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RESEARCH ARTICLE

Pregnancy Expectations and Experiences among Women in Southeast Ohio: Implications for Clinical Practice

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ABSTRACT

Background/Objectives: Nearly 4 million women experience pregnancy every year in the United States. While there is research about medical outcomes related to pregnancy, especially in the context of disease, there is a dearth of research related to pregnancy expectations.

Methods: This qualitative study explored women's expectations and experiences of pregnancy in Southeast Ohio. Participants attending a clinic were recruited for individual interviews onsite at the physician's office. Interviews were audio recorded and transcribed verbatim. Codes, in the form of descriptive labels such as words or brief phrases, were developed based on entire interviews.

Results: Results indicate that women experience pregnancy on a continuum, some women enjoyed the experience, some were ambivalent, while others did not enjoy the experience. Furthermore, some women reported that their expectations for pregnancy matched their experience(s), while others felt that their expectations did not match their experience. Some women also felt "judged" by other women and even health care providers if they did not "love" the experience.

Conclusions: Women experience pregnancy in a variety of ways, therefore, it is important that health care providers be sensitive to the notion that not all women enjoy the process, but they all want the same outcome of a healthy child. While it is important for health care providers to assess the physical health of the mother and the unborn child, this study demonstrated that it is also important to assess what an expectant mother knows about pregnancy and what she expects to happen.

Key Words: Pregnancy, Appalachia, reproductive health, contraception

(doi number goes here)

INTRODUCTION

Our understanding of women's expectations and experiences of pregnancy and childbirth are increasingly salient to informing and improving maternity policy, practice, education, and research.[1] The Centers for Disease Control and Prevention confirms that there were 3.9 million births in 2016 in the United States.[2] There has been extensive research about women's expectations and experiences around the world.[1,3,4,5,6] While women tend to report that they are satisfied with the care they receive during pregnancy and childbirth,[7] there is a tendency to focus on the medical outcomes related to pregnancy, especially in the context of health and disease conditions.[1]

Pregnancy expectations research has been conducted related to childbirth among pregnant women[1,8,9] and fathers-to-be.[10] Researchers have also explored parenthood among expectant parents,[11] the perfect baby among expectant mothers,[12] and working while pregnant.[13] Additionally, studies have investigated the experiences of Mexican-American women[14] and diabetic women[15] and provided comparisons based on race and ethnicity.[1] Furthermore, Miller et al.[16] explored postpartum social support among pregnant women. The collective body of research suggests that when women and/or parents have positive expectations, their outcomes are perceived as more positive than women/parents who have negative expectations.[9]

The current study focused on Southeast Ohio, part of the Appalachian region of the United States. Appalachia is a vast region covering over 205,000 square miles (530,000 kilometers) and is composed of mountainous terrain.[17] It is often ranked as one of the poorest regions in the country due to its low per capita income, which is among the lowest in the country and this perhaps explains the vast disparities in availability and access to adequate health care services.[18] While there is research about medical outcomes related to pregnancy, especially in the context of disease, there is a dearth of research related to pregnancy expectations and experiences in this region. Research on pregnancy in Appalachia is focused on risk factors for negative pregnancy outcome such as smoking,[19] intimate partner violence[20,21] as well as the impact of rural residence on birth outcomes.[22] Given that women experience pregnancy in a variety of ways, it is important to further investigate how women understand their pregnancy expectations vis-à-vis their lived experiences in Southeast Ohio, a region hampered by insurmountable health disparities. To that end, the purpose of the current study was to explore women's expectations and experiences of pregnancy in Southeast Ohio. Specifically, the study aimed to (1) better understand the expectations and needs of pregnant women in Southeastern Ohio and (2) examine the women's information-seeking behaviors, feelings regarding the support they received from doctors, family, friends, and others during pregnancy. The results of the current study will be used to develop hypotheses that can be tested in a larger quantitative study. Findings from the larger study will advocate for integration of services within existing maternal and social services as well as inform clinical communication trainings to enhance health care providers' sensitization to the expectations and experiences of expectant mothers.

