

Breast Cancer Disparities Among Women in Underserved Communities in Northwest Indiana

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Background: Breast cancer is the second most common cancer found in women, after skin cancers. Research has discovered that factors such as race, socioeconomic status, and education affect both screening levels and cancer staging at diagnosis. Black women as well as lower-income individuals usually have higher grade staging as well as higher mortality. Since Lake County medical systems serve both high and low-income communities we wanted to analyze breast cancer staging in Lake County to see how it compares to national trends.

Methods: "Hospital A" provided data from 393 positive breast cancer diagnoses along with the clinical staging at diagnosis from January 2019 to December 2022 for both high and low-income neighborhoods. Using a Mantel-Haenszel chi-square test we compared staging levels among the different income neighborhoods as well as among different races.

Results: When looking at total staging data from 2019-2022, there was a significant difference between the race category of "Black or African American" and "White" population staging data. White patients tend to have lower stages, during initial clinical diagnosis, compared to Black patients. The "Other" category, which included all other races that did not fit into the "Black or African American" or "White Category" such as Asians, also had lower staging upon diagnosis when compared to the "Black or African American" group but no statistically significant difference with the "White" population.

Conclusion: Our data showed that in Lake County, Indiana there are disparities in cancer staging among both income levels as well as race. The lower-income areas in our study were correlated with a greater proportion of Black residents as compared to the higher-income areas. This data shows that Lake County needs to be more proactive in screening its minority communities.