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## African American Women's Views of Factors Impacting Preterm Birth

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### Abstract

**Purpose**—To explore pregnant African American women's views of factors that may impact preterm birth.

**Study Design and Methods**—Qualitative descriptive exploratory cross-sectional design. A convenience sample of 22 low-risk pregnant African American women participated in focus group interviews. Women were asked questions regarding their belief about why women have preterm birth and factors impacting preterm birth. Data were analyzed using content analysis.

**Results**—Pregnant African American women encounter multiple physical, psychological, and social stressors. The four themes included knowledge of preterm birth, risk factors for preterm birth, protective factors for preterm birth, and preterm birth inevitability. The risk factors for preterm birth were health-related conditions, stressors, and unhealthy behaviors. Stressors included lack of social and financial support, interpersonal conflicts, judging, dangerous neighborhoods, racism, and pregnancy and mothering related worries. Protective factors for preterm birth included social support and positive coping/self-care.

**Clinical Implications**—Clinicians may use the results of this study to better understand women's perceptions of factors that affect preterm birth, to educate women about risk factors for preterm birth, and to develop programs and advocate for policies that have the potential to decrease health disparities in preterm birth.

### Keywords

Preterm birth; stress; neighborhood; social support

### Introduction

Preterm birth (less than 37 weeks gestation) is a public health problem, as almost half a million (11.72%) infants were born prematurely in 2011 (Hamilton, Martin, & Ventura, 2012) resulting in a cost of \$26.2 billion per year (Institute of Medicine, 2006). Preterm birth is a major factor associated with neonatal mortality and long-term childhood health problems (McCormick, Litt, Smith, & Zupancic, 2011). Persistent health disparities in preterm birth exist, with African American women having almost twice the rates of preterm birth as White women (Culhane & Goldenberg, 2011). There are also differences in rates of

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preterm birth for Black women according to where they were born; US born African American women have higher risk for preterm birth than foreign-born Black women (Culhane & Goldenberg, 2011; Forna, Jamieson, Sanders, & Lindsay, 2003; Janevic et al., 2010). Genetic predisposition has been considered a potential risk for preterm birth as well (Rich-Edwards et al., 2001).

Chronic stressors of neighborhood environment and racial discrimination have been shown to be associated with preterm birth (Dole et al., 2004; Messer, Kaufman, Dole, Herring, & Laraia, 2006; Messer, Kaufman, Dole, Savitz, & Laraia, 2006). Compared with pregnant non-Hispanic white women, pregnant African American women are more likely to be living in neighborhoods with high poverty (Reagan & Salsberry, 2005), violent crime (Messer, Kaufman, Dole, Herring, et al., 2006), and abandoned commercial buildings and litter (Laraia et al., 2006). African American women are also more likely to experience racial discrimination (Dole et al., 2004). Poor neighborhood environment and experiences of racial discrimination may increase stress for pregnant women (Nkansah-Amankra, Luchok, Hussey, Watkins, & Liu, 2010; Stancil, Hertz-Picciotta, Schramm, & Watt-Morse, 2000). Stress has also been associated with preterm birth (Ghosh, Wilhelm, Dunkel-Schetter, Lombardi, & Ritz, 2010; Misra, Strobino, & Trabert, 2010; Roy-Matton, Moutquin, Brown, Carrier, & Bell, 2011). However, these quantitative studies do not provide insights into pregnant African American women's perceptions of factors related to preterm birth, and thus this study was done.

A small body of qualitative research with African American women has identified that African American women experience stress from physical isolation, living in violent neighborhoods, lack of social support, and racism (Jackson, Phillips, Rowland Hogue, & Curry-Owens, 2001; Pletsch, Morgan, & Pieper, 2003; Savage, Anthony, Lee, Kappesser, & Rose, 2007). To cope with the stress, women included support from families, especially from the females in their lives (Savage et al., 2007). Studies showed that African American women considered that prenatal care should include assessment of psychosocial factors such as: their relationships with family and support available; stress they experience due to life events, discrimination, and environment; health history perceptions including past medical history, nutrition, and risk behaviors; and beliefs related to spirituality, religion, and culture (Yi, Lori, & Martyn, 2008). However, no previous studies have examined African American women's perceptions about the factors that relate specifically to preterm birth. The purpose of this study, therefore, was to explore pregnant African American women's perceptions of risk and protective factors impacting preterm birth.

## Research Design and Methods

### Design

This study used a qualitative descriptive exploratory design (Sandelowski, 2000).