METHODS

Setting, Design and Participants

Participants were recruited from a public OB/GYN clinic as well as a social media social support group for mothers within the area. The study had projected interviewing up to 40 participants, but 14 participants were deemed sufficient after reaching data saturation.[19] At the clinic, paper fliers were posted on poster boards and distributed to female patients attending the clinic, while electronic fliers were posted in the social media of support groups. All fliers contained the research team's contact information and participants were instructed to call/email to express interest. A snowball sampling method was also applied, whereby participants were asked to suggest other potential participants.

Procedures

After receiving consent, interviews were conducted for one hour and participants received a $15 retail store gift card for their participation. Participants were interviewed by three members of the research team. The semi-structured nature of the interview enabled the interview questions to reflect and be informed by the participants' experience, perceptions, and concerns. All participants consented to being audio recorded. All audio-recorded tapes were transcribed verbatim. Transcripts were compared with recorded interviews to ensure accuracy and the names of the women, family members, and caregivers were replaced with pseudonyms.

Measures/outcomes

A semi-structured interview guide was used to conduct interviews (available upon request). The semi-structured guide included questions about pregnancy onset (e.g. describe your reaction to finding out you were pregnant?, who did you tell first?, how and when did you chose to tell others?); expectations and actions taken (e.g. what did you expect to happen during pregnancy?, did your expectations match your reality?); family and relationships (e.g. were there changes in your relationship with others throughout your pregnancy?, do you feel your needs were met throughout your pregnancy?); support networks (e.g. what kind of support did you expect to receive while pregnant?, did you receive the kind of support you expected?); as well as demographic information (e.g. age, race, marital status, employment and insurance coverage).

Statistical Analysis

Thematic analysis of the data was undertaken, in keeping with the steps outlined by Green et al.;[4] namely, immersion in the data, coding, creating categories and identifying themes. Immersion in the data initially occurred in the interview phase, which was conducted by three of the authors and continued throughout the analysis process with repeated close readings of the transcripts, listening to the recordings, and discussion among the interviewers. Codes, in the form of descriptive labels such as words or brief phrases, were developed based on entire interviews. This was done by the three interviewers. A second round of coding was conducted through a cyclical process including the use of markers to color code each transcript based on the words and phrases identified in the initial coding. Open coding was then employed to create a list of categories, which was followed by discussion and comparison among the research team to determine the final list of categories. Finally, all interview transcripts were coded by two of the authors to identify themes based on relationships between the lists of categories.

Institutional Review Board Approval

Approval to conduct the study was provided by the Ohio University Institutional Review Board.

RESULTS

Fourteen (n=14) semi-structured interviews were conducted among women who were either pregnant or had given birth less than one year from the time of data collection. The mean age was 29 years and majority were non-Hispanic White (71.4%). Of those interviewed, 100% were partnered, 78.6% were employed, 57.1% had a college education and 92.8% had health insurance. Only 35.7% were currently pregnant and 64.2% reported that their pregnancy was planned. The median monthly income reported was $2303.57 (Table 1). Of the women interviewed, two had two previous children, two had one previous child, and ten of the women were discussing the pregnancy of their first child.

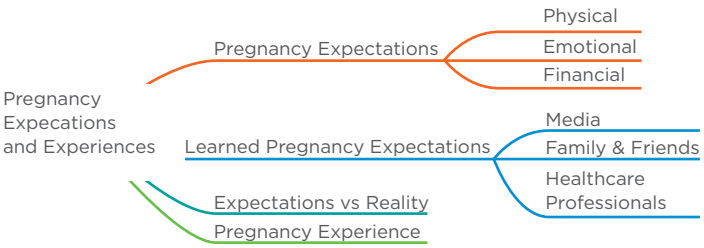
Table 1. Characteristics of women in the study (n=14)

Characteristic	Mean (SD) or %
Mean Age (range 21-39)	29.21 (SD = 5.7)
Currently pregnant	35.7%
Planned pregnancy	64.2%
Non-Hispanic White	71.4%
Married or partnered	100.0%
Insured	92.8%
Employed	78.6%
College graduate	57.1%
Median monthly income	$2303.57

Emerging Categories

Four major categories emerged from the analyzed interviews: pregnancy expectations, learned pregnancy expectations, expectations versus reality, and pregnancy experience. Within two of the four major categories, some sub-categories also emerged (see Figure 1).

