

Development of Prenatal Event History Calendar for Black Women

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ABSTRACT

Objectives: To identify psychosocial factors that Black women think should be addressed in prenatal care assessment and develop a Prenatal Event History Calendar to assess these factors.

Design: A qualitative descriptive study.

Setting: Two inner city hospital prenatal care clinics in Southeastern Michigan.

Participants: Twenty-two Black women who had attended at least 2 prenatal care visits.

Method: Three focus groups were conducted using a semistructured interview guide.

Main Outcome Measure: Using the constant comparative method of analysis (Glaser, 1978, 1992) themes were identified that were relevant to Black women during prenatal care visits.

Results: The women in this study wanted to talk with their providers about psychosocial factors and not just the physical aspects of pregnancy. To “go off the pregnancy” represents pregnant women’s desire to discuss psychosocial factors that were important to them during prenatal care. Five themes emerged from the data and were used to develop categories for the Prenatal Event History Calendar: relationships, stress, routines, health history perceptions, and beliefs.

Conclusion: One vital component of prenatal care assessment is assessing for psychosocial risk factors. Prenatal Event History Calendar was specifically developed to provide a comprehensive and contextually linked psychosocial risk assessment for use with pregnant Black women.

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Despite advances in medical care, technology, and services, racial/ethnic disparities in pregnancy outcomes have remained unchanged or have increased for more than a decade (Hoyert, Mathews, Menacker, Strobino, & Guyer, 2006). Consistently, the rate of infant mortality for Black infants has been at least twice as high as White infants; the ratio of death rates between the infants of Black mothers and White mothers was 2.4 in 2005 (Kung, Hoyert, Xu, & Murphy, 2008). Low birth weight (LBW) (less than 2,500 g, 5.8 lbs) remains the leading cause of infant mortality in Blacks (Mathews & MacDorman, 2007). High rates of preterm delivery account for most of the excess LBW and infant mortality among Blacks, and Black mothers are 60% more likely to deliver preterm and have three times the risk for extreme prematurity compared with White mothers (Fiscella, 2005).

One of the most important public health measures for improving the outcome of pregnancy since the mid-1980s has been expanding and increasing

access to prenatal care (Alexander & Kotelchuck, 2001; Institute of Medicine, 1985). Prenatal care provides women with the opportunity to be introduced and integrated into the health system, thereby receiving preventive care, education regarding pregnancy and birth, and special ancillary services that benefit both the mother and the infant. However, this has not led to a significant improvement in disparities in pregnancy outcome, and the effectiveness of prenatal care has become the subject of great controversy (Lu, Tache, Alexander, Kotelchuck, & Halfon, 2003).

The debate surrounding prenatal care is not centered on its *value* but rather restructuring the delivery and content of prenatal care to include a more contextually integrated model of care that addresses the individual, interpersonal, and community factors that contribute to LBW (Lu et al., 2003). The current standard prenatal care assessment fails to explore the interactions of psychosocial and environmental contextual

determinants of poor pregnancy outcome, such as neighborhood hazards, racial discrimination, residential segregation, environmental pollutants, and inadequate nutrition (Lu & Halfon, 2003; Lu et al., 2003). In addition, the current standard prenatal care assessment examines a brief time period of a woman's life and does not present a time- or context-linked integrated history of psychosocial factors that influence and contribute to poor maternal and infant outcomes before, during, and after pregnancy. Thus, a time-efficient, integrated method of assessment that elicits temporally linked information on the context of the woman's life, shows co-occurrence and health behavior patterns, and facilitates patient-provider communication may be useful during prenatal care assessments.

