



“Mourning the Experience of What Should Have Been”: Experiences of Peripartum Women During the COVID-19 Pandemic

Clayton J. Shuman¹ · Mikayla E. Morgan¹ · Jolyna Chiangong¹ · Neha Pareddy¹ · Philip Veliz¹ · Alex Friedman Peahl² · Vanessa K. Dalton²

Accepted: 27 November 2021 / Published online: 7 January 2022

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2021

Abstract

Objectives The ongoing COVID-19 pandemic may significantly affect the peripartum experience; however, little is known about the perceptions of women who gave birth during the COVID-19 pandemic. Thus, the purpose of our study was to describe the peripartum experiences of women who gave birth during the COVID-19 pandemic in the United States.

Methods Using a cross-sectional design, we collected survey data from a convenience sample of postpartum women recruited through social media. Participants were 18 years of age or older, lived in the United States, gave birth after February 1, 2020, and could read English. This study was part of the COVID-19 Maternal Attachment, Mood, Ability, and Support study, which was a larger study that collected survey data describing maternal mental health and breastfeeding during the COVID-19 pandemic. This paper presents findings from the two free-text items describing peripartum experiences. Using the constant comparative method, responses were thematically analyzed to identify and collate major and minor themes.

Results 371 participants responded to at least one free-text item. Five major themes emerged: (1) Heightened emotional distress; (2) Adverse breastfeeding experiences; (3) Unanticipated hospital policy changes shifted birthing plans; (4) Expectation vs. reality: “mourning what the experience should have been;” and (5) Surprising benefits of the COVID-19 pandemic to the delivery and postpartum experience.

Conclusions for Practice Peripartum women are vulnerable to heightened stress induced by COVID-19 pandemic sequelae. During public health crises, peripartum women may need additional resources and support to improve their mental health, wellbeing, and breastfeeding experiences.

Keywords COVID-19 · Coronavirus · Pregnancy · Postpartum · Breastfeeding

Significance

What is already known on the subject? The COVID-19 pandemic may significantly affect the peripartum experience. Peripartum patients are a vulnerable population and experience heightened stress induced by COVID-19 pandemic sequelae. However, few studies have described the experience of peripartum women during this public health crisis.

What this study adds? Our study is one of first to describe the lived experiences of postpartum women who delivered an infant during the first 6 months of the COVID-19 pandemic.

Introduction

The novel coronavirus (COVID-19) has a monumental impact on maternal health. Peripartum women are exceptionally vulnerable to pandemic-related sequelae (e.g., state mandated orders; restrictive hospital policies) (Berthelot et al., 2020; Durankus & Aksu, 2020; Hessami et al., 2020; Thapa et al., 2020; Zanardo et al., 2020). According to the Centers for Disease Control and Prevention, peripartum women are also at greater risk for severe symptoms related to COVID-19 infection (CDC, 2020a, 2020b).

✉ Clayton J. Shuman
clayshu@med.umich.edu

¹ Department of Systems, Populations, and Leadership, University of Michigan School of Nursing, 400 N. Ingalls, Ste. 4162, Ann Arbor, MI 48109-5842, USA

² Department of Obstetrics and Gynecology, University of Michigan, Ann Arbor, USA

Therefore, peripartum women may be at greater risk for adverse mental health outcomes subsequent to pandemic-induced stress and strict public health mandates and guidelines (CDC, 2020a, 2020b; Hessami et al., 2020; Liu et al., 2021; Riyad Fatema et al., 2019). We must understand the experiences of peripartum women during the COVID-19 pandemic. Their experiences can inform development of resources to improve maternal mental health, identification of facilitators and barriers to resource and healthcare utilization, and development or revision of hospital and clinic policies for assessing and treating peripartum women at risk for mental illness during COVID-19.