Figure 1: Pregnancy Expectations and Experiences



Pregnancy expectations

Participants acknowledged that they had preconceived expectations throughout their pregnancy. These expectations were associated with physical (bodily changes), emotional, and financial expectations.

Physical expectations: Participants highlighted that the most common expected bodily changes were nausea, weight gain and fatigue.

For those participants who experienced nausea, they had expected the major change to be associated with physical change such as increase in breast size:

"The nausea. For some reason I kept thinking, man I'm going to get these giant boobs...oh gosh, I'm ready for these giant boobs. I'm going to be waddling I guess." (P1)

However, some did expect significant physical changes like weight gain, but were not aware of the extent to which such changes would be debilitating:

"Well I definitely expected this, the belly! I figured I would be tired, but it was more than expected, I was always so tired, like, this extreme fatigue." (P8)

It is apparent that weight expectations were obvious, but participants did not anticipate suffering from extreme exhaustion and nausea.

Emotional expectations: In addition to physical changes, participants also reported experiencing emotional changes that enhanced the bond between the mother and unborn child:

"Emotionally, I thought I would turn into the [most] sappiest, touching my belly, holding my bump. Ah, this is so beautiful, oh my gosh! Coming home from work being all tranquil just sitting, holding my belly, singing to it." (P7)

Other participants reported experiencing feelings of fear and anxiety. For example, one participant reported that she endured a plethora of emotions that were far beyond her expectations:

"I was really happy. I was really emotional, kind of scared, nervous, you know. I had so many emotions running through my body…I expected to be emotional and cry for no reason." (P10)

Emotional expectations seemed to range from happiness to fear to anxiety and much more given the hormonal changes they were experiencing during their pregnancy.

Financial expectations: While some participants reported physical and emotional roller-coasters, other participants' expectations were in relation to finances. Finances heightened their anxiety. For example, one participant reported that:

"I did have a few panic attacks, but I don't know if that was just from working the 2 jobs and my boyfriend stressing about the finances, which had me stressing out about finances." (P1)

Mental health challenges need to be examined further to ensure optimum health outcomes for the mother and unborn child. Participants acknowledged that financial expectations were not only influenced by the pregnancy but also anxiety from a significant other. Financial expectations were a primary source of negative stress for most of the participants:

"I constantly thought about the fact that we would need to try and save a lot more money for baby to come, we'd have to spend money because baby was coming, we'd have to buy new clothes because of my maternity clothes." (P7)

Financial expectations superseded both physical and emotional expectations, particularly for first time mothers. The anxiety of an additional mouth to feed signified increased anxiety.

With regard to women who had more than one child, their expectations were slightly different from first-time mothers. They acknowledged having less expectations and resulting anxiety. As reported by a participant:

"The first one I was probably anxious because it was the first child. This time I don't feel like I was too overly stressed or anxious not that I remember." (P4)

It is evident that pregnancy expectations were heightened in the first pregnancy as opposed to subsequent pregnancies.

Learned pregnancy expectations

In addition to individual expectations, some participants revealed that they knew what to expect due to exposure to media, family/friends and health care providers.

Media: Participants highlighted the salient influence of media in enhancing expectations of pregnant women. Most women reported learning about their pregnancy expectations from electronic media: websites, blogs, and web applications. As reported by a participant, she utilized the Internet to provide her with information:

"I would read a lot online. Any time I would feel anything new, I would look it up to make sure it was normal." (P12)

Other participants utilized their phones where they downloaded applications that helped them track psychical changes. For example:

"I have an app. The 'What to Expect' app…It shows me how much weight I should have gained by this point, and my baby is supposed to be the size of a cucumber this week. Like, almost a foot long. Like, wow!" (P8)

Participants who were tech savvy were able to access information using web applications and online websites. The challenge with such access is having to sift through a lot of information that may not always be accurate.

