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RESEARCH

Mixed-Methods Study of the Experience of Pregnancy During the COVID-19 Pandemic

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ABSTRACT

Objective: To understand the experiences of women who were pregnant during the initial stage of the COVID-19 pandemic, March 2020 to May 2020, and how they coped with stress.

Design: A convergent mixed-methods design.

Setting: Online survey that launched in April 2020.

Participants: A total of 185 pregnant women.

Methods: For the quantitative strand, we measured adaptation to coping with stress using the Brief Resilient Coping Scale. For the qualitative strand, we asked participants to describe the experience of being pregnant during the pandemic.

Results: The mean score on the Brief Resilient Coping Scale was 14.7, which indicated a medium-level resilient coper. Using Krippendorff's content analysis, we identified four themes: *Robbed of Enjoying the Expected Pregnancy Experiences, Anxiety and Fear in the Face of a Pandemic Pregnancy, Heightened Source of Worry With Birth on the Horizon, and Choosing Hope.*

Conclusion: To meet the needs of pregnant women, perinatal nurses and other maternity care providers must understand the experience of pregnancy during times of upheaval, such as the onset of a global pandemic. Health care providers and nurses can help ensure ideal outcomes for pregnant women by recognizing the loss of the expected pregnancy experience, providing support through creative social outlets, and fostering hopeful optimism.

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he World Health Organization affirmed 2020 as the Year of the Nurse and the Midwife, and nurses were to be celebrated and recognized for the caring services they provide (World Health Organization, 2020). Uniquely, perinatal nurses care for dyads and affect health outcomes for the mother and newborn. After the celebratory announcement, the global health crisis of the COVID-19 pandemic created new challenges for perinatal nurses. COVID-19 was identified in December 2019 as a respiratory illness in Wuhan, China. The first infection in the United States was reported in January 2020, and 2 months later, a national state of emergency was announced (Proclamation 9994, 2020). Between January 20, 2020, and June 13, 2022, the pandemic infected 217,210 pregnant women, 33,584 required hospitalization, and 295 died as a result of the virus (Centers for Disease Control and Prevention, 2022). At the time of this writing, COVID-19 has claimed more than 6,314,972 lives internationally (World Health Organization, 2022).

The first wave of COVID-19 (March–May 2020) was a global event, and the virus directly changed daily life, including formal and informal interactions, work environments, family gatherings, health care delivery, and the experience of pregnancy. Pregnant women who already experienced normal physiologic and psychological changes faced vast alterations in how they received prenatal care and prepared for birth. Furthermore, in efforts to slow the spread of the disease, the provision of physical and social support abruptly changed.



Literature Review

Internationally, pregnant women experience added burdens and stressors as physical and emotional changes occur, as they anticipate labor and birth, and as they face impending lifestyle changes (Ravaldi et al., 2021). The emergence of COVID-19 brought the additional stressors of loneliness (Aydin & Aktaş, 2021; González-Timoneda et al., 2021; Mortazavi & Ghardashi, 2021), social isolation (Aydin & Aktaş, 2021; Mortazavi & Ghardashi, 2021), and several unknowns related to the potential for fetal transmission (Ravaldi et al., 2021), all of which further contributed to feelings of anxiety. Pregnant women suffered physical and psychosocial effects from stay-at-home orders (Aydin & Aktaş, 2021). The physical effects described were increased weight gain and fatigue (Aydin & Aktaş, 2021). Some of the psychosocial effects they expressed were disruptions in their social lives and isolation from family and friends (Aydin & Aktaş, 2021: Mortazavi & Ghardashi, 2021), and they experienced an immense sense of loss related to the traditional experience of being pregnant (Ajayi et al., 2021). They worried that they (Atmuri et al., 2022; Aydin & Aktas, 2021) and/or their infants would be infected (Karavadra et al., 2020; Yassa et al., 2020).