Mental health is critical to healthy pregnancies, deliveries, and infants. Increased stress can result in numerous adverse outcomes to women and infants, including premature labor, intrauterine growth restriction, fetal demise, caesarian section, postpartum anxiety and depression, and decreased breastfeeding rates (Durankus & Aksu, 2020; Zanardo et al., 2020). Numerous physiological, mental, and environmental factors influence peripartum mental health and wellbeing (Lobel & Ibrahim, 2017). The COVID-19 pandemic exacerbates existing stressors and compounds maternal stress resulting in potentially worse outcomes for women and infants (Ceulemans et al., 2020; López-Morales et al., 2021). However, little is known about the perspectives of women regarding their peripartum experiences during the COVID-19 pandemic. To date, very little is known about the lived experience of peripartum women during the COVID-19 pandemic. The purpose of our study was to address this gap by describing the lived experiences of postpartum women who delivered an infant during the first 6 months of the COVID-19 pandemic in the United States.

Materials and Methods

Design

We used a cross-sectional descriptive design and survey methods to collect open-ended, free-text data from a convenience sample of women about their peripartum experience during COVID-19. This study was a part of the COVID-19 Maternal Attachment, Mood, Ability, and Support (MAMAS) study which gathered data on postpartum depression, traumatic birth experiences, maternal self-efficacy, breastfeeding experiences, maternal-infant bonding, and social and emotional support. This report presents our qualitative findings. The study was deemed exempt by the University of Michigan Institutional Review Board. All participants were provided with study information and consented to participate by completing the survey.

Sample

The sample included postpartum women who met the following inclusion criteria: (1) 18 years of age or older; (2) lived in the United States (U.S.) or a U.S. territory; (3) delivered a live infant on or after February 1, 2020 (U.S. declaration of COVID-19 as a public health emergency); and (4) could read and understand the English language.

Procedures

We recruited participants through major social media platforms (e.g., Twitter, Instagram, and Facebook) by collaborating with various influencer accounts with large numbers of peripartum followers in the U.S. We provided influencers with a recruitment post for them to share which included a link to the web-based survey. Postpartum patients interested in the study accessed the survey link and were screened for eligibility. The survey included items to measure postpartum anxiety and depression, birth trauma, emotional and social support, maternal-infant bonding, maternal self-efficacy, and breastfeeding experiences. This study presents findings from the two free-text items included in the survey: (1) “If you found being a mother very stressful, very difficult, or unenjoyable, why do you think that is?” [Adopted from Being a Mother-13 Scale (Matthey, 2011)] and (2) “If there are any other details about your story that you want to share, please do so here.” Survey responses were collected between June 4, 2020 and July 8, 2020.

Data Analysis

Using the constant comparative methods of Glaser and Strauss (Glaser et al., 1968), two team members (MM, JC) reviewed and coded participant responses utilizing qualitative software NVivo release 1.3.1 (Jaye, 2002). Initial coding was completed individually by each coder to generate discrete codes, followed by discussion to finalize the identified codes. Qualitative rigor was maintained by assuring credibility with peer debriefing, member-checking, and prolonged engagement (Glaser et al., 1968). The coders met repeatedly to discuss differences, compare results, and refine the working codebook. After coding, the research team collaboratively identified major and minor themes through in-depth analysis and discussion until reaching consensus.

Results

Participant Demographics

Of the 675 participants who completed the entire survey, 371 (55%) responded to at least one free-text item (Table 1). Most were white (91.9%) and married (94.9%), and delivered a term infant (91.6%). A slightly smaller proportion

of participants responding to free-text items breastfed their infants (81.1%) compared to the total sample completing the survey (85.1%) [$\chi^2(1)=4.3588$; $p=0.04$]. No other significant differences in demographics were observed.

Themes

We identified five major themes: (1) Heightened emotional distress; (2) Adverse breastfeeding experiences; (3) Unanticipated hospital policy changes shifted birthing plans; (4) Expectation vs. reality: “mourning what the experience should have been;” and (5) Surprising benefits of the COVID-19 pandemic to the delivery and postpartum experience. Minor themes supported each of the major themes (Table 2).

Heightened Emotional Distress

Participants expressed significant mental health concerns and, without prompting, attributed these concerns to the COVID-19 pandemic. They frequently discussed “maternal guilt” related to restricting their infant from engaging in traditional, pre-pandemic activities (e.g., visits with family, walks outside, running errands). Some participants described “maternal guilt” as: (1) feeling guilty for not providing their infants with normal newborn experiences and (2) feeling guilty for providing these experiences during the pandemic. For example, “I’ve been unable to go out with my baby, at first at all, but now without feeling fear or extreme guilt for risking my baby’s health for some time outside, or in a store, or around people at all.”