While some participants utilized online platforms on the web, other participants knew what to expect by watching television:

"Probably just TV, I don't think I read too many books…just from the fictional books that I had. Just knowing okay, you get pregnant and then all of a sudden you have a baby. No one really talks about the in-between that I was really uncomfortable, or I was going to the bathroom a lot. You have baby and you scream really loudly for like 10 minutes and then the baby is here. Which is all I really knew because that is what is represented in media. I also joined a couple online forums and used the What to Expect App." (P10)

Furthermore, some women formed online relationships with other mothers through Facebook groups or other networks:

"I am constantly talking to other mothers on social media. All my friends asking a million questions. Asking the doctors questions. Just a lot of word of mouth too you know. Just hearing people with their experiences." (P4)

The use of online resources could be related to the uncertainty many women expressed regarding pregnancy. These women acknowledged that they were interested in gathering as much information as possible to assist them during their pregnancy journey.

Family and friends: In addition to media sources and online relationships, many women also relied on family members and friends to understand what to expect:

"I didn't know a lot about babies so, I can remember getting things at my baby shower and not knowing what they were or what to do with them. I had a lot of help from my mom and my grandma and of course, my mother-in-law." (P2)

Participants acknowledged that having family members available to assist with the pregnancy, minimized anxiety that stemmed from traditional events such as baby showers. In addition, some participants knew what to expect because they had assisted their pregnant relatives.

While families were deemed very instrumental in assisting pregnant mothers who did not know what to expect, other participants acknowledged having friends who were available to provide a helping hand when the expectant mother did not know what to expect:

"I asked a lot of questions. I have a neighbor who was very helpful. Every weekend in the fall, last fall, we'd go up to Columbus and she took me to like Buy Buy Baby and Babies R Us and told me like, "you need this, you don't need this." So just was like a mentor. And I'd ask my in-laws, my mother and my mother-in-law, and they had children so many decades ago that the knowledge that they had wasn't current, they didn't remember, so like it was really nice to have someone who had just gone through it a few years ago." (P11)

The support from family and friends made a big difference and seems to have enhanced the participants' self-efficacy. Women with strong support systems tended to have more positive experiences.

Health care providers: Some participants acknowledged that they knew what to expect based on their interaction with their health care providers:

"Well my doctor, of course. I came in with a list of questions my first appointment, and I have a baby center app on my phone. If I have any questions, I just like type in the question and then I'll get answers that come up." (P9)

This participant's expectations about pregnancy were informed by her technology savvy skills and face-to-face time with her doctor. Her ability to utilize the web application on her phone and her proactive nature of asking questions enhanced her knowledge of what to expect.

Women who reported learning about pregnancy expectations from their doctors typically had very good experiences, based on a foundation on trust:

"I just started going with what the doctor had told me to do. By that time, I had a pretty good relationship with the doctor I had been seeing. So, I knew I could trust her with any questions that I had and try to see her as much as possible." (P6)

"She was very excited. She said she actually went down to the lab because she wanted to be the one to give me the results herself. She knew how much we had been wanting kids. So she waited for them to run the test and then ran the print up to us instead of waiting. So that was sweet." (P12)

Patient-doctor relationship for expectant mothers emerged as important in establishing trust that enhanced the probability of patient satisfaction with her pregnancy expectations as well as services rendered.

However, while some participants were happy with their health care providers' ability to address their pregnancy expectations, other participants expressed some level of disappointment with their patient-doctor experiences. These negative experiences varied largely and included: not being able to have their doctor present for delivery, feeling as though a doctor was indifferent to their concerns, not receiving desired or needed information from their doctor, and not being included in their health care decision making. The women who experienced these sentiments did not typically reference a previous positive relationship with their care providers:

"That doctor to be the one that I'm dealing with and seeing because she knows my chart, she knows my personality, she knows everything and here I am explaining everything to a new person every eight hour when they change shifts. So, I'm like ah, this isn't what I wanted, yeah. If you would've explained this to me beforehand, might've gone with the midwife who like hands out her cell phone and you just call her, and she is there the whole time. I liked my doctor and she did awesome throughout the pregnancy but for the actual birth I would have liked to have her there, the person I had been seeing, there." (P10)

Doctor-patient relationship for expectant mothers was deemed important because of the personal connection and trust placed on the doctor by the patient. This was important in ensuring patient satisfaction.

