



A Cross-Cultural Analysis of the COVID-19 Pandemic's Impact on Antenatal Healthcare-Seeking Behaviors in Ghana and the United States

Journal of Patient Experience
Volume 8: 1-9
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DOI: 10.1177/23743735211062392
journals.sagepub.com/home/jpx


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Abstract

The coronavirus (COVID-19) pandemic impacted healthcare systems worldwide. In this study, we conducted qualitative interviews with pregnant women in Ghana and the United States (US) to understand their antenatal care (ANC) experience. Adapting to the virtual nature of the pandemic, social media platforms Facebook and WhatsApp were used to recruit, consent, enroll, and interview women. Interviewers used a semi-structured guide with content validated by the US and Ghanaian collaborators. Audio recordings of the interviews were transcribed, coded using Dedoose (v8.0.35, Dedoose) and grounded theory, and analyzed for recurring themes. Between May and July 2020, 32 women (15 Ghanaians, 17 Americans), aged 25–40 years were interviewed. Major themes emerged: (i) apprehension about ANC services; (ii) disruptions to planned healthcare provider use; and (iii) changes in social support. Although the women strove to retain their ANC as planned, the pandemic universally caused several unanticipated changes. Given associations between higher maternal mortality and poor outcomes with inadequate ANC, specific policies and resources for telehealth education and intra- and postpartum support should be implemented to reduce disruptions to ANC imposed by COVID-19.

Keywords

COVID-19, qualitative study, maternal health, antenatal care

Background

Increased global access to maternal and perinatal healthcare services over the past decade reflects a unified effort to reduce maternal mortality worldwide (1). However, as countries have responded to the SARS-CoV-2 (COVID-19) pandemic by implementing national or local lockdowns (2), there is increasing concern that the downstream ramifications of these policy changes will disrupt antenatal care (ANC) and general health delivery services for pregnant women, particularly those in low- and middle-income countries (LMICs).

In the West African country of Ghana, the first confirmed case of COVID-19 detected in March 2020 precipitated multiple countrywide restrictions that enforced stay-at-home measures and limited community contact (2). In the United States (US), restrictions also were imposed, but with great variability by state and localities. The fact that Ghana and the US differ economically (LMIC vs. high-income country, respectively), in healthcare infrastructure (majority

public vs. private, respectively), and more broadly in cultural norms surrounding maternity, provided an opportunity to explore how pregnant women in such disparate settings have adapted to the COVID-19 restrictions to maintain their ANC care.

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The infrastructure of the Ghanaian and American healthcare systems and how they relate to ANC is important to consider when determining COVID-19's impact. In Ghana, the National Health Insurance Scheme (NHIS) covers citizens receiving care at government-funded hospitals and facilities, with a private sector that does not accept NHIS but charges patients directly. Most Ghanaian women receive ANC at public hospitals (3), and 79% of births occur in hospitals. The final consideration is that the labor wards in Ghanaian hospitals typically consist of multiple beds in one room, with little privacy. As such, there are spatial restrictions on patient support (4). The US system consists of both private and public systems, with a majority enrolled in private insurance plans (5). Pregnant women attend ANC in offices and at hospital clinics; the majority of women living in the US deliver at hospitals in private rooms (6). With COVID-19, telemedicine has become a more frequently used option in the US (7).

As the pandemic continues, little is known about how the COVID-19 crisis has affected pregnant women's ANC utilization. In this study, we sought to conduct a cross-cultural comparison of the experiences of pregnant women in Ghana and the US to identify women's concerns, preferences, and adaptations to ANC during the pandemic. Understanding the context-specific determinants of ANC utilization in these two countries during the pandemic could help set priorities for women's health globally and inform future maternal healthcare policies during a crisis of this nature.

Methods

Adapting to the virtual nature of the pandemic, pregnant women living in Ghana were recruited to participate in this qualitative research study through social media posts on the Women and Child Health Advocacy Group (WaCHAG)-Ghana Facebook page, while pregnant women living in the US were recruited via the researchers'

Table 1. Ethnographic Interview Guide.