The Event History Calendar (EHC) method clearly and concisely shows integrated health behaviors (Martyn & Belli, 2002; Martyn & Martin, 2003) and uses cues to help patients remember and reconstruct past experiences and events (Belli, 1998; Conway, 1996; Martyn & Belli, 2002). Compared with other traditional surveys, EHCs have been shown to provide more detailed data, are less expensive than longitudinal data collection methods, and encourage greater levels of provider and patient interaction (Belli, Shay, & Stafford, 2001; Martyn & Belli, 2002; Martyn, Reifsnider, & Murray, 2006). Event History Calendars have been used with women similar to this target population of Black women at higher risk for adverse pregnancy outcomes in the National Survey of Family Growth (Mosher, 1998), in Black adolescent mothers research (Furstenberg, Brooks-Gunn, & Morgan, 1987), and in the Family Nurse Home Visiting project (Olds, 2006). Evidence for the clinical utility of the EHC with the target population is found in the Nurse-Family Partnership program, a successful intervention that has resulted in improvements in prenatal health and pregnancy outcomes (Olds, 2006). In the Nurse Family Partnership program, home visiting nurses use an EHC to assess the social context of women's lives and tailor interventions.

The majority of research in this area has focused on biomedical interventions to reduce LBW disparities. Increasingly, current evidence points to the influence of psychosocial and environmental contextual factors associated with poor pregnancy outcomes (Lu & Halfon, 2003; Lu et al., 2003). Consequently, a recent report by the American College of Obstetricians and Gynecologists (ACOG) Committee on Health Care for Underserved Women (2006) strongly recommends addressing psycho-

Standard prenatal care assessments do not fully capture psychosocial risk factors that are pertinent to pregnant women's lives and influence birth outcomes

social issues (i.e., nonbiomedical factors) that are pertinent to women and their families during prenatal care. Thus, the aims of this study were to (a) identify culturally relevant psychosocial factors that pregnant Black women perceive to influence pregnancy, (b) identify topics/questions relevant to prenatal care assessment, and (c) identify psychosocial factor domains for development of an EHC for Black women.

Methodology

A descriptive study design was used to explore the perceptions of pregnant Black women about culturally relevant psychosocial factors that influence pregnancy and to identify contextual areas that should be included in a Prenatal EHC assessment. Qualitative data were obtained by conducting focus groups with pregnant Black women receiving prenatal care at two urban hospital-based clinics. Institutional review board approval for the research was obtained from the investigators' institution and the two prenatal clinic sites where the focus groups were conducted.

Sample and Setting

A convenience sample of 22 pregnant Black women ages 18 to 35 years old who had at least two prenatal care visits were recruited from two large, urban hospital-based prenatal clinics located in Southeastern Michigan. Women were excluded if they had less than two prenatal visits and were not between the ages of 18 and 35 years old. The investigators, a Black research assistant (RA), and clinic staff recruited participants by posting and handing out study flyers that included a toll-free number in the prenatal clinic waiting rooms, and speaking with interested participants after their prenatal care appointment (see Table 1).

Data Collection

Three focus group interviews were held in private conference rooms located near the prenatal clinics. Each interview lasted from 1.5 to 2 hours. Group size was between 5 and 12 participants who met the eligibility criteria. A total of 22 women ($n = 22$) participated in the focus groups. Women were provided a light lunch and bus pass to the focus group locations. Each group was conducted by one of the investigators using a semistructured interview

Table 1: Focus Group Interview Questions

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1. Tell me about what and who has influenced your pregnancy?
 - Probe: Tell me about things you have done (activities, behaviors, habits) that have influenced your pregnancy?
 - Probe: Tell me about who (relationships) has influenced your pregnancy?
 - Probe: Tell me about experiences (life events, discrimination, exposures) that have influenced your pregnancy?
 - Probe: Tell me about feelings (fears/worries, wantedness) that have influenced your pregnancy?
 - Probe: Anything else that influenced your pregnancy?

 2. Tell me about the history information you were asked during prenatal visits
 - Probe: What history information were you asked?
 - Probe: What do you think was most important?
 - Probe: What was not as important?
 - Probe: Tell me what any history information you think should have been/be asked during your prenatal visits?
 - Probe: What should not be asked?

