

# Examining the Impact of Socioeconomic Status and Socioecologic Stress on Physical and Mental Health Quality of Life Among Breast Cancer Survivors

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**S**ocioeconomic status and its influence on healthcare delivery and outcomes relevant to cancer control are well documented (Cornelius, Smith, & Simpson, 2002). Several studies have shown that low income, education, and job status negatively affect access to care and health outcomes (Singh, Miller, Hankey, & Edwards, 2004; Ward, Jemal, & Cokkinides, 2004). In addition, ethnic minority patients with cancer disproportionately experience lower socioeconomic status and greater socioecologic stress (e.g., living situation, financial status, employment) (Freeman, 1991; Weissman & Schneider, 2005). Additionally, survivors with low socioeconomic status report more stressful life events than individuals with high socioeconomic status (McLeod, 1990).

Research has found that survivors' job types contribute to health-related quality of life (QOL), indicating a significant association between better employment and more favorable health-related QOL (Engel et al., 2003; Mellon, Northouse, & Weiss, 2006). Several studies also demonstrated that financial difficulties and educational status significantly influenced health-related QOL among multiethnic breast cancer survivors (Ahles et al., 2005; Ganz et al., 2002). The literature also reports that African American (Ashing-Giwa, 2000) and Latina American (Ashing-Giwa et al., 2006) breast cancer survivors showed moderate to severe socioeconomic status difficulties, including unstable employment and financial hardship.

Cancer survivors with low socioeconomic status are likely to experience more episodes of psychosocial and socioecologic instability; therefore, socioeconomic status and socioecologic stress may influence the physical and emotional health of breast cancer survivors. Despite increasing interest in disparities in health outcomes and their relationship to socioeconomic status, little empirical research examines the associations of socioeconomic status, socioecologic stress, and health-related QOL among multiethnic breast cancer survivors.

**Purpose/Objectives:** To examine how physical and mental health quality of life (QOL) varies in relation to the socioeconomic status and ethnicity among breast cancer survivors; to determine key socioecologic factors influencing outcomes.

**Design:** Cross-sectional.

**Setting:** Participants were recruited from the California Cancer Surveillance Program, from hospital registries, and from community agencies in southern California.

**Sample:** 703 multiethnic population-based breast cancer survivors, including European, African, Latina, and Asian Americans.

**Methods:** Participants completed a mailed questionnaire or answered a telephone survey. To identify socioeconomic status and socioecologic stress, four measures were used: household income, education, job type, and the Life Stress Scale.

**Main Research Variables:** Physical and mental health QOL, socioeconomic status (income, education, and job type), and socioecologic stress.

**Findings:** After controlling for the demographic and medical information, health-related QOL was significantly correlated to socioeconomic status, such that higher socioeconomic status groups expressed better QOL. Ethnic variations existed in QOL according to socioeconomic status. Socioecologic stress was the most important factor influencing physical and mental health QOL.

**Conclusions:** The findings provide additional evidence that low socioeconomic status and high socioecologic stress exacerbate negative QOL sequelae.

**Implications for Nursing:** Practice and research implications include the need for greater attention to QOL outcomes among at-risk lower socioeconomic status survivors and the recognition of the unique contributions of socioeconomic status, socioecologic stress, and ethnicity on physical and mental health QOL.

## Health-Related Quality of Life

Health-related QOL is a major outcome variable (Pilkington & Mitchell, 2004) in the assessment of cancer survivorship outcomes. Health-related QOL entails not only the extension of life as an objective state but also the