Expectations vs. Reality

Less than half of the participants reported that their expectations matched their reality. Most women reported a mismatch between their expectations and experiences of physical changes and emotional changes. Women were commonly shocked by the intensity of emotional changes as seen here:

"I think the overwhelming amount of emotions was the biggest thing for me. I was thrilled to be pregnant. I thought that was going to be it…I had done my research. But I wasn't prepared for the feeling of fear or anxiety." (P4)

While most women expected negative symptoms, many were surprised by what symptoms they had, or the intensity of their symptoms:

"I was a lot more uncomfortable than my expectation was. My expectation was, oh this glorious journey through pregnancy and growing this little human. It's not going to hurt or anything at all. I had PDS at 13 weeks…it hurt to walk, it hurt to sit, it hurt to pretty much be." (P10)

"I figured I would be sick a little and obviously uncomfortable towards the end of it. I had no idea that I would have what I felt like was the worst 10 months of my life." (P5)

Some women did, however, have compatible expectations and realities:

"I expected to nest and I really enjoy that I did. Um, I expected to have a healthy pregnancy and I think I did." (T11)

The juxtaposition between reality and expectations reveals the unpredictability of the physical body changes during pregnancy and the emotional toll these women experienced.

Pregnancy Experience

Most of the women reported positive changes in their relationships with others. For example, the pregnancy experience helped some participants' relationship with family members to blossom:

"The biggest change I saw was that I've always been very distant with my in-laws. They were suddenly excited to see me and wanted to spend more time with me and that was something I'd never known from them before." (P12)

"One of my siblings and I had a very rocky relationship before I got pregnant. And then he had been like 'you know, you're going to be having my nephew. I really want, you know, us to work things out.' So our relationship had gotten better." (P14)

When women were asked how they felt overall about being pregnant, some loved it, some were ambivalent, and others disliked it:

"I felt fine. Everybody is like man it is horrible and I am like it is not that bad." (P9)

"It was a really wonderful time of life, very special. Loved it." (P11)

"I honestly felt miserable the whole time. I didn't have that fun, warm pregnancy glow and wasn't anything like I expected." (P5)

DISCUSSION

The current study focused on Southeastern Appalachian Ohio and explored women's expectations and experiences of pregnancy. Four major categories emerged from the analyzed interviews: pregnancy expectations, learned pregnancy expectations,

expectations versus reality, and pregnancy experience. Although there is extensive study regarding the disease state and medical outcomes of pregnancy, there is a deficit in pregnancy related research. Knowing what expectations pregnant women have, and how they come about these expectations has great potential in the clinical and community setting. Because of the small sample size, these findings are only speculative and need to be researched further.

The study revealed that women experience pregnancy in a variety of ways. Most of the women reported pregnancy expectations in the form of physical changes, but few discussed expectations related to emotional changes. Documented evidence indicates that pregnancy expectations vary on a continuum of very positive to very negative, but most women anticipate parenthood with enthusiasm and excitement.[23] In the current study, women reported shaping their expectations about pregnancy by interacting with other pregnant women, reading books, finding information on the internet and, to a lesser extent, from their physicians.

