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Providing Labor and Delivery Care During the First Wave of COVID-19: Qualitative Interviews with Nurses and CNMs

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Abstract

Objective: To examine perspectives of nurses and certified nurse midwives providing care to childbearing families in the US during the first wave of the COVID-19 pandemic.

Design: This is a qualitative descriptive study utilizing interview data.

Setting: Online distribution of surveys beginning May 2020 until September 2020.

Participants: 100 nurses and CNMs were interviewed; This study's sample focuses on 19 study participants who reported practicing in the labor and delivery settings.

Methods: Descriptive statistics were utilized to calculate both respondent's demographic and workplace characteristics. Semi-structured interviews were conducted with participants, recorded for thematic analysis. This data collection is to ensure that interview data are participants' actual verbatim responses in the qualitative interviews are recorded and subsequently transcribed rather than relying on interviewer notes (Polit & Beck, 2020).

Results: The research team derived five major themes from the responses: Separation of birthing parents and newborns, Isolation of birthing parents, Disparities, Barriers to Communication, and Mental health of the care team. Participants (n=19) described changes in their roles, and associated care delivery challenges during the first wave of the COVID-19 pandemic. Participants described stressors that affected their mental health and perceptions of changes that altered the quality-of-care delivery to perinatal patients.

Conclusion: Participant's experiences are helpful in gaining knowledge of barriers and challenges to care and give insight and foundation for the development of successful care strategies for marginalized and vulnerable populations. This study will examine how these issues and concerns impacted patients, nurses, and certified nurse midwives' delivery of consistent patient care to expectant mothers in the US.

Introduction

In the last two years, a global novel COVID-19 pandemic has had immense impacts on global health, healthcare access, disproportionately impacted vulnerable populations, yielded devastating losses, shortages of PPE, overt safety, and communication concerns, and seen overwhelmed healthcare providers and health systems, which inevitably has affected care delivery. Impacts on well-being, mental health, economic dimensions, and overall health status continue to be evaluated. This pandemic has led to devastating effects, leaving hospital organizations unequipped and scrambled to meet the needs of patients, staff, and health providers, (Beckman, 2020).

During the first wave of the Novel Coronavirus, which erupted between March 15th and June 30, 2020, many aspects of primary and specialty care had to quickly adapt to meet healthcare needs, and there were rapidly changing public health strategies aimed at preventing the transmission of COVID-19 (Fernandez, et al., 2020).

Lessons learned from prior pandemics demonstrate that vulnerable populations continue to be at a higher risk to present with more severe illness, and clinicians continue to face incredible challenges to protect these most vulnerable populations (Kuy et al., 2020). There are many vulnerable groups affected including racial and ethnic minorities, women, children, immigrants, refugees, disabled, the underinsured, elders, those socioeconomically disadvantaged, underinsured, those from rural communities, incarcerated facing domestic violence and LGBTQ+ (Kuy et al., 2020).

Over the last two years, while learning about what has been effective in keeping both patients and staff safe, it is discovered care of the expectant mother during this time has had many challenges. In taking a view of the current literature, the impact on pregnant women is of

special concern for the intrauterine and postnatal development of their offspring (Gur et al., 2021). What is known is that expectant mothers who are at the center of maternity services have been most affected during this public health crisis. While exploring impact of COVID-19, maternity care is of special concern to prioritize as pregnant women are potentially more vulnerable to a severe Covid-19 infection yielding poor health outcomes.

Recent research does highlight a few articles that point to the care of pregnant women in the US during the pandemic. Altman et al., (2021), describes how Covid 19 hospital adaptations were inadequate to meet birthing needs, leaving patients and nurses who cared for them unsure of both receiving and provide adequate care based on the inconsistencies of policies and hospital organization actions. Most recently, in a research project by George et al., (2021), information received from the data reinforces what this project already displays: That the experiences were similar from their group of participants as well as our participants globally. What is not clearly identified in the current literature this study hopes to address. Besides direct impact of disease, there are many indirect consequences of the pandemic can adversely affect maternal health, including reduced access to reproductive health services, increased mental health strain, and increased socioeconomic deprivation (Wastnedge et al., 2020). To date, no known studies have explored the perspective of nurses and certified nurse midwives (CNMs) providing patient care during the first wave of COVID-19 pandemic in the US. Therefore, the purpose of this study was to describe the narrative experiences of labor and delivery nurses and CNMs during the initial COVID-19 response in the US.

