

2022 NPCR MINNESOTA SUCCESS STORY

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Disparities in Breast Cancer Outcomes Among Black Women in Minnesota

National Program of Cancer Registries SUCCESS STORY

SUMMARY

The Minnesota Cancer Reporting System (MCRS) and the Minnesota Sage Breast and Cervical Cancer Screening Program (Sage) collaborated to conduct and disseminate analyses that describe and quantify the excess burden of breast cancer among Black women in Minnesota.

CHALLENGE

National data show large disparities in breast cancer outcomes between Black and White women. The mortality rate for U.S. Black non-Hispanic women is 40% higher than for White non-Hispanic women, and twice as high for Black non-Hispanic women under the age of 50.⁽¹⁾ Minnesota is a healthy state with strong health care and safety net systems. Yet cancer is the leading cause of death in Minnesota and cancer incidence is slightly higher than the national average. People of color and American Indians in Minnesota experience a greater burden of cancer than others in our population. Disparities in breast cancer mortality for Black women in Minnesota are like national estimates, but a detailed analysis of breast cancer outcomes based on MCRS data has not been conducted to date.

SOLUTION

We conducted a series of analyses of MCRS incidence and mortality data to better characterize the excess burden of breast cancer among Black women in Minnesota. This information is important to breast cancer prevention and control program planning and resource allocation. We collaborated with the Minnesota Sage Breast and Cervical Cancer Program to widely disseminate findings from this analysis to interested parties and partners and presented the findings to MDH cancer programs, a continuing education meeting for nurse oncologists, and the annual meeting of the Minnesota Public Health Association.



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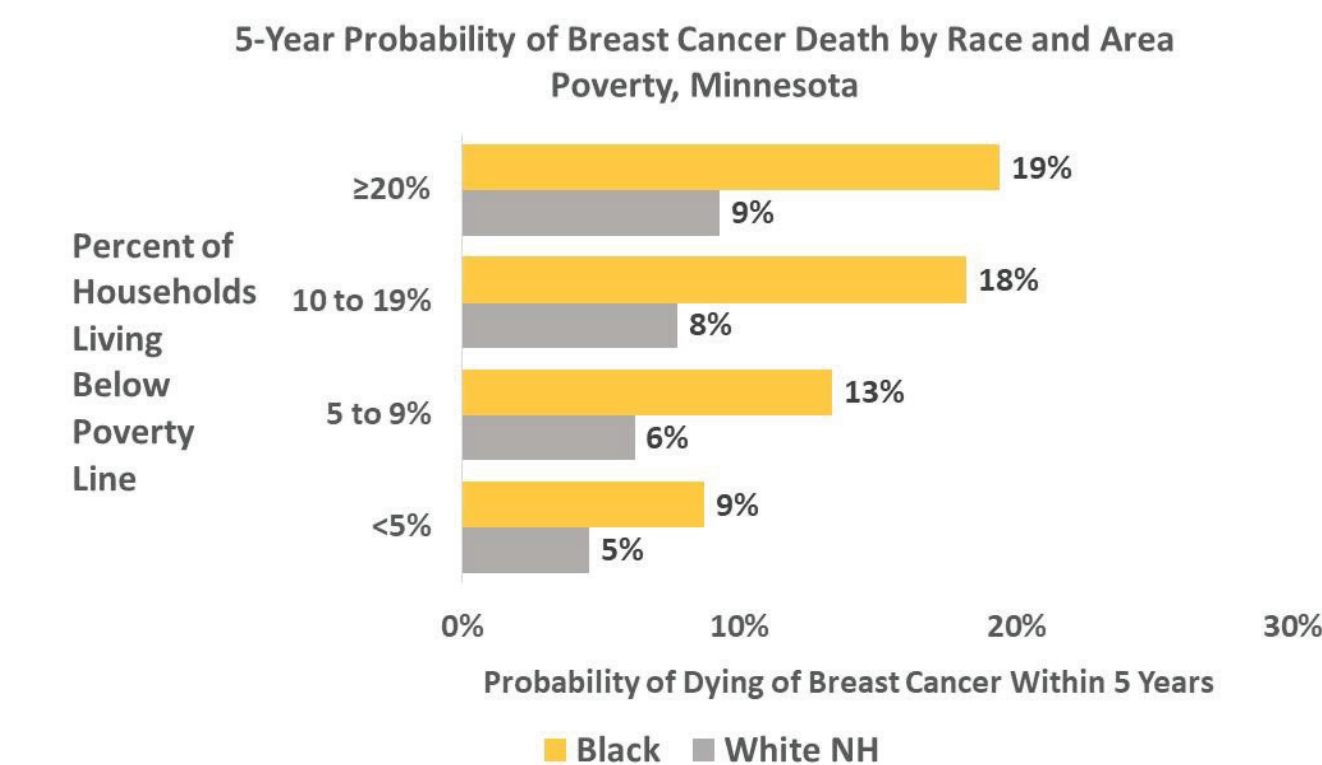
RESULTS

