Insurance plays significant role in breast cancer disparities

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Differences in insurance account for a substantial proportion of the excess risk of death from breast cancer faced by black women, according to a new study. The study, appearing in *Journal of Clinical Oncology*, concludes that equalizing access to care could address much of the existing black/white disparity in breast cancer mortality.

Breast cancer mortality was higher in *white women* than in *black women* until the 1980s, when improvements in early detection and treatment began to create a gap between black and white women. Whites benefited more from these improvements, and since then, the black-white mortality gap has continued to widen. In 2014, the most recent year for which data is available, breast cancer mortality rates were 41% higher in black women than white women.

For the new study, investigators from the American Cancer Society, Emory University, and Dana-Farber Cancer Institute examined the contributions of demographics, other medical conditions (comorbidities), insurance, tumor characteristics, and treatment to black-white mortality disparities among more than 550,000 nonelderly women diagnosed with early stage breast cancer. The data come from the National Cancer Database, a national hospital-based cancer registry cosponsored by the Commission on Cancer (CoC) of the American College of Surgeons and the American Cancer Society.

Compared with white women, black women were more likely to be uninsured or have Medicaid insurance (22.7% vs 8.4%) and were more likely to have tumors that were larger, higher grade, and hormone receptor negative. Hormone receptor negative cancers have fewer treatment options and tend to grow faster than hormone receptor-positive cancers.

Among women with hormone receptor-positive tumors, the risk of death in blacks was twice that of whites (100% higher). The excess risk among black patients decreased to 25% when they were matched to white patients by demographics (age, year of diagnosis, and area of residence), comorbidities, insurance, tumor characteristics, and treatment. In other words, these factors together accounted for 75% of the total excess risk of death in black patients. Insurance accounted for 37% of the total excess, followed by tumor characteristics (23.2%), comorbidities (11.3%), and treatment (4.8%).

Among women with hormone receptor-negative disease, blacks had a 49.5% excess risk of death compared to whites. As with patients with hormone receptor-positive disease, the excess risk decreased when adjusted for demographics, other conditions, insurance, tumor characteristics, and treatment. These factors combined accounted for 63.6% of the total excess risk of death in blacks. Insurance accounted for 34.1% of the total excess, followed by tumor characteristics (22.0%), comorbidities (3.8%), and treatment (3.6%).

"We found that differences in insurance explained one-third of the total excess risk of death in nonelderly black women compared to white women diagnosed with early stage breast cancer, while differences in tumor characteristics explained approximately one-fifth of the excess risk," write the authors. "Health policy makers should ensure that the benefits of important scientific advances in prevention, early detection, and treatment of breast cancer are made available to all women, especially black women, who experience an undue share of the mortality burden from this disease," they conclude. "Equalization of access to care in nonelderly black women could substantially reduce ethnic/racial disparities in overall mortality of women diagnosed with breast cancer."

**More information:** Factors That Contributed to Black-White Disparities in Survival Among Nonelderly Women with Breast Cancer Between