Methods

Study Design

This qualitative descriptive study utilized a subgroup analysis of primary data collected from nurses and midwives during the first wave of COVID-19 in the US (Simonovich, 2021). Semi-structured interviews were conducted with participants and recorded for thematic analysis. This type of data collection is done to ensure that interview data are participants' actual verbatim responses in the qualitative interviews are recorded and subsequently transcribed rather than relying on interviewer notes (Polit & Beck, 2020).

Setting & Sample of Participants

100 nurses and APRN's who work in a labor and delivery setting within the United States who provided direct care to laboring parents. The participants were interviewed from May 2020 to September 2020. This study's final sample of participants will focus upon the 19 labor and delivery nurses and CNM participants who reported working in labor and delivery settings at the time of the interviews. The data collected was from these participants who answered the questionnaire willingly. These interviews took place during the first wave of the Covid-19 Pandemic.

Measures

Each study participant completed a semi-structured interview which was audio recorded and transcribed to written text by Happy Scribe software. These interview transcripts were validated by the research team before formal thematic network analysis. A thematic network is a web-like illustration that summarizes the main themes constituting a piece of text and is a robust and highly sensitive tool for systematization and presentation of qualitative analyses (Attride-Sterling, 2001). The final thematic network was discussed and approved by the research team.

The team identified five pertinent themes from the data, followed by formal coding utilizing a web-based software platform used for qualitative analysis, called Dedoose. IBM SPSS 27 was utilized for descriptive analysis of the study sample characteristics (IBM, 2020).

Data Collection

Recruitment

Participants were recruited via personal email, social media outlets, and their work mail. In comparison to other research designs, this study utilizes qualitative methodology to facilitate the best opportunity for nurses to share their experiences. Within the United States, the changing demographics, and the roles of racial and ethnic influences on the perception and practice of nursing mandates a better understanding of the human responses to COVID-19 of all people (Webber-Ritchey et al., 2021). The nature of qualitative methodology is advantageous in facilitating recruitment by providing an opportunity for nurses to share their experiences while lessening the threat of sharing (Knobf et al., 2007). Researchers undertaking qualitative research among underrepresented populations should prioritize giving voice to participants while providing a safe space to vulnerable groups for sharing views and perspectives on sensitive information (Pyer & Campbell, 2012).

In this study using qualitative methodology, a diverse sample of nurses were asked to discuss sensitive topics as they relate to their experience during the first wave of the COVID-19 pandemic. The purpose was to achieve a wide variety of distribution among nurses and CNMs actively practicing who could provide their experiences. Successful recruitment of nurses in

research is essential to providing useful insight into current practices and ways to improve the delivery of care, nursing practice, and patient outcomes (Webber-Ritchey et al., 2021).

Data

This qualitative study represents the 19 semi-structured interviews with a diverse group of registered nurses and CNMs who identified as actively practicing in labor and delivery during the first wave of the Covid-19 pandemic. A validated questionnaire was utilized to conduct interviews asking the nurses about their experiences providing care and being a part of the care response for patients during the first wave of the Covid-19 pandemic. The interviews conducted contributed useful data and insight about birthing experiences and care team dynamics that may not have been prevalent during the first wave of the COVID-19 pandemic. The interviews provided an opportunity for nurses and CNMs to give their valuable feedback on their experiences giving care to birthing parents during the first wave of the COVID-19 pandemic. There were open-ended questions structured to allow participants to give full answers and feedback and contribute to the data in their own words. The reason this data becomes valuable in this study is because it highlights many changes in practice and inevitably circumstances that were unknown which influenced the overall birthing experiences-both for providers as well as patients. This aligns with the purpose of the study, to explore the birth experiences during the first wave of the Covid-19 pandemic. This insight may even give new guidance into care delivery during a global crisis (Simonovich, 2021).

Among the many questions on the interview guide, those applicable to this analysis included: “Tell us about your experience beginning with when you first learned of COVID-19?” and “How did you feel taking care of COVID-19 patients?”