For women in Minnesota, invasive breast cancer is the most common cancer diagnosed and the second leading cause of cancer death. It accounts for 31% of new cancers diagnosed in Minnesota women. The breast cancer mortality rate for Black women was 28% higher than the rate for White non-Hispanic (White-NH) women while the incidence rate for Black women was 24% lower than the rate for White-NH women. Additionally, Black women in Minnesota were 12% less likely than White-NH women to survive their breast cancer 5-years after diagnosis (5-year relative survival: 81% Black women versus 93% White-NH women). They were also 2.5 times more likely than White-NH women to die of their breast cancer within 5-years of diagnosis (5-year crude probability of death: 16% Black women versus 6% White-NH women).

We further examined disparities by late stage at diagnosis and area poverty prevalence, both of which contribute to the gap in mortality between Black and (White-NH) women.⁽²⁾ Our findings, combined with previous analyses on the incidence of aggressive breast cancer subtypes (i.e., triple negative) and mammography screening rates, document the excess burden of breast cancer among Minnesota's Black women.

- Aggressive disease: Black women have a higher incidence of triple negative breast cancer than White-NH women (age-adjusted rate/100,000: 17.2 for Black and 12.2 for White-NH women).⁽³⁾
- Late stage at diagnosis: A greater proportion of Black women have late-stage breast cancer at diagnosis than White-NH women (41% for Black women versus 28% for White-NH women).
- Relative survival by stage at diagnosis: 5-year relative survival for Black women is lower than for White-NH women regardless of stage (relative survival, early stage: 92.8% for Black versus 99.2% for White-NH women; relative survival, late stage: 64.4% for Black versus 78.0% for White-NH women).
- Mammography: Black women have lower screening mammography use than White-NH women (64% for Black women versus 73.5% for White-NH women).⁽⁴⁾

- Census tract poverty indicator:⁽⁵⁾ A greater percentage of Black women diagnosed with breast cancer live in areas where more than 20% of residents fall under the federal poverty line (29% for Black versus 6% for White-NH women).
- Poverty and race: The 5-year probability of breast cancer death increases as the census tract poverty indicator increases for both Black and White-NH women (see chart below) (Black women: 9% for low poverty to 19% for high poverty; White-NH women: 5% for low poverty to 9% for high poverty). Further, at each level of area poverty, the 5-year probability of death from breast cancer is about 2-times greater for Black women than White-NH women.



REFERENCES

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SUSTAINING SUCCESS

Data analyses that examine disparities and the factors that contribute to them can help inform programs, policymaking, and educational outreach. MCRS and Sage will continue to collaborate on analyses of MCRS and other data and develop effective data dissemination plans with interested parties at state, local and community levels. Soliciting feedback from diverse groups will be an important source of information on which to improve the usefulness of cancer registry data in breast cancer prevention and control.

REGISTRY CONTACT INFORMATION

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