1. How has your pregnancy been?
2. Is this your first pregnancy? If not, which one? How does this pregnancy compare to your last one or what you expected?
3. How did you feel when you learned about the pandemic and/or lockdown
4. Has anything related to your pregnancy changed since the coronavirus emerged?
5. Where do you typically go to seek antenatal care?
6. Where did you go for antenatal care prior to coronavirus?
7. Has where you go to seek antenatal care changed since coronavirus emerged?
8. Has your healthcare provider given you any guidance about how to stay safe from coronavirus?
9. Where do you plan to give birth and why?
10. Have your birth plans changed since the coronavirus pandemic emerged? If so, how?

Facebook network, with subsequent snowball sampling. WaCHAG-Ghana is a non-governmental organization (NGO) focused on reducing maternal and child mortality since 2018, with a broad reach across Ghana (8) and over 50,000 members as of July 2021 (9).

To be eligible, participants had to be currently pregnant and residing in Ghana or the US, provide a valid telephone number, and have access to Zoom or WhatsApp video call capability. Consenting participants who completed a short REDCap (Research Electronic Data Capture) screener and demographic survey were contacted to schedule a one-on-one interview. The REDCap platform enabled a central location to inform participants about the study, recruit those interested in the study, complete the consent process, and ensure the privacy, confidentiality, and data protection of each participant. To capture the experiences of a diverse cohort of pregnant women in both countries, we

Table 2. Demographics.

	US Cohort <i>n</i> = 17		Ghana Cohort <i>n</i> = 15	
	<i>n</i>	Percent (%)	<i>n</i>	Percent (%)
Age range (years old)	27–40		25–37	
Demographic	<i>n</i>	Percent (%)	<i>n</i>	Percent (%)
Ethnicity				
Non-Hispanic	16	94.1	..	..
Hispanic	1	5.9	..	..
Ashanti-Akan	..	..	6	40.0
Ewe	..	..	2	13.3
Grusi	..	..	2	13.3
Other/prefer not to answer	..	..	4	26.7
Race				
White	11	64.7	..	..
Black	4	23.5	..	..
Asian	2	11.8	..	..
Setting of Residence				
Urban	8	47.1	11	73.3
Rural	6	35.3	4	26.7
Suburban	3	17.6	..	..
Region of Residence				
South	6	35.3	..	..
Midwest	4	23.5	..	..
West	4	23.5	..	..
Northeast	3	17.6	..	..
Greater Accra	..	..	8	53.3
Ashanti	..	..	2	13.3
Central	..	..	2	13.3
Volta	..	..	1	6.7
Northern	..	..	1	6.7
Eastern	..	..	1	6.7
Marital Status				
Married	12	70.6	14	93.3
Single	5	29.4	1	6.7
Parity				
Zero	4	23.5	8	53.3
1+	13	76.5	7	46.7

prioritized contacting and interviewing participants from a wide range of geographic regions, level of education, and employment status.

A semi-structured interview guide was created (Table 1) and content was validated by the US and Ghanaian collaborators of the WaCHAG-Ghana team prior to study launch. Interviews ranged from 45 to 60 minutes and were conducted from the US jointly by the research team. No repeat interviews were carried out, though we re-contacted participants for clarification as needed. Audio recordings of the interviews were transcribed verbatim and manually coded using Dedoose (v8.0.35, Dedoose Hermosa Beach, California) and grounded theory. Both descriptive and reflective field notes were recorded during and after interviews and continued until both interviewers reached a consensus of data saturation when the ability to obtain additional new information had diminished and no further coding was necessary.

All transcripts were initially coded separately, then recoded as new or more refined themes were derived from the data. Codes were aggregated into overarching themes. After each interview was independently coded, researchers met to discuss coding differences. Specific quotations within each coded category were analyzed to identify themes among participants' responses, with a particular focus on how maternal healthcare utilization and ANC practices in both countries were impacted by the COVID-19 pandemic. All study materials and processes were expedited and approved. The study followed COREQ reporting standards (S1). Interview transcripts and additional data are available upon request.