 3. Tell me about your past experiences with your prenatal care?
 - Probe: What did you like about your visit?
 - Probe: What did you dislike about your visit?
 - Probe: What parts of the visit do you think need to be changed or improved?

 4. Tell me about your interaction with your health care provider
 - Probe: What did you discuss during your visit?
 - Probe: What would you have liked to discuss that wasn't?
 - Probe: Tell me about how you were treated.
 - Did you feel you were treated with respect? Why or why not?
 - How would you like your provider to treat you?
 - Probe: What would you tell other women or close friends about your provider?
 - Probe: What kind of "vibes" do you get from your provider?

 5. What was the most important thing we talked about today?

 6. Was there anything we didn't talk about that you would like to?

guide (see Table 1). The interview guide was modified based on prior work by Martyn and Hutchinson (2001) conducted with Black teenagers who shared their strategies in avoiding pregnancy. Before each focus group, the co-investigators reviewed the study purpose, the confidentiality statement, and obtained informed consent from each participant. The RA and the other investigator took notes and monitored the recording equipment. Immediately following each group session, the investigators and the RA participated in a debriefing session to record initial impressions (e.g., nonverbals, highlights, striking themes). All focus group

interviews, debriefing sessions, and notes were audiotaped and transcribed verbatim. After each focus group, demographic data were collected and a \$50 gift was provided to the participants (see Table 2).

Data Analysis

Descriptive statistical and qualitative analyses were performed. Simple descriptive statistics were analyzed for participant demographic characteristics. Qualitative data were analyzed using the constant comparative method of analysis (Glaser, 1978, 1992) and was guided by the research question: What are the psychosocial factors that Black women perceive to influence pregnancy and thus, should be assessed during prenatal visits?

Rigor

Constant comparative method of analysis involved careful scrutiny of the data to identify patterns or themes that explained what was occurring in the data. This technique involved line by line examination of the transcribed focus group discussions to identify prominent themes related to the research question. Each theme was then reviewed until a main theme was identified. Initially, the investigators and the RA analyzed the data separately, and then met together to debrief and record memos of impressions and observations. This team approach enhanced conceptual insights and linkages. Theoretical coding, memoing, and sorting facilitated concept modification and integration.

Common themes of relationships, stress, routines, health history perceptions, and beliefs were identified. The simultaneous process of data collection and analysis along with validation with participants and colleagues contributed to validity (Lincoln & Guba, 1985). The identified themes were used to develop the relevant contextual factors for Prenatal EHC assessment of Black women.

Results

Demographics of Study Participants

Although the demographics of the Black women participants varied (see Table 2), the typical participant was a Black unmarried woman in her mid-20s who was pregnant with her second or third child in the third trimester of pregnancy, lived with her family, and was eligible for or received Medicaid.

Overarching Theme

The women in this study expressed a strong desire to talk with their providers about contextual factors

Table 2: Sample Characteristics

Variable	<i>n</i>	%
Age (years)		
19-22	5	22.7
23-25	11	50.0
26-28	6	27.3
Marital status		
Single	17	81.0
Married	4	19.0
Living situation		
Alone	5	22.7
With family	12	54.5
With significant other	5	22.7
Occupation		
Student	3	13.6
Work full-time	7	31.8
Work part-time	4	18.2
Unemployed	8	36.4
Income		
< \$10,000	9	40.9
\$10,000-25,000	4	18.2
\$25,000-50,000	7	31.8
Insurance		
Medicaid	19	86.4
Private	2	9.1
No insurance	1	4.5
# of living children		
0-1	9	42.9
2-3	11	52.4
3 or more	1	4.8
Trimester (weeks) ^a		
First (1-13)	1	5.2
Second (14-26)	5	26.3
Third (>27)	13	68.4

Note. ^aBased on *n* = 19.

outside the pregnancy that affected their overall well-being. This was viewed by them as an indication that their provider cared about them and

helped them to communicate. One woman explained:

They [providers] have to let you know they care. Come in the room, speak, make a joke. Ask how your day was. Sometimes even go off the pregnancy. How's work going? How's school going? Are you having any concerns at home any problems at home? Do you need to talk about anything? It really helps you feel better. It helps you open up more. It really does.

