Relationship With the Father of the Baby and Perceived Stress Among Black Women



Relicious N. Eboh, Carmen Giurgescu, PhD, RN, WHNP, and Dawn P. Misra, MHS, PhD

Abstract

Objective: The purpose of this study was to examine whether the relationship with the father of the baby was related to psychological stress among Black women.

Methods: This is a secondary analysis of data derived from a retrospective cohort study of 1,410 Black new mothers participating in the Life-course Influences on Fetal Environments (LIFE) study conducted in the Detroit Metropolitan area. Data were obtained from maternal interview and medical records abstraction. Perceived stress was measured by the Cohen's Perceived Stress Scale. The mother's relationship with the father of the baby before and after pregnancy was measured using two questions.

Results: Women who reported sometimes close/ sometimes distant relationship with the father of the baby *prior to* pregnancy had higher levels of perceived stress compared with women who reported close relationship with the father of the baby *prior to* pregnancy (38.73 and 35.10, respectively, p < .001). Women who reported *current* distant relationship (38.82 and 34.45, respectively, p < .001) and sometimes close/sometimes distant relationship (38.83 and 34.45, respectively, p < .001) reported higher levels of perceived stress compared with women who had *current* close relationship with the father of the baby.

Clinical Implications: Women who reported to have a close relationship with the father of the baby before and during the pregnancy reported lower levels of stress compared with women with a distant relationship with the father of the baby. Nurses should assess women's relationship with the father of the baby and their levels of stress.

Key words: Fathers; Pregnancy; Psychological stress.

lack women experience higher levels of psychological stress compared with White women (Catov, Abatemarco, Markovic, & Roberts, 2010; Giurgescu, 2004; Holzman et al., 2006; Mustillo et al., 2004; Seng, Kohn-Wood, McPherson, & Sperlich, 2011). Lack of social support from family and friends is associated with higher levels of stress and depressive symptoms for pregnant Black women (Giurgescu et al., 2015). Support from fathers of the babies may alleviate psychological stress experienced by pregnant women (Ghosh, Wilhelm, Dunkel-Schetter, Lombardi, & Ritz, 2010). In a sample of 95 pregnant Black women, father involvement during pregnancy was related to lower levels of psychological distress and depressive symptoms (Giurgescu & Templin, 2015). In another study, focusing on low-income pregnant women (of which only 10% were Black), women who had no relationship with the father of the baby had higher levels of depressive symptoms (Byrd-Craven & Massey, 2013).

Although any father involvement during pregnancy may be protective and may increase support and thereby decrease stress, the nature of the relationship of the pregnant woman with the father of the baby could have an impact on stress in either direction. If the father of the baby is involved in the pregnancy but there is a poor relationship with him, the pregnant woman may experience more psychological stress rather than less. In a study of unmarried pregnant women, those in a poor relationship with the father of the baby were more likely to have stress and depressive symptoms compared with women in a good relationship with the father of the baby (Bloch et al., 2010). Similarly, in a study in Iceland, dissatisfaction of the pregnant woman with the relationship with her partner was related to psychological distress (Jonsdottir et al., 2017). Lu and Chen (2004) examined stressful life events using a multiracial cohort of 33,542 women (~20% Black) giving birth to babies in 2000 in 19 states in the United States. They found that partner-related stress was greater among Black women compared with White women, even after controlling for sociodemographic characteristics. Although these studies provide support for further study of fathers, available research has been limited in the extent to which it examines the role of babies' fathers, particularly in the lives of pregnant Black women.

According to the Transactional Model of Stress and Coping, stress is defined as a "relationship between the person and the environment that is perceived by the person as exceeding his/her resources and endangering his/her well-being" (Lazarus & Folkman, 1984, p. 21). We focused on the relationship with the father of the baby to assess the social environment of

September/October 2018 MCN **259**

pregnancy for Black women. According to the model, the short-term outcomes are positive and negative feeling (Lazarus & Folkman). We examined the short-term outcome of psychological stress for these women. The purpose of this secondary analysis was to examine whether the relationship with the father of the baby prior to and during pregnancy was related to psychological stress among Black women during their pregnancy. Our research question was: Among pregnant Black women, do women with a close relationship with the father of the baby have lower levels of psychological stress compared with those without a close relationship with the father of the baby? This question was examined for both the relationship prior to the pregnancy and during the pregnancy, as the relationship may have changed with learning of the pregnancy.