Results

Between May and July 2020, 32 women (15 Ghanaians, 17 Americans) aged 25–40 years consented and were interviewed for the study (Table 2). Twenty-four US respondents were contacted for interviews, but 7 were lost to follow-up, leaving 17 in the study. Similarly, 18 respondents from Ghana were contacted, but 3 were lost to follow-up, leaving 15 in the study. Reasons for participant dropout are unknown.

Table 3. Key Findings (Themes and Subthemes).

Apprehension About Attending ANC
Fear of increased COVID-19 exposure at ANC appointments
Preference for in-person over virtual ANC appointments
Inadequate provision of resources to support emotional and mental well being
Disruptions to Planned Healthcare Usage
Delayed care, less frequent appointments, and poor communication
Switching healthcare facilities
Changes in birth plan and access to support personnel
Changes in Social Support
Changes in access to support system
Acceptance of increased exposure risk to gain access to pre-and postpartum support
Lack of childcare options during the pandemic

Three major themes emerged from the analyses using an iterative coding process: (i) Apprehension about ANC services, (ii) Disruptions to planned healthcare provider usage, and (iii) Changes in social support (Table 3). Code list including individual code counts can be referenced in the Supplemental Materials (S1 and S2).

Apprehension About Antenatal Care Services

Fear of Increased COVID-19 Exposure at ANC Appointments. Women from both cohorts described feeling “*uncomfortable*” about attending their ANC appointments amid the lockdown, and some delayed onset of care. They expressed heightened levels of stress, frustration, and fear, particularly of their increased vulnerability to COVID-19 infection due to the immunosuppressive effects of pregnancy and perceived increased risk of exposure upon leaving their homes. Ghanaian women expressed more explicit fear, describing they felt “*very worried to the point [of] crying.*”

“I was really terrified. It got to a point I was too afraid to go to the hospital.”

- Ghana, 3rd trimester

Another Ghanaian took her ANC into her own hands and “*... went to the pharmacy myself and bought folic acid so I was taking that without any prescription from anyone.*” She reported her gestational age at her first ANC appointment to be “*about 17 weeks ... I didn't go at all in my first trimester.*” She reported missing three appointments because she feared exposing herself to the virus.

Along with discomfort about attending ANC, some US women described “*feeling really disconnected*” from their pregnancies due to COVID-19-related changes to daily life. One woman shared, “*I haven't really felt pregnant.*” Offered an extra in-office visit for an additional ultrasound, the same woman stated that she normally would have considered this, but with the risk of exposure, “*it just seemed frivolous.*”

Preference for in-Person Over Virtual ANC Appointments. Despite the potential for COVID-19 exposure, women from both countries expressed a preference for in-person over virtual visits. None of the Ghanaian women were offered telehealth options. When asked if they would have accepted telehealth if offered, all stated they would not, because of perceived limitations of care by phone.

“If they are going to check on me via the telephone, how will they assess me? There are times I feel pain, abdominal pain, side pain, you go and complain, and they take a look at it. Sometimes a scan is performed ... If you stay home, you wouldn't have access to the scan ...”

- Ghana, 2nd trimester

“You just can’t describe everything perfectly to your doctor on the phone.”

- Ghana, 3rd trimester

In the US, most women also expressed skepticism about telehealth (it *“just doesn’t feel the same”*), voicing concern about the quality of care they would receive *“just by talking on the phone.”* Much of the hesitation related to unfamiliarity, shorter, less-structured virtual visits, and because *“it’s really helpful for me to be in person, because I feel more comfortable that way.”*

“I think it’s hard for me to get all my questions over video. And it’s just not the same because they’re supposed to be measuring your belly and you know, tracking the heartbeat, your weight gain, your blood pressure, getting a urine sample. I’m not getting any of that.”

- US, 2nd trimester

Women in the US often reported their physician’s office offered only telephone rather than video options, and one expanded on the importance of adequate investment in telehealth infrastructure:

“Being creative about reaching folks ... would be good for them ... there’s probably a lot more pregnant women that are super anxious and nervous and need some encouragement.”