Loneliness was a clear theme reported in the global literature on pregnant women during the pandemic (Aydin & Aktaş, 2021; González-Timoneda et al., 2021; Mortazavi & Ghardashi, 2021). Anxiety and depression were also commonly reported during the early stages of the pandemic (Ahmad & Vismara, 2021; Aydin & Aktaş, 2021; González-Timoneda, 2021; Ravaldi et al., 2021). Lin et al. (2022) found that post-partum parenting stress was elevated during the pandemic, although high maternal self-efficacy mitigated some of this stress.

Overall, pregnant women were frustrated by the disruption in the provision of routine prenatal care due to COVID-19 (Atmuri et al., 2022; Javaid et al., 2021; Karavadra et al., 2020; Mortazavi & Ghardashi, 2021; Sweet et al., 2022), and they described the change of prenatal visits from in person to virtual as impersonal (Atmuri et al., 2022; Javaid et al., 2021; Sweet et al., 2022). This disruption and the rapidly changing information regarding the virus were challenging for pregnant women, who had the added worry of their children's well-being (Atmuri et al., 2022; Yassa et al. 2020). In a qualitative study of 2,519 pregnant women in the United States,

Little is currently understood about the experience of pregnancy during a pandemic and how women coped with the changes brought by the COVID-19 outbreak.

participants reported fear, anxiety, and the sense of abandonment as emotional consequences of the structural changes of prenatal care services (Javaid et al., 2021).

During the uncertainty of the pandemic and the disruptions to care, pregnant women focused on seeking information and the newborns they were preparing to welcome (Atmuri et al., 2022; Aydin & Aktas, 2021; Mortazavi & Ghardashi, 2021). This focus demonstrated resiliency and their ability to cope with pandemic-related adversity. Specifically, some women demonstrated strength, optimism, and resilience (Atmuri et al., 2022; Mortazavi & Ghardashi, 2021), and others displayed positive coping strategies such as indoor activities that were focused on the infant (Aydin & Aktas, 2021). We identified a gap of mixed-methods research on the experience of pregnancy during the pandemic and coping with stress. Therefore, the purpose of this mixed-methods study was to understand the experiences of women who were pregnant during the initial stage of the COVID-19 pandemic, March 2020 to May 2020, and how they coped with stress. It is important for nurses and health care providers who ensure the physical and mental well-being of women to understand the experiences of being pregnant, receiving care, and living through the pandemic.

Methods

The following three research questions guided our study: Were pregnant women able to cope with the stress of the pandemic? What was the experience of being pregnant during the pandemic? To what extent would the quantitative results on coping with stressful situations confirm the qualitative data on the experience of being pregnant during the pandemic?

Design

We used a convergent mixed-methods design (Creswell & Plano Clark, 2018) to collect data regarding the experience of being pregnant during the pandemic. For the quantitative strand, we measured adaptation to coping with stress using the Brief Resilient Coping Scale (BRCS; Sinclair & Wallston, 2004). For the qualitative strand, we asked participants to describe the experience of being pregnant during the pandemic. We collected both types of data simultaneously and then analyzed the strands separately before we merged them together (see Figure 1). Our systematic approach to combining quantitative and qualitative design, data collection, analysis, and integration was central to generating new knowledge and theory-guided evidence (Creswell, 2018). We held inductive and deductive reasoning in equal importance when arriving at conclusions supported by the research evidence (Polit & Beck, 2021). The institutional review board of Fairfield University granted approval for this study before recruitment and data collection began.

Participants

Eligible participants were currently pregnant, 18 years of age or older, and fluent reading and writing in English. Participants consented to participate in the study before they completed the online survey.

Procedures

We used snowball sampling to recruit potential participants through social media between April 16 and May 1, 2020. We advertised the study through our personal Facebook pages, and we encouraged people to share the advertisement on their own pages and within their networks. When participants clicked the link to the study, they first saw an information sheet regarding consent, and by selecting "agree," they gave implied consent. This allowed them to enter the study on the online survey platform, Google Forms. Participants completed a demographic form and the BRCS. All participants described their experiences with specific examples, which served as an attention check and human verification to ensure data quality. The study took approximately 15 to 60 minutes to complete, and this variation in time was related to how much of a narrative the participant wrote. During inspection of the data, we found that all submissions were complete, and we deleted one duplicate submission from the data set. We stored all data on confidential and password-protected computers and Google drive accounts that only the authors could access. We did not offer an incentive to participants.

