

Exploring the Perceptions & Experiences of Breastfeeding Mothers During COVID 19 Lockdown

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ABSTRACT

The COVID-19 pandemic brought its attendant health and social challenges to people worldwide. Some categories of people who endured most of the COVID-19 pandemic peculiarly were breastfeeding mothers and their infants given the lockdown that followed because it created an unfriendly atmosphere. Consequently, this study sought to explore the perceptions and experiences of breastfeeding mothers during the lockdown in various parts of the world. Interviews were conducted over WhatsApp telephone calls using a purposeful and homogenous sample of 6 mothers who volunteered to participate in the research. Using the dictates of Interpretative Phenomenological Analysis (IPA), interview recordings were transcribed, coded, and analyzed to capture the idiographic experiences of participants. Findings revealed the emergence of major themes like the adjustment, protective, and psychological impact that summed up the experiences of breastfeeding mothers. Areas of limitation of the study are highlighted, and direction of future research proposed.

KEYWORDS: Breastfeeding mothers, COVID-19 Pandemic, experiences, IPA, perceptions.

Background of the Study

In a quest to ensure a pragmatic and safe containment of the virus, governments worldwide implemented quarantine restrictions that disrupted the customary ways of interaction. This "new normal" seemed to be a logical step to tackling a health crisis that arose spontaneously with limited knowledge of eradicating it (Moccia et al., 2020; Menut et al., 2020). This meant that people were placed in mandatory isolation and subjected to policies that hindered their free movement. Consequently, breastfeeding mothers were affected (physically and emotionally) by these changes, which have the potential to have mental health implications (Brown & Shenker, 2020; Serafini et al., 2020). The spread of the virus further necessitated efforts by health organizations globally. These efforts were aimed at identifying cautious steps

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mothers should take to shield their infants from the virus (Baño-Piñero et al., 2018; Kumar et al., 2020; Moccia et al., 2020; Saaó & Kampmann, 2020). These measures had implications for breastfeeding mothers because of the challenges in feeding their infants to prevent infection. This study sought to explore the obstacles mothers faced during the COVID-19 pandemic lockdown.

COVID-19 is an infectious disease that majorly focuses on the dysfunction in an individual's respiratory system, which can spread through various means (Daniel, 2020; Streatfield et al., 2020). Its infection process starts from fever, cough, short-term breathing to mild respiratory disease. It is suggested that most likely transmission happens from an infected person to person. In these circumstances, mother to breastfeeding infants is not excluded in the transmission of the disease. This scenario has led to broad guidelines or protocols on how mothers should handle the process of breastfeeding. For instance, the European Milk Bank Association (EMBA, 2020) has given guidelines on the mother-child relation during COVID-19. This has been due to concerns that mothers can transmit COVID-19 to their infants. Indeed, Chmeielewska et al. (2021) suggests that infected mothers with COVID-19 should be isolated from other individuals to prevent the spread of the virus to others. However, that is not within the scope of this study. Our concern here is how mothers have coped with the attendant problems of breastfeeding during the COVID-19 period and the attendant depression it may cause (Britton et al., 2007; Britton et al., 2020; Dias & Figueiredo, 2015). In other words, what are the perceptions and experiences of breastfeeding mothers in the COVID-19 period?

Theoretical Framework and Review of Literature

Theoretical Framework

Attachment Theory: This theoretical framework by Ainsworth & Bowlby (1991) highlights the importance of consolidating an emotional connection between mother and child. This connection becomes the foundation for the developmental milestones and psychological wellbeing of the child. Bowlby and Ainsworth, provides an evolutionary perspective to attachment, underscoring the psychological distress of infants being separated from their primary caregivers (Bowlby & Ainsworth, 2013). Thus, infants possess an innate desire to form bonds with primary caregivers, who develop protective instincts for the child's survival (Stevenson-Hinde, 2007). The child displays five attachment behaviours (which includes sucking, clinging, following, crying, and smiling) to alert mothers of their desire for comfort and care.