- US, 2nd trimester

Inadequate Provision of Resources to Support Emotional and Mental Well-Being. Women in this study felt that aside from routine depression screening, healthcare providers lacked the capacity to adequately acknowledge and address the impact of the pandemic on their mental health throughout their pregnancies. In both countries, pregnant women were left to make critical healthcare decisions on their own, filling in gaps in their care using the knowledge they had gained from previous pregnancies and prior healthcare experiences. Those with prior pregnancy experiences speculated that a first-time pregnancy during the pandemic would have been even more challenging to navigate:

“I think any first-time mom or somebody who didn’t work in healthcare would definitely have a lot more challenges ... because they ... don’t know how to navigate the system.”

- US, 2nd trimester

Disruptions to Planned Healthcare Provider Usage

Delayed Care, Less Frequent Appointments, and Poor Communication. Despite efforts to regularly attend ANC appointments, many

women reported significant disruptions. In-person appointments felt *“rushed”* because providers seemed *“in a hurry”* to conduct visits quickly to minimize COVID-19 exposure. Most women reported providers canceling appointments or scheduling fewer of them. One woman recalled, *“they were even suggesting people not come in until 20 weeks, and that seemed like a long time to wait for a first in-person appointment.”*

Above all, the women voiced the need for more effective communication from their healthcare providers:

“When we have our appointments ... we go over what we need to and then we’re done. She never really talked to me about ... how being pregnant is high risk with this virus. She’s just like, we don’t want you in the office if you don’t have to be, but there really hasn’t been a whole lot of communication.”

- US, 2nd trimester

“When you ... ask [healthcare professionals] a lot of questions, sometimes they feel like you’re taking all their time. Because of the pandemic now they barely have time, they don’t really talk much to us about anything.”

- Ghana, 2nd trimester

Switching Healthcare Facilities. Ghanaian women often reported switching healthcare facilities and providers in response to pandemic-related changes, including government hospital restrictions on the number of available appointments. They felt switching to private hospitals was necessary to *“avoid crowded government [public] hospitals”* and *“long queues.”*

“It wasn’t my intention to ever attend the private hospital during this pregnancy, but I have to because I can’t access the government ones because of the closures.”

- Ghana, 2nd trimester

“[At the government hospital], you can’t go for your monthly check up ... If something happens, you have to stay away for 2 months ... So I had to look for another facility. I have friends who were told not to come at all, until they have emergency.”

- Ghana, 2nd trimester

These disruptions in continuity of care placed further financial burden on the women because private hospitals *“don’t take [national health] insurance,”* and to avoid exposure, women who would have normally taken public transportation spent *“four times”* more money using private transportation to get to appointments. Switching healthcare

facilities and providers was not a common phenomenon experienced by the US women in this study. Two suburban/rural US women reported their providers had practices in more than one location, the closer of which closed during the height of the pandemic. Thus, they were able to retain this provider throughout their ANC visits but had to travel a farther distance to obtain this care.

Changes in Birth Plan and Access to Support Personnel. When asked whether they were planning to deliver vaginally or via cesarean section (CS), some US women reported modifying their planned delivery methods due to the uncertain nature of the pandemic. One woman who elected a CS expressed, *“It was comforting to me to have a definitive date ... it just gave me more peace of mind to have a plan.”*

Another woman in the US reported she was *“originally going to try [for a Vaginal Birth After Cesarean (VBAC)], but we actually changed our minds and scheduled a CS because I think it was the one thing [that brought] some certainty to the pregnancy ... [and] so we can get in at a certain time, get it done and ... get out.”*

US women reported more significant changes to their birth plans and use of support personnel than Ghanaian women. Women who initially wanted doulas expressed concerns over COVID-19 restrictions limiting doula support to exclusively virtual:

“Having someone like a doula would’ve been a really attractive option. But right now, there’s a possibility they might not be able to be [at the birth] and I don’t feel like that’s worth the expense at all.”

- US, 2nd trimester

“I was really excited about maybe getting a doula but then having it be automatically a virtual thing—it was a little less appealing for me.”

