Racial and Ethnic Disparities in Elective vs. Emergent Appendectomy in Pregnant Patients : A 2018–2023 New York State Analysis

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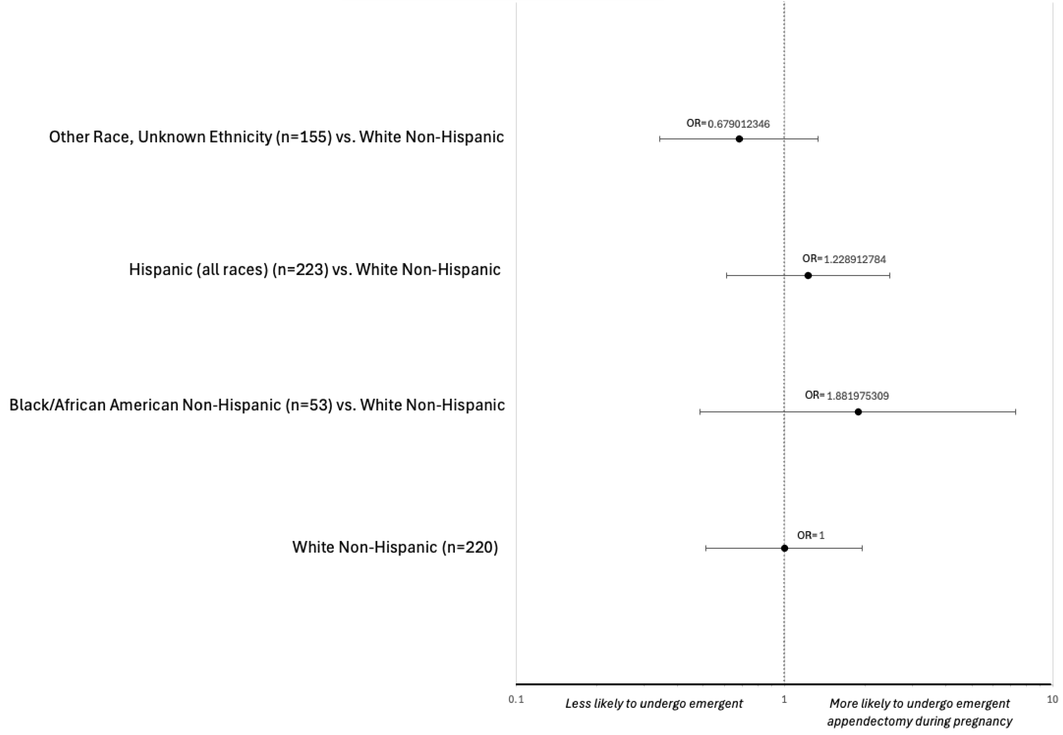
BACKGROUND

Appendectomy is one of the most common emergency abdominal surgeries and may be required during pregnancy. Emergent procedures are associated with increased maternal and fetal morbidity compared to elective operations. Prior research has demonstrated disparities in surgical urgency across racial and ethnic groups. This study examines differences in the likelihood of undergoing emergent versus elective appendectomy among pregnant patients in New York State from 2018 to 2023.

METHODS

A retrospective analysis was conducted using 2018 to 2023 New York Statewide Planning and Research Cooperative System (SPARCS) inpatient discharge data. Pregnant adult patients undergoing appendectomy were included. Patients were categorized by race/ethnicity and surgical urgency (elective vs. emergent). Odds ratios (ORs) with 95% confidence intervals (CI) were calculated to assess differences in emergent appendectomy across racial/ethnic groups, with White Non-Hispanic patients serving as the reference group.

RESULTS



No subgroup demonstrated statistically significant differences in the likelihood of emergent appendectomy compared to White Non-Hispanic patients. Black Non-Hispanic patients showed increased odds (OR: 1.88, p = 0.361), while Hispanic patients of all races also had higher odds (OR: 1.23, p = 0.565). Patients in the Other/Unknown category demonstrated decreased odds (OR: 0.68, p = 0.264). None of these associations reached statistical significance.

DISCUSSION

These findings suggest no significant racial or ethnic disparities in the urgency of surgical management for pregnant patients undergoing appendectomy in New York State between 2018 and 2023. While Black Non-Hispanic and Hispanic patients trended toward higher odds of emergent procedures, and Other/Unknown patients trended toward lower odds, none were statistically significant. This may reflect more equitable access to emergency surgical care in this population. Further research is warranted to confirm these findings and to investigate whether standardized emergency care pathways contribute to the absence of significant disparities.

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