### Sample and Setting

We conducted five focus groups with a convenience sample of 22 low-income pregnant African American women recruited from a medical center in Chicago. Inclusion criteria were: self-identified African American; at least 18 years of age; singleton pregnancy; and less than 37 weeks gestation. Women were excluded who had medical diagnoses (e.g., hypertensive disorders) that may pose as stressors themselves and may also increase the risk for preterm birth, in order to obtain a homogenous sample of low-risk pregnant African American women and provide the opportunity to focus on issues specific to the group under study.

## Measures

An interview guide was used to collect information. Focus groups are well-suited to facilitate better understanding of health disparities based on the perceptions of the participants (Ruff, Alexander, & McKie, 2005). The focus group interview format consisted of 16 open ended questions with probes designed to address a wide range of responses. Some examples include: *“Sometimes people will give their opinion or beliefs about why women had premature births. What are your beliefs about the reasons women have premature birth?”*; *“Some people say that some parts of a woman’s neighborhood such as crime and not being safe may affect her having her baby earlier than the expected due date. What do you think about some parts of a woman’s neighborhood affecting her pregnancy?”*; and *“Some people say that a woman’s feelings may affect her having her baby earlier than the expected due date. What do you think about a woman’s feelings affecting her pregnancy?”*

Sociodemographic and pregnancy data were collected regarding maternal age, marital status, level of education, employment, annual household income, pregnancy history, EDC, gestational age at the time of data collection, and gestational age at birth.

## Research procedures

Recruitment consisted of face-to-face meetings and flyers posted at the prenatal clinics of the participating site. The focus groups were scheduled at the times most convenient for the majority of women.

Each focus group meeting included the principal investigator, the research assistant, and the focus group moderator. The principal investigator completed the informed consent process.

The moderator led the group discussion and kept the participants focused on the key questions. Each participant was encouraged to share her opinion or comments during the discussions. At the end of each focus group, the moderator provided a brief summary of the key points presented in the discussions. All of the focus groups were audio-taped. Each focus group lasted approximately 60-90 minutes. Women received \$30 for their participation.

## Data management and analysis

Focus group data were transcribed verbatim by the research assistant and reviewed by a second research assistant who also listened to the audiotapes and compared the transcripts. The unit of analysis was the group and the focus group data were analyzed by content analysis (Sandelowski, 2000). This technique involves coding, categorizing, and classifying participants’ responses (Patton, 2002). Transcripts of the five focus groups were coded using Atlas.ti software program. A total of 37 individual codes were initially developed; codes expressed in three or more focus groups were combined into four broad themes.

Trustworthiness was evaluated in relation to credibility, dependability, and transferability. Credibility was established by investing sufficient time in data collection to build trust and learn the culture of the group. Dependability was established by regular communications with the research team. Transferability was established by providing a sufficient description of the sample characteristics, selection criteria, data collection and analysis in the research report (Graneheim & Lundman, 2004; Guba & Lincoln, 1989).

## Results

Focus groups ranged from three to seven participants [mean age=24 years ( $\pm 5.62$ , range 18-38), mean gestational age=27 weeks ( $\pm 7.1$ , range 14-36)]. Women gave birth at a mean gestational age of 39 weeks ( $\pm 1.43$ , range 36-42). One woman had a preterm birth at 36 weeks. Fifty-eight percent of the women were multiparous, and three women had a history of a prior preterm birth. Most were single (88%), unemployed (77%), and lived in low income Chicago neighborhoods. Two women had less than high school education, nine women completed high school, ten women had some college, and five women had associate or bachelor degrees. All but one woman reported an annual household income below \$30,000 and 17 women had incomes below \$10,000 (65%).

The findings were clustered into four themes: (1) knowledge of preterm birth, (2) risk factors for preterm birth, (3) protective factors for preterm birth, and (4) preterm birth inevitability.

### (1) Knowledge of preterm birth

MEMBERS OF all five groups had some awareness of preterm birth as evidenced by these representative quotes: *“when the baby come early before its time. Like a few weeks early or a month or two months early”, “Baby born before due date most likely 2-3 pounds”, and “Baby that was born early or not developed like a full term baby... something might be wrong with it, undernourished. Immature cause when they come early nine times out of ten they are undernourished, or there is a problem like that”.*

### (2) Risk factors for preterm birth

**Health-related conditions**—All five focus groups cited health-related conditions, including diabetes, hypertension, depression, and sexually transmitted infections (e.g., Chlamydia and gonorrhea) as causes of preterm birth in African American women. For example: *“We carry more cultural diseases such as diabetes... African Americans have a lot of health issues. So that plays a major part”, “My friend, she has diabetes. She gonna have a premature baby”, and “Blood pressure can sometimes contribute to it”.*

**Stressors**—All five groups mentioned the following stressors as potential risk factors for preterm birth: lack of social support, lack of financial support, interpersonal conflicts, judging, dangerous neighborhoods, racism, and pregnancy and mothering related worries.