The contributions of attachment theory also provide a detailed understanding of the different attachment styles (secure, insecure-avoidant, and insecure ambivalent & resistant) formed from mother-infant interactions (Levy et al., 1998; Simpson, 1990). Secure attachment is linked to the emergence of maternal sensitivity (referring to a mother's capacity to comprehend the signals given by the infants, especially within the first 12 months) (Ainsworth, 1969). Alternatively, children with insecure-avoidant attachment explore their environment independently and do not form strong bonds with their mothers (Ainsworth, 1978). This is due to the inability or insensitivity of mothers to their signals and for help and support. Insecure ambivalent & resistance are displayed by children who exhibit dependent and independent behaviours when interacting with their mothers (Cassidy & Berlin, 1994; Ainsworth & Eichberg 1991). The child has little or no trust that their care will protect them when exploring the environment.

The adaptive component of attachment theory offers a lens to understanding the experiences of breastfeeding mothers during the pandemic. Mothers may feel an increased sense of awareness and responsibility to guarantee their children's safety. Although mothers are likely to exhibit increased levels of secure attachment (proximity to the kids), there is also a

possibility of separation anxiety. Separation anxiety, in this case, is the distress their children will face if the mother contracts the virus and is forced to isolate herself from her kid.

Attachment theory also provides a pathway for exploring the psychological wellbeing of mothers in the pandemic. As primary caregivers, the distress they experience might strain their capacity to provide optimal support for their children. Maternal sensitivity requires mothers to respond swiftly to the signals from their children, but the concerns over the overall safety of their family could prove to be a distraction. Therefore, their responsiveness may be diminished due to the focus on economic strain from governmental restrictions.

Family Stress Theory: The family stress theory was conceptualized by Hill (1949), and it underscores the significance of detailed stressors to the family structure. Hill (1949) theoretical contribution was instrumental to comprehending the pattern by which families separated during wartime, how they reacted to the separation, coped during the initial disorganization phase, and recovered. Later theoretical development investigated other situations where households undergo stress detrimental to their mental health (McCubbin & Patterson, 1983). These circumstances include health, socio-economic barriers, divorce, domestic violence, and the issues surrounding the developmental stages of children. The consequence of these stressors can be so profound that it could affect a child sense of security or a caregiver's capacity to protect their children. The family stress model also explains the adjustment patterns of families when faced with an unexpected event or crisis (McCubbin, 1979). This requires the readjustment of specific family routines and the adaptability to these changes as they emerge.

The unexpected fallout from the COVID-19 pandemic tested families' adaptive capacity and agility (especially nursing mothers). The economic fallout with the loss of jobs or lack of prospects to earn a living was a significant stressor for breastfeeding mothers. The struggles they faced reflected in the scheduling of postnatal care (due to the overrunning of hospitals) and the risks of visiting. Mothers had to learn new ways to cope with the situation and identify strategies to guarantee that their children were not deprived of the nutritional support they needed. This theoretical foundation also highlights the importance of utilizing other support systems (fathers, relatives, or extended families) to lessen the emotional burdens of breastfeeding mothers. These support systems are pivotal in providing external resources for mothers and helping them feel a genuine social connection. Without such support, breastfeeding mothers may struggle to give the child's excellent nutritional care.