Results

Study Sample Characteristics

The study participants (n=19) had a mean age of 36.05 years, with a range of 30 years, a minimum of 27 years, and a maximum of 57 years. All 19 of the study participants identified as female. The study sample racial composition included 47.4% White, 26.3% Black, 10.5 % Asian, 10.5% Multiracial, 5.3 % American Indian. 15.8% of interviewed nurses and CNMs identified as Hispanic, and 84.2% Non-Hispanic. The diversity of the sample reveals over half of the sample, 58% identify as a member of a traditionally underrepresented racial or ethnic group. 100% of the study sample identifying as female. Educational statistics reveal there were seven (36.8%) of participants who are bachelor's prepared, ten (52.6%) of participants who are master's prepared, one (5.3%) of participants who are DNP prepared, and one (5.3%) of participants who are PhD prepared. The mean for time each participant has been in practice is 8.84 years. The range of years is twenty-nine years with a minimum of one year, and a maximum of thirty years. 5.3% of participants have been in practice for at least 1 year, 10.5% have been in practice for at least two years, 15.8% of participants have been in practice for at least three years. 42.1% are employed in an Academic Medical Center, 26.3% are employed in a Multi-Center Hospital System, and 31.6% are employed in an Independent Community Hospital. All 100% of participants practiced in Labor and Delivery settings. The details of this study participants characteristics can be found in Table 1.

Thematic Network Analysis Results

The semi-structured interviews with nurses and CNMs revealed five overarching themes central to their experiences during the initial COVID-19 response. These five themes included:

1) Separation of birthing parents and newborns, 2) Isolation of birthing parents, 3) Disparities, 4) Barriers to Communication, and 5) Mental health of the care team. (See Figure 1).

Theme 1. Separation of birthing parents and newborns:

The first key theme described by nurses and CNMS interviewed was the separation of birthing parents and newborns. The research team defines the theme of separation of birthing parents and newborns as removing newborns from the presence of birthing parents after delivery. Study participants described the physical and emotional challenges of separating birthing parents from their newborn, especially among those who had experienced previous perinatal loss. One participant shared:

> *"It's really frustrating, especially if... you have somebody that [had] a prenatal death before and it's like you have to separate mom... because she's COVID positive...Mom wears her mask and [is] an asymptomatic carrier. But still, you have to be separated...The mom, in the end, is the one who loses...because she's not able to hold her baby or breastfeed her baby."*

The interviews with labor and delivery nurses and CNMs revealed this concern stemming from the unknown COVID-19 status of birthing parents. Respondents responded that they felt unaccustomed to having to deal with the possibility of separating newborns from their parents, as one participant shared the challenges of implementing these types of policies consistently at birth, describing that,

> *"So [upon] delivery, the OB... lifted the child to place it on mom's stomach. And when Mom reached out to touch her baby, he told her, 'I'm sorry, they're telling me I can't give*

you your baby.' And that's when he cut the cord and gave the baby to us. That mom shrieked so loudly that it was a shriek of pain, a pain of loss. So, at that moment, I was able to realize we're no longer deal with the happy birth... Whatever vision that mom had in her head of a perfect delivery has gone to the wayside."

These shared concerns highlight interrupted bonding and trauma for both the birthing families and the care teams that were required to separate birthing parents from their newborns during the first wave of the pandemic.

Theme 2. Isolation of birthing parents:

The second key theme described by nurses and CNMs interviewed was isolation of birthing parents. The research team defines the theme of isolation of birthing parents as physical distancing of care team or isolative practices from laboring patients during the time of care. The participants interviewed described the physical and emotional challenges of distancing themselves during care measures to mitigate infectious spread especially as it heightened during the first wave of the COVID-19 pandemic. Participants shared needing to support birthing women who were alone with one participant sharing, "I know I need to… be in there… These women are by themselves" and "didn't plan to be" alone during their births. Another participant described the struggle of maintaining the isolation of birthing parents stating,

"I'm not keeping my distance with patients...Women need a lot of emotional support in labor or through miscarriages. I mean, we see that so much. And to stand at the doorway and talk to someone is so impersonal and... to see laboring COVID patients with no family member."

This theme appears in sixteen out of nineteen (84.2%) nursing interviews that reveal this concern. While it is not a customary practice during labor and delivery experiences to isolate birthing parents from their newborns, these interviews reveal it became widespread practice to isolate women during labor, allowing limited or even no visitors along with segmenting nursing care during active labor and delivery cases. The results highlight interrupted bonding, promoted isolation and disappointment regarding the birthing experience.

Theme 3. Disparities

The third key theme described by nurses and CNMs interviewed was regarding disparities. The research team defines disparities as existing factors that display great differences in circumstances that promote equitable access or impact to care to vulnerable populations such as in expectant mothers. It is the hope that knowing the impact on care of pregnant women leads clinicians to improve strategies and focus more on options for prioritization of patient care.

