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The Lived Experience of Postpartum Anxiety During COVID-19: A Hermeneutic Phenomenological Study

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Abstract

The experience of pregnancy and postpartum anxiety disorders results in adverse birth outcomes and the disrupted development of infants and children. Since the COVID-19 Pandemic, the Centers for Disease Control and Prevention (CDC) has designated pregnant and postpartum women as more vulnerable to COVID-19 (CDC, 2021), and perinatal mood and anxiety disorders rates have increased. However, research regarding the lived experience of women with postpartum anxiety (PPA) during a global pandemic remains lacking. Using van Manen's hermeneutic phenomenological research method, we interviewed eight women self-identifying as having had PPA during the COVID-19 pandemic. Analysis revealed five themes describing the lived experience of PPA during COVID-19: Wired, Trapped, Lost in Time, No Safety Net, and Doubting Myself. The lived experience of PPA was both mirrored and masked by the lived experience of a global pandemic, exacerbating PPA due to the unknown and constricting nature of the pandemic. These findings suggest the need for future research to include subjective human experiences as pivotal components in creating support practices and a deeper understanding of PPA in the context of unprecedented life events.

Keywords

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The Lived Experience of Postpartum Anxiety During COVID-19: A Hermeneutic Phenomenological Study

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The experience of pregnancy and postpartum anxiety disorders results in adverse birth outcomes and the disrupted development of infants and children. Since the COVID-19 Pandemic, the Centers for Disease Control and Prevention (CDC) has designated pregnant and postpartum women as more vulnerable to COVID-19 (CDC, 2021), and perinatal mood and anxiety disorders rates have increased. However, research regarding the lived experience of women with postpartum anxiety (PPA) during a global pandemic remains lacking. Using van Manen's hermeneutic phenomenological research method, we interviewed eight women self-identifying as having had PPA during the COVID-19 pandemic. Analysis revealed five themes describing the lived experience of PPA during COVID-19: Wired, Trapped, Lost in Time, No Safety Net, and Doubting Myself. The lived experience of PPA was both mirrored and masked by the lived experience of a global pandemic, exacerbating PPA due to the unknown and constricting nature of the pandemic. These findings suggest the need for future research to include subjective human experiences as pivotal components in creating support practices and a deeper understanding of PPA in the context of unprecedented life events.

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Introduction

Perinatal mood and anxiety disorders (PMADs) occur with alarming frequency affecting as many as one in five women in the United States (Bauman et al., 2020). Despite the large body of research regarding depression, women experience perinatal anxiety disorders more frequently than depression (Uguz et al., 2018; Vesga-Lopez et al., 2008). The American Psychiatric Association (APA, 2013) defines anxiety disorders as "excessive fear and anxiety and related behavioral disturbances" (p. 189). Further, the APA distinguishes "*fear* is the embodied response to real or perceived imminent threat, whereas *anxiety* is anticipation of future threat" (p. 189). The broad category of anxiety disorder includes subtypes of disorders classified according to the nature of the fear and anxiety presented for the individual, including generalized anxiety disorder (GAD), panic disorder (PD), and obsessive-compulsive disorder (OCD; APA, 2013). As clinically defined, all anxiety disorders present a group of co-occurring symptoms of excessive worry or fear, restlessness, "feeling keyed up or on edge," sleep disturbance, and muscle tension (APA, 2013, p. 222). Diagnostic criteria include symptoms disrupting daily life and lasting over 6 months or more.

Perinatal anxiety increases the risk of adverse birth outcomes (Ding et al., 2014; Sanchez et al., 2013; Xue et al., 2021), an increased likelihood of developing postpartum depression (PPD; Goodman et al., 2016), and increased suicidality (Asad et al., 2010; Farias et

al., 2013). Anxiety results in increased breastfeeding difficulty (Dennis, 2006; Fallon et al., 2016), disrupted physical, behavioral, and cognitive development in infancy (Grigoriadis et al., 2018; Kingston et al., 2012) early childhood (Leis et al., 2014; Loomans et al., 2011), and adolescence (Van Batenburg-Eddes et al., 2013). Despite the adverse outcomes associated with prenatal anxiety, research regarding postpartum anxiety (PPA) remains lacking (Agrati et al., 2015; Ali, 2018; Grigoriadis et al., 2018; Grigoriadis et al., 2019). Moreover, given the excessive global, social, and individual stress and disruption caused by COVID-19, the need for research regarding the convergence of PPA and the pandemic could not be more significant. The CDC lists pregnant and postpartum women as part of the COVID-19 vulnerable population due to increased risk of complications and adverse outcomes for both mother and infant (CDC, 2021). Further, a better understanding of the lived experience of PPA during the COVID-19 pandemic may address obstacles to care for pregnant and postpartum women in current pandemic and future global events. Therefore, we framed this hermeneutic phenomenological study on the research question: What is the lived experience of PPA during COVID-19?

Theoretical Framework

Theoretically, we framed our work in hermeneutic phenomenology developed by Martin Heidegger and Hans-Georg Gadamer (Vessey, 2009). We were able to describe, understand, and reveal the nature of the lived experience of a phenomenon by using hermeneutic phenomenology. Employing hermeneutic phenomenology allowed us to view the human experience through the lens of an interpretive epistemology, advancing the position that researchers bring to their work preconceptions of the phenomenon from their own lived socio-historical contexts and experiences, known as their lifeworld (Suddick et al., 2020). According to hermeneutic phenomenology, participants function within their "lifeworlds," and the language used to describe the lifeworld reflects the meaning of the experience (Beck, 2019). The dialog between researchers and participants allows for a co-construction of meaning (Modesto, 2018; Vessey, 2009), resulting in something that may not have been at the forefront of awareness before the engagement. This process, known as the hermeneutic circle, blends the parts and the whole towards a "fusion of horizons" of essential meaning. Conducting qualitative research required us to engage fully with the hermeneutic cornerstone, the "fusion of horizons."

Background of the Problem

The Coronavirus Disease 2019 (COVID-19) was first reported in Wuhan China in 2019, (Huang et al., 2020). On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic (WHO, 2020). COVID-19 infection often results in fever, malaise, and acute upper respiratory symptoms necessitating hospitalization and intensive treatment (Wang et al., 2020). As of May 23, 2021, the WHO reported 521,920,560 confirmed cases and 6,274,323 deaths (WHO, 2021). Despite the development of pharmacological and non-pharmacological interventions, COVID-19 continues to impact daily life significantly, and the future of the pandemic remains uncertain (Case et al., 2021; Cowling et al., 2020). Since December 2020, new variants of the SARS-CoV-2 virus have emerged, increasing infection and mortality rates, and prolonging the implementation of mandatory quarantine and social distancing protocol (Faria et al., 2021; Tegally et al., 2020; Volz et al., 2021; Wibmer et al., 2021).

Among those at increased risk of COVID-19, the CDC lists pregnant and postpartum women as a vulnerable population (CDC, 2021). COVID-19 infection for pregnant and postpartum women represents a significantly increased risk of adverse maternal and obstetric

outcomes such as preterm delivery (Knight et al., 2020; Lu et al., 2020) and increased cesarean section (Saccone et al., 2020; Xue et al., 2021).

Literature Review

Impact of Epidemics on Mental Health

In addition to physical illness, psychological distress results from pandemics, epidemics, and large-scale disasters (Goldmann & Galea, 2014). Previous research reported increased depression and anxiety in the general population after Ebola virus disease (Barbisch et al., 2015; Rubin et al., 2016), severe acute respiratory syndrome (SARS; Cava et al., 2005; Hull, 2005; Lee et al., 2005), H1N1 (Braunack-Mayer et al., 2013), MERS (Yoon et al., 2016), and large-scale disasters such as the 9/11 World Trade Tower attacks in the United States (Cukor et al., 2011). Due to the widespread nature of COVID-19 infection, the duration of the outbreak, quarantine, and social and travel restrictions, the negative impact of COVID-19 on mental health appears more drastic than previous pandemics (Brooks et al., 2020; Luo et al., 2020). Increased rates of anxiety, depression, and traumatic stress occur more frequently among vulnerable populations, including healthcare workers (Pappa et al., 2020), women (Santomauro et al., 2021), those with previous histories of mental illness (Abdalla et al., 2021; Feter et al., 2021; Lebel et al., 2020; Qiu et al., 2020; Santabárbara et al., 2021; Xin et al., 2020), and pregnant women compared to non-pregnant women (Corbett et al., 2020; López-Morales et al., 2021). Moreover, the impact of COVID-19 on maternal health services in low-income and middle-income countries (LIMIC) presents significant challenges to already lacking maternal health and maternal mental health programs (Farley et al., 2021; Menendez et al., 2020; Roberton et al., 2020).

Prevalence of PMADs in Perinatal Population

Before the pandemic, the estimated prevalence of PPA ranged between 13% and 40% (Field, 2018; Giardinelli et al., 2012). The epidemiological literature has noted a concerning increase in the prevalence of perinatal mood and anxiety disorders (PMADs) during COVID-19 (Davenport et al., 2020; Wu, 2020). For example, using the Edinburgh Postnatal Depression Scale (EPDS; Cox, 1987), the Positive and Negative Affects Schedule (PANAS; Watson et al., 1988), and the Satisfaction with Life Scale (SWLS; Diener et al., 1985), Chaves et al. (2021) assessed that of 450 pregnant and 274 postpartum women living in Spain during COVID-19, 58% scored positively for depression and 51% [7] for anxiety. Early longitudinal comparisons of pre-pandemic prevalence rates with those during the pandemic present mixed findings. Davenport et al. (2020) compared self-reported rates of depression and anxiety in 900 women 40.7% (n = 520) of pregnant and 51% (n = 380) postpartum women using the EPDS and the State-Trait Anxiety Inventory (STAI; Speilberger, 1983). The authors reported a pre-pandemic prevalence of 15% depression and 29% anxiety, while post-pandemic rates measured 40.7% for depression and 72% for mild or moderate anxiety (Davenport et al., 2020). Recent longitudinal studies confirm that prevalence for both depression and anxiety increased post-pandemic (Al Sumri et al., 2021; Perzow et al., 2021; Sun et al., 2021). Research also demonstrates an increase in prevalence rates among pregnant or postpartum women with a previous mood or anxiety disorders history. In a sample of 1,123 perinatal women, Liu et al. (2021) reported rates of depression (36.4%), anxiety (22.7%), and PTSD (10.3%) and that those with a pre-existing mental health history were at significantly increased risk for more significant clinical levels of depression, anxiety, and PTSD.