Review of Literature

It is primarily assumed that breastfeeding is the best form of nutrition for infants because it provides numerous benefits. It also gives warmth between mother and child and fosters better social, mental, and psychological growth. In the traditional view of motherhood, breastfeeding should not be taken for granted because it sustains growth and development among children, which may later affect overall health when they eventually mature into adults (Rodriguez-Giallego et al., 2021; ABM, 2019). Furthermore, a mother who attends prenatal and postnatal clinics are often advised to follow specific protocols. These protocols ensure that mothers breastfeed their infants for six months without additional food while they continue to breastfeed their infants until early childhood, with different foods for infants (World Health Organisation, 2020). Of course, there are circumstances where mothers don't exclusively breastfeed, but these are exceptions. The bottom line is that breastfeeding is mainly essential in child development

It is also known that in the process of breastfeeding infants, mothers can account for a variety of experiences that can be positive or negative to the health of the infants or indeed for them as mothers (Palmer & Ericson, 2019). Antenatal clinics often encourage breastfeeding to maintain a better health condition of the infant. Apart from that, these processes guide mothers to safeguard these infants from disease and maintain a better immune system (Santos et al.,

2011). For instance, a compromised environment in terms of public health has a high tendency to transmit diseases to infants that may have fatal implications (Brown, 2017). Therefore, it is imperative to keep to these protocols so that mother and infant breastfeeding will be safe because there is an attendant problem that may arise of social or psychological nature (Best et al., 2021; Menut et al., 2020). However, with the advent of the COVID-19 pandemic ravaging most parts of the world, the protocols that an average mother would need to stay at home for long hours and these conditions may have mental health implications (Gribble, 2006; Tull et al., 2020) or even financial issues (Ferneini, 2020). These mothers may also need to follow safe breastfeeding protocols but may be encumbered by several problems, which can create difficulties, including the entire support systems available to these mothers (Baño-Piñero et al., 2018; Demeritas, 2012; Susin & Giugliani, 2008; Seccone et al.2020). This study explores the implications that breastfeeding mothers may experience during COVID-19 lockdown.

The Present Study

This study contributes to academic and practitioner-based solutions to mental health conversations due to the pandemic. In its June 2020 scientific brief, the World Health Organization (WHO) acknowledged the magnitude and nutritional impact of exclusive breastfeeding on a child's survival (World Health Organization, 2020). Thus, mothers with suspected or confirmed COVID-19 were still urged to breastfeed their children (Cheema et al., 2020). Therefore, it is imperative to explore the tensions mothers have experienced during this period and get a detailed understanding of their adaptive coping mechanisms. Bringing mothers into the global conversation can impact theoretical development and help structure interventions tailored to their needs.

The theoretical contributions will be calibrated within the developmental and social psychology literature. Optimal childhood development requires favourable environmental conditions and stimulating interaction between mother and child (Ginsburg & Committee on Psychosocial Aspects of Child and Family Health, 2007; Magill-Evans & Harrison, 2001). Stress inducing events like the pandemic might disrupt the quality of this interaction and undermine the genuine intention of mothers to cultivate a naturing relationship with their kids (Bryan, 2000; Garbe et al., 2020; Mermelshtine, 2017). Qualitatively exploring their experiences broadens theoretical frontiers around attachment in unpredictable or crisis inducing events. Furthermore, findings from this study could potentially advance conversations around the context for optimal growth and stress response capacity of primary caregivers.

This study also aims to develop appropriate clinical interventions for breastfeeding mothers—the WHO recommends highlighting that the merits of breastfeeding significantly outweigh the risks of transmission (Rodrigues et al., 2020; World Health Organization, 2020). Thus, mothers are encouraged to consistently undergo counselling to help deal with the fear or anxiety they might experience over the transmissibility. Therefore, a study like this provides a foundation for empathetic listening to what they're going through, understanding their current coping mechanisms and the provisions of practical solutions to dealing with the mental health challenges they may face.

The researchers involved in this study come from both social and developmental psychology backgrounds. Their experience in utilizing qualitative methods also inspires their desire to gather in-depth insights into the meaning-making process of participants in this study.

