Disparities in Outcomes following Ovarian Cancer: An analysis of the SEER database (1998-2016)

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Abstract

Objectives: To determine if race/ethnicity is an independent predictor of adverse outcomes following diagnosis of primary ovarian cancer. Design: Retrospective study Setting: We utilized data from the Surveillance, Epidemiology, and End Results Program (SEER) database for this study. Population: We studied women with a primary diagnosis of Ovarian Cancer in the SEER database between January 1998 and December 2018. Method: We utilized the nearest neighbor propensity-score matching without replacement in a 1:1 ratio to compare mortality and overall survival following primary ovarian cancer diagnosis between Non-Hispanic Black (NHB) women and a control group of Non-Hispanic White (NHW) women. These women were matched for age, treatment modalities (surgery/irradiation/chemotherapy), laterality, and stage of cancer at presentation. Main Outcomes: The primary outcomes of interest were differences in mortality and survival (in months) among NHB and NHW women Results: We compared 6,801 NHB women with 27, 204 NHW women with primary ovarian cancer. Prior to propensity-score matching, NHB women had a higher mortality rate (56.7%vs.53.5%, p<0.001) and lower survival rate (40.1 vs. 48.9 months<0.001). Following propensity-score matching, there was no difference in the mortality rate between the two groups. (56.7% vs 55.7% p=0.13). However, NHB women had significantly lower survival rates (40.1vs.49.6 months, p < 0.001). Conclusion: Racial disparities in survival following treatment for ovarian cancer persist despite adjusting for age, stage of cancer, and treatment modalities. Further research is warranted to explore patient and systemic factors such as appropriate level of care and follow-up after treatment that might account for these differences.

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