Qualitative Research

The significance of qualitative research in health and health policy has precedence (Chafe, 2017; Gobat et al., 2018; Palinkas, 2014; Vindrola-Padros et al., 2020). Qualitative research on previous pandemics such as AIDS/HIV demonstrates a significant contribution to our understanding of the lived experience of these global events (Schatz et al., 2013; Teti et al., 2015). Not surprisingly, there has been a direct call for more qualitative research regarding COVID-19 (Teti et al., 2020). Tremblay et al. (2021) noted that qualitative research about COVID-19 "is essential as it allows for in-depth knowledge development through the lens of the ones living the changes, shaped by a unique context" (p. 5).

Although the body of qualitative literature about COVID-19 remains small, early research sheds light on the human experience of COVID-19. Examples include a descriptive phenomenological study using Colaizzi's (1978) method regarding the experience of recovery from COVID (Moradi et al., 2020), the lived experiences of nurses caring for patients with COVID-19 in Iran (Karimi et al., 2020), the experience of midwives treating women during COVID-19 (Goberna-Tricas et al., 2021), and the lived experience of COVID-19 infection (Jesmi et al., 2021).

Early qualitative research regarding the intersection of COVID and pregnancy demonstrates an integral alignment between understanding the human experience and qualitative research design. For example, a recent Turkish study explored COVID-19 concerns and attitudes of 15 pregnant women using content analysis, and the authors reported that women experienced fear of the unknown and concern regarding the disruption in routine prenatal care and social lives caused by public health protocol to socially distance (Sahin & Kabakci, 2021). Ollivier et al. (2021) explored the social isolation of 68 new mothers in Nova Scotia during COVID-19; however, the discourse analysis did not address postpartum anxiety. A Canadian qualitative study of how 57 birthing women were affected by social distancing policies reported poor postpartum health, particularly among women with a previous history of mental health conditions and those with complicated deliveries (Rice & Williams, 2020). However, the study did not address the experience of a postpartum anxiety disorder in their sample. Jackson et al. (2021) explored the psychological experiences of 12 UK women during the COVID-19 pandemic, revealing the cumulative and negative experience of social restrictions for postpartum women. Still, the study did not address anxiety or women self-reporting a postpartum anxiety disorder.

Finally, despite previous phenomenological research regarding the lived experience of postpartum anxiety (Wardrop & Popadiuk, 2013), a phenomenological study about the lived experience of PPA during the COVID-19 pandemic does not exist. Exploring the intersection between unprecedented life events warrants framing the problem within a research approach that positions the subjective human experience as central to developing solutions and increasing understanding. In this way, addressing the research question, "What is the lived experience of postpartum anxiety" positions the subjective experience at the core of our inquiry.

Relationship to Topic

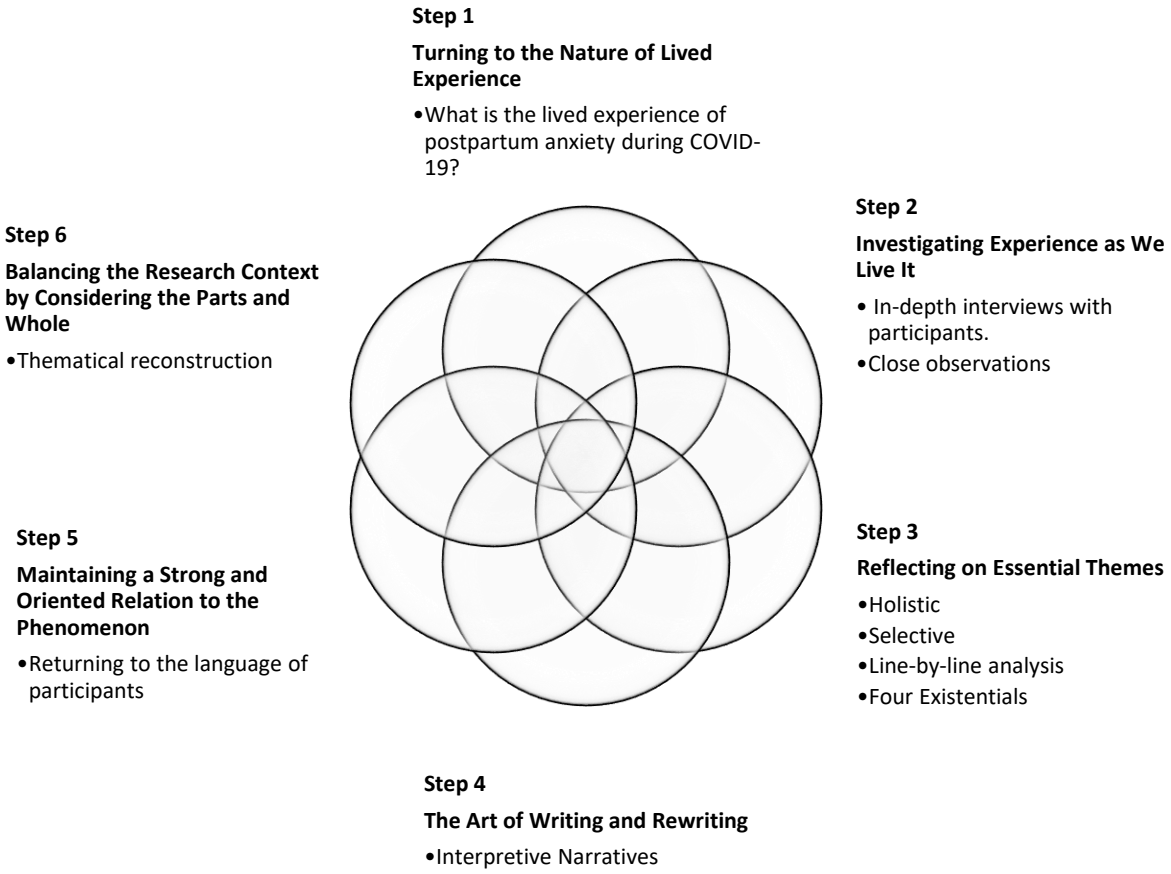
Our mutual hermeneutic philosophical orientation was aligned with our perspectives on qualitative and humanistic research. Further our individual life's work had primed us both with inherent biases impacting how we analyzed the data. I (WL) came to the study with decades of experience researching maternal mental health and advocating for birthing persons, as well as a background in clinical psychology. I (JD) approached the study with over a decade of working with the birthing families and maternal-infant health and an orientation toward mind-body

medicine. Working together to acknowledge, amend, and utilize these differences helped us create a more robust analysis touching broader aspects of the phenomenon than we would have achieved on our own. These peer debriefing sessions took place in the form of zoom meetings, comments in our shared documents, and text messaging. We shared literature, researchers' notes, drafts, edits, concept maps, and SmartArt. In this way, we used the hermeneutic circle to cycle through the data representing the participants' lived experiences, our interpretations of the data, and our own professional relationships to the topic. Our professional work in the field provided a collaborative research context.

Methods

Eight women participated in the study. The average age of participants was 30.4 years. Six participants lived in the United States, and two resided in Canada. All participants self-identified as suffering from a postpartum anxiety disorder within one year following the birth of their child. All women reported giving birth between January 2020 and September 2020. Participants were married and employed full-time before the pandemic. We conducted the interviews via Zoom which yielded a total of 371 minutes and 119 pages of raw data. On average, interviews lasted 46 minutes in length, generating an average of 15 pages of raw data. We conducted the hermeneutic phenomenological study of the lived experience of PPA during COVID-19 applying van Manen's (1997) method of analysis (See Figure 1).

Figure 1
van Manen's Method of Analysis



Step 1: Turning to the Nature of Lived Experience

As qualitative researchers with a shared interest in the human science approach to perinatal mental health, the experience of postpartum anxiety during the COVID-19 pandemic drew us toward a shared and abiding concern (van Manen, 2016, p. 31). Our research goals and philosophical commitment to understanding of the lived experience of PPA during COVID-19 aligned with van Manen's (2016) approach that human science aims at both understanding and analyzing the meaning of the human experience. van Manen (2016) suggested that the act of researching in the human sciences is the "intentional act of attaching ourselves to the world, to become more fully part of it, or better, to *become* the world" (p. 5). To this end, we turned to the topic of postpartum anxiety during COVID-19, creating a research question that aligned with our purpose.

Step 2: Investigating Experience as We Live It

We approached our research as "a project of someone: a real person, who in the particular context of individual, social, and historical life circumstances, sets out to make sense of a certain aspect of human existence" (van Manen, 2016, p. 31). In this way, we approached collecting data from those situated within the context of having a PPA during the social and historical life circumstances of the COVID-19 pandemic. Following approval from the Saybrook University IRB, we used a purposive sampling strategy. Recruitment took place through obtaining permission to post the recruitment flyer to social media platforms of international and national maternal mental health organizations. Eligibility to participate included being a female adult who experienced a postpartum anxiety disorder up to one year postpartum during the COVID-19 pandemic, English speaking, and willingness to participate. Screening conversational interviews determined eligibility. A sufficient sample size occurs when information and concepts continually reemerge in the data (van Manen, 2016). Seidman (2013) and Charman (2017) suggested six participants is often satisfactory for hermeneutic phenomenology. Our final sample consisted of eight participants. This purposive sample facilitated investigating the experience of PPA during COVID-19 as women lived it.

