, results suggested that African American women who held specific cultural beliefs, including holism, religiosity, collectivism, future orientation, less fear, and fewer fatalistic views about breast cancer, were more likely to get screened (Danigelis et al., 1995; Hoffman-Goetz & Mills, 1997; Lukwago et al., 2003; Mitchell, Lannin, Mathews, & Swanson, 2002; Phillips, Cohen, & Moses, 1999; Phillips, Cohen, & Tarzian, 2001; Smith, Phillips, & Price, 2001). Consistent results have emerged from investigations on sociodemographics and

Kathleen M. Russell, DNS, RN, is an associate professor in the School of Nursing, Susan M. Perkins, PhD, is an associate professor in the Division of Biostatistics, Terrell W. Zollinger, DrPH, is a professor in the Department of Family Medicine, and Victoria L. Champion, DNS, RN, FAAN, is associate dean for research in the School of Nursing, all at Indiana University in Indianapolis. This research was supported by grant #PA99104 from the National Cancer Institute and grant #P30NR05035 from the National Institute of Nursing Research to the Center for Enhancing Quality of Life in Chronic Illness in the School of Nursing at Indiana University. (Submitted January 2005. Accepted for publication March 3, 2005.)

Digital Object Identifier: 10.1188/06.ONF.105-112