
Authors: Salman Zahid, Mian Tanveer Ud Din, Anum Minhas, Devesh Rai, Muhammad Zia Khan, Waqas Ullah, Harriette Gillian Christine Van Spall, Allison G. Hays, Erin D. Michos, Rochester General Hospital, Rochester, NY, USA, Johns Hopkins, Baltimore, MD, USA

Background: Data on the interaction between race/ethnicity and income for preeclampsia outcomes and complications remain limited.

Methods: We analyzed National Inpatient Sample data using ICD-9/10 codes to identify preeclampsia cases from 2004 to 2018. We stratified the population based on median household income (0-25th (31.3%), 25-50th (24.4%), 50-75th (23.2%), 75-100th (19.4%) percentile). We identified preeclampsia cases using ICD-9/10 codes. We then compared outcomes across income quartiles.

Results: A total of 4,674,442 hospitalizations for preeclampsia were identified (White (54.1%), Black (22.9%), Hispanic (19.6%) and Asian or Pacific Islander (A/PI) (3.4%) women). We stratified the population based on median household income (0-25th (31.3%), 25-50th (24.4%), 50-75th (23.2%), 75-100th (19.4%) percentile). White and Hispanic women in the highest income group had lower mortality compared to lowest income group (Fig A). However, the same was not true for Black or A/PI women where belonging to a higher income quartile did not translate into significantly lower mortality odds. Hispanic women had a lower prevalence and Black women a higher prevalence of peripartum cardiomyopathy (PPCM) across all income quartiles (Fig B).

Conclusion: White women from a higher income group have lower in-hospital mortality than lower-income White women with preeclampsia. However Black and A/PI women have worse mortality outcomes than White women, and the association is not mitigated by higher incomes. Hispanic women tend to have a lower incidence of PPCM across all quartiles of income.