Data Collection: Interviews and Close Observations

Collecting data from the purposive sample of participants required crafting interview questions eliciting description and meaning in a conversational manner. van Manen (2016) suggested that hermeneutic interviews proceed as a triad of conversation regarding the phenomenon: "conversational relation between the speakers, and the speakers are involved in a conversational relation with the notion of phenomenon that keeps the personal relation of the conversation intact" (p. 98). As such, we employed semi-structured interview questions to encourage a hermeneutic conversation about the experience of PPA during COVID and to develop a deeper understanding of the phenomenon (Lauterbach, 2018; van Manen, 2016). We asked participants the following interview questions.

1. To gather data about how women described the experience we asked: How would you describe your experience of a postpartum anxiety disorder during the COVID-19 pandemic?
2. To gather data about how women experienced the impact of the phenomenon, we asked: What are the ways you saw yourself impacted?
3. To gather data about how women made meaning of the phenomenon, we asked: How do you make sense of the experience now?

The first question elicited a description of the phenomenon, and the second and third questions facilitated conversational exploration of the phenomenon by the speakers relative to the personal nature of the phenomenon under inquiry, PPA during COVID-19. Following data collection, we reviewed transcripts an additional time for accuracy before sending them to participants for member checking. Upon receiving the member-checked transcriptions, we analyzed the data to reflect on essential themes. We reviewed transcripts an additional time for accuracy before sending them to participants for member checking. Upon receiving the member-checked transcriptions, we analyzed the data for essential themes.

Step 3: Reflecting on Essential Themes

According to van Manen (2016), "meaning is multidimensional and multi-layered" (p. 78). We used van Manen's (2016) three approaches to thematic discovery during data analysis: holistic, selective, and detailed. First, the holistic approach views the entire account as one unit of meaning. We analyzed each transcript and created initial categories to help shape the holistic sense of the experience of PPA and expose the nature of the phenomenon. We shared our individual analyses in our secure Microsoft Teams channel, utilizing real-time meetings to compare interpretations until the following thematic categories emerged. These categories such as, "COVID specific, PPA versus previous anxiety, and relationships as well as constant, this was different, family stress, isolation, restriction, and expectation," were drawn out of the original transcripts when looking at the entire transcript as one unit of data in the first phase of thematic discovery. These categories helped shape the development of the initial themes.

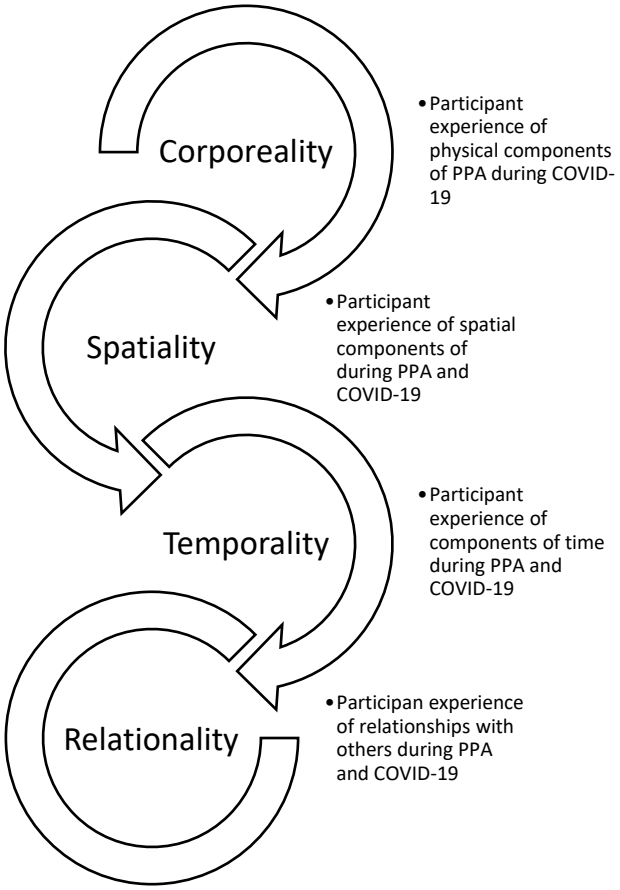
In the second approach, selective thematic discovery, we pulled similar phrases shared by multiple participants, yielding the beginnings of emerging themes from new categories related to the participants' "somatic experience, relationship to self and others, and within the context of their external environment during COVID-19." The early emerging themes were taken from participants verbatim as to capture the similarities across participants' experiences. We then emerging themes by performing a line-by-line analysis of each Finally, the detailed approach allowed us the opportunity to align verbatim quotes with the essence of each theme as a layering process. The process provided a rich illustration of the emergence of the themes. Noticing the reoccurring concepts relating to body, time, space, and interpersonal relating, we were inspired to work with van Manen's (2016) four existentials (see Figure 2).

We placed the new set of categories side-by-side in an excel sheet document with the emerging concepts of corporeality, spatiality, temporality, and relationality. Through this side-by-side analysis, we were able to compare the similarities and place the categories within the template of the four existentials. Corporeality is in reference to the body, spatiality corresponds to the geographic or lived space surrounding the experience, temporality relates to the sense of time, either real or felt, and relationality corresponds to relationships (van Manen, 2016). For example, the concept of restriction, layered with the emphasis on the body and the essence of "caged," and paired with the in vivo "elephant on my chest" (P2) helped us witness the emergence of Theme 2: Trapped. We continued this layering process with the raw data, initial categories, in vivo again, initial themes, new categories, and corresponding existential until the final five themes captured the lived experience of our participants. The five themes of Wired, Trapped, Lost in Time, No Safety Nets, and Doubting Myself, emerged from this layering process.

We participated in "collaborative hermeneutic conversations" (Beck, 2019, p. 77), meeting bi-weekly to review emerging thematic material until we achieved co-constructed interpretations of corporeality, spatiality, temporality, and relationality of the lived experience of PPA during COVID-19 (see Figure 2). In this way, we cycled through the hermeneutic circle,

considering how an outward understanding of the main themes supported our deepening knowledge of the participant and the whole of the experience.

Figure 2
Application of van Manen's Four Existentials in Collaborative Analysis

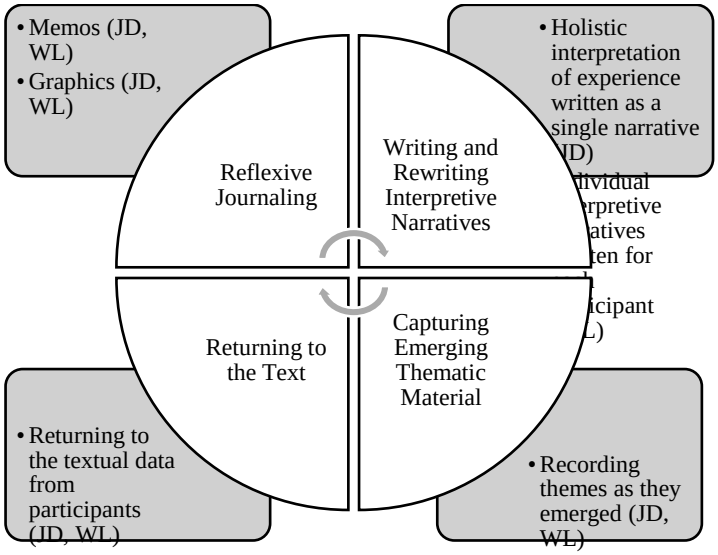


Step 4: The Art of Writing and Rewriting

To become increasingly familiar with the lived experience of the participants, and in alignment with van Manen's suggested step four of analysis, we engaged in the process of writing and rewriting. van Manen (2016) positioned reflective writing as central to the art of phenomenological research. In this way, writing brings language to the forefront of the meaning-making experience allowing researchers to gather and reflect on the data by recollecting the participants' experiences. Our agreed-upon writing process included extensive reflexive journaling and writing and rewriting interpretive narratives to provide insight into the experiential nature of the data while providing a platform for interpretation. We wrote individual interpretive narratives for each participant, capturing the overarching components of common themes in the data. These narratives were multiple-page interpretations of the experiences shared by the participants. The process of rewriting the narratives in our own voice allowed us to bear witness to each other's understanding of the experience as well as our own. In essence, we used this step of the analysis to tell the story in our own words, as a dialog with the experience that was shared by each participant, or in other words, repeating back what it was that we heard. Writing the participants' stories led to a deeper understanding of the variations and similarities among the data, depicting a cohesive appreciation for the hermeneutic circle (see Figure 3). The interpretive narratives served as illustrations of the

essence of the participant's individual experiences and the phenomena itself, marrying the parts and the whole and generating our final themes.

Figure 3
Illustration of Collaborative Process: Writing and Rewriting



Step 5: Maintaining a Strong and Oriented Relation to the Phenomenon

Abstraction in qualitative work can lead the researcher away from the participants' actual experiences (Hamedanchi et al., 2021; van Manen, 2016). We iteratively circled back to our participants' original transcripts to avoid this potentiality, cross-checking our theme titles with participant text. Turning to the original data allowed us to stay focused on the research question and the participants' experiences.