Methods

Design

This is a secondary data analysis of the Life-course Influences on Fetal Environments (LIFE), a retrospective cohort study of Black new mothers from the Detroit Metropolitan area (Giurgescu et al., 2015; Osypuk, Caldwell, Platt, & Misra, 2012). The purpose of the original study was to examine the influence of racism on birth outcomes among Black women. Data were also collected on psychosocial factors such as psychological stress and relationship with the father of the baby. This analysis examined whether the relationship with the father of the baby was related to psychological stress among these women.

Dissatisfaction with the relationship with the father of the baby may increase stress for pregnant women.

Sample and Setting

A sample of 1,410 Black new mothers was enrolled into the LIFE study. Postpartum women were included in the study if they self-identified as African American or Black, were 18 to 45 years old, and had singleton pregnancy. Women were excluded if they had intellectual disability (intellectual developmental disorder), on the basis of history or any prior records, as these conditions limit collection of reliable interview data on women's lives during pregnancy. Women were recruited from Labor and Birth and Postpartum units of a Detroit suburban hospital from June 2009 to December 2011.

Procedure

Institutional Review Board approval was obtained from the participating site. Research staff reviewed hospital birth logs for eligible participants. All eligible women were approached for study enrollment within approximately 48 hours after birth. Women gave informed consent if they agreed to participate in the study. Interviews were conducted by a trained interviewer in a private hospital room, and lasted about 1 hour. Women received a \$50 gift card to a local store for their time and participation. The final study sample included 1,410 women, which represented 71% of the women approached for study participation.

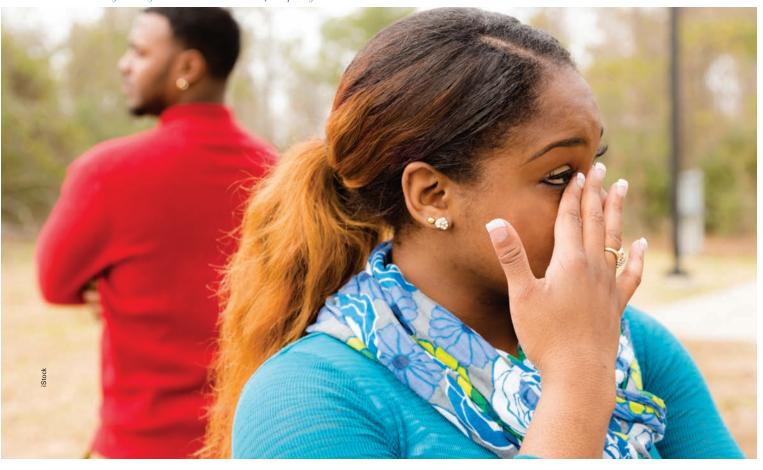
Measures

Maternal characteristics: Maternal sociodemographic characteristics (e.g., age, level of education) and medical

history (e.g., hypertensive disorders) were collected by self-report and medical records.

Perceived stress: Perceived stress was

measured by Cohen's Perceived Stress Scale (Cohen, Kamarck, & Mermelstein,



Copyright © 2018 Wolters Kluwer Health, Inc. All rights reserved.

1983; Cohen & Wills, 1985). The instrument contains 14 items on a 5-point scale (1 = never to 5 = very often) that ask about feelings and thoughts during the prior month (e.g., "felt upset," "stressed out"). Eight items represent positive characteristics (e.g., "felt in control of life") and were reversed coded. The sum of scores can range from 14 to 70 with higher scores representing higher levels of perceived stress. The Perceived Stress Scale has been correlated with Stressful Life Events (r = .24-.49) and the Center for Epidemiologic Studies Depression Scale (r = .65-.76) supporting tool's validity (Cohen et al., 1983; Cohen, Tyrrell, & Smith, 1993). The instrument had good internal consistency reliability for this sample (Cronbach's $\alpha = 0.87$).

Relationship with the father of the baby: The participant's relationship with the father of the baby was measured using two questions on a 5-point Likert scale (1 = very close to 5 = very distant): "How would you describe the relationship with the father of the baby before pregnancy?" and "How would you describe your current relationship with the father of the baby?" Women's responses were grouped into three categories: responses of very close and somewhat close were classified as close relationship with the father of the baby; responses of sometimes close/sometimes distant were classified as neutral relationship with the father of the baby; and responses of somewhat distant and very distant were classified as distant relationship with the father of the baby.