Not only did the pandemic contribute to higher levels of reported emotional distress, but it also created a barrier to accessing and using pre-pandemic coping mechanisms. Women described a sudden and dramatic shift in how they coped with challenges and stressors, mainly due to the inability to engage in pre-pandemic activities (e.g., going to the gym, engaging with friends). Unable to access their normal, pre-pandemic coping mechanisms, women reported high levels of emotional distress, anxiety, and isolation. “I have not had my usual outlets to turn to when I get stressed, such as going to the gym, out to dinner with friends or my husband, or going shopping”.

Several women described a lack of traditional postpartum social support resulting from stay-at-home orders and social distancing mandates. Infection control recommendations and mandates contributed to low levels of emotional support as they navigated postpartum mood and anxiety challenges. Further, stay-at-home orders and social distancing mandates contributed to decreased assistance in the home and increased postpartum stress. “Lack of support due to Covid-19 has definitely made me feel more stressed and

Table 1 Participant characteristics (N=371)

	n (%)
Demographic characteristics	
Age in years	
18–25	17 (4.6)
26–30	99 (26.7)
31–35	193 (52.0)
36–40	45 (12.1)
41–45	9 (2.4)
Race	
Caucasian or white	341 (91.9)
African American or Black	3 (0.8)
Hispanic or Latinx	17 (4.6)
Asian	13 (3.5)
Native American	2 (0.5)
Pacific Islander	2 (0.5)
Other	1 (0.3)
Gestational age in weeks	
< 32	7 (1.9)
32–36	24 (6.5)
≥ 37	340 (91.6)
Marital status	
Single	3 (0.8)
Married	352 (94.9)
Separated, living with partner	1 (0.3)
Living with partner, not married	11 (3.0)
Other	4 (1.1)
Infant admitted to NICU	37 (10.0)
COVID-19 status	
I or someone in my household tested positive	4 (1.1)
I self-quarantined during pregnancy	232 (62.5)
I self-quarantined during postpartum	277 (74.9)
I worried about personally contracting COVID-19	281 (75.7)
I worried about my infant contracting COVID-19	287 (77.4)
Primary feeding route	
Breastfeeding	246 (66.3)
Formula feeding	65 (17.5)
Pumping my own milk and feeding it to my infant in a bottle or feeding tube	55 (14.7)
Using human donor milk	1 (0.3)
I prefer not to answer	4 (1.1)

Table 2 Major themes, minor themes, and supporting quotes

Major theme	Minor theme	Quote
Heightened emotional distress	Maternal guilt	I've been unable to go out with my baby, at first at all, but now without feeling fear or extreme guilt for risking my baby's health for some time outside, or in a store, or around people at all Mom guilt [has been] caused by comparing to other [moms] on social media
	Inability to use previously established coping mechanisms	I have not had my usual outlets to turn to when I get stressed, such as going to the gym, out to dinner with friends or my husband, or going shopping
	Decreased social support	Lack of support due to Covid-19 has definitely made me feel more stressed and the adjustment to new motherhood more difficult than if I was able to have friends and family around and able to help more
	Adverse breastfeeding experience	...Part of my difficult experience stems from the fact that I have had difficulty breastfeeding, due to issues that a lactation consultant could have helped with, but I couldn't get that help due to being unable to physically see the lactation consultant to get exact help Because of the stress and sadness of this event, my breastmilk supply stopped. This experience [was] because of Covid [and] very difficult for my family and I
Unanticipated hospital policy changes shift women's birthing plans	Shift from and in-hospital to out of hospital birth	I switched from a planned hospital birth to an out-of-hospital birth center at 36 weeks due to concerns about being in the hospital with COVID patients
	Increased elective inductions	I opted for a 39-week induction because I was terrified the hospitals would be overrun and I'd have to give birth without my husband there to support me. The induction ended up failing and I had an emergency c-section. I often wonder if that would have happened if I had waited to go into labor naturally in a non-Covid world
	Shifted visitation policy	Not having my doula allowed with me was heartbreaking I wasn't able to have my mom in addition to my partner in the delivery room with me, which was very hard emotionally, since I had never gone through birth before
Women mourn the loss of expectations that are not met	Emotional distress due to policy changes	I gave birth wearing a face mask. It sometimes makes me sad that the first time I held my baby he could not see my whole face
	Different postpartum experience than expected	I feel like I'm mourning what the experience should have been while I cope with what it actually is