Measures

Quantitative strand. We measured coping and resilience using the BRCS (Sinclair & Wallston, 2004). This four-item self-report questionnaire consists of a 5-point Likert response format. Participants rate how well each statement



Figure 1. Diagram for the convergent mixed-methods design. BRCS = Brief Resilient Coping Scale.

describes their behavior and actions: 1 = not atall to 5 = very well. It is used to measure the ability to effectively cope with stressful situations and to quantify the ability to emotionally, adaptively, and flexibly recover from stressful circumstances (Sinclair & Wallston, 2004). The total score can range from 4 to 20. Those who rated themselves with a low score (1) chose answers that corresponded to maladaptive behaviors, whereas those who rated themselves with a high score (5) chose answers that corresponded to resilient behaviors (Sinclair & Wallston, 2004). The BRCS is used to measure the following individual characteristics: tenacity, optimism, creativity, problem solving, and growth. The four questions of the BRCS are listed in Table 1.

Sinclair and Wallston (2004) reported the Cronbach's α coefficient of the BRCS as .69 when they tested the instrument with a sample of 90 women who had rheumatoid arthritis. The scores of the scale were totaled and interpreted to represent low (4–13 points), medium (14–16), or high (17–20) resilient copers. Participants with high scores demonstrated the ability to find positivity and growth. Participants with low scores lacked the coping mechanisms needed to thrive through difficult situations. We intentionally chose this brief, four-item scale for our study to not cause undue burden to the participants given the uncertainty caused by the outbreak of the pandemic.

Qualitative strand. We asked participants to write in response to the following prompt: "As a currently pregnant woman, please describe for me your experience of being pregnant during the COVID-19 pandemic. Share all your thoughts, feelings, and perceptions until you have no more to say about the experience. Specific examples are helpful."

Analysis

We used descriptive and inferential statistics to analyze quantitative data obtained from the BRCS and demographic information using spreadsheet software in Google Sheets. We conducted an independent *t* test to compare BRCS scores and calculated the α coefficient for the BRCS. We followed Krippendorff's (2018) content analysis methodology to analyze the qualitative data. This process of content analysis involved our systematic reading of participant responses, during which we gained new insights and our understanding of the experience of being pregnant during the pandemic was deepened

BRCS Statement	М	SD	Range	
I look for creative ways to alter difficult situations.	3.77	0.79	1–5	
Regardless of what happens to me, I believe I can control my reaction to it.	3.56	1.00	1–4	
I believe I can grow in positive ways by dealing with difficult situations.	3.99	0.79	3–5	
I actively look for ways to replace the losses I encounter in life.	3.46	0.79	2–5	

(Krippendorff, 2018). This process occurred independent of our own perspectives on the topic.

Table 1: BBCS Scores of Participants (N - 195)

In our content analysis, we defined the unit of analysis as the individual parts of the narratives that described specifically how the pandemic influenced the experience of pregnancy. The first author independently conducted the qualitative analysis by reading the participant narratives several times to become familiar with the data. Next, we followed Krippendorff's (2018) methodic technique whereby the first author used clustering to connect the portions of the data that were related and had common meaning to form a whole. We then organized the identified clusters into dendrograms, tree-like diagrams that visually represented the process of systematically merging or clustering the data together into common themes. In Figure 2, we provide an example of a dendrogram for the final theme: Choosing Hope.

Results

Sample

A total of 185 self-identified pregnant women participated in this study and provided complete data. Notably, 175 participated within the first 4 days the study link was available. The average age of participants was 32 years (SD = 4), with a range of 23 to 44 years. The racial breakdown of participants follows: White, 90.2% (n = 167); Hispanic, 4.3% (n = 8); multiracial 3.2% (n = 6); Black, 1.1% (n = 2); and Asian, 1.1% (n = 2). Most participants were currently married (89.7%, n = 166), 17 (9.1%) were in committed relationships, and 2 (1.1%) were single. Participants had no living children to date (n = 81), one living child (n = 60), two living children (n = 33), or a range of three to six living children (n = 11). Overall, the participants lived in geographically diverse areas, including 31 U.S. states, the District of

During the COVID-19 pandemic, fear and anxiety dominated the emotions of participants, but they still found solace in the anticipation of meeting their newborns.