Data Analysis

Descriptive statistics (frequency, mean, standard deviation, range) were used to describe the characteristics of the sample, perceived stress, and relationship with the father of the baby. One-way Analyses of Variance were used to examine differences in perceived stress among the three groups of relationship with the father of the baby (close relationship, neutral relationship, and distant relationship). Chi-square was used to examine the relationship between the three groups of relationship with the father of the baby and the top 25th percentile of Cohen's Perceived Stress Scale scores (bottom 75th percentile for scores 14–40 and top 25th percentile for scores 41–64).

Results

A sample of 1,410 Black new mothers was enrolled into the LIFE study. Women had a mean age of 27 years. They reported moderate levels of perceived stress (35.45 ± 8.09). The majority had health insurance (99%), completed high school (87%), had very close or somewhat close relationship with the father of the baby (77%), reported good or excellent health (76%), were either married or cohabiting (54%), and were working (49%) (Table 1).

Women who reported sometimes close/sometimes distant relationship with the father of the baby prior to pregnancy had higher levels of perceived stress compared with women who reported close relationship with the father of the baby prior to pregnancy (38.73 and 35.10, respectively, p < .001). Women who reported current distant relationship (38.82 and 34.45, respectively, p < .001) and sometimes close/sometimes distant relationship (38.83 and 34.45, respectively, p < .001) reported higher levels of per-



Nurses should assess pregnant Black women's relationship with the father of the baby and their levels of stress.

ceived stress compared with women who had current close relationship with the father of the baby (Table 2).

Forty-five percent of women who reported sometimes close/sometimes distant relationship with the father of the baby prior to pregnancy had Cohen's Perceived Stress Scale scores 41 to 64 (high stress score) compared with 23% of women who reported close relationship prior to pregnancy who had Cohen's Perceived Stress Scale scores 41 to 64. Forty-three percent of women who reported current distant relationship and 41% of those who reported current sometimes close/sometimes distant relationship had Cohen's Perceived Stress Scale scores 41 to 64 compared with 21% of women who reported current close relationship with the father of the baby (Table 3).

Discussion

Black women in our study who reported currently having a distant relationship with the father of the baby had higher levels of perceived stress compared with women who reported currently having a close relationship with the father of the baby. Forty-three percent of women with currently a distant relationship had perceived stress scores in the top 25th percentile compared with 21% of women with currently a close relationship with the father of the baby. Our results suggest that the relationship with the father of the baby influences women's psychological stress levels.

Past studies have not examined the mother's report of her relationship with the father of the baby prior to or during pregnancy. Most studies have considered marital status and cohabitation as the sole descriptors of the relationship (Gondwe, White-Traut, Brandon, Pan, & Holditch-Davis, 2017; Shah, Zao, & Ali, 2011). This is lacking in nuance on understanding how fathers may contribute to or reduce stress during pregnancy. Our results provide support for the few past studies looking at the relationship beyond marriage and cohabitation. Our results are consistent with a prior study by Ghosh et al. (2010) reporting that a

September/October 2018 MCN **261**

Table 1. Maternal Characteristics (N = 1,410)^a

Variable	Mean ± SD	Range
Age	27.31 ± 6.2	18–45
Perceived stress	35.45 ± 8.09	14–64
	N (%)	
Marital status		
Married	396 (28.1)	
Living with partner	365 (25.9)	
Widowed	3 (0.2)	
Divorced	30 (2.1)	
Separated	22 (1.6)	
Never married	589 (41.8)	
Employment		
Yes, currently working	695 (49.3)	
Yes, temporarily laid off	134 (9.5)	
Not working	559 (39.5)	
Completion of high school		
High school diploma	1,230 (87.3)	
High school equivalency	60 (4.3)	
Did not complete high school	118 (8.4)	
Health insurance		
Had health insurance	1,393 (98.9)	
Did not have health insurance	7 (0.5)	
Rate of physical health		
Excellent	183 (13.0)	
Very good	409 (29.0)	
Good	475 (33.7)	
Fair	265 (18.8)	
Poor	73 (5.2)	
Cohen's Perceived Stress Scale scores		
based on quartiles		
14–29	311 (22.8)	
30–34	319 (23.4)	
35–40	378 (22.7)	
41–64	357 (26.2)	
Relationship with the father of the baby before pregnancy		
Very close	984 (70.2)	
Somewhat close	235 (16.5)	
Sometimes close/sometimes distant	154 (11.0)	
Somewhat distant	20 (1.4)	
Very distant	8 (0.6)	
Current relationship with the father of		
the baby		
Very close	872 (62.4)	
Somewhat close	203 (14.5)	
Sometimes close/sometimes distant	172 (12.3)	
Somewhat distant	63 (4.5)	
Very distant	88 (6.3)	

^aThe sample size differs for variables based on availability of data.

relationship with the father of the baby may alleviate psychological stress experienced by pregnant women. However, Ghosh et al. did not consider the quality of the relationship. In two studies that provided more detail on the relationship, whether about the quality (poor vs. not poor) (Bloch et al., 2010) or satisfaction (dissatisfied vs. not dissatisfied) (Jonsdottir et al., 2017), both were consistent with our findings of associations in the expected directions with stress (negative relationship characteristics associated with higher prenatal stress).