**Lack of social support:** Receiving very little emotional support from family members, partners, and health care providers during pregnancy were reported by all of the five groups. Quotes that exemplified lack of social support were: *“She feel nobody there for her or neglected or not getting enough attention” and “Our men are not there like they’re supposed to be for us. It’s a lot, it’s a lot”.*

**Lack of financial support:** All five groups mentioned lack of financial support as a stressor in their lives. Public assistance was often the only source of income for women in the focus groups. Being on public assistance frequently resulted in difficulties obtaining a medical insurance card and/or cash that caused increased stress for these women. Additionally, unemployment created financial worries/stress as exemplified in the quotes below: *“They fired me at four months. And I just looked and looked and I didn’t find anything and that’s just stressing out” and “Going around trying to find an apartment and they either say they looking at him like you don’t make enough... and like who’s going to hire me with this big old stomach? And I didn’t even tell unemployment that I’m pregnant, cause that’s stress, and I gotta get my check.”*

Even employment created stress as indicated in this quote: *“At the beginning of the pregnancy I was working at a job and because it was my first pregnancy I was confused and I didn’t know I was gonna get sick...I like to work, but I can’t work and my manager is on me constantly every day telling me to go home, ‘you can’t come to work sick like this because you’re not doing anything’ but I just kept coming back”.*

**Interpersonal conflict:** Three of the four groups identified interpersonal conflict as a stressor that influences pregnancy outcomes. Interpersonal conflicts occurred between the woman and significant other, family, and friends: *“Some people fight. Like a lot of young people try to mess with a lot of different men, and then get pregnant by them, and they might fight basically the whole pregnancy, and that’s not good.”* and *“My uncle’s friend baby died she was eight months [pregnant] ...but her and her boyfriend used to just argue every day all day, non-stop, just constantly argue and she just recently lost her baby”.*

**Judging:** Three of the five focus groups considered that teenage African American pregnant women and African American women with children by multiple fathers felt that society was judging them specifically because of their circumstances. These women’s experiences are mirrored in the following quotes: *“She’s actually giving her baby up for adoption because she doesn’t want to have to deal with, I don’t think she know who the father is and she doesn’t want to deal with people judging her cause she already has a bad reputation in the neighborhood or things of that nature, and she went through so much, you know.”* and *“The pressure of people judging, I’ve got a lot of people judging me...I just got angry like, being pregnant again, I felt like everybody was judging me about being pregnant”.*

**Dangerous neighborhoods:** Four of the groups cited residing in dangerous neighborhoods as a major stress factor in preterm birth because of concerns related to safety. The following quotes exemplified the stress experienced by living in dangerous neighborhood: *“Stress comes into play again because you think about I don’t want my baby to grow up in this ... and we sleeping and the police knocking down doors and stuff trying to find drug dealers”* and *“Every woman wants to be in a safe place to raise their children in a good environment. So when you come and you realize that you can’t have those things, you got all these people around you that is corrupt, it’s stressful.”*

**Racism:** Three of the groups mentioned racism as a stressor that could lead to preterm birth. Two quotes exemplified racism experienced by women: *“Like when she gonna make comments, like she said she had the master/slave mentality... and me being the only support staff that was Black I was the only person she had to treat that way, ... like the day I found out I was pregnant I would only bleed at work... I was nervous all the time and couldn’t talk back...Cause when you feel like that you have a lid and you’re about to blow, it’s time to go.”* And *“If somebody made a racist slur or was being racist and they knew that was going on, yeah it could cause some stress. ... They just hold everything in and then go somewhere, to work, to school, or anywhere, walking down the street. For somebody to make a racial slur, it causes a lot of stress”.*

**Pregnancy and mothering related worries:** Four focus groups noted concerns about physical appearance and worry about the care of the newborn as stressors. Stress over the normal physical signs and symptoms of pregnancy including vomiting, weight gain, facial edema, skin discoloration, crying and irritability, and stretch marks were reported. For example: *“Weight gain causes stress”* and *“I’ve heard people say something like stretch marks can stress themselves”.* Also frequently reported were concerns during pregnancy over to whom to entrust the care of the baby after birth so they can reenter the workforce:

*“Who can you trust with the baby? It’s hard to leave a newborn with anybody” and “Insecurity. About your ability to take care of the baby and yourself”.*

**Unhealthy behaviors**—All five focus groups identified unhealthy behaviors such as smoking, alcohol, drugs, a lack of physical activity, and inadequate nutritional intake as factors affecting preterm birth. These three quotes exemplified unhealthy behavior: *“Drinking. Drugs. Here’s what it is, especially among the Black African American women, I mean I’m not trying to be, there’s a lot of things going on that we deal with on everyday basis”, “If you’re pregnant, you stay in the house cause you don’t feel like walking or getting up. You don’t feel like doing nothing but getting up, going to the bathroom, eating and going right back”, and “I was smoking cause I was stressed”.*

### (3) Protective factors for preterm birth

All of the five groups identified potential protective factors for preterm birth such as social support and positive coping/self-care.