Method

Research Setting

The global scope of the pandemic necessitated that the research setting wasn't restricted to a specific geographical location. In this study, it was acknowledged earlier that governments worldwide had instituted lockdown procedures that restricted movement and conventional social activities. Therefore, the research was conducted with residents in Nigeria, South Africa, and the United Kingdom. These countries had stringent regulations on containing the virus and operated based on the directives provided by the WHO. Thus, recommendations provided by the WHO for breastfeeding mothers was similar across the three countries, and the scientific advice on implementation was ubiquitous. However, when adopted by different countries, there are bound to be logistical differences that still help to provide a more detailed and comparatively diverse data set. It is also imperative to note that this research is exploratory, with a primary focus on nurturing experiences in the face of a worldwide pandemic. Therefore, the stressors were indistinguishable since the international health community were still trying to understand and contain the spread of the virus.

Research Design

The essence of this study was to gain some in-depth understanding of participants' perceptions and experiences of breastfeeding during the COVID-19 lockdown in one-on-one interviews. Therefore, an inductive approach that afforded the participants to create constructive narratives to enable intersubjective analysis was most appropriate. This bottom-up nature of understanding this phenomenon essentially offers primacy to developing theory from basic observation or interview in explaining phenomena (Madill et al., 2000). Apart from that, this research approach is mainly idiographic, biographic and suggests that participants in their own words express their thoughts, values, ideologies, perceptions, preferences and indeed their experiences. Furthermore, this approach requires a flexible, serene, and primarily fluid but non-judgmental atmosphere to enable participants to say it as they see or feel. Therefore, the Interpretative Phenomenological Analysis (IPA) as a theory and data gathering method is most appropriate (Smith & Osborn, 2015).

Participants and Sampling Technique

The purposeful sampling strategy was adopted to recruit participants in this study. This simply meant using a sample that was unique but homogenous. That is, nursing mothers during COVID19. Six nursing mothers were purposely selected between ages 25-31 and volunteered to participate in the study. Two participants were residents in South Africa, one in the United Kingdom, and the remaining three were from Nigeria or residents in Nigeria. Since this is an exploratory study, the sample size in such a study is not necessarily of grave concern. What is important here is the "thickness and richness" of data in each study. (Smith & Orsborn, 2015).

Procedure: The Interview Process and the Role of the Researchers

All interviews were conducted through WhatsApp voice calls during the daytime and at the convenience of the participants. All interviews were recorded on a digital recorder. The questions asked during the interview comprised a set of semi-structured aimed at eliciting responses on the experiences of nursing mothers during the COVID-19 pandemic. Interviews were conducted at the peak of the lockdown (the first wave of COVID-19), around the second quarter of 2020. The interviews lasted between 30 to 50 minutes each. Transcription of the

discussion was done verbatim as Smith et al. (1999) prescribed. For ease of analysis in the transcription protocol, the participants were given pseudo names. Participant 1 was Kim, participant 2 -Ivy, participant 3 – Sue, participant 4- Amy, participant 5, Liz, and participant 6- Zoe. The first author designed the study and conducted the interviews, while the second author listened to each interview. The second author also transcribed the interview recordings' verbatim transcription into readable text. The third author analyzed the transcribed text. The fourth author cross-checked and ensured that the analysis was an accurate and fair reflection of the interview recordings and the subsequent transcription.

Data Analysis: Justification for the Use of IPA

The IPA is appropriate for this study because it is sensitive and detailed in analyzing narratives. IPA principally evolved as a variant of philosophical perspective referred to as phenomenology. IPA cascades within the constructivist ontology which suggests that humans consciously construct any phenomena in the context of their environment (Smith et al., 1999). Along this line, it offers epistemologies that are largely interpretative for "inter-subjectiveness". In this context, the inter-subjectiveness implies that both the participants and researcher(s) play an active part in pinpointing and interpreting the entire meaning making processes of the participants narratives or ideas of lived experiences (Smith, 2004). In addition, it is a double hermeneutic process that enhances the exploration process so that better sense can be made of the meaning of what participants are saying (Smith & Osborn, 2015).