Five themes of psychosocial or “off the pregnancy” factors were identified from the data and were then used to develop categories for the Prenatal EHC. The themes were: (a) *relationships* which included who the women lived with, family, and neighborhood; (b) *stress* related to significant life events, daily stressors, discrimination, and environment; (c) *routines* including daily and self-care routines; (d) *health history perceptions* including past medical history, nutrition, risk behaviors, and pregnancy; and (e) beliefs related to spirituality, religion, and culture.

Relationships

The women shared in great detail how family and other relationships influenced their pregnancies. To many, this was an important topic, but often overlooked during prenatal care. As one woman stated:

I wish I would talk about my daughter . . . I didn't catch it until somebody told me that she was jealous of the new baby. She started peeing in the bed at night. Why? . . . I wished I would have talked to her about that, with a social worker or somebody.

The importance of family and family support, both giving and receiving support was a priority for the women.

. . . we all make mistakes. And those mistakes are quickly to be handled if you got a family that's behind you 100%. If you don't have a family that's behind you 100%, you not gonna get no where in life.

As another participant simply stated, “I'm always there for my daughter.”

Family and friends provided emotional and financial support throughout their pregnancies and even more after birth. Although women indicated

To “go off the pregnancy” expresses women’s desires for providers to address psychosocial factors during prenatal care.

family support was important to cope with problems, family responsibilities were also a source of stress. Stressful relationships both with family members, other children, and significant others were identified as a common theme by participants. The women identified the importance of discussing these relationships with their health care provider during their prenatal care visits.

Stress

Stress in the home, on the job, and in relationships with others was foremost in the minds of many of the women who thought stress had a significant impact on their pregnancies. One woman described the cumulative effect of stressors:

... if you're pregnant and you're having problems with finances ... you're depressed. You may be tired. Sometimes I feel like the home stress is worse than physical stress because it wears you down physically because you have work to do. So, you could not function, you can't function physically and you need to function physically.

Another woman talked about the daily stress and guilt related to not being able to be the mother she should be for her four children:

This is my fourth child and since this pregnancy I have been stressed since day one ... My kids, they do try to help me, but there are moments when I push them away from me, and I feel bad about that because I am the mother.

Apart from being pregnant, several women experienced significant stressful changes in their lives that left them on their own. One explained:

I come from a very religious background. I refuse to marry the father, and basically I got disowned ... and when he went to prison, that was my baby. When she was a week, he was gone. And that was my baby.

Routines

In response to the question, “Did you discuss issues with providers other than pregnancy?,” the women

stated fatigue was a barrier to spending more time and discussing personal issues with their providers. By the time the women met with their provider (after one hour or longer in the waiting room), they were already tired from work or family responsibilities. However, women still wanted acknowledgment from providers of the multiple roles they have in life and the responsibilities they have as mothers and wives. One described how overwhelming her multiple roles are:

If I sit out there for an hour, waiting for them to come in, I'm just ready to go. Let them do whatever it is they have to do today so I can go home. When you be pregnant, you tired ... I do waitressing and at night I do cooking. Then at night I come home and the house is a mess, and I clean up the house, and I get the girls ready for school and daycare for the morning. Then I have to pack lunches for my husband and my daughters, and I don't get to bed until about 1 o'clock, and I have to wake right back up at 7.

Another participant shared:

I've got a full time job. I work, and I've got the three girls and my husband ... I lay out all their clothes and stuff like that. It's just overwhelming.

Health History Perceptions

Obtaining a past health history is an important component to prenatal care. Depending on the health needs of the women, prenatal care is tailored throughout pregnancy to ensure optimal outcome for both mother and baby. Many women in the focus groups had significant past experiences with the traditional health care system and these perceptions shaped their understanding of quality prenatal care.