Columbia, and seven other countries. The four U.S. states with the greatest representation were Connecticut (n = 54), New York (n = 12), New Jersey (n = 8), and Texas (n = 8). Outside the United States, Canada (n = 8) and the United Kingdom (n = 2) were most represented.

Most participants (69.3% [n = 128]) reported that their maternity care providers were obstetricians, and 18.3% (n = 34) reported that their maternity care providers were midwives. The remaining 12.4% (n = 23) saw midwives and obstetricians. At the time of participation, 28.6% (n = 53) had at least one prenatal visit via telehealth, and others noted that they had upcoming telehealth visits. Participants who had telehealth visits wrote that their largest concern was not hearing the fetal heartbeat.

Quantitative Strand

Among participants, 28.6% (n = 53) were low resilient copers, 50.3% (n = 93) were medium resilient copers, and 21.1% (n = 39) were high resilient copers. The average score on the BRCS for the entire sample (N = 185) was a mean of 14.7 (SD = 2.33). Overall, this total mean score indicated that participants were medium resilient copers. The Cronbach's α coefficient was borderline low at 0.64 for the BRCS in this study. We compiled means and standard deviations for each BRSC question in Table 1.

We found no statistically significant difference between the BRCS mean scores of participants who reported no living children and those who reported one living child (M = 14.64 vs. M =14.78, p = .73). Additionally, we found no statistically significant difference between the BRCS mean scores of participants who reported no living children and those who reported two to six living children (M = 14.64 vs. M = 14.93, p = .48)

Qualitative Strand

Written responses ranged from a paragraph of six sentences to two single-spaced pages. From these responses, we identified four themes: *Robbed of Enjoying the Expected Pregnancy Experiences, Anxiety and Fear in the Face of a Pandemic Pregnancy, Heightened Source of Worry With Birth on the Horizon, and Choosing Hope.*

Robbed of Enjoying the Expected Pregnancy Experiences. The first theme, Robbed of Enjoying the Expected Pregnancy Experiences, represented the way participants felt the loss of social pregnancy events. Regardless of parity, participants shared the sentiment, "I understand what a pregnancy should look and feel like. This is not it." They were disappointed by having to cancel baby showers, and they associated missed opportunities to gather in celebration, show off their changing bodies, and receive necessary infant items with sentiments of loss. This was especially difficult in the context of pandemic-related lost wages or unemployment when they needed the financial support.

Repeatedly, participants wrote that they "want [ed] all the treatment that every other pregnant woman has received prior to this virus." Access to chiropractic care, prenatal massages, and prenatal yoga classes to relieve the discomforts of pregnancy was limited. When events such as prenatal yoga and childbirth education resumed on virtual platforms, participants shared that it was not the same source of support. They expressed frustration with the inability to order basic newborn items such as diapers and wipes given supply shortages. They reflected on the unavailability of maternity or birth photographers and the inability to receive a pedicure, shop for infant clothes with family and friends, and tour the labor and birth unit at the hospital. All of these losses affected their ability "to nest" and to experience pregnancy.

Participants described feeling isolated because they could not physically meet with family and friends. They also wrote about the disappointment of not hearing the fetal heart rate when prenatal visits were conducted virtually. They recounted that partners were unable to attend inperson prenatal visits and were concerned that the bonding process would be altered because these visits were their partners' "gateway to bond with the baby." One participant offered, "Our sonogram had to lay on our basement floor for 72 hours to disinfect" because modes of COVID-19 transmission were not known.

Participants wrote that they were "robbed of the joy that pregnancy normally brings." They grieved the loss of joyful experiences such as physical comfort measures, social support, and



opportunities to gather to celebrate their pregnancies: "I sometimes feel like what should be the 'happy moments' of my pregnancy have been stolen from me."