Given that women experience pregnancy in a variety of ways, it is important in pregnancy that health practitioners provide credible information or resources about what to expect to happen physically and emotionally. Many women expressed some level of disappointment with their patient-doctor experiences. These negative experiences varied largely and included: not being able to have their doctor present for delivery, feeling as though a doctor was indifferent to their concerns, not receiving desired or needed information from their doctor, and not being included in their health care decision making. The women who experienced these sentiments did not typically reference a previous positive relationship with their care providers. Documented evidence reports that positive expectations are linked with better prenatal care, decreased substance abuse, adequate nutrition, and social practices that benefit maternal and infant health.[24] So, health practitioners need to assess the pregnancy related expectations and educate them on what are normal symptoms to expect while pregnant. One critique that arises in relation to studies that seek to address women's expectations is the fact that it is typically based on a pre-determined list of issues, reducing researchers' ability to share the nuances of experiences and opinions.[7,25] Additional studies will elucidate if these findings are related to doctors' patient load or training, the culture of the region, or other reasons.[26]

The majority of women said that pregnancy had a positive effect on relationships, and some expressed that they "loved" being pregnant and others were "miserable" while pregnant. Ayers and Pickering found that women who were generally anxious in pregnancy were more likely to express negative emotions and poor support.[27] Women with strong support systems tended to have generally more positive experiences. Many women reported that they learned what to expect with pregnancy through conversations or observations of family and friends. These women relied on their support systems for information on what to expect in pregnancy. On the contrary, Bouchard found that individuals who displayed overly optimistic and simplistic expectations before birth, despite social support, were likely to suffer depressive symptoms and marital dissatisfaction post-partum due to mismatched expectations.[28] It is paramount to caution pregnant women not to be overly optimistic but also provide both prenatal and post-partum counseling to prepare parents to face reality and resulting changes.[28,29]

This study only included women living in an Appalachian region because the study was conducted in an Appalachian County and recruitment primarily depended on referrals. Interviews were only conducted among self-selected participants which means that there are many who did not self-select who could have provided pertinent information. Thus, findings may not be generalizable across similar populations. The study was completed in one of the poorest county in the State of Ohio where the, median income is $37,191 annually and 29% of the population live in poverty, compared to $52,652 and 12% for the rest of the state.[30] Comparatively, our study median income was about $28,000, which would suggest that our study included a diverse range of individuals. And while the county in which this study was conducted has a major research university, which draws women from all over the world, we did not limit the inclusion criteria to only women who were born and raised in Appalachia because the purpose was to better understand the expectations of all women who reside in Appalachian Ohio. However, in future research we will compare the experiences of women who are born and raised in Appalachia compared to women from outside the region.

CLINICAL PRACTICE IMPLICATIONS

This was one of the first studies conducted to better understand how women learn about what to expect when they are pregnant in Southeast Ohio. While it is important for health care providers to assess the physical health of the mother and the unborn child, this study demonstrated that it is also important to assess what an expectant mother knows about pregnancy and what she expects to happen. If these expectations are not grounded in reality, then it is important for health care providers to help the woman understand what to anticipate emotionally, physically, and financially during the pregnancy. To that end, it is important that health care providers integrate other services within maternal and pregnancy care via referrals for counseling support, nutritional support, and social services support. Such integration ensures that clinicians are not overwhelmed, and patients do not fall through the cracks of health care services.

PUBLIC HEALTH IMPLICATIONS

In relation to pregnancy, overall maternal, infant and child health is a critical goal in ensuring the health of the public. According to Healthy People 2020, in order to ensure the well-being of the mother and child, pregnancy provides an avenue to recognize any prevailing health issues in women in order to mitigate future problems in this population. To that end, this study contributed to the existing body of research by providing pertinent information that expands on the larger maternal and child health issues. Participants' negative experiences were intertwined with their expectations not being met. For instance, participants who reported not receiving desired or needed information from their health care had an expectation (whether stated or implied) that they would get that information from their care provider. This is salient knowledge for public health efforts to better educate mothers, families and care providers of the need to consider and work to address factors, such as patients' expectations, doctors' patient load, and cultural competency, which can lead to conflicting expectations and experiences. From a public health perspective, this study found that a better understanding of the expectations and needs of pregnant women and examining their information-seeking behaviors, feelings regarding the support they received from doctors, family, friends, and others during pregnancy, can help align women's expectations and experiences. This could help to improve the likelihood of pregnant women experiencing and reporting more positive encounters as health care practitioners learn about women's pregnancy related expectations and work to manage those expectations by providing accurate information.

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