I think when they do all those tests ... I feel like, yeah it's frustrating, but I'd rather do that and get pricked, sit me down, ask questions. So, if there's something not right, I'm gonna call the clinic and speak to a nurse.

Despite the multiple tests pregnant women undergo, all were cognizant of the need and importance of receiving quality prenatal care. Quality prenatal care assessments included discussing their pregnancy history, past medical history, nutrition, and risk behaviors with their providers. For instance, depression, irregular eating patterns, and smoking

were concerns that were expressed by many pregnant women. As shared by this woman, providers can significantly influence those who are hurting physically and emotionally:

I got my examination at the other doctors because I didn't want to come here because I didn't want them to know that I was having an abortion. So, I went to another clinic. I hated the clinic. I felt so depressed. And I could feel like, if the Good Lord took me today, I'd be so happy. And that's how I felt. And when I got to the clinic, my doctor looked at me and said, "I feel your pain and that you've been going through depression." So, she started talking to me, and the more she talked to me, the better I felt.

The women described risk behaviors they engaged in and how it made them feel. One woman expressed:

Like I had started smoking cigarettes when I was pregnant. I was smoking cigarettes. My husband to this day still doesn't know that I was drinking and smoking cigarettes, and it would make me feel better because it would make me dizzy. And I would go in my room and go to sleep.

Beliefs

The women in the focus groups deeply valued their personal beliefs. These beliefs were rooted in their spirituality. Many women used prayer as a method to deal with their life stressors and to understand their difficult circumstances. Through prayer, the women were able to receive strength and courage to overcome negative thoughts about themselves and their relationships with significant others. Trusting on a higher power helped the women cope with stress of pregnancy and life in general. One woman stated,

... I would love for my baby's father to be here, but he's not, and that's because of him ... but I don't let it get me down anymore because I look at it as his loss. God sees everything and when it all comes down to it, you're gonna be congratulated. You're gonna get all the praise and everything for it.

When one participant was going through depression during pregnancy, she had considered an abortion, started to smoke and was not conversing with her family including her children. She shared

Prenatal Event History Calendar is a comprehensive contextually-linked history tool that shows co-occurrence of psychosocial risk behaviors/factors interacting over time to influence a woman's pregnancy.

how her family and God helped overcome her depression.

I felt so depressed. They [children] may not tell you, but if you talk to them and let them know how you feel, they will understand. I thank God for them and I am so glad I am over that point. Thank you Lord. But that's how I go through it. I started back to church, me and my husband go with the kids.

Another woman who was experiencing hardships in pregnancy due to lack of family and spousal support stated:

God. God is what helped. I don't know anybody who lives in my [apartment] complex, but God is what helped me.

Prenatal EHC

Using the five themes and subcomponents from the study, the authors developed a Prenatal EHC (see Figure 1). The Prenatal EHC provides an opportunity for women to share a comprehensive psychosocial history with their providers. In accordance with ACOG's recommendation of conducting a psychosocial risk assessment at least once each trimester, the EHC's one page format (11x17) allows for an integrated assessment of behaviors/concerns before, during, and after pregnancy. The Prenatal EHC grid is structured to inquire first about less sensitive information such as women's past medical and pregnancy history. The five columns represent the following time periods: before pregnancy, each trimester, and future plans. The 14 rows list psychosocial categories that were developed based on the themes identified through the focus groups (e.g., relationships, beliefs, etc.) and literature review. Each category includes questions about psychosocial factors that are used to complete the Prenatal EHC.