Our study has limitations. The sample of Black women was recruited from a medical center in the Detroit area. Thus, the results may not be generalizable to women from other racial/ethnic groups or in other cities. However, Black women are the highest risk racial group for adverse birth outcomes. As a consequence, knowledge of contributors to prenatal stress for this population is critical. Data were collected from maternal reports. We did not have fathers' reports of their perceptions of the relationship. Future studies should examine how the father of the baby feels about his relationship with the mother and his levels of perceived stress. Despite these limitations, we found that the relationship with the father of the baby influences psychological well-being of Black women.

Clinical Implications

Maternal-child nurses should assess women's relationships with the father of their babies during prenatal visits. Based on the results of our study, the current relationship with the father of the baby seems to be more important than relationship with the father of the baby prior to pregnancy, suggesting that pregnancy is not too late to intervene. Stress during pregnancy has been well established as a risk factor for adverse birth outcomes. Stress resulting from the relationship with the father of the baby would be expected to increase risk of preterm birth and low birthweight. Research on this topic is very promising and suggests that paternal factors play a role. Given the high risk of adverse birth outcomes for Black families, a potentially modifiable risk factor such as the relationship with the father of the baby seems particularly relevant to examine further and consider addressing in future efforts.

Pregnancy is a period in which nurses can intervene to improve pregnant woman's relationship with the father of her baby and ultimately decrease her level of stress in the pregnancy and subsequently improve pregnancy outcomes. Although prenatal care may be late or sporadic, most women do access care at some point in their pregnancy, even if just for pregnancy testing. Nurses could suggest that women participate in enhanced prenatal services sponsored by their state in conjunction with federal Maternal Child Health Block Grant funding. To be eligible for this program, the future mother has to qualify for Medicaid. This is unlikely to be a barrier as approximately two thirds of Black

Table 2. Differences in Perceived Stress Among the Three Groups of Relationship With the Father of the Baby Prior to Pregnancy and Current Relationship With the Father of the Baby

Relationship With the Father of the Baby	Perceived Stress <i>M</i>
Relationship with the father of the baby prior to pregnancy ^a	
Close relationship ($N = 1,184$)	35.10°
Neutral relationship (<i>N</i> = 146)	38.73
Distant relationship (N = 26)	36.12
Current relationship with the father of the baby ^b	
Close relationship ($N = 1,044$)	34.45 ^{c,d}
Neutral relationship (N = 165)	38.83
Distant relationship (N = 145)	38.82

 $^{{}^{}a}F = 14.13, p < .001$

Table 3. Relationship With the Father of the Baby and Perceived Stress

Relationship With the Father of the Baby	Cohen's Perceived Stress Scale Bottom 75th Percentile (Scores 14–40) N (%)	Cohen's Perceived Stress Scale Top 25th Percentile (Scores 41–64) N (%)		
Relationship with the father of the baby prior to pregnancy ^a Close relationship Neutral relationship Distant relationship	906 (76.5) 80 (54.8) 17 (65.4)	278 (23.5) 66 (45.2) 9 (34.6)		
Current relationship with the father of the baby ^b	000 (70 7)	000 (04.0)		
Close relationship	822 (78.7)	222 (21.3)		
Neutral relationship	96 (58.2)	69 (41.8)		
Distant relationship	83 (56.6)	63 (43.4)		

 $^{^{}a}\chi^{2} = 32.874, p < .001$

births in the United States are covered by Medicaid (Curtin, Osterman, Uddin, Sutton, & Reed, 2013). Enhanced prenatal services programs address behavioral, psychosocial, and health risks among low-income pregnant and postpartum women by providing risk assessment, care coordination, home visiting, psychosocial support, nutritional counseling, and other services (Roman et al., 2010). Being a part of this program will give women the social support they are seeking if they are not receiving the same support from the father of the baby. The nurse should encourage the mother to talk about their relation-

ship with the father of the baby with program workers so they could help the mother come up with a plan that could potentially alleviate the stressors in the woman's life.

