Breast Cancer Survival Differs Dramatically by Where People Live

Women residing in locations with historic housing discrimination have lower breast cancer survival rates.

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Frequently, government policies affect people's health in ways that are not readily apparent. Discriminatory laws, for example, can affect the type of medical care individuals receive and the health outcomes they experience.

The latest evidence: Women with breast cancer who live in "redlined" neighborhoods sustain worse rates of survival, reports a press release from the Medical College of Wisconsin (MCW). The study was published in the Journal of Clinical Oncology.

Redlining is the discriminatory lending practice used by some banks to deny mortgages to individuals—often people of color—who live in certain locations. The term originates from red lines drawn on maps delineating minority neighborhoods. This activity began after government legislators passed the National Housing Act of 1934 and continues today, according to an in-depth discussion by researchers about the impact of structural racism on breast cancer outcomes, reported by Neha J. Pancholi in the American Association for Cancer Research blog.

For the study, researchers utilized data from the Home Mortgage Disclosure Act (from 2007 to 2013) and a Surveillance, Epidemiology and End Results (SEER)-Medicare group of 27,516 women, age 66 to 90. (All individuals were enrolled in Medicare parts A and B and diagnosed with Stage I to Stage IV breast cancer from 2007 to 2009 with follow up through 2015.)

To determine the connection between redlining and mortality of participants from all causes and breast cancer specific deaths, scientists used a statistical tool—the Cox Proportional-Hazards Model—to assess any relationship between patient survival time and different variables that affect life expectancy.

After adjusting for race and ethnicity, age, cancer stage and hormone receptor status, results revealed that 34% of non-Hispanic white, 57% of Hispanic and 79% of non-Hispanic Black women lived in the redlined areas.

Living in those areas was statistically linked to poorer breast cancer outcomes: Women's survival

rates worsened as redlining index values rose from low to medium to high. The data was even more powerful for the 54% of women in the study who had comorbidities, that is, no other accompanying illnesses.

“The impact of this bias is emphasized by the pronounced effect even among women with health insurance (Medicare) and no comorbid conditions,” noted study authors. “The housing sector actively reveals structural racism and economic disinvestment and is an actionable policy target to mitigate adverse upstream health determinants for the benefit of patients with cancer.”

“Women without comorbidities at diagnosis of cancer might be expected to have more favorable prognoses,” Kristen Beyer, PhD, MPH, an associate professor in the division of epidemiology at MCW and the lead author of the investigation, told Medpage Today. “Our study indicates that mortgage lending bias is still an adverse impact on survival among these women who might otherwise have a very strong prognosis.”

Beyer suggested some potential reasons for the connection between redlining and breast cancer survival. “Explanations of the association might include differences in access to quality health care, environmental stressors, or lack of health-promoting neighborhood features (i.e. healthy foods, bike lanes, etc.) due to economic disinvestment,” she said.

“The implication of these findings is that place matters and interventions and policies are needed beyond clinics and hospitals to address the root causes of health disparities,” said Beyer in a short interview with Oncology Times. “Clinical providers need to know that a patient’s outcomes are not just a result of the care they receive, but of the complete life situation and context within which a person lives. Structural racism is also embedded in health care and should be dismantled.”

To learn more about racial disparities and cancer, read “Advocacy Groups Unite to Reduce Racial Disparities in Cancer Care.”

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