Step 6: Balancing the Research Context by Considering the Parts and Whole

Hermeneutic phenomenological research requires a continual dialog between the original research question and emerging analysis to ensure alignment with the aim of the study as the analysis unfolds (Hamedanchi et al., 2021). van Manen (2016) presented five approaches to organizing the text to be used collaboratively or individually: thematical, analytical, exemplificative, exegetical, and existential. We employed the thematical approach, structuring the text in themes and subthemes, systemically situating the individual parts within their relationships to the whole. The final themes constituted the results and step six was imperative in our confidence, as it provided the opportunity to align the final analysis to our original research question.

Trustworthiness

Trustworthiness, "...the degree of confidence in data, interpretation, and methods used to ensure the quality of a study" (Connelly, 2016, p. 435) was achieved in our study by adhering to qualitative guidelines for establishing credibility, dependability, confirmability, and transferability (Guba & Lincoln, 1994; Morgan & Ravitch, 2018; Polit & Beck, 2017). We employed member-checking, peer-debriefing, extensive reflexive journaling, and triangulation to establish credibility. Continued engagement with participants transpired through the process

of member-checking. Peer debriefing occurred through my (Walker Ladd) conferring with two different colleagues in the field of perinatal mood and anxiety disorders to review and discuss findings relative to the clinical presentation of postpartum anxiety. We questioned our interpretation of the findings through ongoing reflexive journaling. Triangulating our findings with emergent research regarding anxiety disorders in the general and perinatal populations relative to COVID-19 strengthened the dependability of our findings. We maintained process logs, examining the methodological literature to support the confirmability of our research. Finally, we achieved transferability by creating transparent data collection and analysis (Beck, 2019).

Results

We analyzed data according to van Manen's (2016) methodology, revealing the following five themes.

Theme 1: Wired

Participants described the embodied experience of PPA as a sense of constant psychomotor agitation, rage, insomnia, a sense of physical constraint, and waves of hot and cold accompanied by nausea. In addition to a sense of "constantly being wound up" (Participant #4) and "intense, overwhelming energy kind of always" (Participant #5), women described that the symptoms of PPA were notably different than previous experiences of depression or anxiety. As Participant 8 explained, her experience with PPA was "an entirely different beast that, like, I was not prepared for." Participant 6 confirmed, "I had no clue what anxiety was like until going through this." Participant 2 rated her PPA in this way, "I would say that normal anxiety might be a two or three; this was more like a seven or eight every day."

Theme 2: Trapped

While experiencing significant symptoms of PPA, women described being trapped by COVID-19 travel restrictions and isolated from others due to social distancing protocol. Many referred to not being able to go outside due to concerns regarding the transmission of COVID-19 infection. The "massive isolation indoors all the time, not getting any sunlight" described by Participant 8 echoed Participant 5, sharing, "It was during that time where I felt totally restricted and not free to let out my energy" (Participant #5). Participant 7 elaborated on the experience of being trapped inside, "but it's definitely not the same when you've been cooped up in your house for, like, a year and not seeing people really in person." (Participant #7)

Many referred to not being able to go outside due to their concerns or their partner's concerns regarding the transmission of COVID-19 infection early in the pandemic; as Participant 3 shared:

> At this point, nobody knows how COVID spreads, right? Is it in the air? We live in a condo building. [My husband] is super paranoid about that. He doesn't even want me to take the elevator because he doesn't want to be in the elevator with other people. We live on the 10th floor. I'm like, I'm not walking a baby up 12 flights of stairs because our parking was on the two-below ground. Nor am I walking our groceries up 12 flights of stairs. We're fighting constantly because he doesn't want me to go through the condo building or go anywhere, and we're trapped in this apartment. (Participant #3)

Here, Participants Revealed how Postpartum Anxiety was Exacerbated by the Social Restrictions and Early Confusion Relative to COVID-19. Theme 3: Lost in Time

The lived experience of PPA during COVID included a temporal sense of constant waiting, as Participant 4 described, "that feeling where sort of, like, your heart drops or something like that, but never for the length of time and just constant." COVID-19 exacerbated a sense of unknown while waiting for the pandemic to end, as Participant 3 explained, "We just basically lived in fear at this cottage for three months." Participant 7 shared, "I was constantly worrying about, like, all of the things that were going on…I would get so anxious because I would feel like I'm failing her [baby]."

Women experienced uncertainty in deciding to return to work while waiting for the end of scheduled maternity leave as Participant 4 noted, "The whole time of my maternity leave in the back of my head I was thinking, okay, now I have three weeks left of leave. Now I have two weeks left." While waiting to see how COVID-19 would evolve, participants also reported being part of two-income homes and were faced with the challenge of either returning to work, relying on hard-to-find childcare, or stepping away from their careers. Participant 2 explained:

> I had to extend my maternity leave because we had no way to do childcare. I was kind of thinking, well, maybe she can go to daycare, or we can have someone come in to sit with her. I was gonna [*sic*] be required to go into the office. I had to make the decision to resign. (Participant #2)

Waiting to return to work created significant concern about exposure and potentially bringing COVID home to the family, particularly for those who worked in high-risk jobs; as one participant reflected, "I knew I was gonna be going back to work in a hospital, and I had no idea what I was gonna be walking into." (Participant #4) As described by our participants, PPA during COVID-19 involved grappling with the uncertainty of time while managing an anxiety disorder. Co-occurring and co-existing, the intersection of PPA and COVID-19 created powerful fear of the future.

Theme 4: No Safety Nets

Restricted access to the medical providers and familial relationships due to COVID-19 regulations prevented women from engaging in relationships that maintained health and well-being before COVID-19. Participants shared that the COVID-19 safety protocol stopped them access to previously established coping mechanisms for anxiety and depression "Some of my normal coping skills that I use, I just can't access now because of the pandemic." (Participant #2) Facilities that would have previously assisted with coping mechanisms during anxiety, such as the gym, visiting friends, and space outside the home, were no longer available. Relationally, PPA during COVID-19 was an experience of wondering who could help and if others adhered to COVID-19 protocol.

Medical Providers

Participants described restricted access to medical care providers due to the COVID-19 mandated medical protocols. Participant 1 explained that accessing medical care was a combination of experiencing "Restrictions on being able to get into the doctor's offices, and a little bit of fear of not wanting to expose this baby to this sort of unknown virus." For some, the experience of a PPA while living in a rural area during COVID-19 "definitely adds a lot of stress and worrying about being isolated and being disconnected and being unsure if you need

medical care if you can access it or not." (Participant #2). As telehealth became an available option, additional difficulties arose from arranging meetings. Participant 4 explained:

> There was this series of playing phone tag. Like, she would respond by message and then try to call me, and it was, of course, a time where I'm in the middle of something where I couldn't answer the phone. (Participant #4)

When accessing pediatric care providers, COVID-19 medical mandates required that only one parent accompany the baby. Women described the difficulty making decisions as to critical care interventions for their baby. As Participant 2 shared, "Only one parent could go. So that added some anxiety to that just knowing that you're the only parent that gets to go in and make decisions for your kid." (Participant #2) Restrictions compromised women's postpartum physical health. Participant 7 described the experience of readmission due to infection in this way:

> COVID really impacted the trauma of the situation because I was separated from my daughter for a week when I was readmitted to the hospital with sepsis because I couldn't see her due to, like, COVID restrictions. (Participant #7)

Familial Social Support

In addition to the difficulty of making health care decisions for their baby, COVID-19 mandates created uncertainty about which family or friends they would allow to see them or offer postpartum support with the baby. Participant 1 explained:

> We had to decide who and if we would let people into our house after he was born to help. Originally, we thought we'll just take care of it, we'll keep people out, so as not to be bringing in more exposures and our family doesn't live right in town, but eventually, we had to have parents and family come in. (Participant #1)

COVID regulations and mandates simultaneously further revealed relational components of the lived experience of PPA during COVID-19. Not only did women describe geographic isolation from families, but feelings of desertion while managing a PPA disorder, as Participant 5 shared:

> I felt abandoned by my family. I thought we were super close. But then they left me in the lurch with anxiety and used COVID as an excuse—then said it was my fault because I was trying to keep my family safe and follow protocol. (Participant #5)

When family members refused to follow the COVID-19 masking protocol, previous familial relations were challenged as one participant disclosed, "For the first couple of months nobody talked to us. We've seen what it's normally like when a new baby is in the family, and that's not been the case for us, which has been painful" (Participant #7). Another participant described that because her local mandates allowed a limited number of family members to visit, resulting in "My in-laws were here for the whole day, every day, for months. I couldn't be open and talk about what I was going through because they were not understanding" (Participant #8).