Given the adopted approach, interpretative phenomenological analysis (IPA) has three different operation phases. The first entails noting key themes involving participants texts expressed into a few words that effectively convey descriptions of significance in the text. This process of line-to-line reading of the text to identify themes in the entire text of the interview transcript continues. This was done carefully by reading the whole text of each participant. See a sample in Appendix 1

The next stage involved the clustering and the tracking of the distinctive themes that emerged from the first stage. This was done by pinpointing the objects responsible for the theme development and transformation to make psychological sense congruent with the subject matter under investigation. This is done with each participant's text to recognize each participant's appropriate perceptual and experiential claim (See Appendix -2). The third or final stage requires the final clustering of themes where the sub-themes and the superordinate themes are identified. In this case, the number of each participant's contribution to each subtheme is identified and is in turn used to make rational inferences (Smith et al., 1999).

Ethical Considerations

Informed consent was obtained from the participants before the start of the interview. This required providing a detailed briefing of the purpose of the research and the estimated duration of the discussions. Furthermore, they also had the right to withdraw at any desired point of the interview. These considerations are aligned with the Ethics Code of the American Psychological Association (O'Donoghue, 2019). A confidentiality agreement was reached with all involved in the study, and the limits were specified. For example, participants were assured that their identity would remain anonymous, and they had the right to retract any information they had previously provided.

Results

Table 1 below contains the data from the final stage of the IPA process. Thematic categorizations reflect the cataloguing of identified codes on the transcripts. The superordinate themes are the higher-order themes to help calibrate findings to the relevant literature. It also provides opportunities to project the theoretical contributions of the study.

Table 1
Final Table of Generated Themes

<i>Superordinate Themes</i>	<i>Thematic Categorization</i>	<i>Definition of Theme</i>
<i>Psychological Impact</i>	Anxiety and Fear	Explores the accounts of mothers regarding the psychological toll that news of the pandemic took on them.
	Discomfort and Uneasiness	
<i>Protective Component</i>	Increased Breastfeeding Frequency	Examines the degree of apprehension they experienced living within the lockdown restrictions imposed by the government.
	Polarized Attitude towards Immunization	
<i>Adjustment Component</i>	Alterations to Routines	Explores the amount of protective responsibility absorbed by mothers in an attempt to eliminate the risk of potential infection.
	Reinforced Support Systems	
<i>Heightened Attachment</i>	Increased sensitivity to baby's needs	Explores the actions taken by mothers to adapt to the current climate and the nature of support received during the adjustment phase.
		Explores the intensified connection between mothers and babies. It also investigates the factors for the improved compassion felt by mothers.

Findings

As information about the pandemic streamed in from various news and social media outlets, its content was teeming with anxiety-provoking themes that were bound to stimulate mass hysteria (Tull et al., 2020). Findings from the interview revealed that most mothers found the situation overwhelmingly exhausting. The spread of the virus contrasted across locations or countries, causing leaders to put extraordinary measures to save the situation (Menut et al., 2020). These difficulties across locations could also contribute to the psychological strain experienced. Sue was in an environment different from one they were familiar with. Thus, she struggled due to the inability to fully connect with her loved ones or even secure the services of a babysitter.

Then COVID happened, and I was unable to take her to crèche. I can't take a nanny because I don't want to expose myself or her to any of these circumstances. It is really affecting a lot of things, though, and again it affected me maybe probably because I was like; let me go to Nigeria. In that way, I'll seek help with my folks. (Sue)

The pandemic's ambiguities are known to facilitate apprehensions and discomfort (Saccone et al., 2020). For mothers like Liz, a mother of twin babies, her fears emerged from being unable to ascertain how much the holistic changes she had to make in her life would affect her baby. These resulted in her feeling uneasy and wishing she had a more effective communication strategy.

My fear really was they would not be able to tell me how they were feeling. If they were to be talking, I would have been a bit calm. But because they can't talk and won't know what is wrong with them. I was worried and wanted to just protect them as much as I could. (Liz)

Regarding breastfeeding frequency, interviews revealed some measure of consensus that suggested breastfeeding was non-negotiable due to its invaluable role in strengthening their babies' immune systems. Kim expressed this sentiment clearly when she used the word 'aggressive' to stress further what this meant in her unwavering quest to safeguard her child's health.