Anxiety and Fear in the Face of a Pandemic Pregnancy. The second theme, Anxiety and Fear in the Face of a Pandemic Pregnancy, represented participants' intensified worry, anxiety, and fear about themselves and their fetuses. They specifically worried that risks to pregnancy had not yet been identified, there were too many unanswered questions, and the science was limited. Many participants understood that stress can negatively affect pregnancy, and given their high stress levels and anxiety from the pandemic, they worried they were causing harm: "I'm stressed about the amount of stress I'm under. I think often, is this going to affect the baby?" They feared that they and/or their newborns could become infected with COVID-19 from being in the hospital, and these worries were compounded for anyone who was pregnant and worked in the health care field: "For essential workers, what if I catch COVID and did not fare well and something happened to my baby. I could never live with that."

The fear of being separated from their newborns was palpable, and participants were deeply concerned about the potential psychological and emotional toll and the lack of bonding that would occur if they tested positive for COVID and were separated. Some checked hospital policies daily, and others mentioned that separation was not congruent with recommendations from the World Health Organization regarding proper hand washing and masking in the context of maternal infection. They described that not knowing what the policy would be when they gave birth caused uncertainty and fear, and they worried that their hospitals would enact a "no support person policy." The fear of birthing alone was second only to the fear of being separated from the newborn: "How lonely and scary it is to be pregnant right now."

Participants further worried about experiencing postpartum depression because of the lack of social support from friends and family: "I wonder if there will be higher rates of postpartum depression and anxiety from being so isolated." Those with histories of depression or postpartum depression expressed that they were hyperaware of the likelihood for worsening symptoms.

	BRCS		
BRCS Category	Score	Quotation	
Low resilient coper	10	"I'm terrified. I'm terrified that I won't have my husband in there. That the nurses a doctors will give us or the baby the virus. And if we go to the NICU, that only or parent will be allowed."	
Medium resilient coper	15	"No one knows yet how long this outbreak will last, and therefore it makes me unsure about how much this will impact my pregnancy in its entirety. Will I be subject to all of the COVID precautions that are taking place on the labor & birth floor?—who knows!"	
High resilient coper	18	"Every day, we pray for the baby, pray for our health and protection, and pray that the virus will come to a rapid halt. Even though things have been 'taken away' from us, I am grateful to have my health, my prenatal visits, and extra time as a family that normally wouldn't be here if our routine schedules hadn't changed."	

Table 2: Joint Display BRCS Scores With Participant Quotations

Heightened Source of Worry With Birth on the Horizon. The third theme, Heightened Source of Worry With Birth on the Horizon, represented the participants' concerns related to the type of labor and birth experience they would have as a result of the pandemic. They mourned the loss of the traditional labor and birth and postpartum experiences they expected or had previously experienced. The need to wear a mask during labor was a central concern: "Not only do I have to worry about the pains of labor, I have to worry about how to deal with them through a mask." They did not want to feel restricted during labor and birth, which they said was "already like running a marathon."

Participants grieved and discussed in depth the loss of extra support persons, such as their mothers, sisters, and doulas. Several worried about giving birth without their doulas to physically support and guide them during labor. They also noted their disappointment that they would not have the option of nitrous oxide while in labor.

Participants worried they would be rushed out of the hospital 24 hours after birth and that lactation staff would be unavailable. They also were troubled by the loss of visitors in the hospital after birth: "No one will visit us with balloons or flowers in the hospital." It was painful for them to acknowledge that family members might not be able to meet the newborn for weeks or even months: "No one but us will ever meet him as a newborn, and that hurts." They expressed sadness that "family and children wouldn't get that milestone visit of the hospital meeting" and especially highlighted the absence of grandparents.

