Sigma Theta Tau International's 29th International Nursing Research Congress

Support From the Father of the Baby and Preterm Birth Among Black Women

Carmen Giurgescu, PhD[1]
Dawn P. Misra, PhD[2]
Lara Fahmy, PhD[2]
Jaime C. Slaughter-Acey, PhD, MPH[3]
Alexandra Nowak, JD, BSN[1]
(1)College of Nursing, The Ohio State University, Columbus, OH, USA
(2)School of Medicine, Wayne State University, Detroit, MI, USA
(3)Dornsife School of Public Health, Drexel University, Philadelphia, PA, USA

Purpose: Preterm birth (PTB; birth before 37 completed weeks of gestation) is the leading cause of infant mortality among Blacks.[1] Compared with non-Hispanic white women, Black women are more likely to have PTB (8.9% and 13.4%, respectively in the United States).[1] Maternal depressive symptoms have been related higher risk of PTB among Black women.[2,3] Pregnant Black women also report lower levels of social support than pregnant white women.[4] Lack of social support was related to higher levels of depressive symptoms among Black women.[5,6] However, little has been reported on potential buffering effect of support from the father of the baby on the association between depressive symptoms and PTB. Thus, the purpose of this study was to examine if support from the father of the baby moderated the associations between depressive symptoms and PTB among Black women.

Methods: Data were obtained from the Life-course Influences on Fetal Environments study (2009-2011), a cohort of 1,410 Black women in Metropolitan Detroit, Michigan (71% response rate) using maternal interviews and medical record abstraction collected during the postpartum hospitalization. The 20-item Center for Epidemiologic Studies Depression Scale was used to measure depressive symptoms. CES-D scores of 23 or higher have been related to severe depressive symptoms. The 14-item Social Networks in Adult Relations Questionnaire (SNARQ) was used to assess support from the father of the baby. We split the SNARQ at the median (scores less than 60=less support; scores 60 or higher= more support). Logistic regression was used to explore the interaction between CES-D and SNARQ with regard to PTB risk. We adjusted for maternal advanced age, income, education level, smoking status, hypertension, prenatal care, and Body Mass Index.

Results: The PTB rate in this cohort was 17.7%. Among women with SNARQ sores <60 (less support), the odd ratio (OR) of PTB for women with CES-D scores ≥23 (severe depressive symptoms) as compared to CES-D scores <23 (no severe depressive symptoms) was 2.57 [95% confidence interval (CI): 1.68, 3.94, p<0.001]. Among women with SNARQ scores ≥60 (more support), the odds of PTB in women with CES-D scores ≥23 did not significantly differ from the odds of PTB in women with CES-D scores <23 (OR=1.34; 95% CI: 0.74, 2.44; p=0.3). After adjustment for covariates, among women with SNARQ scores <60, the OR of PTB for women with CES-D scores ≥23 as compared to CES-D scores <23 increased by 8.5%. Among women with SNARQ scores ≥60, the odds of PTB in women with CES-D scores ≥23 was not statistically significantly different from the odds of PTB in women with CES-D scores <23. The interaction term was statistically significant (p=0.04).

Conclusion: Complex processes are at work in the lives of pregnant Black parents. We found that among women whose fathers of their babies were less supportive, women who reported severe symptoms of depression were more likely to have preterm birth. The buffering effect of support from the father of the baby on the association between depressive symptoms and preterm birth may be one mechanism by which the father of the baby influences birth outcomes among Black women.

Understanding the role of the father of the baby on birth outcomes will provide the foundation for designing interventions to eliminate disparities in PTB among Black women.

Title:

Support From the Father of the Baby and Preterm Birth Among Black Women

Keywords:

depressive symptoms, father of the baby and preterm birth

References:

1. Martin JA, Hamilton BE, Osterman MJK, Driscoll AK, Mathews TJ. Births: Final data for 2015. . Hyattsville, MD: National Center for Health Statistics;2017.
2. Misra DP, Strobino D, Trabert B. Effects of social and psychosocial factors on risk of preterm birth in Black women. Paediatr Perinat Epidemiol. 2010;24(6):546-554.
3. Giurgescu C, Engeland CG, Templin TN. Depressive symptoms predict negative birth outcomes in African American women: A pilot study. Journal of Midwifery and WomenÃ¢Â€Â™s Health. 2015;60(5):570-577.
4. Paul K, Boutain D, Agnew K, Thomas J, Hitti J. The relationship between racial identity, income, stress and C-reactive protein among parous women: Implications for preterm birth disparity research. Journal of the National Medical Association. 2008;100(5):540-546.
5. Giurgescu C, Misra DP, Sealy-Jefferson S, et al. The impact of neighborhood quality, perceived stress, and social support on depressive symptoms during pregnancy in African American women. Social Science and Medicine. 2015;130:172-180.
6. Giurgescu C, Zenk SN, Templin TN, et al. The impact of neighborhood environment, social support and avoidance coping on depressive symptoms of pregnant African American women Women's Health Issues. 2015;25 (3):294-302.