So, I am feeding more; I will say I am feeding more, I am feeding more aggressively. So that it can help her immune system to avoid being sick because my biggest fear is her falling sick during this pandemic, having to go to the hospital, and her contracting the disease. (Kim)

Breastfeeding schedules differ depending on the mother's experience, the context, and the needs of the child. For Amy, who was nursing a six-month-old baby (her only child), this protective method meant doubling the feeding frequency.

That means if I was feeding for three times a day, I had to increase it to like six times. Because I want her to get as much as possible to boost her immune system so that I know that she is good to go. (Amy)

When asked about immunization and vaccination, a comparative analysis of the risk made them feel better. Sue, for example, acknowledged the importance of attending the immunization but felt dissatisfied with the treatment she received from a nurse on a previous occasion. This was when she was asked to put a mask on her baby.

I can remember the last one I took her; the nurse was asking for her, and I told her I can't use a mask for her because she is still too small and might likely suffocate. The next thing I was told is, 'maybe you are going to enter at your own risk.' Then I said, okay, fine, I will, because she needs to get the immunization. (Sue).

Others were predisposed to executing extra measures to ensure that the child's safety was secure. For Ivy, this process was uncomfortable and required heightened awareness, but it was understood as a necessary compromise. This helped ease her anxiety while securing the physiological welfare of her child.

Yes, I was. While we went for the immunization, I made sure that I had to carry him by myself, and nobody had to say hello. I was hundred percent careful and paid proper attention. (Ivy)

Amy seemed to have developed a positive outlook towards the immunization process and was determined to attend even if it posed some apparent risks. This could have resulted from her vast knowledge of the medical implications of not getting immunized and the consequences of not doing it early.

Yes, for postnatal stuff, what we did was when our period of immunization was due, I told my husband we had to go. In as much as COVID 19 is concerned, it will come and go. Also, I understood the importance of children being immunized, so I told my husband it is not negotiable. (Amy)

The interviews also explored the nature and degree of support systems mothers had access to. Almost all participants conceded that they received sufficient spousal support from their husbands. These prompted a gratifying feeling of "shared responsibility" thus, certifying that they concentrated on the maternal role of breastfeeding. Sue admitted that her husband helped with essential household chores when he was off work, allowing her to take a much-needed rest.

My husband was like; since he is off work today, you are not going to cook, you are not going to do this and that. So, I had a lengthy nap, and I told him, 'yoh! I never knew I am this tired'. So, it is good. (Sue)

Zoe acknowledged her husband's role in providing the much-crucial support required in caring for her baby. This helped to alleviate the stressful conditions resulting from the pandemic.

My husband, for example, was home during this COVID 19, so my baby could not go to the crèche any longer, and the baby had to start staying with him at home. He had to juggle things as both a working father at home and a career. So, when I get back, I pick it up from there. It's really a lot of help because thinking and getting stressed on that around this period would have been unthinkable. (Zoe)

For some working mothers, the lockdowns coupled with the time spent in nursing meant that their businesses would close. But with the spousal support they received, they could still do some work and experience the fulfilment it brings. Amy gave an account of her husband's instrumental role in keeping her business afloat and how much that helped improve her nursing experience.

Most importantly, the initiative of doing nose mask came, and I started producing nose mask. The one with filter and without filter and people were making orders online. So, it is my husband that goes to supply because I cannot go out, and he told me not to go out because of my baby. (Amy)

While some admitted that they observed no significant difference in the amount of support received, Zoe conceded that she experienced a distant relationship with the health care professionals. Despite her concerns, she stated that this could result from the overburdened commitments resulting from the pandemic.