Choosing Hope. The fourth and final theme, *Choosing Hope*, represented how, despite the negative aspects the pandemic brought to their pregnancies, the participants offered ways they intentionally chose hope. The dendrogram in Figure 2 illustrates this theme. Participants indicated optimism that the pandemic would be somewhat better or over by the time they gave birth and were "hoping that things will be more stable by the time my due date rolls around." "I am trying to be optimistic that this [pandemic] might be over sooner rather than later." They expressed gratitude that they and their partners were healthy, specifically that they had not contracted COVID-19.

The participants also shared the many ways they made the most of the situation through creative solutions. For example, some mentioned that they switched from a hospital-based practice to a home birth midwifery practice to support their desired birth experience. Others planned to take their own newborn photos. This flexibility and creativity demonstrated how they coped. They constructed new plans in the presence of more questions than answers because "[the] joy and excitement of welcoming our baby can't be taken away." Their central focus came back to the joyful anticipation of welcoming their newborns, and they expressed how this "blessing" could not be stripped away: "But we will keep trying to think positive and hope we have the beautiful [birth] experience we want, even with all this going on!" When participants focused on the expectant newborn, they chose hope.

Integration of Results

When we integrated the quantitative results in context with the qualitative themes, the result was a snapshot of the experience of pregnancy during the initial stage of the COVID-19 pandemic (see Table 2). Irrespective of parity, the collective experience reported in the themes shows that most participants were medium resilient copers. They experienced loss and sadness as well as simultaneous problem solving, reframing, and growth: "My husband and I are both happy to be healthy and safe, but we can't help but feel nervous about the baby's health and sad for the loss of the fun experiences we won't get back."

Overall, the first three themes were indicative of challenges and stressors: "Would I choose to go through another pregnancy in a pandemic? Absolutely not." Participants described what they lost, their fears, and their worry about changing protocols related to labor and birth. A participant with low coping said, "COVID has made being pregnant much more procedural. Now it's just about getting through rather than enjoying the experience and that's really hard to carry emotionally on a daily basis." Nonetheless, the theme Choosing Hope illustrated how the participants coped. Some used the pandemic as a catalyst to switch to a home birth practice. Numerous challenges, stressors, and frustrations were present; however, the participants looked forward to the birth of their children and found hopeful optimism: "Overall, the blessings outweigh the stresses and I choose to focus on what's good rather than what's fearful."

Given the unknown timeline of the pandemic, some were hopeful that their labor and birth experiences would not be affected. They maintained the belief that "the curve would flatten" and that the pandemic would exit as quickly as it had entered. The integration of the qualitative and quantitative results shows that for participants, "excitement for our newborn can't be taken away. . . . [We] won't let the virus do that."

Discussion

At the time of data collection for this study (April 2020–May 2020), participants faced immense uncertainty because knowledge about COVID-19

When perinatal nurses and other maternity care providers acknowledge fear and worry among pregnant women, women can feel validated and that they are not alone.

in pregnancy and related recommendations were only beginning to emerge. Our results validate the findings of other researchers that uncertainty caused distress and fear in pregnant participants (Atmuri et al., 2022; Mortazavi & Ghardashi, 2021; Ravaldi et al., 2021).

We used a mixed-methods design to present a picture of the experience of being pregnant at the onset of the pandemic. As described in other studies (Ahmad & Vismara, 2021; Atmuri et al., 2022; Aydin & Aktas, 2021; Karavadra et al., 2020; Yassa et al., 2020), we confirmed that participants were worried about themselves and about their expectant newborns' health and safety. Our participants were also concerned about the health care environment during the pandemic and feared that they or their newborns would contract the virus while in the hospital, which also validates previous research (Ahmad & Vismara, 2021; Atmuri et al., 2022; Aydin & Aktaş, 2021; Karavadra et al., 2020; Yassa et al., 2020). Our participants shared the social experiences they lost, which further supports previous research (Ajavi et al., 2021; Atmuri et al., 2022; Mortazavi & Ghardashi, 2021) and how they "felt robbed" of the joys of pregnancy.