- US, 2nd trimester

Several US women who opted to include a doula, planned to labor at home with their doula for as long as possible before transferring to a hospital. None of the women interviewed ultimately decided on either foregoing the presence of their husband in favor of a doula during delivery or birthing at home rather than at a hospital or skilled birthing center, but both were common considerations. Several women mentioned knowing other pregnant women who had decided to forego partner support in exchange for their doula during delivery to comply with COVID-19 restrictions.

Changes in Social Support

Changes in Access to Support System. The pandemic disrupted social support systems surrounding pregnant mothers in both countries. The majority of these disruptions resulted in

reduced in-person support and women heavily relying on technology to “see” others. Many women felt sad and isolated, unable to experience their pregnancy how they had expected to with family and friends:

“That [celebrating with family] hasn’t been able to happen in person ... that’s probably been my biggest point of grief ... just not being able to share it in the same way with my family.”

- US, 2nd trimester

An additional concern pertinent to Ghanaian women was fear of being unable to restrict friends and family from visiting (as is customary), and thus failure to maintain social distancing. To prevent visitors and minimize exposure risk, most Ghanaian women decided against telling friends and family about the pregnancy, furthering their sense of isolation.

These changes contributed to some women of both cohorts feeling emotionally disconnected from the pregnancy because they could not celebrate the pregnancy milestones they had expected, including sharing the news with others in person, shopping for nursery items or baby clothes, or learning the baby’s sex together with their partner. One American woman described the pandemic as *“kind of a cloud over a lot of [the pregnancy].”*

Acceptance of Increased Exposure Risk for Pre- and Postpartum Support. Ghanaian women in this study, more so than US women, frequently emphasized the importance of receiving mothers’ or siblings’ support in person both during and after the pregnancy. Especially first-time mothers were willing to incur additional exposure risk through travel to receive this direct support:

“Even though I’ve been alarmed ... I still need her here. This is my first time and I wouldn’t know what to expect.”

- Ghana, 3rd trimester

In contrast to the Ghanaian women, many US women stated they would not involve their mothers due to increased risk of exposure to both parties, a decision they found very difficult but necessary:

“I was hoping that my mom would be able to come out and spend a couple weeks with us, but ... I don’t think it’s something that I’m comfortable with at this point, the thought of her flying through multiple airports and then making it to our home. Just the possibility that somebody could get sick is too much for me ... we’re just kind of going to be our own island unto ourselves.”

- US, 2nd trimester

“I’m kicking [my parents] out when we get home, which is gonna suck, because we’re going to have a toddler and a newborn, and I’m worried I’m going to be recovering from a C-section. But I won’t know for a couple of weeks if we’ve been exposed when we’re in the hospital, so I’m not willing to risk exposing them until we know we’re healthy or not.”

- US, 3rd trimester

As a result, American women relied more heavily on spousal support and expressed increased distress about restrictions barring partners from attending ANC appointments and/or possibly attending the delivery itself. These drastic changes were “terrible,” “challenging,” “disappointing,” and “certainly not something [they] expected to ever have to think about.”

Lack of Childcare Options During the Pandemic. Both cohorts identified childcare as a key support that they lost because of lockdowns. Women found it difficult to secure childcare during ANC appointments, often resulting in partners not being able to attend ANC appointments to provide childcare or having to provide childcare themselves at all times (e.g., during working hours, going to appointments, picking up medications from the pharmacy). COVID-19-related school closures exacerbated this stress, creating “stressful changes” in routine:

“My husband and I are the sole providers for our older child, which means he has not gotten to come with me to doctor’s appointments.”

- US, 2nd trimester

“My son is at home because of the pandemic. So when I am going to ANC and my husband is not available, I have to carry him along and it’s a lot of stress for me. It takes a toll on me, [carrying] him along everywhere I go.”

- Ghana, 2nd trimester

Another woman reflected that the lack of time due to balancing childcare obligations with pregnancy limited her ability to participate in virtual birthing classes and other time-consuming methods of preparing for delivery, causing her to ultimately opt for a medicated delivery (e.g., using an epidural):

“For this pregnancy I was thinking ... do I want to get an epidural, do I not ... I remember saying to my husband, I don’t have time for that. Right now with no childcare ... you basically collapse into bed every night.”