Participants shared specific challenges of surrounding noted disparities, and how their role may have contributed consistently at birth, with one participant describing,

> "*This has all shed so much light on how dysfunctional our system is... Our population is very, very much underserved. And so those disparities that exist that combined with the anti-racism movement as well, I think like the fact that those two things are coincided is super important and hopefully move the needle a little bit or a lot.... [As a] nurse midwife... I think being even more of a patient advocate and thinking through how the whole person is sitting in front of you and that it's not just her pregnant belly, but also like, 'Did she just lose her job? What stress is going on in her life?' Being an advocate in*

terms of... supporting... if a patient is positive, working with the peds team in terms of isolation with the baby... Patients need more advocacy and more support."

Another participant shared,

"One disparity point is that we've been trying to keep pregnant people out of the office as much as possible. And to do that, [patients] need to be able to take their blood pressure at home. And so, people who can afford a blood pressure cuff don't have to come in as much. People who can't afford a blood pressure cuff have to come in for all their appointments. So, their exposure to the virus is much worse compared to people who could pay thirty dollars for a blood pressure cuff. So, should institutions be giving away free blood pressure cuffs? Yes."

This theme appears in seventeen out of nineteen interviews (89.5%). These highlight various inequities in care to expectant mothers, especially younger aged profiled for behavior believed to be unbecoming, fair treatment to mothers, including those without resources for care or monitoring devices, nurses wanted respectful interactions filled with dignity for expectant mothers. Nurses, certified nurse-midwives, or other clinicians wanted to feel close to their patients and ensure they could treat everyone the same. Most of the participants reported these concerns during interviews. The data reveals patients felt they received less quality of care and had fewer interactions with the care team. Highlighting this concern displays how care for patients was impacted, as well as impact to nursing practice. The occurrence in this theme creates high confidence in these findings.

Theme 4. Barriers to connections

The fourth key theme described by nurses and CNMs interviewed was barriers to connections. The research team described barriers to connections as circumstances that

interrupted connectedness of birthing parents from care team. Participants shared the challenges of implementing these types of policies consistently at birth, with one participant describing that she was “very uncomfortable as a nurse. In L and D, we're in our patients’ rooms' every 15 to 30 minutes. We're very close to our patients. We cannot keep six-foot distance, especially if the woman is pushing, you know, we’re the middle of a delivery."

Eighteen out of nineteen (94.7%) participants reported barriers to connections as a concern in the quality-of-care connectedness and the way in which COVID-19 “injected uncertainty into the patient provider relationship.” One participant shared,

> *I am a very facial expression kind of person. And so, the fact that people can't see my face, I think is a little bit of a communication barrier...I had a patient a couple of weeks ago who [was] from Ukraine and her English is good, but it wasn’t great, and she could not understand people when they have masks on because she couldn’t see their mouths."*

The data reveal changes in interactions, social distancing, PPE, changes in protocols all promoted changes in the connectivity of patients to care providers, and interrupted care. It is unknown the degree to which this occurred, but it is noted that changes during the COVID-19 pandemic first wave “created a barrier between nurses and their patients”, and "[COVID-19 has] injected this uncertainty into the patient-provider relationship." This information is also important surrounding patient care and safety. Having all the participants report these results suggest high confidence in these findings.

Theme 5. Mental health of the care team:

The fifth key theme described by nurses and CNMs interviewed was mental health of the care team. The research team described mental health of the care team to mean psychological

stressors that may have presented during the first wave of the COVID-19 pandemic. These stressors yielded some changes in anxiety levels or caused concerns regarding delivering care to patients in the labor and delivery setting. Participants shared the challenges of having to face these concerns consistently among the care team as well as potential effect on birthing experience for birthing parents. There are six illustrative quotes out of two-hundred and six excerpts where this theme was mentioned. Of the study sample all nineteen participants (100%) mention this as an overt concern. One participant noted,

> *"I feel like the mental, the psychological part is just the number one for us in the health care field... It's...the fear of the unknown... it just throws everyone over the edge."*

Another participant described her experience as follows,

> *"I actually… considered reaching out to one of my primary docs because I thought I needed Xanax or something because I had chest pain and anxiety. Full blown anxiety which I [had] never experienced."*

Another participant stated,

> *"Because of the unknown and the rabbit hole that I'll go down... I don't [want to] freak myself out going down the rabbit hole...Like is it even worth it because what we know changes every day? So, I feel like to protect my own feelings and emotions, I just have to keep going."*

Despite what is known about caring for patients with infectious diseases, during the first wave of the COVID-19 pandemic, so much was unknown and uncertain, transmission possibility combined with a heightened fear of contracting the virus. This promoted anxiety, immense fear, unveiled stressful scenarios and promoted mental health strain. Many clinicians experienced increased stress during this time, which had the potential to disrupt patient care. All the

participants were fearful of work exposure and the impact it may have on their own families. Although each respondent acknowledged the need to reduce infection risk on the unit, they reported that added responsibilities increased time demands, made them spend more time away from the bedside, and interrupted labor support, which is an integral part of their job role. This concern was noted by all the participants (100%), reporting, which suggests high confidence in these findings.