Conclusion

Relationship with the father of the baby may influence psychological well-being of pregnant women. We found that women who report distant relationship with the fathers of their babies during pregnancy had higher levels of perceived stress. Future research needs to examine paternal report of the motherfather relationship and stress levels. Maternal-child nurses should assess the relationship between mothers and fathers and offer support to women who report distant relationship and/or higher levels of perceived stress. How the fathers and mothers relate to each other is an important area of study that may increase our understanding of designing interventions to eliminate disparities in birth outcomes and enhance parental mental health functioning. The mechanisms by which paternal factors exert their effects within Black families must be better understood if appropriate interventions are to be developed. •

Acknowledgment

The study was funded by the National Institutes of Health, National Institute of Child Health and Human Development R01 HD058510 and ReBUILDetroit. The authors thank the women who participated in the study.

Relicious N. Eboh is an undergraduate student, ReBUILDetroit Scholar, Department of Biology, University of Detroit Mercy, Detroit, MI.

Carmen Giurgescu is an Associate Professor, College of Nursing, The Ohio State University, Columbus, OH. The author can be reached via e-mail at giurgescu.1@osu.edu

Dawn P. Misra is a Professor, Department of Family Medicine and Public Health Sciences, Wayne State University School of Medicine, Detroit, MI.

The authors declare no conflicts of interest.

Copyright © 2018 Wolters Kluwer Health, Inc. All rights reserved.

DOI:10.1097/NMC.00000000000000459

References

Bloch, J. R., Webb, D. A., Mathews, L., Dennis, E. F., Bennett, I. M., & Culhane, J. F. (2010). Beyond marital status: The quality of the mother-father relationship and its influence on reproductive health behaviors and outcomes among unmarried low income pregnant women. *Maternal and Child Health Journal*, 14(5), 726–734. doi:10.1007/s10995-009-0509-7

Byrd-Craven, J., & Massey, A. R. (2013). Lean on me: Effects of social support on low socioeconomic-status pregnant women. *Nursing and Health Sciences*, *15*(3), 374-378. doi: 10.1111/nhs.12043

Catov, J. M., Abatemarco, D. J., Markovic, N., & Roberts, J. M. (2010). Anxiety and optimism associated with gestational age at birth and fetal growth. *Maternal and Child Health Journal*, 14(5), 758–764. doi:10.1007/s10995-009-0513-y

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396.

September/October 2018 MCN **263**

 $^{^{}b}F = 36.69, p < .001$

[°]p < .05 between close relationship to neutral relationship

 $^{^{}d}p$ < .05 between close relationship to distant relationship

 $^{^{\}rm b}\chi^2 = 56.353, \, p < .001$

Clinical Implications

- During prenatal visits, discuss with women about their relationships with the father of their babies
- Assess levels of stress for pregnant women through self-reported survey
- Suggest that women participate in enhanced prenatal services such as group prenatal care
- Encourage women to talk with nurses about their relationship with the father of the baby
- Cohen, S., Tyrrell, D. A., & Smith, A. P. (1993). Negative life events, perceived stress, negative affect, and susceptibility to the common cold. *Journal of Personality and Social Psychology, 64*(1), 131–140.
- cold. *Journal of Personality and Social Psychology*, 64(1), 131–140. Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357. Curtin, S. C., Osterman, M. J., Uddin, S. F., Sutton, S. R., & Reed, P. R.
- Curtin, S. C., Osterman, M. J., Uddin, S. F., Sutton, S. R., & Reed, P. R. (2013). Source of payment for the delivery: Births in a 33-state and District of Columbia reporting area, 2010. *National Vital Statistics Reports*, 62(5), 1–20.
- Ghosh, J. K., Wilhelm, M. H., Dunkel-Schetter, C., Lombardi, C. A., & Ritz, B. R. (2010). Paternal support and preterm birth, and the moderation of effects of chronic stress: A study in Los Angeles county mothers. Archives of Women's Mental Health, 13(4), 327–338. doi:10.1007/s00737-009-0135-9
- Giurgescu, C. (2004). The impact of uncertainty, social support, and prenatal coping on the psychological well-being of women with high-risk pregnancy. Chicago, IL: Loyola University of Chicago.
- Giurgescu, C., Misra, D. P., Sealy-Jefferson, S., Caldwell, C. H., Templin, T. N., Slaughter-Acey, J. C., & Osypuk, T. L. (2015). The impact of neighborhood quality, perceived stress, and social support on depressive symptoms during pregnancy in African American women.

