

Characteristics Associated with Severe Psychological Distress (SPD) in a Cohort of African American (AA) Pregnant Women

Lesya Ekshyyan, MPH(c), BS¹, Jaime Slaughter, PhD, MPH¹, Dawn Misra, PhD², and Cleopatra Caldwell, PhD

¹Drexel University, Dornsife School of Public Health, Philadelphia, PA

²Wayne State University, School of Medicine, Detroit, MI

³University of Michigan, School of Public Health, Ann Arbor, MI

Abstract

Severe psychological distress (SPD) has been linked to preterm birth (PTB), and low birth weight. Few studies have examined characteristics that may be associated with severe psychological distress in African American pregnant women. The objective of this study was to determine which demographic, health behavior, and psychosocial characteristics/risk factors were associated with SPD in a cohort of pregnant African American women.

Data were obtained from a retrospective cohort of 1410 African American women in metropolitan Detroit, Michigan using maternal interviews and medical record abstraction (71% response rate). Kessler's six-item questionnaire of psychological distress (0-"never" to 4-"very often", range: 0-24) was used to evaluate severe psychological distress. Descriptive statistics and multivariable logistic regression were used to examine the associations between SPD (score \geq 13) and the following characteristics: maternal age, education, marital status, employment, smoking, physical health rating, father-of-the-baby (FOB) support, and Cohen's perceived stress.

9% of women in the study had SPD. Women with SPD compared to women without had higher rates of very preterm birth, less than 35 weeks gestation, (14.7% vs. 8.2%; $X^2=4.6$, $p=0.03$) and low birth weight babies (19.0% vs. 12.0%; $X^2=4.3$, $p=0.04$). Regression models showed marital status ($p=0.03$), education ($p=0.03$), employment ($p=0.04$), perceived stress ($p<0.01$), and support from the father of the baby ($p<0.01$) were significantly associated with SPD. Physical health was moderately significant ($p=0.05$). Women who were stay-at-home were 2.0 times (95%CI: 1.1-3.6) as likely as those employed to have SPD. Women who reported negative FOB support versus positive FOB support were twice as likely (OR=2.0, 95%CI: 1.3-3.0) to have SPD.

Understanding the risk factors of severe psychological distress in African American pregnant women is important for mental health screening and intervention development.