Table 2 (continued)

Major theme	Minor theme	Quote
Policy changes lead to increased bonding opportunities with partner and infant	Decreased visitors during postpartum period	We are not letting our baby see grandparents yet and this is very difficult for us and them. Aside from not having the help we were counting on, and missing them, I feel guilty and pressured because they are respecting but don't understand or agree with our decisions, and it causes them pain
	Increased in-hospital bonding	I enjoyed the limited visitor at the hospital. My husband and I had 3 days to bond alone with our baby
	Increased bonding at home	I actually enjoyed the alone time that my husband and I got to experience while in the hospital and the first couple of weeks due to the quarantine for the virus. It allowed us to spend time together and figure out how to be first-time parents

the adjustment to new motherhood more difficult than if I was able to have friends and family around and able to help more.”

Adverse Breastfeeding Experiences

Although many breastfed or provided human milk to their infants, several reported poor breastfeeding outcomes due to the pandemic. Many participants reported a significant lack of breastfeeding support and resources (e.g., lactation consultants, provider support, other breastfeeding moms) during the COVID-19 pandemic. Some stated telehealth applications to provide lactation support both in the hospital and at home were provided; however, they reported telehealth support was not helpful and caused them additional stress.

...part of my difficult experience stems from the fact that I have had difficulty breastfeeding, due to issues that a lactation consultant could have helped with, but I couldn't get that help due to being unable to physically see the lactation consultant.

In addition, they reported concerns and guilt regarding their limited breastmilk supply and attributed supply issues to heightened stress caused by the pandemic. “Because of the stress and sadness of this event, my breastmilk supply stopped. This experience, because of COVID, [was] very difficult for my family and I.”

Unanticipated Hospital Policy Changes Shifted Birthing Plans

Maternal birthing plans were significantly impacted during the COVID-19 pandemic. Unanticipated and sudden changes in hospital policies related to COVID-19 (e.g., mask wearing, visitor policies, exposure-related safety concerns), led to birthing experiences outside of their desired plans. In some cases, patients changed their birthing location from an in-hospital to an out-of-hospital birth in order to reduce COVID-19 exposure and improve social support (more visitors, doulas). Of note, some reported electing for inductions in order to “avoid being in the hospital when cases surge.”

I opted for a 39-week induction because I was terrified the hospitals would be overrun and I'd have to give birth without my husband there to support me. The induction ended up failing and I had an emergency c-section, I often wonder if that would have happened if I had waited to go into labor naturally in a non-COVID world.

Participants mentioned numerous protocols and policies that limited support persons and visitors, required masks to be worn during labor, mandated COVID-19 testing, and increased personal protective equipment worn by healthcare

personnel. One participant reported that facemask requirements during labor caused her emotional distress because “the first time [she] held [her] baby, he could not see [her] whole face.” Visitor restrictions, especially restrictions not allowing any support persons to visit, resulted in additional sadness and feelings of isolation for women. Although recognizing visitor restrictions as important for controlling viral transmission, participants noted restrictions resulted in less support during labor and the postpartum period (e.g., inability to have doulas, maternal mother, and/or partner attend the birth). “I wasn’t able to have my mom in addition to my partner in the delivery room with me, which was very hard emotionally, since I had never gone through birth before.”

Expectation vs. Reality: “Mourning What the Experience Should Have Been”

Women described feeling an immense sense of isolation and difficulty navigating postpartum life, which was considered quite different from what they expected. Previously imagined expectations for motherhood (e.g., celebrating baby’s birth, receiving familial help) were diminished and women described an inability to experience support, community, and regular activities which they envisioned. “I feel like I’m mourning what the experience should have been while I cope with what it actually is.”

Some found it difficult to make family-centered decisions while balancing necessary safety boundaries. Participants who decided to prohibit visitors from entering their home faced emotional distress and described a “deep sense of loss.”

We are not letting our baby see grandparents yet and this is very difficult for us and them. Aside from not having the help we were counting on, and missing them, I feel guilty and pressured because they are respecting but don’t understand or agree with our decisions.