Discussion

The purpose of this study is to describe the clinical care experiences of labor and delivery nurses and CNMS during the first wave of the COVID-19 pandemic in the US. Our findings provide a description of their valuable experiences. A thematic network was utilized, revealing five overarching themes of concern: 1) separation of birthing parents and newborns, 2) isolation of birthing parents, 3) disparities, 40) barriers to connections and 5) mental health of the care team. This data is a unique portrayal of how labor and delivery experiences from the perspective of nurses and CNMs were impacted during the first wave of the COVID-19 pandemic in the US.

Globally, during the first wave of the pandemic, health service changes caused significant concern for populations that needed consistent care such as in vulnerable populations. Pregnant women are in that number, needing consistent and ongoing care to ensure positive birth outcomes. The challenge here is that several factors threaten those positive birth outcomes, including barriers to care, marginalized care, or even lengthier timeframes between prenatal care due to COVID-19 restrictions. Examining the feedback of nurses and certified nurse midwives in this qualitative study could reinforce the relevance of restrictive choices in care during the COVID-19 pandemic that may have impacted care to vulnerable populations the most, creating gaps in care and worsening disparities even more. It is important to highlight these challenges

that impact birth experiences and hear feedback from nurses and certified nurse midwives that gives insight on how to improve the care of pregnant women and other populations. This project highlights clinician feedback regarding birth experiences and the need for improved safety, communication, and the development of guidance for the implementation of appropriate care measures for pregnant women and their caregivers.

Even though other recent studies have reflected experiences of nurses during COVID-19 pandemic, none have addressed the specific nature of labor and delivery experiences as viewed by nurses and CNM's during the first wave of the COVID-19 pandemic. There is a lack of evidence regarding the impact on labor and delivery experiences of nurses and midwives in the US during the first wave of COVID-19. The findings of this project will serve as a record of nurses' and certified nurse midwives' viewpoints related to circumstances that affected them during the first wave of this global pandemic. The descriptive data gathered in this qualitative study can be used for future guidance for improving obstetric patient care prioritization, the structure of maternity care, and the comprehensive maintenance of quality patient care during a pandemic crisis. It is the hope these experiences could not only support the consistent changes in the structure of maternity care, but also how to maneuver during future health crises.

To date, no known studies have explored the perspective of nurses and certified nurse midwives on birthing experiences during the first wave of COVID-19 pandemic in the US. The experiences of the nurses and certified nurse midwives seek to help fill the gap by advancing understanding of the related concerns during a health crisis for caregivers going forward during labor and delivery experiences. This project highlights clinician feedback regarding birth experiences and the need for improved safety, quality care, and development of guidance for implementation of appropriate care measures for pregnant women and their caregivers.

Strengths & Limitations of the study design

Our study had some strengths and some limitations. One limitation to note is that these were one-time interviews with the sample group. This precluded the ability to have follow up answers from the same group that gave the initial data. But a noted strength is that due to the robust survey format, we were able to have robust and full thought-out answers to capture as data. Another noted strength to our results of the study's nineteen participants is that we were able to capture a large diverse group of RNs, and CNMs in one specialty yet varied types of hospital settings along with variety of representation across the United States with varied reported experiences. Another limitation to this study was there were multiple negative comments regarding their experiences and as a result, each respondent reported disruption of their role along with the other five overarching thematic factors yielded perceived disruption of care as well as a lower quality of care to their patients and support persons. This data is important and indicates potential gaps in care provided. The data from this study can be utilized further in the development of policies or guidance for the future of nursing practice. Another positive strength of this study is that of the initial one-hundred participants, nineteen shared significant commonalities, yet had plenty of diversity and variance among them in the data. The greatest strength of this qualitative study is that information was received from members of the same specialty and has authentic answers regarding the concerns during a fragile time in a global pandemic.