Theme 5: Doubting Myself

The convergence of PPA with the spatial, temporal, and relational dynamics of a global pandemic resulted in women doubting themselves as mothers and the integrity of their PPA symptoms amidst the pandemic. As shared by Participant 6, "because we were quarantining, it was hard to gauge. Is this just in my head, or am I really needing help here?" Participant 4 elaborated on this experience:

> It's this global pandemic we've never been in before. Or if it was postpartum-related anxiety. Am I feeling depressed because of the things that I saw at work this week? Or is this still my postpartum depression coming into play? And I still don't really know. I don't know that there's a way to differentiate since I was experiencing it at the same time. It's been an interesting year. (Participant #4)

Doubting oneself as a mother was an experience of "guilty feelings about like, I can't believe I'm bringing a baby into this world, and it's so messed up" (Participant #8), along with the experience of doubting one's capacity to provide primary care for their infant, as Participant 6 conveyed:

> I would just obsess over things like that, like feeding her enough and, like, she wouldn't want to do tummy time, and I would get so anxious because I would feel like I'm failing her because I couldn't get her to stay on her tummy and I thought she wouldn't develop how she needed to. (Participant #6)

Doubt involved both the fear of not being able to care for the immediate needs of their infants and anxiety about how COVID was impacting the future social development of their developing child:

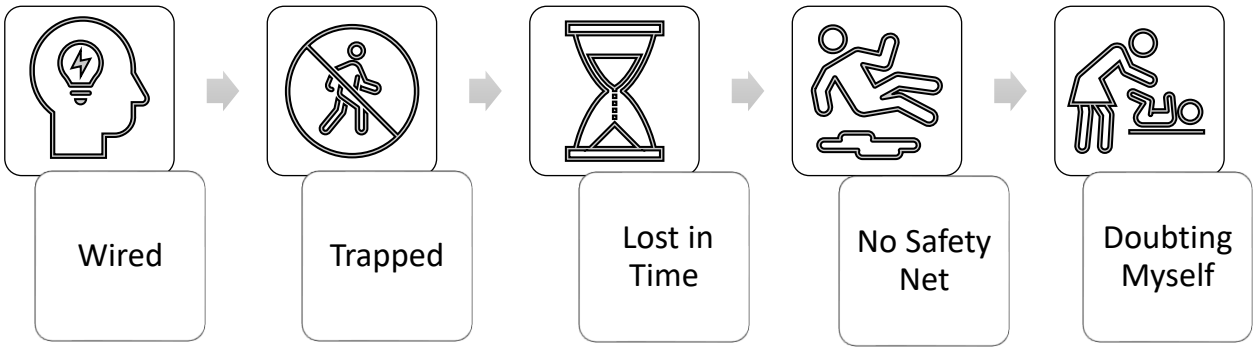
> I'm super terrified, like, is he getting enough antibodies from me? Is he gonna catch it because he doesn't have an immune system? Will he have an immune system because now I can't take him and roll him in the dirt or bring him around other people to absorb those germs? Am I gonna have this bubble child who's gonna have immunity problems for the rest of his life because of this? (Participant #3)

Discussion

Within the context of COVID-19, the lived experience of PPA was both mirrored and masked by the lived experience of a global pandemic (see Figure 4). The lived experience of PPA was mirrored by the pandemic due to the nature of living in fear and isolation that the COVID-19 shut down provided for many. The experiences felt by the population at large mirrored the internal experiences of the participants within the context of PPA. This mirroring is, was in part, what led to the development of themes four and five. These participants felt the global experience of doubt and confusion, isolation and unknown, but through the context of having a mental health disorder and a baby to care for. This mirroring of the global context within their own body and mind exacerbated the experience of PPA confounding the variables of mental illness and a pandemic. The experience was simultaneously masked by the pandemic because it was difficult for the participants to fully understand their anxiety due to the context of the pandemic. This masking, in part, bolstered themes one, two, and three. The restrictions

and protocols in place for the community health during the pandemic were detrimental for the mental health of the participants and created a gap in care and resources to manage PPA. Again, layering the experience of a global pandemic on PPA, the participants experienced devastating times during what was expected to be happy days of one's life.

Figure 4
Representation of the Lived Experience of PPA During COVID



Wired

Somatic expression is a way for the body to witness a mental phenomenon that creates a fundamental understanding for the individual experiencing the phenomenon (Ogden et al., 2006). As described by our participants, PPA during COVID-19 was an embodied experience of anxiety. Being "wired" (Participant #3) like a "caged animal" (Participant #5) was the corporeal embodiment of the lived experience of PPA within a context of global anxiety regarding the threat of exposure to a pandemic killing people every day and communicated through television and social media platforms. Our findings confirm previous literature regarding that prior history of mood or anxiety disorders correlate to the development of PPA (Yim et al., 2015), and the symptoms of PPA as characterized by psychomotor agitation (Beck, 1998), irritability/rage (Coates et al., 2014), insomnia (Clarke et al., 2014), and chest pressure (Ali, 2018; Farr et al., 2014; Goodman et al., 2016). Our findings further support previous literature that PPA involves worry or excessive concern for the baby (Iliadis et al., 2018). Our results are unique because within the context of COVID-19, symptoms were not only experienced by the individual but mirrored by the response to the pervasive threat of COVID-19 infection and the necessary but overwhelming global response to protect the public.

Trapped

Restricted access to space was exacerbated by concerns of potential COVID exposure to themselves and their child, moving them to follow the suggestions and social distance. The unforeseen outcomes of isolation were an increase of anxiety about the outside world and behaviors of others, feeling trapped indoors, and worry about traveling outside the home in shared public spaces. Partners also contributed to this worry in communicating their concerns about the communicability of COVID, as illustrated by Participant 3 sharing, "He doesn't even

want me to take the elevator because he doesn't wanna be in the elevator with other people. And he's worried about the air in the elevator!"

Lost in Time

Expectations of a celebratory pregnancy and motherhood quickly changed when COVID regulations shut down in-person gatherings. These findings support previous research describing the discrepancy between women's expectations of motherhood and the experience of PPA (Highet et al., 2014). As Participant 8 shared:

> You would think that you would get to be around a lot of people who are excited about your pregnancy and, you know, just be surrounded by that, and I wasn't getting that. My baby shower was done entirely online. And I tried to stay positive, but it was really hard. (Participant #8)

Yet within the temporal nature of COVID-19, time was suspended. There was no way to change their current situation and attempts to relate to the world they once knew were shadowed with feelings of doom and uncertainty. The future was unknown. Being lost in time paralyzed women's sense of control over the present or the future.

No Safety Nets

The role of social support for women experiencing PPA has been well-documented (Milgrom et al., 2019). Women in our study indicated a need for social support, but due to COVID-19, they were wary of who they asked for help. The combination of isolation and lack of social connection created a sense of profound vulnerability, as Participant 6 described, "There was no one else left to check on me, we had no other places to go, there are no other safety nets here" (Participant #6). As shared by Participant 5, "COVID magnified and brought all this stuff up. My family loves me, but they're not there for me."

Rising cases of COVID-19 put a strain on the hospitals and medical centers utilized for birth and perinatal care. Doctors' offices limited appointments based on need and immediacy and placed restrictions on the number of people allowed to enter. The participants who could access health care reported feeling unsure of or unsafe with the protocols or risks involved.

Doubting Myself

The circumstance of becoming a new parent during a time of isolation caused deep concern regarding both the ability to parent and the symptoms of PPA. As the participants fell further into their experience of anxiety, they became less and less confident in their ability to care for their children. Participant 6 shared the immense turmoil of mothering during a global health crisis while experiencing a PPA, "He's crying, and my brain is saying, you can't pick him up because you'll get him sick."

Recommendations

COVID-19 has claimed the lives of nearly six million people. As new variants of the SARS-CoV-2 virus emerge, such as the B.1.617.2 Delta variant discovered in June of 2021 and the B.1.1.529 Omicron variant identified in November 2021, the need for ongoing precaution and safety protocols remains vital to public health (WHO, 2020). A common

denominator for the vulnerability to anxiety disorders and COVID-19 remains pregnant and postpartum women.

The findings from this study suggest incongruence between awareness of the potentiality of PPA and proactivity in supporting and treating pregnant and post-partum women. Specifically, in the context of an unprecedented life circumstance, the effects of PPA may become exacerbated and require an additional level of preparation and treatment. Based on the participants' reports, we have compiled possible recommendations for medical providers, maternal care providers, patient advocates, and birthing families, to help create support networks, self-care alternatives, and means to explore communication with the birthing persons' providers and familial support.

Establishing a series of checkpoints for screening protocols throughout pregnancy and the postpartum period can help the birthing person engage in a dialog with their providers regarding their history of mental health concerns. Regular mental health check-ins explicitly may include more explicit protocols specific to perinatal and postpartum women that can lay a foundation of expectation, including hospital protocols regarding the birth process, what to expect at follow-up appointments, and a plan for decision-making for unforeseen obstacles/concerns or needed interventions for baby or birthing person. Home-based support and counseling on communication techniques may be offered. Families often need guidance on how to communicate difficult circumstances to their social support networks and employers, especially during unprecedented times. Topics for counsel may include caretaker agreements regarding vaccination, immunization safety and efficacy for pregnancy and breastfeeding, safety protocols and mandate adherence, and family or extended leave from work if necessary.

In addition to relational guidance, personal support is incredibly vital for birthing persons at the onset of PPA and before. Recognizing current self-care practices may become unavailable during quarantines and shutdowns and bringing this reality to the forefront of conversation can help the families prepare in advance for options and alternatives. Locating spaces both inside and outside the home that allow for movement and exercise, interaction with nature, virtual or physically safe support networks, may empower families to feel control over their environment.

To our knowledge, this is the first hermeneutic phenomenological study to examine the lived experience of PPA during the COVID-19 pandemic. Findings support the previous body of literature specific to perinatal mood and anxiety disorders and the literature regarding the psychological impact of COVID on pregnant and postpartum women, therefore bridging the gap between the two. Failing to address PMADs within the context of COVID-19 research misses an opportunity to address the 1 in 5 women experiencing a PMAD during the pandemic. Future qualitative research regarding the birthing person's postpartum mental health is warranted.

Limitations

Limitations for this study included the self-assessment of PPA by participants rather than official clinical diagnoses. It has been suggested that while maternal worry alone may induce distress, women still may not meet diagnostic criteria for an anxiety disorder (Brockington et al., 2006). However, no clinical diagnostic criteria for postpartum anxiety exist in either the DSM-V (APA, 2013) or the ICD-11 (WHO, 2018). Therefore, meeting clinical criteria for PPA, while ideally would benefit this study and the field, cannot be held as a litmus test for the experience of PPA as defined by participants.

References

Abdalla, S. M., Ettman, C. K., Cohen, G. H., & Galea, S. (2021). Mental health consequences of COVID-19: A nationally representative cross-sectional study of pandemic-related stressors and anxiety disorders in the USA. *BMJ Open*, *11*(8), e044125.