I am not actually in the postnatal period no longer. So, probably that is the first reason. Then there is no really hospital-patient relationship these days. Yeah. During this COVID 19... they have enough on their hands, and I learned some hospitals even closed down. Maybe that's why. (Zoe)

Liz tapped into collaborative networks (like support groups), where nursing mothers could learn from each other's experiences and prioritize their psychological wellbeing.

Okay, currently, I am in many groups because I have twins, and it is stressful. So, I have people that keep calling to ensure that I am okay... they are called health visitors. So, they keep calling to find out because mental health is a big thing here. Everyone is scared people might breakdown, and scared for the kids and also to be sure am mentally stable. (Liz)

When asked about the impact of the pandemic on their routines, most participants admitted that there had been no profound difference. After all, they were already accustomed to staying at home due to intensive care, anyway. For others like Sue, who still had to juggle work obligations with nursing, this proved to be a challenging and tricky phase. The lockdown restrictions limited employees working from home, so Sue still had to attend work-related meetings virtually. She shared an experience that almost led to an altercation with her boss because she could not actively participate when compelled to do so.

It is difficult like I said. Sometimes, my boss calls and wants me to do a zoom meeting. And I am like wondering, have you guys forgotten I have a child? So, I said, 'sorry I can't', and he insisted I have to do the zoom meeting. I entered the conference then muted the call; he messages me privately that 'why did I mute the call that I must talk. I unmuted, and then my baby started crying. He messaged me back and said, 'oh, mute yourself back; in fact, you can log off'! (Sue)

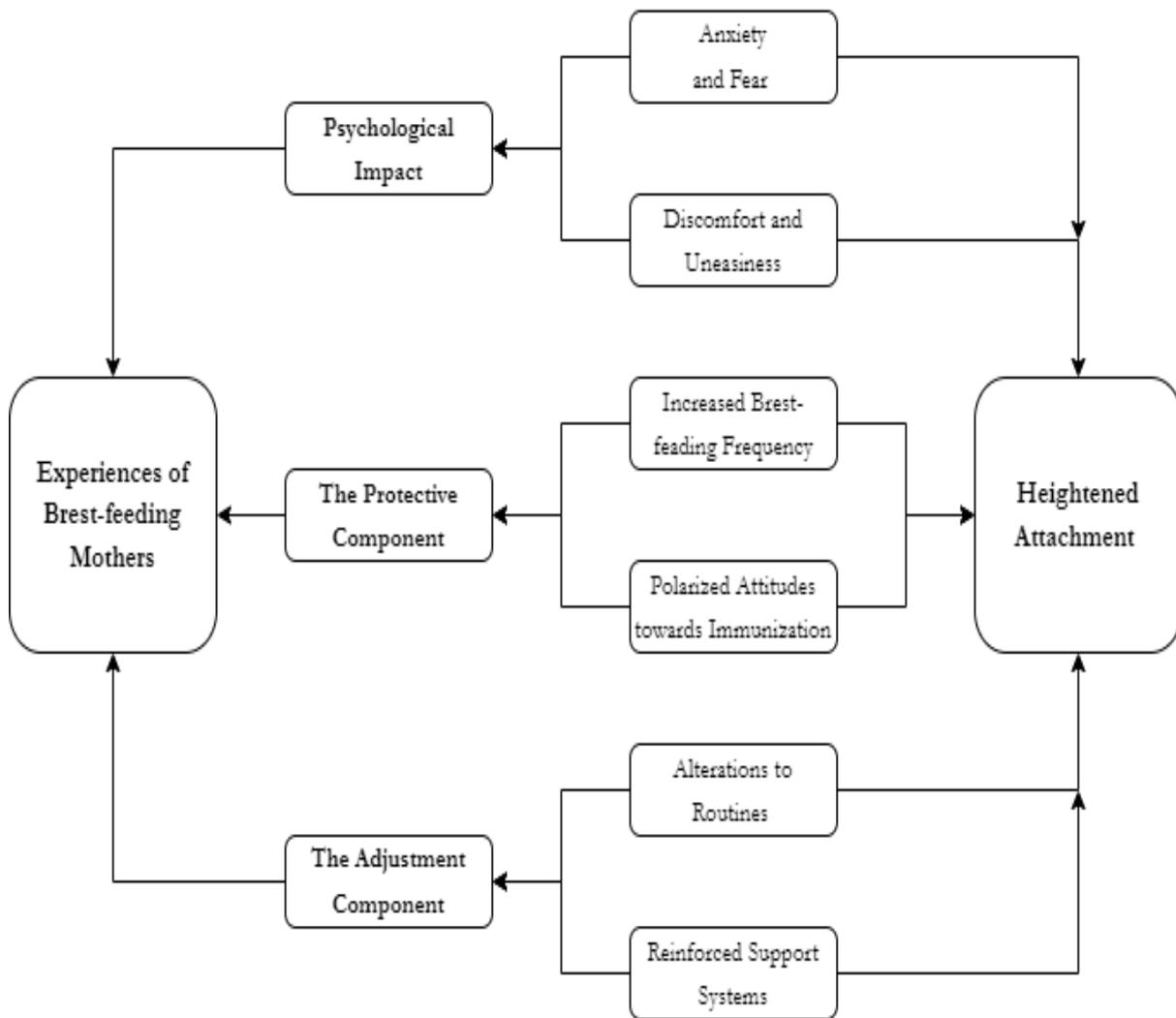
Despite the limited changes to routines, mothers experienced an increased level of attachment to their kids. Their closeness grew remarkably; first, due to the restrictions, secondly, due to the more time spent together.

