Association between anemia in pregnancy and severe maternal morbidity among pregnant patients of different racial, ethnic, and socioeconomic groups determined by Area Deprivation Index at large tertiary care center

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Pregnant patients in the world are anemic<sup>1</sup>



Anemia in pregnancy (AIP), is a predictor of maternal morbidity and mortality.





Anemia in pregnancy can lead to: Adverse perinatal outcomes Post-partum anemia Increased blood transfusions<sup>2</sup>



# Hypothesis

The incidence of AIP among different racial and ethnic groups, and socioeconomic status measured by ADI, in the peripartum period may be responsible for some differences in severe maternal morbidity and mortality outcomes at two delivery sites at a single tertiary care center.

Race and socioeconomic status (SES) can worsen outcomes associated with AIP<sup>2</sup>

Area Deprivation Index (ADI) can potentially be utilized as a proxy for SES<sup>3</sup>

We do not know the anemia status and associated outcomes of pregnant patients at our tertiary care center.





### Methods



## **Discussion and Conclusion**



Non-white individuals experience higher rates of predelivery anemia and live in greater deprivation areas. Contributors:

> Socioeconomic disparities Food insecurity Limited prenatal care<sup>1</sup>





Moderate to severe anemia increases the risk of SMM events, even when excluding blood transfusions. Effective anemia management during the peripartum period could improve outcomes for high-risk groups.<sup>3</sup>



- 1. PMID: 22718605
- 2. PMID: 11518906
- 3. PMID: 33992832

## Hispanics had the highest post-delivery anemia rates. Contributors:

Communication barriers Reluctance toward interventions Discrimination<sup>2</sup>

Future directions include:

- Quality improvement initiatives
- Optimizing care of the anemic patient in the peripartum period
- Further investigation of post-delivery anemia status and interventions in follow up