Clinical Implications

The findings of our qualitative study reveal circumstances during the first wave of the COVID-19 pandemic have had significant effects on nurses and CNMs' perception of quality

care delivery to laboring parents. Research shows that disrupted care to patients to poor outcomes, and that less time at the bedside and delays in care are associated with negative labor and birth outcomes (Simpson & Lyndon, 2017). Our findings reflect comparable data to the George et al., 2021 study: Each study group had similar experiences, even around various parts of the U.S.A. This just reinforces the data findings and is generalizable to other nursing populations who practice in a similar setting. Although our study was published in early 2022, the argument remains that to date, there are no interview studies displaying labor and delivery experiences with nurses or CNMs during the first wave of the COVID-19 pandemic. This study findings are also generalizable to other perinatal patients receiving care during the first wave of COVID-19 pandemic. What was common to both of the studies is that each of the participants in the two studies expressed concerns surrounding role changes and how these changes may have impacted quality of care delivery. Our qualitative study suggests a need for determining just how the first wave of the COVID-19 pandemic and related changes in practice for nurses and CNMs have affected labor experience outcomes in the United States. Our study also depicts five areas of concern that could overtly impact nursing practice as well as effects on care providers. A fundamental concern is that nurses who experience the strains of the COVID-19 pandemic will leave the profession, which will further exacerbate the nursing shortage in the United States, and an estimated half-million nursing jobs will go unfilled by 2030 (Zhang et al., 2018).

Recommendations for future research

The eruption of a global pandemic has led to tremendous lifestyle, nursing practice and procedural changes globally. What is known is that expectant mothers who are at the center of maternity services have been most affected during this public health crisis. However helpful in mitigation of infectious spread, these changes have created circumstances that could have

affected approaches to care, and the ability to provide normal levels of care to patients in need, especially in marginalized populations such as perinatal patients. The goal of future research should center around how to better support nurses APRNs and CNMs in nursing practice, and how to segue to improved care planning thereby closing the gap in care to these populations. Gathering appropriate resources for nurses, CNMs and other APRNs to feel safe while providing care in a global crisis could also be recommended for future research highlighted in research

The lessons learned from the experiences of nurses and certified nurse midwives during past infectious disease outbreaks, such as Ebola, H1N1, and SARS, suggest that enacting policies to address resilience in nurses can help decrease burnout rates, enable coping skills, and increase retention in the profession (Shorey & Chan, 2020). This project highlights clinician feedback regarding birth experiences and the need for improved safety, communication, and development of guidance for implementation of appropriate care measures for pregnant women and their caregivers. The information learned in this qualitative study will be useful moving forward and can be a guide for changes in nursing practice.

Conclusion

This qualitative study's purpose was to highlight labor and delivery birth experiences of nurses and CNMs during the first wave of the global COVID-19 pandemic. Participants delivered feedback that was transcribed into data that highlighted five areas of concern. These five themes included: 1) separation of birthing parents and newborns, 2) isolation of birthing parents, 3) disparities, 40) barriers to connections and 5) mental health of the care team. Healthcare providers are the cornerstone in fighting this contagious infection and are at the frontline saving lives while risking their own (Al-Jumaili et al., 2021). The Covid-19 pandemic has impacted nursing and nursing practice in unexpected and unnerving ways (Beckman, 2020).

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Table 1. Study Sample Characteristics (n=19)

Age		
	Mean	36.05
	Range	30 years
	Min, Max	27, 57
Gender		
	Female	19 (100%)
Race		
	White	9(47.4%)
	Black	5(26.3%)
	Asian	2 (10.5%)
	Multiracial	2(10.5%)
	American Indian	1(5.3 %)
Ethnicity		
	Hispanic	(3)15.8%
	Non-Hispanic	(16)84.2%
Education		
	Bachelor	7(36.8%)
	Masters	10 (52.6%)
	DNP	1(5.3%)
	PhD	1(5.3%)
Years of Nursing Experience		
	Mean	8.84
	Range	29
	Min, Max	1, 30
Employment		
	Academic Medical Center	42.1%
	Multi-Center Hospital System	26.3%
	Independent Community Hospital	31.6%