The Prenatal EHC extends beyond the standard yes/no questions on prenatal care assessment and provides a detailed timeline interaction of psychosocial risk factors. It is intended that a woman would complete an initial Prenatal EHC and at subsequent prenatal care visits update the EHC with the provider. Then the provider could talk about the

Prenatal Event History Calendar Number of: Pregnancies _____, Miscarriages _____, Abortions _____, Living Children _____
 Any Allergies? _____ Date of: Last Menstrual Period _____, Pap Smear _____, Mammogram _____
 Reason for today's visit/Questions? _____

	Before pregnancy	0-3 mo. Pregnant	3-6 mo. Pregnant	6 mo.-Delivery	Future Plans
Age					
Past Medical History Do you have any illnesses? Injuries? Surgeries?					
Pregnancy History How do you feel about being pregnant? What worries you? What pregnancy problems do you have? What medications are you taking?					
Nutrition What are your usual eating habits (fast food, milk, meats, fruits, vegetables, breads)? Do you take Vitamins/Calcium? Gained or lost wt.?					
Routines What are your typical activities & responsibilities? Typical sleep/rest?					
Family & Relationships Who helps you? Who do you help?					
Living Arrangements Where do you stay and who stays with you?					
Environment Are you exposed to bad air, water, food, or other things in your home, work, school, or community?					
Neighborhood Is your neighborhood safe? Do you have grocery stores, electricity, services, transportation?					
Beliefs What are your religious and cultural beliefs?					
Stressors What are your stressors (personal, family, work) and how do you handle them?					
Discrimination Have you been treated unfairly because of your race or income?					
Significant Events What good things have happened to you? What bad things? Have you felt threatened? Abused?					
Risk Behaviors Do you smoke, use tobacco, alcohol, drugs, or have other risk behaviors?					

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Figure 1. Perinatal Event History Calendar

woman's history of psychosocial factors, patterns over time, and sequence of events. As shown on the Prenatal EHC, the women answers the questions as listed on the domains (rows) underneath the corresponding time period (column). The use of the Prenatal EHC with Black women in clinical settings is currently being explored in a study being conducted by the authors.

Discussion

Findings from this qualitative study indicate Black pregnant women desire more discussion of psychosocial factors during their prenatal care visits in addition to their standard prenatal care assessments. To "go off the pregnancy" emphasizes the importance of attending to the psychosocial concerns such as relationships, beliefs, stressors, and routines Black women perceive to influence their pregnancies. Psychosocial issues, as defined by ACOG, are "non-biomedical factors that affect

mental and physical well-being," of pregnant women (ACOG, 2006). The results of the focus groups support ACOG's recommendation for routinely screening psychosocial concerns during pregnancy.

The participants of this study revealed that personal relationships were connected to the larger structural environment. The majority of the current sample was single and living with their extended family. Although families could be a potential stressor, many women believed their families provided them with needed emotional and financial support. This is consistent with previous research on provision of social support and birth outcomes. In a review by Logsdon and Davis (2003), provision of social support by the women's partners was positively correlated to women's adequate use of prenatal care (Schaffer & Lia-Hoagberg, 1997) and higher birth weights (Killingsworth-Rini, Dunkel-Schetter, Wadhwa, & Sandman, 1999).

A large body of research has been conducted in examining the role of stress and racial ethnic disparities in birth outcomes (Lu & Halfon, 2003). However, studies are now emphasizing the role of chronic stress (e.g., racism, discrimination, social relationships, environment, life events) and ethnic differences in levels of stress over the woman's life course as contributing to racial/ethnic disparities in birth outcomes (Giscombe & Lobel, 2005). Specifically, Black women delivering VLBW preterm infants were more likely to report experiencing greater lifetime interpersonal racial discrimination than those Black women delivering normal birth weight infants at term (Collins, David, Handler, Wall, & Andes, 2004). Understanding the pregnant women's living arrangements and their larger neighborhood context is an important factor contributing to positive birth outcomes. For instance, Shiono et al. (1997) found that living in public housing was negatively associated with birth weight while having a stable residence (living 3 or more years at a current residence) was positively associated with birth weight. Residential segregation (Bell, Zimmerman, Almgren, Mayer, & Huebner, 2006) and residing in violent communities (Collins & David, 1997) have been associated with lower birth weight, higher rates of prematurity and fetal growth restriction.