Previous researchers touched on social isolation (Aydin & Aktaş, 2021; Mortazavi & Ghardashi, 2021), and our findings add to the evidence about the tangible experiences that were lost, such as celebratory gatherings, in-person prenatal visits, and childbirth education classes. Additionally, our participants expressed concern about the risk for postpartum depression because of social isolation. These findings add to the literature and suggest that perinatal nurses and other maternity care providers should be more vigilant about educating women and screening for symptoms of postpartum depression.

The scores of our participants on the BRCS revealed positivity, tenacity, creativity, unconventional approaches to problem solving, and the willingness to thrive through a difficult situation. As evidenced in their BRCS scores and narratives, our participants turned to alternative solutions to appreciate their pregnancies, such as planning to be their own photographers, using time at home to bond with their partners, and reimagining their birthing environments, which validate the themes of resilience cited previously (Atmuri et al., 2022). They demonstrated tenacity and their unwavering motivation to be mothers by choosing hope.

Despite the constant background noise and chaos of the pandemic, participants never lost sight of the fact that they would soon welcome their newborns. Our results can help maternity care providers support women's physical and emotional well-being during the ongoing pandemic and prepare for any unforeseen, disruptive events to a pregnancy.

Limitations

The racial homogeneity of the sample for this study was a limitation. Furthermore, most participants were currently married. Therefore, the results were largely reflective of the experiences of White (non-Hispanic) married women. Finally, the Cronbach's alpha coefficient for the BRCS in this study was borderline low at 0.64.

Implications for Research

A study with recruitment more purposefully directed toward Black and Hispanic pregnant women is needed. Furthermore, research is needed to understand the experiences of pregnant women who are single, who are in same-sex marriages/relationships, or who identify as transgender, non-binary, or gender non-conforming. Finally, because our participants feared greater rates of postpartum depression because of the isolation of the pandemic, more studies on postpartum depression during the pandemic are advisable.

Implications for Practice

When perinatal nurses and other maternity care providers acknowledged fear and worry among our participants, this action was validating and served as a reminder that the participants were not alone in experiencing these emotions. Participants experienced negative emotions in tandem with the excitement of welcoming their children, and each emotion—whether perceived as negative or positive—was part of the pregnancy experience. The fact that most participants (n = 175) responded so quickly—within 4 days of the study opening—highlighted the importance of sharing experiences in writing. Therefore, we recommend that perinatal nurses ask pregnant women to journal throughout pregnancy and to

share these entries with a trusted source, such as the nurse or maternity care provider. Virtual support groups of women with similar due dates is another plausible way to address psychosocial concerns and provide validation. Perinatal nurses can and should lead these support groups.

Being pregnant during the outbreak of the global pandemic and feeling "robbed of enjoying" the pregnancy experience places women at increased risk for postpartum depression throughout the first year after birth. Therefore, health care providers and nurses must consistently screen for symptoms of this mood disorder at the 6-week postpartum visit. Moreover, because pediatricians have interactions with women and at multiple time points after birth, they should be reimbursed to screen for postpartum depression. Women who screen positive for symptoms should be referred back to their midwives or obstetricians.

Conclusion

Pregnancy is a time of immense physical and emotional change, and pregnant women were presented with a heightened sense of uncertainty at the onset of the pandemic. In social media feeds, news outlets, e-mails, and conversations, the COVID-19 pandemic took center stage, and pregnant women were faced with headlines that cited the risk of serious adverse outcomes for themselves and their infants. We explored the experience of being pregnant during the initial outbreak of a global pandemic. At that time, scientific data were not yet available on the effects of COVID-19 in pregnancy, vaccine development was a distant hope, and hospitals in many areas of the world cared for COVID-19 patients with limited personal protective equipment.

The aims of this study were to understand the experiences of participants who were pregnant during the initial stage of the COVID-19 pandemic and how they coped with stress; however, this study also serves as a historical snapshot during a pivotal time. Our findings help preserve the experience of pregnancy during the initial stage of the COVID-19 pandemic and can help to guide best practices in caring for pregnant women as the pandemic continues and as other unfore-seeable events disrupt access to health care and social supports in the future.

CONFLICT OF INTEREST

The authors report no conflicts of interest or relevant financial relationships.

RESEARCH

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