- US, 2nd trimester

Discussion

To determine the culture- and context-specific implications of COVID-19 on antenatal healthcare behaviors among women in Ghana and the US, this study qualitatively explored the experiences of pregnant women of varying parities, trimesters, and geographical locations across both countries. Current research fails to encompass the culturally diverse needs and priorities of pregnant women to inform country-specific policy changes and responses to a global outbreak (10). The aims of this study align with speculations that the pandemic has had significant potential repercussions on childbearing women (11,12). To our knowledge, this is the first cross-cultural comparison of pregnant women’s preferences, concerns, and lived experiences regarding their healthcare-seeking behaviors in response to the COVID-19 pandemic in Ghana and the US. Ultimately, we found that the pandemic did not reduce adherence to ANC visits, but instead created barriers for women striving to retain high-quality ANC amid the pandemic.

Most women in this study were forced to reconsider their preferences during pregnancy as governments instituted policies to mitigate disease spread. They were particularly concerned about restrictions limiting support persons and reported that these measures failed to consider the impact they would have on women. Limiting access to trusted supports such as doulas and spouses can increase mental distress and worsen perinatal outcomes (13,14). When entering the hospital for delivery during the pandemic, the burden of mitigating exposure risk should not be placed on the patient in the form of laboring without support. Thus, policies allowing women to retain their labor support system while simultaneously reducing the infection risk of COVID-19 should be considered.

Daycare closures further complicated the issue of labor support. Women in the US found COVID-19-induced daycare closures especially stressful, as most had anticipated their spouses’ presence during delivery. Because Ghanaian women rely on more informal networks for childcare (15), they continued to turn to mothers and extended family members (often in different regions of Ghana) for in-person help throughout pregnancy, despite increasing risks for COVID-19 exposure. Policy makers should consider childcare an essential component of support for pregnant women while they attend ANC appointments and during labor and delivery. Potential solutions include federal aid packages that include expanded family leave benefits such as paid time off (16), and federal aid to incentivize healthcare systems to provide subsidized on-site childcare (17). For example in March 2020, the Italian government introduced a COVID-19 family leave for parents of children up to 12 years old who were unable to work due to childcare responsibilities (18). Childcare options would provide pregnant women with additional support and alleviate undue stress imposed by the lack of childcare resources during the pandemic.

Notably, women of both cohorts expressed fear about COVID-19 exposure while attending ANC; however, this was not mutually exclusive with preferring virtual ANC

appointments. Although Ghanaian women more frequently used strong language such as “terror” when describing this risk, they were less enthusiastic about the possibility of receiving ANC via telemedicine. They emphasized how, despite being terrified of potential COVID-19 exposures, the only way to ensure high-quality care was to attend appointments in person. American women expressed partial agreement of ANC via telemedicine, while still expressing skepticism about the quality of care provided virtually. Thus, both cohorts of women preferred in-person ANC visits.

With the integration of assistive technologies such as Doppler devices, blood pressure cuffs, and scales to monitor the weight gain during virtual visits, telemedicine has the potential to provide ANC that meets the standards of care (19). However, the abrupt transition to telehealth in response to COVID-19 did not allow for this, resulting in the perception of unsatisfactory care. Many US women described the telehealth they received as limited to a phone call. The Ghanaian women in our study were not offered remote care options, and distrusted that telehealth could ever achieve the same level of care as in-person appointments. With appropriate government support, funding, and infrastructure, delivery of standardized, uniform telehealth services to pregnant women has the potential to improve the quality of ANC and obstetric care, particularly given restricted mobility and fear of crowded facilities. For example, the inclusion of virtual visits between in-person appointments may alleviate pregnant women’s concerns about fewer and more spaced-out appointments during times of high exposure risk. The capabilities and coverage of telehealth are advancing in countries including Ghana despite relatively lower availability of telehealth technologies (20), and continued investment in telehealth resources would better support the needs of pregnant women.