Figure 1. Conceptual Framework

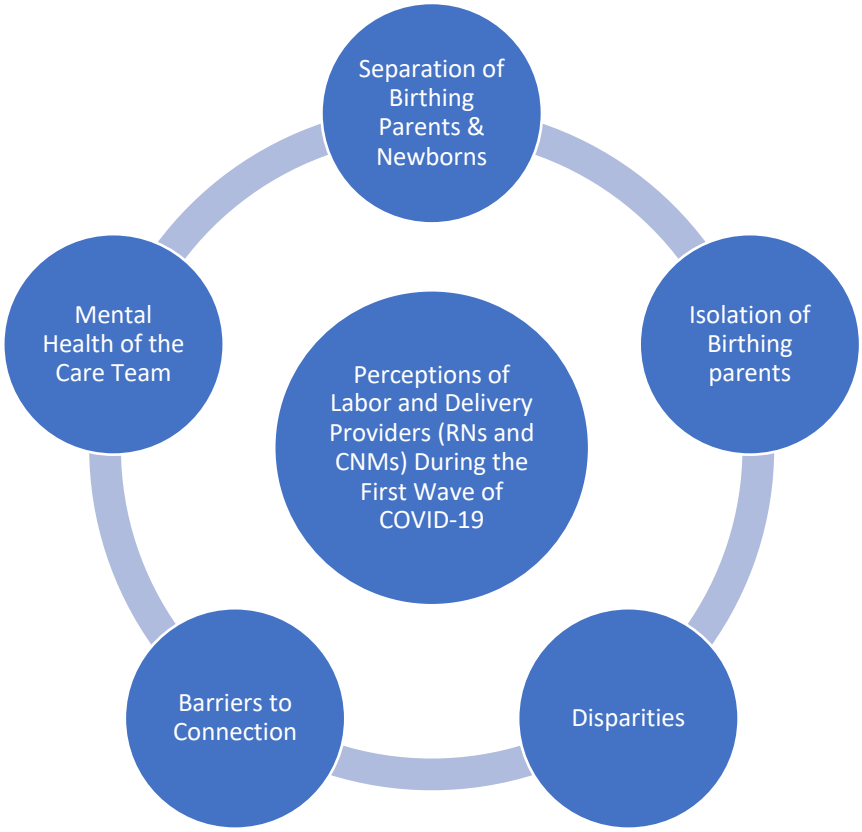

Table 2. Key Themes and Illustrative Quotes

Separation of Birthing Parents and Newborns *(48* ***excerpts,*** *11/19 study participants* ***(57.8%))***	
	"Nursing as a whole, we're here for our community, for our profession. And as a nurse midwife, we stand with women and their families, and their babies…A lot of things can improve with...not having to separate mom and baby at birth."
	"It's really frustrating, especially if... you have somebody that [had] a prenatal death before and it's like you have to separate mom... because she's COVID positive...Mom wears her mask and [is] an asymptomatic carrier. But still, you have to be separated...The mom, in the end, is the one who loses...because she's not able to hold her baby or breastfeed her baby."
	"Patients are... willing to separate without really like questioning. Which, you know, I understand like, this is scary...There is so much unknown, especially... between mom and baby transmission and what kind of long-term effects it could have on a baby and all that. So that I think that's probably been the hardest."
	"So once the induction occurred and we notified [the patient that] the recommendations at that time [were] to separate mom and baby. There was a huge deterioration in communication. She became withdrawn. She became very argumentative and wanted to be tested again. The second test came up positive."
	"So [upon] delivery, the OB... lifted the child to place it on mom's stomach. And when Mom reached out to touch her baby, he told her, 'I'm sorry, they're telling me I can't give you your baby.' And that's when he cut the cord and gave the baby to us. That mom shrieked so loudly that it was a shriek of pain, a pain of loss. So, at that moment, I was able to realize we're no longer deal with the happy birth... Whatever vision that mom had in her head of a perfect delivery has gone to the wayside."
Isolation of Birthing Parents	
	"It was unsettling, to be honest...I felt like it would be nice to just take a step back and look at the bigger picture and sort of slow down and make decisions that seemed appropriate, not just decisions that were rapid. And it seemed like that's what was happening. We were just making these off-the-cuff decisions based on whatever whim somebody had that day and things were constantly changing. One of the things that was most frustrating for me was the changes to our visitor policy."
	"You get one visitor for OB and... her visitor was her mom and her mom refused to go back in the room with her because she was afraid of getting COVID. And so, this woman was having a baby, her first baby, and she's sick and she's in labor. And then she had surgery and then she went to the ICU all by herself."