Surprising Benefits of the COVID-19 Pandemic to the Delivery and Postpartum Experience

Some described positive aspects of giving birth during the COVID-19 pandemic. Due to stay-at-home orders and hospital visitor restrictions, they described increased and protected bonding opportunities with their infant and partner. Participants positively described the concentrated time with their infant and partner as a more relaxing birth experience with decreased stress related to entertaining visitors immediately following birth and after transitioning home.

I actually enjoyed the alone time that my husband and I got to experience while in the hospital and the first couple of weeks due to the quarantine for the virus. It

allowed us to spend time together and figure out how to be first-time parents.

Discussion

The results of our national study describe the experiences of postpartum women during the COVID-19 pandemic. The COVID-19 pandemic introduced new stressors to peripartum women and amplified existing stressors (e.g., breastfeeding challenges). Healthcare systems and clinicians must understand new and existing stressors, identify the effect they have on peripartum patients, and tailor perinatal and postpartum care to address them.

During the COVID-19 pandemic, peripartum women lost some control over their birth plans and experiences. Gildner and Thayer found 42.5% of patients altered their birth plan in some way because of the COVID-19 pandemic (Gildner & Thayer, 2020). Similarly, we found some participants reported changing their birth plans, including birthing location and presence of support persons. Our study extends Gildner and Thayer’s findings by identifying hospital policies and mask mandates as unanticipated changes to birth plans (e.g., mother wearing a mask when first meeting infant). Notably, lack of breastfeeding support and limited or altered access to lactation consultants incurred additional emotional distress. New or heightened stressors during the COVID-19 pandemic limited the control that women had over their peripartum experiences and may significantly increase their anxiety and depression (Cook & Loomis, 2012; Roocca-Ihenacho & Alonso, 2020). New approaches to labor, delivery, and postpartum services during pandemics and other public health crises are needed to improve the care quality and maternal mental health outcomes, while also respecting patients’ birthing rights.

Participants also reported experiencing guilt and grief due to the unanticipated restrictions from the COVID-19 pandemic. Women stated feelings of inadequacy and responsibility for altered newborn experiences. Chivers et al. noted a similar sense of guilt and grieving during the prenatal period (Chivers et al., 2020). COVID-19 pandemic-related restrictions changed the way patients experienced the prenatal period (e.g., partners not allowed to attend prenatal visits; virtual baby showers) and led to feelings of isolation (Chivers et al., 2020). Peripartum women need social contact support; however, engaging in social events brought feelings of guilt and stress (Chivers et al., 2020; Ellis & Roberts, 2020). Emotional and psychological challenges specific to the pandemic are critical to note, as peripartum patients are already disproportionately affected by feelings of guilt and distress (Corbett et al., 2020).

Notably, our study described perceived benefits the pandemic introduced to the peripartum experience. Whereas

some participants experienced emotional distress related to hospital-initiated visitor restrictions and/or state-mandated stay-at-home orders, others found restrictions beneficial, hence the importance of individualized care. Some participants also noted that due to the hospital restrictions, they were able to have greater time alone to bond with their infant and partner. Perceived benefits may be useful for clinicians when counseling women about some positive aspects of their experience that may help them cope with feelings of loss, stress, and guilt. More research is warranted to explore the potential benefits of the pandemic sequelae to the delivery and postpartum experience post-pandemic.

Peripartum patients have had to navigate COVID-19 and pandemic restrictions (e.g., stay-at-home orders; social distancing; mask mandates; hospital-enacted visitation policies). Subsequently, the pandemic has had a profound impact on maternal mental health (Berthelot et al., 2020; Durankus & Aksu, 2020; Thapa et al., 2020; Zanardo et al., 2020). Postpartum mental illness affects both women and infants (e.g., poor maternal-infant attachment; development delays; early breastfeeding termination) (Earls et al., 2019; Hoffman et al., 2017). Because of the integral role that a mother plays in the development of their infant, it is vital to screen peripartum women for mental health illness. The pandemic created unique life experiences that may not be adequately assessed using available screening measures. Healthcare systems are encouraged to provide infrastructure to support the screening and treatment of mental health concerns and better resources to support breastfeeding.