Abstract Summary:

While maternal depressive symptoms during pregnancy have been linked to preterm birth, little has been reported on potential buffering factors, particularly for Black women. We examined the association between depressive symptoms and preterm birth in pregnant Black women, with father of the baby support as a potential buffering factor.

Content Outline:

This presentation will discuss the role of the father of the baby on birth outcomes for Black women. While maternal depressive symptoms have been related to preterm birth (less than 37 weeks gestation), little is known about the role of support from father of the baby on buffering the effects of depressive symptoms on preterm birth. We examined the moderating effect of support from the father of the baby on preterm birth among Black women.

First Primary Presenting Author

Primary Presenting Author

Carmen Giurgescu, PhD
The Ohio State University
College of Nursing
Associate Professor
Columbus OH
USA

Professional Experience: I have experience as a Labor and Delivery Registered Nurse and a Women's Health Care Nurse Practitioner. I have been in academia for the past 10 years. My research has been focusing on factors related to preterm birth.
Author Summary: Dr. Giurgescu is an Associate Professor at the Ohio State University, College of Nursing. Her research has been focusing on social determinants of health, mental health and birth outcomes among Black women.

Second Author

Dawn P. Misra, PhD

Wayne State University
School of Medicine
Professor
Detroit MI
USA

Professional Experience: Dr Misra has been conducting numerous research studies on factors related to preterm birth among Black women. She has more than 80 peer reviewed publications.
Author Summary: Dr Misra is Professor and Associate Chair for Research in the Department of Family Medicine & Public Health Sciences Dr. Misra has extensive research expertise on factors related to preterm birth among Black women.

Third Author

Lara Fahmy, PhD
Wayne State University
School of Medicine
Postdoctoral Fellow
Detroit MI
USA

Professional Experience: Dr Fahmy has expertise in statistics. She contributed with her expertise to this research on the moderating effects of support from the father of the baby on the association between depressive symptoms and preterm birth in Black women.
Author Summary: Dr Fahmy is Postdoctoral Fellow in the Department of Family Medicine & Public Health Sciences, School of Medicine at Wayne State University in Detroit, MI

Fourth Author

Jaime C. Slaughter-Acey, PhD, MPH
Drexel University

Dornsife School of Public Health
Assistant Professor
Philadelphia PA
USA

Professional Experience: 2001-2002 Research Assistant, MCH Epidemiology Unit, MCH Program, New Orleans, LA 2002-2004 Associations of Schools of Public Health/CDC Research Fellow, CDC, Atlanta, GA 2004-2005 Public Health Epidemiologist, MCH Epidemiology Unit, New Orleans, LA 2006-2008 Research Assistant, Division of Community Health Sciences, University of Illinois, Chicago, IL 2009-2010 Research Assistant, Neighborhood & Health Projects, College of Nursing, University of Illinois, Chicago, IL 2011 Instructor, Division of Community Health Sciences, University of Illinois, Chicago, IL 2011-2013 NIH T32 Perinatal Postdoctoral Fellow, Department of Epidemiology & Biostatistics, Michigan State University, East Lansing, MI 2012-2013 Research Fellow, Department of Family Medicine & Public Health Sciences, Detroit, MI 2013 Instructor, Department of Family Medicine & Public Health Sciences, Wayne State University, Detroit, MI 2013-Present Assistant Professor, Doctoral Nursing Program, College of Nursing & Health Professions, Drexel University, Philadelphia, PA 2014-Present Assistant Professor, Epidemiology & Biostatistics, School of Public Health, Drexel University, Philadelphia, PA (Secondary Appointment)
Author Summary: Slaughter is a maternal and child health (MCH) epidemiologist and assistant professor in the College of Nursing & Health Profession at Drexel University. In addition to being trained in MCH epidemiology she has background in social epidemiology. Slaughter worked and consulted with non-profits and MCH units at state health departments. Her research interests lie in the investigation of social, behavioral, biological determinants that influence MCH outcomes and the utilization of maternal and child health services

Fifth Author

Alexandra Nowak, JD, BSN

The Ohio State University
College of Nursing
PhD student
Columbus OH
USA

Professional Experience: Miss Nowak has experience as a Labor and Delivery Registered Nurse. She participated as a Research Associate in research studies that examined risk factors for preterm birth.
Author Summary: Alexandra Nowak is a PhD student at The Ohio State University, College of Nursing. Her dissertation research is focused on DNA methylation and preterm birth among Black women.