Differential Survival: Do Racial and Socioeconomic Disparities Persist Beyond “Poor Birth Outcome”?  

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**Introduction**
In Kalamazoo County, significant racial and socioeconomic disparities are evident in infant mortality rates. The greater prevalence of poor birth outcomes (PBO) (prematurity, low birthweight, small for gestational age) among infants of color and poor infants is a significant contributor. It is unknown, however, whether these disparities continue to impact the survival of PBO infants.

**Objectives**
To examine whether there are racial or socioeconomic differences in the one-year-survival of PBO infants, controlling for other health contributors.

**Data**
- Local Health Department, Kalamazoo Health & Community Services
- Kalamazoo County birth records 2008-2014
- Kalamazoo County infant death certificates 2010-2015
- Kalamazoo County linked birth-death records 2008-2015

21,858 infants delivered 2008-2015

EXCLUDED: infants with adequate weight & gestation infants missing race/insurance data

LBW, premature, small for gestational age N = 4,528

**Methods**

**Weighting**
- COVARIATES OF INTEREST*:
  - plurality, Hispanic ethnicity, teen, kotelchuck score, prenatal care in 1st trimester, previous poor outcome, chronic medical risk, BMI, obstetric medical risk, high school education, infection, tobacco smoker, marital status, weight gain during gestation
- RACE / SES CATEGORY

- Outcome Model
  - RACE
  - SES
  - Race x SES

- INFANT MORTALITY

**Results/Conclusion**

The outcome model indicates that neither race (β = -0.1428, p = .6134) nor SES (β = -0.4528, p = .3993) nor the raceXses interaction (β = .4026, p = .5088) are significantly associated with infant mortality within the first year. Although racial and socioeconomic disparities are present in the likelihood of a poor birth outcome, these disparities do not persist beyond that.

**Analysis**
Utilizing the stabilized weights computed from the Association Model’s propensity scores, the effect of race and SES on covariates of interest associated with PBO (grey box) can be isolated in order to obtain greater confidence in the unbiased effect of race and SES on infant mortality.

**Conclusion**

What are the clinical and policy implications of these findings... (e.g., (1) clinical and community care of at-risk infants appears to be equitable by race and SES, (2) Prevention efforts should focus upon the maternal preconceptional and interconceptional health factors such as...