	"[I am] trying to consolidate my care. I'm not going to be coming in and out [all] of time because a lot of them are... symptomatic...And they're in labor."
	"I [feel] like I'm not able to do my job like I should, especially if there was someone...alone."
	"I know I need to check in or be in there... These women are by themselves, didn't plan to be."
	"I'm not keeping my distance with patients...Women need a lot of emotional support in labor or through miscarriages. I mean, we see that so much. And to stand at the doorway and talk to someone is so impersonal and... to see laboring COVID patients with no family members."
Disparities	
	"I was more attuned... to our low threshold for taking care of people that sounded like they might have had something more going on. And in our practice, because of COVID, we have become much more [frequently] screening people... for domestic violence."
	"There is a disparity. I noticed that when it comes to younger generations, the health care community shunned their behavior...For example, we had a mom who was 19, went to a birthday party who where there was a known COVID positive patient... So, the staff said, 'Well, she deserved it.' You know, if you're pregnant, why would you do that?' So, then you have another spectrum where you have the mom... of two or three that goes to the park and goes to get ice cream afterwards and ends up COVID positive from that. There's more empathy towards a mom who was unfortunate to catch it in the community as opposed to one who went to a family birthday party."
	"This has all shed so much light on how dysfunctional our system is... Our population is very, very much underserved. And so those disparities that exist that combined with the anti-racism movement as well, I think like the fact that those two things are coincided is super important and hopefully move the needle a little bit or a lot.... [As a] nurse midwife... I think being even more of a patient advocate and thinking through how the whole person is sitting in front of you and that it's not just her pregnant belly, but also like, 'Did she just lose her job? What stress is going on in her life?' Being an advocate in terms of... supporting... if a patient is positive, working with the peds team in terms of isolation with the baby... Patients need more advocacy and more support."
	"One disparity point is that we've been trying to keep pregnant people out of the office as much as possible. And to do that, [patients] need to be able to take their blood pressure at home. And so, people who can afford a blood pressure cuff don't have to come in as much. People who can't afford a blood pressure cuff have to come in for all their appointments. So, their exposure to the virus is much worse compared to people who could pay thirty dollars for a blood pressure cuff. So, should institutions be giving away free blood pressure cuffs? Yes."

	"Even though it's scary to work with [COVID positive patients] who may be able to transmit something to you that obviously you don't want anywhere near you, I still think it's really important to treat everybody the same."
	"I still want people to feel human, right? So, I don't want to treat people like they're dirty, especially at... a birth, which is so... critical to who you are as a person... mostly trying to make sure that people still feel like they're not dirty."
Barriers to Connection	
	"There's all these precautions that sometimes...make it harder...You're not looking at somebody's face. It's harder to see the expressions all the time. So, you have to be even more tuned into patients, to listening to what they're saying... and interpreting that...The social needs are more. So, you have to make sure that you're allowing time for those."
	"I think [COVID-19] reinforces the importance of hands-on care and the importance of touch, and it's hard, you know? I mean, there's...a barrier between nurses and their patients now."
	"I was very uncomfortable as a nurse. In L and D, we're in our patients' rooms' every 15 to 30 minutes. We're very close to our patients. We cannot keep six-foot distance, especially if the woman is pushing, you know, we're the middle of a delivery."
	"[COVID-19 has] injected this uncertainty into patient provider relationship."
	"So, we're supposed to wear a mask and our face shield in any room, even if we've tested the patient and they are negative. And then for delivery, specifically for third stage of delivery, for pushing and delivery, we put up a plastic shield in front of the patient with the hope that that is preventing some of their breath and coughing etcetera from getting in our faces."
	"I am a very facial expression kind of person. And so, the fact that people can't see my face, I think is a little bit of a communication barrier...I had a patient a couple of weeks ago who [was] from Ukraine and her English is good, but it wasn't great, and she could not understand people when they have masks on because she couldn't see their mouths."
Mental Health of the Care Team	
	"I feel like the mental, the psychological part is just the number one for us in the health care field... It's...the fear of the unknown... it just throws everyone over the edge."
	"I had a lot of anxiety just driving into work. And it seemed like it increased as I... walked into the hospital."

"When my hand just hit the doorknob, like to push the door open, to go into the room, my heart basically jumped out of my chest... I just started praying to myself, 'God, please protect me. Please... don't let me go in here and catch something that I'm going to give to my friends or family...Keep me safe. Help me not to be scared of her and not to treat her differently than other people, but please protect me, because I'm afraid,' and then I walked into the room."

"I felt more nervous in the beginning about... my family's health than I do now. And I wonder if part of that the exhaustion just, pandemic exhaustion is, or worry exhaustion."

"Every time I encounter a patient and they turn up COVID positive, I immediately panic. Like, did I wear it with my first encounter? Did I not? It's like a mind game."

"I actually… considered reaching out to one of my primary docs because I thought I needed Xanax or something because I had just chest pain and anxiety. Full blown anxiety which I [had] never experienced."

"Because of the unknown and the rabbit hole that I'll go down... I don't [want to] freak myself out going down the rabbit hole...Like is it even worth it because what we know changes every day? So, I feel like to protect my own feelings and emotions, I just have to keep going."