Mother’s Previous Birth Experience, Behavior during Pregnancy and Having Premature Birth: An Analysis of South Carolina PRAMS Survey, 2004-2013

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Introduction

- In 2016, 1 in 9 babies (11.1% of live births) was born preterm in South Carolina (SC).
- Mothers’ behavior during pregnancy, previous birth experience, and neighborhood factors greatly influence birth outcomes.

Objectives

- To assess the factors affecting premature birth in SC.
- To explore the policy implications of study findings.

Methods

- Premature birth: <37 weeks of gestation
- Sample size: 12,426 (weighted 550,742) women who gave live birth in that year.
- Generalized Structural Equation Model (GSEM) using STATA 14.2.

Results

- Factors of Premature Birth in SC
  - Previous premature birth: AOR = 3.0 (2.3-3.9)
  - High blood pressure: AOR = 2.5 (2.0-3.2)
  - African American vs. White: AOR = 1.5 (1.2-1.8)
  - Insured before pregnancy: AOR = 1.3 (1.1-1.5)
  - Adequate vs. Inadequate ANC: AOR = 0.3 (0.2-0.4)
  - Drinking during pregnancy: AOR = 0.5 (0.4-0.8)
  - WIC vs. non-WIC: AOR = 0.8 (0.6-0.9)

Conclusions

- WIC during pregnancy helps mothers to avail prenatal care as well as decreases chance of having premature birth.
- Having insurance has an indirect negative effect on premature birth.
- African American mothers should be given priority in pregnancy and childbirth related policy making.

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