Poster #28

Research Study

Title: "Association between race/ethnicity and the probability of morbidity/mortality in adult patients that underwent a laparoscopic cholecystectomy in the US in 2016"

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Introduction and Objective. Social determinants of health such as race and ethnicity may play a crucial role in patients' access and quality of care. Since cholecystectomies are the most common gastrointestinal surgery, our objective was to determine if there is an association between race/ethnicity and the probability of mortality in adult patients undergoing laparoscopic cholecystectomy in 2016.

Methods. Non-concurrent cohort study including patients over 18 years old who underwent a laparoscopic cholecystectomy at an American College of Surgeons' National Surgical Quality Improvement Program hospital in 2016. The main exposure variables were race (Black/African-American, white, or other) and ethnicity (Hispanics vs, non-Hispanics). The main outcome was the probability of morbidity and mortality. Unadjusted and adjusted logistic regression analysis were used to calculate odds ratios (OR) and 95% confidence intervals (CI).

Results. Hispanics and African Americans had decreased odds of mortality (OR 0.48; 95% CI 0.44-0.52) and (OR 0.85; 95% CI 0.78-0.92), respectively. Hispanics had decreased odds of morbidity (OR 0.85; 95% CI 0.79-0.92). African Americans had 1.43 higher odds of morbidity (OR 1.43 95%CI 1.32-1.54).

Conclusions-Implications. Our recommendation is that the American College of Surgeons considers adding race and ethnicity to their surgery risk calculator as our study indicates that they do play a role in calculating the probability of morbidity and mortality. We recommend future studies assess more social determinants such as socioeconomic status as a primary dependent variable for use in these surgical risk calculators.