Women in the focus groups had multiple roles and responsibilities at home and at work. Kelley and Boyle (1995) explored the experiences of pregnant women who had multiple roles in the home and worked in the service industry. Similar to women in the focus group, these women described their roles at home as a mother, a spouse/partner, and a homemaker while also working. Multiple roles and responsibilities were related to negative health effects such as fatigue and emotional lability. However, the women coped with multiple role demands during pregnancy through health-promoting and religious activities and scheduling routines at work and home differently (Kelley & Boyle, 1995). Assessing the pregnant women's routines may help providers be more cognizant of the complex lives of the women. Greater awareness of the women's lives may promote higher empathy in providers which in turn could strengthen the provider-patient relationship and assist providers to tailor their care to meet the needs of the women.

To cope with multiple demands, inadequate resources, and lack of social support, many women in the focus group used prayer to deal with their stressors. The importance of spirituality during pregnancy was also described in a recent qualitative study of low-income pregnant Black and White

women ($n = 130$) living in the Midwest (Jesse, Schoneboom, & Blanchard, 2007). Face to face interviewing was conducted to assess for the effect of spirituality during pregnancy. Greater percentage of women (47%) interviewed stated that spirituality did affect their pregnancy as compared with those who stated that spirituality did not affect their pregnancy (45%). Spirituality offered women guidance/support, protection, blessing or reward, communication with God, strength and confidence, help with choices, and generalized positive affect (Jesse et al., 2007). Other studies on Black pregnant women have shown that being less spiritual was one of the predictors for depression (Jesse & Swanson, 2007) and a significant predictor of smoking in pregnancy (Jesse, Graham, & Swanson, 2006). In contrast, greater participation in organized religious activities and higher self-reported ratings religiosity were significantly associated with lower odds of reporting recent tobacco use among a large sample of pregnant women receiving prenatal care (Mann, McKeown, Bacon, Vesselinov, & Bush, 2007).

Prenatal care is composed of three main components: risk assessment, health promotion, and medical and psychosocial interventions (Lu et al., 2003). The past experiences of women in the focus group helped determine the types of psychosocial and medical treatments and services provided during prenatal care. Many women understood the importance of receiving medical screening tests and expressed a desire to discuss topics related to their medical/pregnancy and psychosocial history. Assessing for risk behaviors and nutrition in addition to past medical history is consistent with ACOG's (2006) recommendations.

The Prenatal EHC is designed to be completed by women while they wait for their prenatal care appointment. The provider could use the Prenatal EHC during the visit to talk with the women about psychosocial and other history that they recorded on the EHC. During the prenatal visit, additional history could be added by the provider to supplement what the women recorded. In future prenatal visits, the provider and the woman can use the Prenatal EHC at each or select visits (i.e., first, second, third trimester) to update the history. Using the EHC over time allows both the provider and the woman to see psychosocial issues, patterns, transitions, and progress throughout the course of the pregnancy. The Prenatal EHC provides insight into the women's psychosocial concerns before, during, and after pregnancy, and could facilitate patient-provider communication.

Limitations

This research was conducted with 22 pregnant Black women who received prenatal care from two large, urban hospital-based prenatal clinics located in Southeastern Michigan. Although significant psychosocial factors for prenatal assessment were identified, women in other settings and racial/ethnic backgrounds may have different experiences and concerns for what they perceive to influence pregnancy and should be assessed during prenatal care. Further research is needed with other racial/ethnic groups in various settings (e.g., rural clinics) to support the findings. Regardless of population type or setting, as emphasized by ACOG (2006), psychosocial assessment that extends beyond risk behaviors plays a vital role in monitoring and improving the health and well-being of pregnant women and their infants.

Conclusion

Prenatal care is a unique opportunity to address the multiple interactions of biological and psychosocial risk factors that contribute to racial/ethnic disparities in birth outcome. The Prenatal EHC provides an alternate method for providers to assess and understand the psychosocial context of Black women's lives. Research evaluating the clinical feasibility of the Prenatal EHC is needed.

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