- Social Science and Medicine, 130, 172–180. doi:10.1016/j.socscimed. 2015.02.006
- Giurgescu, C., & Templin, T. N. (2015). Father involvement and psychological well-being of pregnant women. *MCN. The American Journal of Maternal Child Nursing*, 40(6), 381–387. doi:10.1097/NMC.00000000000000183
- Gondwe, K. W., White-Traut, R., Brandon, D., Pan, W., & Holditch-Davis, D. (2017). The role of sociodemographic factors in maternal psychological distress and mother-preterm infant interactions. *Research in Nursing* and Health, 40(6), 528–540. doi:10.1002/nur.21816
- Holzman, C., Eyster, J., Tiedje, L. B., Roman, L. A., Seagull, E., & Rahbar, M. H. (2006). A life course perspective on depressive symptoms in mid-pregnancy. *Maternal and Child Health Journal*, 10(2), 127–138. doi:10.1007/s10995-005-0044-0
- Jonsdottir, S. S., Thome, M., Steingrimsdottir, T., Lydsdottir, L. B., Sigurdsson, J. F., Olafsdottir, H., & Swahnberg, K. (2017). Partner relationship, social support and perinatal distress among pregnant Icelandic women. Women and Birth, 30(1), e46–e55. doi:10.1016/j.wombi.2016.08.005
- Lazarus, R., & Folkman, S. (1984). Stress, appraisal and coping. NewYork, NY: Springer.
- Lu, M. C., & Chen, B. (2004). Racial and ethnic disparities in preterm birth: The role of stressful life events. American Journal of Obstetrics and Gynecology, 191(3), 691–699. doi:10.1016/j.ajog.2004.04.018
- Mustillo, S., Krieger, N., Gunderson, E. P., Sidney, S., McCreath, H., & Kiefe, C. I. (2004). Self-reported experiences of racial discrimination and Black-White differences in preterm and low-birthweight deliveries: The CARDIA Study. American Journal of Public Health, 94(12), 2125–2131.
- Osypuk, T. L., Caldwell, C. H., Platt, R. W., & Misra, D. P. (2012). The consequences of foreclosure for depressive symptomatology. *Annals of Epidemiology*, 22(6), 379–387.
- Roman, L. A., Meghea, C. I., Raffo, J. E., Biery, H. L., Chartkoff, S. B., Zhu, Q., ...Summerfelt, W.T. (2010). Who participates in state sponsored medicaid enhanced prenatal services? *Maternal and Child Health Journal*, 14(1), 110-20.
- Seng, J. S., Kohn-Wood, L. P., McPherson, M. D., & Sperlich, M. (2011). Disparity in posttraumatic stress disorder diagnosis among African American pregnant women. Archives of Women's Mental Health, 14(4), 295–306.
- Shah, P. S., Zao, J., & Ali, S. (2011). Maternal marital status and birth outcomes: A systematic review and meta-analyses. *Maternal and Child Health Journal*, *15*(7), 1097–1109. doi:10.1007/s10995-010-0654-z

For additional continuing nursing education activities related to maternal child nursing, go to nursingcenter.com/ce.



Instructions for Taking the **CETest** Online Relationship With the Father of the Baby and Perceived Stress Among Black Women

- Read the article. The test for this CE activity can be taken online at www.nursingcenter.com/ce/MCN.
 Tests can no longer be mailed or faxed.
- You will need to create a free login to your personal CE Planner account before taking online tests.
 Your planner will keep track of all your Lippincott Professional Development (LPD) online CE activities for you.
- There is only one correct answer for each question.
 A passing score for this test is 14 correct answers.
 If you pass, you can print your certificate of earned contact hours and the answer key. If you fail, you have the option of taking the test again at no additional cost.
- For questions, contact LPD: 1-800-787-8985.

Registration Deadline: September 4, 2020.

Disclosure Statement:

The authors and planners have disclosed no potential conflicts of interest, financial or otherwise.

Provider Accreditation:

LPD will award 1.5 contact hours for this continuing nursing education activity.

LPD is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity is also provider approved by the California Board of Registered Nursing, Provider Number CEP 11749 for 1.5 contact hours. LPD is also an approved provider of continuing nursing education by the District of Columbia, Georgia, and Florida CE Broker #50-1223.

Payment:

• The registration fee for this test is \$17.95.

264 VOLUME 43 | NUMBER 5 September/October 2018