

Impact of Race and Area Deprivation on Triple-Negative Metastatic Breast Cancer Outcomes

Margaret Quinn Rosenzweig, PhD, FNP-BC, AOCNP®, FAAN, Bethany Nugent, PhD, RN, and Meaghan McGuire, MSN, RN, CRNP, BC

OBJECTIVES: To describe area deprivation, anxiety, depression, relative dose intensity of first-line metastatic breast cancer (MBC) treatment, and survival in Black and White women who had died from triple-negative MBC, including interaction analysis.

SAMPLE & SETTING: This cohort study drew from a database of women who had died from MBC (N = 53).

METHODS & VARIABLES: Descriptive statistics, independent t tests, analysis of variance, and Mann-Whitney U tests were used, and effect sizes were calculated.

RESULTS: Compared with White women, Black women reported higher anxiety and depression at MBC baseline. Black women living in areas of higher deprivation experienced shorter overall survival than White women living in similar areas (9.9 months versus 24.6 months). These results were not statistically significant, likely because of a small sample size, but were clinically meaningful.

IMPLICATIONS FOR NURSING: Black and low-income women with breast cancer experience inferior survival as compared with White and higher-income women. Newer explanatory models for racial disparity in cancer outcomes include the assessment of neighborhood deprivation. White women may be less affected by their neighborhood, even when living in areas of greater deprivation influencing cancer outcomes. This merits further exploration.

KEYWORDS metastatic breast cancer; survival; race; neighborhood; health disparity

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Dramatic disparities in cancer incidence, progression, therapy tolerance, and survival exist for patients with cancer who have low income and are from underrepresented groups (Zavala et al., 2021). The explanatory model for these disparities is no longer limited to late-stage diagnosis, absence of screening, and aggressive tumor subtypes. There is now evidence that through repeated experiences of lifetime trauma, poverty, and structural and interpersonal discrimination, patients of color and individuals with material and social disadvantage experience stress, which negatively affects health outcomes, including cancer outcomes (Penner et al., 2012; Singh & Jemal, 2017).

Metastatic Breast Cancer

Metastatic breast cancer (MBC) represents a model of chronic care that involves receiving aggressive cancer treatment while living with a progressive, life-ending illness (Drageset et al., 2021). Although MBC is challenging as a disease entity itself, non-older adult, non-Hispanic Black patients with MBC experience worse survival, with survival disparities persisting regardless of neighborhood socioeconomic status (Ren et al., 2019).

Social Determinants of Health

Late-stage presentation and more aggressive cancer etiology have often been implicated in racial survival disparity, yet the importance of measuring social determinants of health is becoming increasingly clear in the context of illness, including cancer (Coughlin, 2019, 2021). Individuals who reside in areas of high racial segregation and higher deprivation receive fewer cancer screenings (Buehler et al., 2019), undergo less intensive cancer therapy (Mora et al., 2021), and experience poorer overall survival