Agrati, D., Browne, D., Jonas, W., Meaney, M., Atkinson, L., Steiner, M., & Fleming, A. S. (2015). Maternal anxiety from pregnancy to 2 years postpartum: Transactional patterns of maternal early adversity and child temperament. *Archives of Women's Mental Health*, *18*(5), 693-705.

Ali, E. (2018). Women's experiences with postpartum anxiety disorders: A narrative literature review. *International Journal of Women's Health*, *10*, 237.

Al Sumri, H., Al Kindi, R., & Al Sumri, S. (2021). The psychological effects of the coronavirus disease 2019 pandemic on pregnant and postpartum women. *Journal of Clinical Gynecology and Obstetrics*, *10*(3), 73-80.

American Psychiatric Association (APA). (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association Publishing. https://doi.org/10.1176/appi.books.9780890425596

Asad, N., Karmaliani, R., Sullaiman, N., Bann, C. M., McClure, E. M., Pasha, O., Wright, L. L., & Goldenberg, R. L. (2010). Prevalence of suicidal thoughts and attempts among pregnant Pakistani women. *Acta Obstetricia et Gynecologica Scandinavica*, *89*(12), 1545-1551.

Barbisch, D., Koenig, K. L., & Shih, F. Y. (2015). Is there a case for quarantine? Perspectives from SARS to Ebola. *Disaster Medicine and Public Health Preparedness*, *9*(5), 547-553.

Bauman, B. L., Ko, J. Y., Cox, S., D'Angelo, D. V., Warner, L., Folger, S., Tevendale, H. D., Coy, K. C., Harrison, L., & Barfield, W. D. (2020). Vital signs: Postpartum depressive symptoms and provider discussions about perinatal depression—United States, 2018. *Morbidity and Mortality Weekly Report*, *69*(19), 575. http://dx.doi.org/10.15585/mmwr.mm6919a2external icon.

Beck, C. T. (1998). Postpartum onset of panic disorder. *The Journal of Nursing Scholarship*, *30*(2), 131-135.

Beck, C. T. (2019). *Introduction to phenomenology: Focus on methodology*. SAGE Publications.

Braunack-Mayer, A., Tooher, R., Collins, J. E., Street, J. M., & Marshall, H. (2013). Understanding the school community's response to school closures during the H1N1 2009 influenza pandemic. *BMC Public Health*, *13*(1), 1-15.

Brockington, I. F., Macdonald, E., & Wainscott, G. (2006). Anxiety, obsessions and morbid preoccupations in pregnancy and the puerperium. *Archives of Women's Mental Health*, *9*(5), 253-263.

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, *395*(10227), 912-920.

Case, J. B., Winkler, E. S., Errico, J. M., & Diamond, M. S. (2021). On the road to ending the COVID-19 Pandemic: Are we there yet? *Virology*, *557*, 70-85.

Cava, M. A., Fay, K. E., Beanlands, H. J., McCay, E. A., & Wignall, R. (2005). The experience of quarantine for individuals affected by SARS in Toronto. *Public Health Nursing*, *22*(5), 398-406.

Centers for Disease Control and Prevention (CDC). (2021). *Pregnant and recently pregnant people. At increased risk for severe illness from COVID-19*. U.S. Department of Health & Human Services. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-

precautions/pregnant-people.html

Chafe, R. (2017). The value of qualitative description in health services and policy research. *Healthcare and Policy, 12*, 12–18.

Charman, L. A. (2017). *Using hermeneutic phenomenology methodology to conduct a nurse's phenomenological enquiry into oncology doctors' decision-making for patients at the end of life: A review of method and research practicalities*. SAGE Publications Ltd.

Chaves, C., Marchena, C., Palacios, B., Salgado, A., & Duque, A. (2021). Effects of the COVID-19 Pandemic on perinatal mental health in Spain: Positive and negative outcomes. *Women and Birth*, *35*(3), 254-261. DOI: 10.1016/j.wombi.2021.01.007

Clarke, K., Saville, N., Bhandari, B., Giri, K., Ghising, M., Jha, M., Jha, S., Magar, J., Roy, R., Shrestha, B., Thakur, B., Tiwari, R., Costello, A., Manandhar, D., King, M., Osrin, D., & Prost, A. (2014). Understanding psychological distress among mothers in rural Nepal: A qualitative grounded theory exploration. *BMC Psychiatry*, *14*(1), 1-13.

Coates, R., Ayers, S., & de Visser, R. (2014). Women's experiences of postnatal distress: A qualitative study. *BMC Pregnancy and Childbirth*, *14*(1), 1-14.

Colaizzi, P. F. (1978). Psychological research as the phenomenologist views it. In R. S. Valle & M. King (Eds.), *Existential-phenomenological alternatives for psychology* (pp. 48-71). Oxford University Press.

Connelly, L. (2016). Trustworthiness in qualitative research. *MEDSURG Nursing*, *25*(6), 435-436.

Corbett, G. A., Milne, S. J., Hehir, M. P., Lindow, S. W., & O'Connell, M. P. (2020). Health anxiety and behavioral changes of pregnant women during the COVID-19 pandemic. *European Journal of Obstetrics, Gynecology, and Reproductive Biology*, *249*, 96.

Cowling, B. J., Ali, S. T., Ng, T. W., Tsang, T. K., Li, J. C., Fong, M. W., Liao, Q., Kwan, M. Y. W., Lee, S. L., Chiu, S. S., Wu, J. T., Wu, P., & Leung, G. M. (2020). Impact assessment of non-pharmaceutical interventions against coronavirus disease 2019 and influenza in Hong Kong: an observational study. *The Lancet Public Health*, *5*(5), e279-e288.

Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *The British Journal of Psychiatry*, *150*(6), 782-786.

Cukor, J., Wyka, K., Mello, B., Olden, M., Jayasinghe, N., Roberts, J., Giosan, C., Crane, M., & Difede, J. (2011). The longitudinal course of PTSD among disaster workers deployed to the World Trade Center following the attacks of September 11. *Journal of Traumatic Stress*, *24*(5), 506-514.

Davenport, M. H., Meyer, S., Meah, V. L., Strynadka, M. C., & Khurana, R. (2020). Moms are not okay: COVID-19 and maternal mental health. *Frontiers in Global Women's Health*, *1*, 1.

Dennis, C. L. E. (2006). Identifying predictors of breastfeeding self-efficacy in the immediate postpartum period. *Research in Nursing & Health*, *29*(4), 256-268.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*(1), 71-75.

Ding, X. X., Wu, Y. L., Xu, S. J., Zhu, R. P., Jia, X. M., Zhang, S. F., Huang, K., Zhu, P., & Tao, F. B. (2014). Maternal anxiety during pregnancy and adverse birth outcomes: A systematic review and meta-analysis of prospective cohort studies. *Journal of Affective Disorders*, *159*, 103-110.

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*, *35*(2), 205-211. DOI:

10.1080/14767058.2020.1763946.

Fallon, V., Groves, R., Halford, J. C. G., Bennett, K. M., & Harrold, J. A. (2016). Postpartum anxiety and infant-feeding outcomes: A systematic review. *Journal of Human Lactation, 32*(4), 740-758.

Faria, N. R., Claro, I. M., Candido, D., Franco, L. M., Andrade, P. S., Coletti, T. M., Silva, C. A. M., Sales, F. C., Manuli, E. R., Aguiar, R. S., Gaburo, N., Camilo, C. C., Fraiji, N. A., Crispim, M. E., Perpetuo, M., Carvalho, S. S., Rambaut, A., Loman, N., Pybus, O. G., & Sabino, E. C. (2021). Genomic characterisation of an emergent SARS-CoV-2 lineage in Manaus: Preliminary findings. *Virological*, *372*, 815-821.

Farias, D. R., Pinto, T. D. J. P., Teofilo, M. M. A., Vilela, A. A. F., dos Santos Vaz, J., Nardi, A. E., & Kac, G. (2013). Prevalence of psychiatric disorders in the first trimester of pregnancy and factors associated with current suicide risk. *Psychiatry Research*, *210*(3), 962-968.

Farley, E., Edwards, A., Numanoglu, E., & Phillips, T. K. (2021). Lockdown babies-birth and new parenting experiences during the 2020 Covid-19 lockdown in South Africa, a cross-sectional study. *Women and Birth*, *35*(4), 394-402. DOI: 10.1016/j.wombi.2021.09.001.

Farr, S. L., Dietz, P. M., O'Hara, M. W., Burley, K., & Ko, J. Y. (2014). Postpartum anxiety and comorbid depression in a population-based sample of women. *Journal of Women's Health*, *23*(2), 120-128.

Feter, N., Caputo, E. L., Doring, I. R., Leite, J. S., Cassuriaga, J., Reichert, F. F., da Silva, M. C., Coombes, J. S., & Rombaldi, A. J. (2021). Sharp increase in depression and anxiety among Brazilian adults during the COVID-19 pandemic: findings from the PAMPA cohort. *Public Health*, *190*, 101-107.

Field, T. (2018). Postnatal anxiety prevalence, predictors and effects on development: A narrative review. *Infant Behavior and Development*, *51*, 24-32.

Giardinelli, L., Innocenti, A., Benni, L., Stefanini, M. C., Lino, G., Lunardi, C., Svelto, V., Afshar, S., Bovani, R., Castellini, G., & Faravelli, C. (2012). Depression and anxiety in perinatal period: prevalence and risk factors in an Italian sample. *Archives of Women's Mental Health*, *15*(1), 21-30.