**Social Support**—Three of the five groups considered that women who carried their baby to term received adequate social support that enabled them to carry their fetuses to term: *“They got a better support system. Like more people for you than against you... You need somebody to help you out, you need somebody to at least offer to help, even if they don’t really come through with it, at least they offered.”*

**Positive coping/ Self-care**—Positive coping for pregnant African American women included reading the Bible, listening to music, doing yoga, exercise, not dwelling on stressful situations, and re-aligning their finances. These quotes were examples of positive coping: *“Trying church or buying a Holy Bible, King James version at the store and just reading it. Take some time out, go to a place you can feel comfortable with like a library or whatever and just read it sometime”, “I can put in a CD and listen to it and... whatever was bothering me is gone now, well it’s not gone but it’s not on my mind so it’s not stressing me out and it’s not irritating me”, and “Do yoga or something”.* Taking care of oneself, such as getting enough rest, taking prenatal vitamins, and eating nutritious foods were also cited as ways to carry the baby to full term: *“They carry themselves such like eating and the vitamins, prenatal vitamins” and “I’m just saying it’s all about the woman, how she’s taking care of herself and the child during pregnancy”.*

### (4) Preterm birth inevitability

Three of the five groups considered that even though there are some protective factors sometimes preterm birth cannot be avoided. Preterm birth inevitability is reflected in the following quotes: *“I don’t think so because you could take your medicine, go to all your doctor’s appointments, and still have your baby early just for some reason”, “It could be the baby itself, you know, sometimes the baby is ready to come out when it’s ready.”, and “My thing is regardless um how healthy you are, what you may do that is health-conscious. If something is gonna be wrong with your baby, it’s gonna be anyway”.*

## Clinical Nursing Implications

This research provided an enhanced understanding of low-income pregnant African American women’s perceptions of factors that may impact preterm birth. We found that women had some awareness of preterm birth, but clinicians should be sure to reinforce women’s understanding of the health risks faced by babies born three or more weeks before their due date. Clinicians should educate women to come for early and regular prenatal care and to respond to early signs of preterm labor, contacting the health care provider to obtain

early treatment. By this education, nurses can empower women to participate in their own prenatal care (see Table 1).

In this study, women identified risk factors and protective factors for preterm birth such as medical conditions, stressors, unhealthy behaviors and social support and positive coping/self-care. Nurses can be instrumental in helping women recognize the stressors in their lives and developing positive coping strategies to manage these stressors. In addition to individual contact with women to enhance their positive coping strategies, nurses can guide women toward prenatal social support groups in their communities which could help women navigate stressors during their pregnancies and enhance their positive coping skills. Nurses should include family or other support persons in such teaching, and be sure to include the benefits of social support. Some positive coping strategies used by the women in this study such as listening to music, more frequent exercise, and depending more on spirituality are positive interventions that these women found helpful. Additionally clinicians should identify community resources and consider collaborating with local police departments and community agencies to learn more about creative strategies and policies to decrease crime and increase neighborhood safety. Police representatives from local police departments can be invited to prenatal social support groups to discuss potential strategies and policies related to crime and neighborhood safety.

Nurses who understand their patients' perceptions are better able to coordinate appropriate comprehensive care for them. This study can lead the way to a better understanding of the perceptions of African American women about preterm birth, and then to possible interventions.

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### Callouts

African American women have almost twice the rates of preterm birth compared with non-Hispanic white women.

“The pressure of people judging, I’ve got a lot of people judging me...I just got angry like, being pregnant again, I felt like everybody was judging me about being pregnant”.

“...I say every woman wants to be in a safe place to raise their children in a good environment. So when you come and you realize that you can’t have those things, you got all these people around you that is corrupt, it’s stressful”.

**Table 1**

## Suggested Clinical Implications

• Define preterm birth for women receiving prenatal care
• Teach women the signs of preterm labor and what to do if they happen
• Support healthy lifestyle and positive coping strategies such as listening to music, doing yoga, more frequent exercise, spirituality, and not dwelling on stressful situations
• Provide community resources for pregnant women such as community agencies and religious affiliations
• Advocate for policies to improve the neighborhood conditions, community safety, and economic development by being active in the community and contacting the legislators.