While our study has several strengths, we do recognize several limitations. Our study only explores peripartum patients' perceptions during the first 6 months of the COVID-19 pandemic in the U.S. Further, we used February 1, 2020 to guide participant inclusion in this study. At this stage of the pandemic, lockdowns were not largely in affect and mask wearing was variable. Therefore, there may be different experiences reported based on infant age and postpartum period, given variation in birth experiences by date. Such experiences may differ at later stages of the pandemic. While we observed some participation across US states and regions, it is important to consider our sample was a convenience sample and we did not measure the effect of state and regional variations in infection spikes, associated state mandates, and the introduction of vaccines. Importantly, our study was conducted during a period of heightened racial tension. The compounded effect of the pandemic and racial climate may have impacted women of diverse racial and ethnic backgrounds differently. Future studies are needed to understand the peripartum experiences of women from more diverse backgrounds (e.g., non-white; unmarried).

Conclusions

Peripartum patients are vulnerable to heightened stress induced by various COVID-19 pandemic sequelae; thus, it is important to understand their pregnancy and postpartum experiences. In our study, participants described both negative and positive aspects to the peripartum experience. The unique experiences of peripartum women during the COVID-19 pandemic inform care delivery, resource development, and policy to improve maternal mental health and wellbeing. Healthcare providers and systems must understand and respond to the experiences of women during this pandemic and provide resources and support to mitigate pandemic-related stressors.

Acknowledgements None.

Author Contributions CS conceived, developed, and led the COVID-19 MAMAS study. MM designed the online survey and led recruitment. MM and JC analyzed the data. CS, JC, and MM drafted the manuscript. AP and VD provided clinical expertise and interpretation of results. PV contributed to manuscript development and analysis of demographic data. All authors contributed to manuscript preparation.

Funding Not applicable.

Data Availability The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Code Availability Not applicable.

Declarations

Conflict of interest The authors declare no conflicts of interest.

Ethical Approval The study was deemed exempt by the University of Michigan Institutional Review Board.

Consent to Participate Eligible participants reviewed and signed an electronic informed consent form before participating in the study.

Consent for Publication All authors read and approved the final manuscript.

References

- Berthelot, N., Lemieux, R., Garon-Bissonnette, J., Drouin-Maziade, C., Martel, É., & Maziade, M. (2020). Uptrend in distress and psychiatric symptomatology in pregnant women during the coronavirus disease 2019 pandemic. *Acta Obstetrica Et Gynecologica Scandinavica*, 99(7), 848–855. <https://doi.org/10.1111/aogs.13925>
- Center for Disease Control and Prevention (CDC). (2020a). Breastfeeding and caring for newborns if you have COVID-19. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html>