Gobat, N. H., Gal, M., Butler, C. C., Webb, S. A. R., Francis, N. A., Stanton, H., Anthierens, S., Bastiaens, H., Godycki-ćwirko, M., Kowalczyk, A., Pons-Vigués, M., Pujol-Ribera, E., Berenguera, A., Watkins, A., Sukumar, P., Moore, R G., Hood, K., DNichol, A. (2018). Talking to the people that really matter about their participation in pandemic clinical research: A qualitative study in four European countries. *Health Expectations, 21*, 387–395. https://doi.org/10.1111/hex.12634

Goberna-Tricas, J., Biurrun-Garrido, A., Perelló-Iñiguez, C., & Rodríguez-Garrido, P. (2021). The COVID-19 Pandemic in Spain: Experiences of midwives on the healthcare frontline. *International Journal of Environmental Research and Public Health*, *18*(12), 6516.

Goldmann, E., & Galea, S. (2014). Mental health consequences of disasters. *Annual Review of Public Health, 35*, 169-183.

Goodman, J. H., Watson, G. R., & Stubbs, B. (2016). Anxiety disorders in postpartum women: A systematic review and meta-analysis. *Journal of Affective Disorders, 203*, 292-331.

Grigoriadis, S., Graves, L., Peer, M., Mamisashvili, L., Tomlinson, G., Vigod, S. N., Dennis, C., Steiner, M., Brown, C., Cheung, A., Dawson, H., Rector, N. A., Guenette, M., & Richter, M. (2018). Maternal anxiety during pregnancy and the association with adverse perinatal outcomes: Systematic review and meta-analysis. *The Journal of Clinical Psychiatry, 79*(5).

Grigoriadis, S., Graves, L., Peer, M., Mamisashvili, L., Tomlinson, G., Vigod, S. N., Dennis,

C., Steiner, M., Brown, C., Cheung, A., Dawson, H., Rector, N. A., Guenette, M., & Richter, M. (2019). A systematic review and meta-analysis of the effects of antenatal anxiety on postpartum outcomes. *Archives of Women's Mental Health*, *22*(5), 543-556.

Guba, E. G., & Lincoln, Y. (1994). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Sage.

Hamedanchi, A., Zanjari, N., Khankeh, H. R., & Momtaz, Y. A. (2021). What does it mean to be never married in later life? Application of phenomenology in an aging study. *Qualitative Report, 26*(4), 1232-1247. https://doi.org/10.46743/2160-3715/2021.4652

Highet, N., Stevenson, A. L., Purtell, C., & Coo, S. (2014). Qualitative insights into women's personal experiences of perinatal depression and anxiety. *Women and Birth*, *27*(3), 179-184.

Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M.,… & Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, *395*(10223), 497-506.

Iliadis, S. I., Skalkidou, A., & Ranstrand, H. (2018). Self-harm thoughts postpartum as a marker for long-term morbidity. *Frontiers in Public Health*, *19*(6), 34. *DOI: 10.3389/fpubh.2018.00034*.https://doi.org/10.3389/fpubh.2018.00034.

Jackson, L., De Pascalis, L., Harrold, J. A., Fallon, V., & Silverio, S. A. (2021). Postpartum women's psychological experiences during the COVID-19 pandemic: A modified recurrent cross-sectional thematic analysis. *BMC Pregnancy and Childbirth*, *21*(1), 1-16.

Jesmi, A. A., Mohammadzade-Tabrizi, Z., Rad, M., Hosseinzadeh-Younesi, E., & Pourhabib, A. (2021). Lived experiences of patients with COVID-19 infection: A phenomenology study. *Medicinski Glasnik*, *18*(1).

Karimi, Z., Fereidouni, Z., Behnammoghadam, M., Alimohammadi, N., Mousavizadeh, A., Salehi, T., Mirzaee, M. S., & Mirzaee, S. (2020). The lived experience of nurses caring for patients with COVID-19 in Iran: A phenomenological study. *Risk Management and Healthcare Policy*, *13*, 1271.

Kingston, D., Tough, S., & Whitfield, H. (2012). Prenatal and postpartum maternal psychological distress and infant development: a systematic review. *Child Psychiatry & Human Development*, *43*(5), 683-714.

Knight, M., Bunch, K., Vousden, N., Morris, E., Simpson, N., Gale, C., O'Brien, P., Quigley, M., Brocklehurst, P., & Kurinczuk, J. J. (2020). Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: National population-based cohort study. *BMJ*, *8*(369). DOI: 10.1136/bmj.m2107.

Lauterbach, A. A. (2018). Hermeneutic phenomenological interviewing: Going beyond semi-structured formats to help participants revisit experience. *The Qualitative Report*, *23*(11), 2883-2898. https://doi.org/10.46743/2160-3715/2018.3464

Lebel, C., MacKinnon, A., Bagshawe, M., Tomfohr-Madsen, L., & Giesbrecht, G. (2020). Elevated depression and anxiety symptoms among pregnant individuals during the COVID-19 pandemic. *Journal of Affective Disorders*, *277*, 5-13.

Lee, S. H., Juang, Y. Y., Su, Y. J., Lee, H. L., Lin, Y. H., & Chao, C. C. (2005). Facing SARS: Psychological impacts on SARS team nurses and psychiatric services in a Taiwan general hospital. *General Hospital Psychiatry*, *27*(5), 352-358.

Leis, J. A., Heron, J., Stuart, E. A., & Mendelson, T. (2014). Associations between maternal mental health and child emotional and behavioral problems: Does prenatal mental health matter? *Journal of Abnormal Child Psychology*, *42*(1), 161-171.

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.

Loomans, E. M., van der Stelt, O., van Eijsden, M., Gemke, R. J. B. J., Vrijkotte, T., & Van den Bergh, B. R. H. (2011). Antenatal maternal anxiety is associated with problem behaviour at age five. *Early Human Development*, *87*(8), 565-570.

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.

Lu, M. J., Huang, K., Yan, S. Q., Zhu, B. B., Shao, S. S., Zhu, P., & Tao, F. B. (2020). Association of antenatal anxiety with preterm birth and low birth weight: Evidence from a birth cohort study. *Zhonghua Liu Xing Bing Xue Za Zhi= Zhonghua Liuxingbingxue Zazhi*, *41*(7), 1072-1075.

Luo, M., Guo, L., Yu, M., Jiang, W., & Wang, H. (2020). The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public: A systematic review and meta-analysis. *Psychiatry Research*, *291*, 113190.

Menendez, C., Gonzalez, R., Donnay, F., & Leke, R. G. (2020). Avoiding indirect effects of COVID-19 on maternal and child health. *The Lancet Global Health*, *8*(7), e863-e864.

Milgrom, J., Hirshler, Y., Reece, J., Holt, C., & Gemmill, A. W. (2019). Social support—a protective factor for depressed perinatal women? *International Journal of Environmental Research and Public Health*, *16*(8), 1426.

Modesto, O. P. (2018). A hermeneutic phenomenological study of teen mothers who graduated from an alternative school. *The Qualitative Report*, *23*(12), 2923-2935. https://doi.org/10.46743/2160-3715/2018.2765

Moradi, Y., Mollazadeh, F., Karimi, P., Hosseingholipour, K., & Baghaei, R. (2020). Psychological disturbances of survivors throughout COVID-19 crisis: A qualitative study. *BMC Psychiatry*, *20*(1), 1-8.

Morgan, D. L., & Ravitch, S. M. (2018). Trustworthiness. B. B. Frey (Ed.), *The SAGE encyclopedia of educational research, measurement, and evaluation* (pp. 1729-1731). SAGE Publications, Inc.

National Institute for Health Research. (2021). *PROSPERO International prospective register of systematic reviews.* Centre for Reviews and Dissemination. https://www.crd.york.ac.uk/prospero/

Ogden, P., Pain, C., & Fisher, J. (2006). A sensorimotor approach to the treatment of trauma and dissociation. *Psychiatric Clinics*, *29*(1), 263-279.

Ollivier, R., Aston, M., Price, S., Sim, M., Benoit, B., Joy, P., ... & Nassaji, N. A. (2021). Mental health & parental concerns during COVID-19: The experiences of new mothers amidst social isolation. *Midwifery*, *94*, 102902.

Palinkas, L. (2014). Qualitative and mixed methods in mental health services and implementation research. *Journal of Clinical Child and Adolescent Psychology*, *43*, 851–861. https://doi.org/10.1080/15374416.2014.910791

Pappa, S., Ntella, V., Giannakas, T., Giannakoulis, V. G., Papoutsi, E., & Katsaounou, P. (2020). Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 Pandemic: A systematic review and meta-analysis. *Brain, Behavior, and Immunity*, *88*, 901-907.

Perzow, S. E., Hennessey, E. M. P., Hoffman, M. C., Grote, N. K., Davis, E. P., & Hankin, B. L. (2021). Mental health of pregnant and postpartum women in response to the COVID-19 pandemic. *Journal of Affective Disorders Reports*, *4*, 100123.

Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice.* Wolters Kluwers.

Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. *General Psychiatry*, *33*(2), 1-3.

Rice, K. F., & Williams, S. A. (2021). Making good care essential: The impact of increased obstetric interventions and decreased services during the COVID-19 pandemic. *Women and Birth*.

Roberton, T., Carter, E. D., Chou, V. B., Stegmuller, A. R., Jackson, B. D., Tam, Y., Sawadogo-Lewis, T., & Walker, N. (2020). Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. *The Lancet Global Health*, *8*(7), e901-e908.

Rubin, G. J., Harper, S., Williams, P. D., Öström, S., Bredbere, S., Amlôt, R., & Greenberg, N. (2016). How to support staff deploying on overseas humanitarian work: A qualitative analysis of responder views about the 2014/15 West African Ebola outbreak. *European Journal of Psychotraumatology*, *7*(1), 30933

Saccone, G., Florio, A., Aiello, F., Venturella, R., De Angelis, M. C., Locci, M., Bifulco, G., Zullo, F., & Sardo, A. D. S. (2020). Psychological impact of coronavirus disease 2019 in pregnant women. *American Journal of Obstetrics & Gynecology*, *223*(2), 293-295.