Having such telehealth infrastructures will help providers respond adeptly to future health crises and gain patients’ trust. Improving community-driven education about telehealth using adaptive approaches, and further integration of it into health systems will be crucial to its incorporation into ANC and overall obstetric care.

In both countries, women voiced increased levels of stress, anxiety, and apprehension regarding their mental well-being in response to COVID-19, demonstrating an unmet need that can be mitigated through the integration of additional mental health services for pregnant women, particularly in countries and cultural contexts where mental health has not been prioritized. Resources should be available so that healthcare professionals can more robustly address the mental health of their pregnant patients, such as asking questions that address their emotional health beyond screening for postpartum depression. This is consistent with the WHO’s Millennium Development Goal of improving maternal health (21). In times of crisis, such as the current pandemic, a model of care should incorporate additional ANC visits that focus on pregnant women’s mental health and emotional well-being. Inclusion of this care has the potential to alleviate intra- and postpartum mental health challenges and enhance

patient-provider relationships throughout the uncertainties of a crisis. Although the mental health and well-being of pregnant women during the pandemic emerged as a key finding, this study did not investigate whether participants had a prior history of anxiety or depression which may have been an underlying factor contributing to their mental health status. Whether preexisting health conditions or prior mental health history may significantly impact the experience of pregnancy amid a pandemic is an important and relevant question for future studies.

Limitations and Future Directions

To our knowledge, this is the first qualitative study to use a cross-cultural lens to highlight the lived experiences of pregnant women’s ANC experiences and concerns during the COVID-19 pandemic in Ghana and the US. However, several limitations of this study merit consideration. Relying on social media and snowball sampling techniques for recruitment eliminated women without access to social media, potentially resulting in a biased sample of participants with higher levels of education, higher socioeconomic status, or living in higher urban concentrations. Despite efforts made to interview women living in rural settings, unstable internet connections for the participants and subsequent loss to follow-up resulted in a potentially biased cohort of study participants. In addition, the Ghanaian women recruited from the network of WaCHAG may, at baseline, have had more knowledge and expectations about ANC than the general pregnant population. Lastly, although the interviewees (KGN, PAH) are from the US, both worked closely with the Ghanaian researchers on the team (MAO and RSK, a midwife herself who provides care and education for pregnant women in Ghana). Throughout this study, Ghanaian research members provided the appropriate cultural context to interpret the study findings and helped inform the team’s understanding of the implications of the COVID-19 pandemic in the context of pregnancy and existing cultural norms.

Conclusion

In the face of COVID-19, the challenges faced by pregnant women in both Ghana and the US exemplify the need to strengthen perinatal health policies to better represent the context-specific priorities of women in both countries. Cultural differences were identified between the two cohorts, but the striking similarities between women in this study demonstrate how these findings represent a universal experience of pregnancy during a pandemic. It is imperative that during a global crisis, policymakers’ decisions take into consideration the needs of pregnant women. As policies are strengthened, developed, and implemented according to the population’s healthcare needs, they should undergo a formal evaluation to ensure they are sufficient and effective in their environment both during and following a global crisis of this nature.

Author's Contribution

RSK and JCG served as content advisors and manuscript editors. KGN, PAH, and MAO. contributed to the design and implementation of the research, to the analysis of the results, and to the writing of the manuscript.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the School of Medicine and Dentistry, University of Rochester. The Office of Medical Education and the Department of Emergency Medicine at the University of Rochester School of Medicine funded this project, but had no role in study design, data collection, analysis, data interpretation, report writing, or decisions regarding submission.

Ethical Approval

All study materials and processes were expedited and approved by the University of Rochester Research Subjects Review Board, Rochester, New York.

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Statement of Human and Animal Rights

All procedures in this study were conducted in accordance with the University of Rochester Research Subjects Review Board (approval number STUDY00004935) approved protocols.

Statement of Informed Consent

Written informed consent was obtained from the participant(s) for their anonymized information to be published in this article.

Supplemental Material

Supplemental material for this article is available online.

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