

# The Relationship Between Access and Stage at Diagnosis of Breast Cancer in African American and Caucasian Women

Sandra C. Garmon Bibb, DNSc, RN

**Purpose/Objectives:** To identify the relationships among potential access, realized access, and stage at diagnosis of breast cancer in African American and Caucasian women receiving care within an equal economic access health-care system.

**Design:** Descriptive-comparative design.

**Setting:** Department of Defense Military Health System.

**Sample:** 62 African American and 573 Caucasian women (ages 25–97) diagnosed with breast cancer over a 10-year period.

**Methods:** Secondary analysis using tumor registry records data.

**Main Research Variables:** Economic, potential, and realized access and stage at diagnosis of breast cancer.

**Findings:** When compared to Caucasian women, African American women were diagnosed at later stages, were younger when diagnosed, were from a lower socioeconomic status, had a higher percentage of incidental breast self-examination-discovered abnormalities, and had a lower percentage of mammogram-discovered abnormalities.

**Conclusions:** Economic access to care did not always result in early diagnosis. Other factors such as age, race, socioeconomic status, and means of discovery influenced diagnosis outcomes.

**Implications for Nursing Practice:** Interventions aimed at increasing participation in breast health programs also should focus on noneconomic aspects of access such as help-seeking behaviors and perceptions of access to care. Additional studies should be conducted to evaluate adherence to breast cancer screening guidelines by women receiving care within equal economic access healthcare systems.

The age-adjusted incidence rate for breast cancer in Caucasian women (114 per 100,000) in the United States is higher than the incidence rate in African American women (100.2 per 100,000). However, the age-adjusted mortality rate for breast cancer in African American women (31.4 per 100,000) is higher than the mortality rate in Caucasian women (25.3 per 100,000) and all other groups of women of color (Greenlee, Hill-Harmon, Murray, & Thun, 2001). Research studies investigating breast cancer mortality disparity between Caucasian women and women of color focus mainly on African American women and point to delayed diagnosis as the primary cause of higher mortality rates in African American women (Coates et al., 1992; Eley et al., 1994; Hunter et al., 1993; Long, 1993; Newman & Alfonso,

## Key Points . . .

- ▶ The age-adjusted incidence rate for breast cancer in Caucasian women in the United States is higher than the rate for African American women. However, the age-adjusted breast cancer mortality rate is higher in African American women than in Caucasian women in the United States.
- ▶ Diagnosis delay related to economic access barriers has been identified as the primary cause of the breast cancer mortality disparity between African American and Caucasian women. Yet, barriers to access can occur at the healthcare delivery system level or at a personal level, and an individual's ability and willingness to participate in health care determines access as well as the economic availability.
- ▶ Early detection is the best defense against delayed diagnosis. Breast healthcare interventions should address all aspects of access and should be economically available, perceptually necessary, and culturally appropriate.

1997; Wells & Horm, 1992; Wojcik, Spinks, & Optenberg, 1998).

Access barriers are the main cause of diagnosis delay and are defined principally in terms of availability of care or in relation to economic factors and health insurance coverage (Ansell, Lacey, Whitman, Chen, & Phillips, 1994; Ayanian, Kohler, Abe, & Epstein, 1993; Lauver, Coyle, & Panchmatia, 1995; Mandelblatt, Andrews, Kao, Wallace, & Kerner, 1995; Mandelblatt, Andrews, Kerner, Zauber, & Burnett, 1991; Michels, Taplin, Carter, & Kugler, 1995; Roach et al., 1997; Simon & Severson, 1996; Zaloznik, 1995, 1997). Yet, barriers to access can occur at the healthcare delivery system level or at a personal level, and an individual's ability and willingness to

*Sandra C. Garmon Bibb, DNSc, RN, is a nurse researcher on active duty in the United States Navy in Camp Pendleton, CA. This research project was completed in partial fulfillment of the requirements for the doctor of nursing science degree at the University of San Diego, CA. The doctoral program was funded by a scholarship from the United States Navy Nurse Corps. The opinions expressed in this paper are those of the author and do not reflect the official policy or position of the Department of the Navy, the Department of Defense, or the U.S. government. (Submitted July 1999. Accepted for publication July 27, 2000.)*