Sahin, B. M., & Kabakci, E. N. (2021). The experiences of pregnant women during the COVID-19 Pandemic in Turkey: A qualitative study. *Women and Birth*, *34*(2), 162-169.

Sanchez, S. E., Puente, G. C., Atencio, G., Qiu, C., Yanez, D., Gelaye, B., & Williams, M. A. (2013). Risk of spontaneous preterm birth in relation to maternal depressive, anxiety and stress symptoms. *The Journal of Reproductive Medicine*, *58*(25), 25-33.

Santabárbara, J., Lasheras, I., Lipnicki, D. M., Bueno-Notivol, J., Pérez-Moreno, M., López-Antón, R., De la Camara, C., Lobo, A., & Gracia-García, P. (2021). Prevalence of anxiety in the COVID-19 Pandemic: An updated meta-analysis of community-based studies. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *109*, 110207.

Santomauro, D. F., Mantilla Herrera, A. M., Shadid, J., Zheng, P., Ashbaugh, C., Pigott, D. M., Abbafati, C., Adolph, C., Amlag, J. O., Aravkin, A. Y., Bang-Jensen, B. L., Bertolacci, G. J., Bloom, S. S., Castellano, R., Castro, E., Chakrabarti, S., Chattopadhyay, J., Cogen, R. M., Collins, J. K., . . . Ferrari, A. J. (2021). Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. *The Lancet, 398*(10213), 1700-1712. https://doi.org/10.1016/S0140-6736(21)02143-7

Schatz, E., Gilbert, L., & McDonald, C. (2013). 'If the doctors see that they don't know how to cure the disease, they say it's AIDS': How older women in rural South Africa make sense of the HIV/AIDS epidemic. *African Journal of AIDS Research, 12(*2), 95–104. https://doi.org/10.2989/16085906.2013.851719

Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Teachers College Press.

Speilberger, C. D. (1983). *State-trait anxiety inventory for adults (STAI-AD)* [Database record]. APA PsycTests. https://doi.org/10.1037/t06496-000

Suddick, K. M., Cross, V., Vuoskoski, P., Galvin, K. T., & Stew, G. (2020). The work of hermeneutic phenomenology. *International Journal of Qualitative Methods*, *19*, 1609406920947600.

Sun, F., Zhu, J., Tao, H., Ma, Y., & Jin, W. (2021). A systematic review involving 11,187 participants evaluating the impact of COVID-19 on anxiety and depression in pregnant women. *Journal of Psychosomatic Obstetrics & Gynecology*, *42*(2), 91-99.

Tegally, H., Wilkinson, E., Giovanetti, M., Iranzadeh, A., Fonseca, V., Giandhari, J., Doolabh,

D., Pillay, S., San, E. J., Msomi, N., Mlisana, K., von Gottberg, A., Walaza, S., Allam, M., Ismail, A., Mohale, T., Glass, A. J., Engelbrecht, S., Zyl, G. V., … Williamson, C. (2020). Emergence and rapid spread of a new severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) lineage with multiple spike mutations in South Africa. *MedRxiv*. https://doi.org/10.1101/2020.12.21.20248640

Teti, M., French, B., Bonney, L., & Lightfoot, M. (2015). "I created something new with something that had died": Photo-narratives of positive transformation among women with HIV. *AIDS and Behavior*, *19*, 1275–1287. https://doi.org/10.1007/s10461-015-1000-7

Teti, M., Schatz, E., & Liebenberg, L. (2020). Methods in the time of COVID-19: The vital role of qualitative inquiries. *International Journal of Qualitative Methods*, *19*. https://doi.org/10.1177/1609406920920962

Tremblay, S., Castiglione, S., Audet, L. A., Desmarais, M., Horace, M., & Peláez, S. (2021). Conducting qualitative research to respond to COVID-19 challenges: Reflections for the present and beyond. *International Journal of Qualitative Methods*, *20*. https://doi.org/10.1177/16094069211009679.

Uguz, F., Yuksel, G., Onur, O. S., Karsidag, C., Gezginc, K., & Arpaci, N. (2018). Neonatal outcomes in pregnant women with untreated and treated panic disorder. *Comprehensive Psychiatry*, *87*, 107-111.

Van Batenburg-Eddes, T., Brion, M. J., Henrichs, J., Jaddoe, V. W. V., Hofman, A., Verhulst, F. Lawlor, D. A., Smith, G. D., & Tiemeier, H. (2013). Parental depressive and anxiety symptoms during pregnancy and attention problems in children: A cross-cohort consistency study. *Journal of Child Psychology and Psychiatry*, *54*(5), 591-600.

van Manen, M. (2016). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Routledge.

Vesga-Lopez, O., Blanco, C., Keyes, K., Olfson, M., Grant, B. F., & Hasin, D. S. (2008). Psychiatric disorders in pregnant and postpartum women in the United States. *Archives of General Psychiatry*, *65*(7), 805-815.

Vessey, D. (2009). Gadamer and the Fusion of Horizons. *International Journal of Philosophical Studies*, *17*(4), 531-542.

Vindrola-Padros, C., Chisnall, G., Cooper, S., Dowrick, A., Djellouli, N., Mulcahy-Symmons, S., Martin, S., Singleton, G., Vanderslott, S., Vera, N., Johnson, G. A. (2020). Carrying out rapid qualitative research during a pandemic: Emerging lessons from COVID-19. *Qualitative Health Research*, *30*(14), 2192–2204. https://doi.org/10.1177/1049732320951526

Volz, E., Mishra, S., Chand, M., Barrett, J. C., Johnson, R., Geidelberg, L., Hinsley, W. R., Laydon, D. J., Dabrera, G., O'Toole, Á., Amato, R., Ragonnet-Cronin, M., Harrison, I., Jackson, B., Ariani, C. V., Boyd, O., Loman, N. J., McCrone, J. T., Gonçalves, S., … & Ferguson, N. M. (2021). Assessing transmissibility of SARS-CoV-2 lineage B.1.1.7 in England. *Nature*, *593*(7858), 266–269. https://doi.org/10.1038/s41586-021-03470-x

Wang, C., Horby, P. W., Hayden, F. G., & Gao, G. F. (2020). A novel coronavirus outbreak of global health concern. *Lancet*, *395*(10223), 470–473. https://doi.org/10.1016/s0140-6736(20)30185-9

Wardrop, A. A., & Popadiuk, N. E. (2013). Women's experiences with postpartum anxiety: Expectations, relationships, and sociocultural influences. *The Qualitative Report*, *18*(3), 1-24. https://doi.org/10.46743/2160-3715/2013.1564

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063.

Wibmer, C. K., Ayres, F., Hermanus, T., Madzivhandila, M., Kgagudi, P., Oosthuysen, B.,

Lambson, B. E., de Oliveira, T., Vermeulen, M., van der Berg, K., Rossouw, T., Boswell, M., Ueckermann, V., Meiring, S., von Gottberg, A., Cohen, C., Morris, L., Bhiman, J. N., & Moore, P. L. (2021). SARS-CoV-2 501Y. V2 escapes neutralization by South African COVID-19 donor plasma. *Nature Medicine*, *27*(4), 622-625.

World Health Organization (WHO). (2018). *International classification of diseases (ICD 11)*. https://www.who.int/news/item/18-06-2018-who-releases-new-international-classification-of-diseases-(icd-11)

World Health Organization (WHO). (2020). *Director-general's opening remarks at the media briefing on COVID-19 - March 11, 2020.* https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-th e-media-briefing-on-covid-19—11-march-2020.

World Health Organization (WHO). (2021). *Coronavirus disease (COVID-19) situation dashboard.* https://covid19.who.int/.

Wu, Y., Zhang, C., Liu, H., Duan, C., Li, C., Fan, J., Hong, L., Chen, L., Xu, H., Li, X., Guo, Y., Wang, Y., Li, H., Yang, S., Tao, X, Xu, Y., Lao, H., Wen, M., Zhou, Y., … & Huang, H. F. (2020). Perinatal depressive and anxiety symptoms of pregnant women during the coronavirus disease 2019 outbreak in China. *American Journal of Obstetrics and Gynecology*, *223*(2), 240-e1.

Xin, M., Luo, S., She, R., Yu, Y., Li, L., Wang, S., Ma, L., Tao, F., Zhang, J., Zhao, J., Li, L., Hu, D., Zhang, G., Gu, J., Lin, D., Wang, H., Cai, Y., Wang, Z., You, H., . . . & Lau, J. T.-f. (2020). Negative cognitive and psychological correlates of mandatory quarantine during the initial COVID-19 outbreak in China. *American Psychologist, 75*(5), 607–617. https://doi.org/10.1037/amp0000692

Xue, R. H., Li, J., Chen, L., Li, Z. Z., Huang, Z., Huang, H. F., & Lin, X. H. (2021). Alternations of cesarean section rates in a non-infected population after the outbreak of COVID-19: A cross-sectional study. *Psychology, Health & Medicine*, 1-7.

Yim, I. S., Tanner Stapleton, L. R., Guardino, C. M., Hahn-Holbrook, J., & Dunkel Schetter, C. (2015). Biological and psychosocial predictors of postpartum depression: Systematic review and call for integration. *Annual Review of Clinical Psychology*, *11*, 99-137.

Yoon, M. K., Kim, S. Y., Ko, H. S., & Lee, M. S. (2016). System effectiveness of detection, brief intervention and refer to treatment for the people with post-traumatic emotional distress by MERS: a case report of community-based proactive intervention in South Korea. *International Journal of Mental Health Systems*, *10*(1), 1-5.

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