- Centers for Disease Control and Prevention (CDC). (2020b). Data on COVID-19 during pregnancy: severity of maternal illness. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/special-populations/pregnancy-data-on-covid-19.html>
- Ceulemans, M., Hompes, T., & Foulon, V. (2020). Mental health status of pregnant and breastfeeding women during the COVID-19 pandemic: A call for action. *International Journal of Gynaecology and Obstetrics*, *151*(1), 146–147. <https://doi.org/10.1002/ijgo.13295>
- Chivers, B. R., Carad, R. M., Boyle, J. A., Skouteris, H., Teede, H. J., & Harrison, C. L. (2020). Perinatal distress during COVID-19: Thematic analysis of an online parenting forum. *Journal of Medical Internet Research*, *22*(9), e22002. <https://doi.org/10.2196/22002>
- Cook, K., & Loomis, C. (2012). The impact of choice and control on women's childbirth experiences. *The Journal of Perinatal Education*, *21*(3), 158–168. <https://doi.org/10.1891/1058-1243.21.3.158>
- Corbett, G. A., Milne, S. J., Hehir, M. P., Lindow, S. W., & O'Connell, M. P. (2020). Health anxiety and behavioural changes of pregnant women during the COVID-19 pandemic. *European Journal of Obstetrics, Gynecology, and Reproductive Biology*, *249*, 96–97. <https://doi.org/10.1016/j.ejogrb.2020.04.022>
- Durankuş, F., & Aksu, E. (2020). Effects of the COVID-19 pandemic on anxiety and depressive symptoms in pregnant women: a preliminary study. *The Journal of Maternal-Fetal & Neonatal Medicine*. <https://doi.org/10.1080/14767058.2020.1763946>
- Earls, M. F., Yogman, M. W., Mattson, G., Rafferty, J., Committee on Psychosocial Aspects of Child and Family Health. (2019). Incorporating recognition and management of perinatal depression into pediatric practice. *Pediatrics*, *143*(1), e20183259. <https://doi.org/10.1542/peds.2018-3259>
- Ellis, L., & Roberts, L. (2020). Exploring the use and quality of Internet discussion forums in pregnancy: A qualitative analysis. *Birth*, *47*(1), 153–161. <https://doi.org/10.1111/birt.12459>
- Gildner, T. E., & Thayer, Z. M. (2020). Birth plan alterations among American women in response to COVID-19. *Health Expectations*, *23*(4), 969–971. <https://doi.org/10.1111/hex.13077>
- Glaser, B. G., Strauss, A. L., & Strutzel, E. (1968). The discovery of grounded theory: Strategies for qualitative research. *Nursing Research*, *17*(4), 364.
- Hessami, K., Romanelli, C., Chiurazzi, M., & Cozzolino, M. (2020). COVID-19 pandemic and maternal mental health: a systematic review and meta-analysis. *The Journal of Maternal-Fetal & Neonatal Medicine*. <https://doi.org/10.1080/14767058.2020.1843155>
- Hoffman, C., Dunn, D. M., & Njoroge, W. (2017). Impact of postpartum mental illness upon infant development. *Current Psychiatry Reports*, *19*(12), 100. <https://doi.org/10.1007/s11920-017-0857-8>
- Jaye, C. (2002). Doing qualitative research in general practice: Methodological utility in engagement. *Family Practice*, *19*(5), 557–562. <https://doi.org/10.1093/fampra/19.5.557>
- Liu, C. H., Erdei, C., & Mittal, L. (2021). Risk factors for depression, anxiety, and PTSD symptoms in perinatal women during the COVID-19 Pandemic. *Psychiatry Research*, *295*, 113552. <https://doi.org/10.1016/j.psychres.2020.113552>
- Lobel, M., & Ibrahim, S. M. (2017). Emotions and mental health during pregnancy and postpartum. *Women's Reproductive Health*, *5*(1), 13–19. <https://doi.org/10.1080/23293691.2018.1429378>
- López-Morales, H., Del Valle, M. V., Canet-Juric, L., Andrés, M. L., Galli, J. I., Poó, F., & Urquijo, S. (2021). Mental health of pregnant women during the COVID-19 pandemic: A longitudinal study. *Psychiatry Research*, *295*, 113567. <https://doi.org/10.1016/j.psychres.2020.113567>
- Matthey, S. (2011). Assessing the experience of motherhood: The Being a Mother Scale (BaM-13). *Journal of Affective Disorders*, *128*(1–2), 142–152. <https://doi.org/10.1016/j.jad.2010.06.032>
- Riyad Fatema, S., Islam, M. S., East, L., & Usher, K. (2019). Women's health-related vulnerabilities in natural disasters: A systematic review protocol. *British Medical Journal Open*, *9*(12), e032079. <https://doi.org/10.1136/bmjopen-2019-032079>
- Rocca-Ihenacho, L., & Alonso, C. (2020). Where do women birth during a pandemic? Changing perspectives on Safe Motherhood during the COVID-19 pandemic. *Journal of Global Health Science*. <https://doi.org/10.35500/jghs.2020.2.e4>
- Thapa, S. B., Mainali, A., Schwank, S. E., & Acharya, G. (2020). Maternal mental health in the time of the COVID-19 pandemic. *Acta Obstetrica Et Gynecologica Scandinavica*, *99*(7), 817–818. <https://doi.org/10.1111/aogs.13894>
- Zanardo, V., Manghina, V., Giliberti, L., Vettore, M., Severino, L., & Straface, G. (2020). Psychological impact of COVID-19 quarantine measures in northeastern Italy on mothers in the immediate postpartum period. *International Journal of Gynaecology and Obstetrics*, *150*(2), 184–188. <https://doi.org/10.1002/ijgo.13249>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.