Discussion

The study aimed to understand the perceptions and experiences of breastfeeding mothers during the COVID-19 pandemic lockdown. To gain a detailed insight into their experiences, this study engaged four superordinate areas of exploration, including experiences of nursing or breastfeeding, propensity for the adherence to postnatal immunization and vaccination schedules, availability of support systems, and the effect the pandemic had on general routines. The model below (see figure 1) succinctly captures the IPA findings and lays the foundation for theoretical and partitioner-based contributions.

Figure 1

Final Model Showing Experiences of Breastfeeding Mothers during COVID-19



The Psychological Impact

This refers to the mental health challenges that arise when news of the virus emerged. It delves into the emotional distress they faced and their accounts of how it impacted their relations with their child. Families faced socio-economic fallout, culminating in a recipe for mental health challenges (Ferneini, 2020). Breastfeeding mothers were ill-prepared for a crisis of this magnitude, and postnatal support structures were yet to be factored into the overall postnatal strategy. At the same time, hospitals were swamped with cases of COVID-19.

This finding is congruent with a study by Best et al., (2021) which identifies stress, depression, and fear as some of the resulting psychological impacts. This study shows that despite the apparent physiological effect of the global health crisis, its fallout on mental health cannot be over-emphasized (Daniel, 2020; Ferneini, 2020; Menut et al., 2020). The immense task of caring for a newborn baby, combined with the flood of information about the viral spread, leaves these mothers vulnerable to mood disorders, stress, and anxieties (Serafini et al., 2020). As some of these participants stated earlier, policy changes and disruption in social cohesion also engendered a tense environment for breastfeeding.

The Protective Component

This refers to the proactive steps to shield their babies from a potential viral infection. It engages the intensity of their maternal protective instincts and how it influenced their breastfeeding frequency. It further examines their attitudes towards adherence to immunization and vaccination schedules.

Increased Breastfeeding Frequency: From reduced risks of respiratory and gastrointestinal infections to the prevention of diabetes, breastfeeding stands out as a pathway to efficient physiological development in a child (Demirtas, 2012; Britton et al., 2006). To attain milestones necessary to facilitate improved health, mothers are recommended to engage in exclusive breastfeeding of a baby from infancy to 6 months and then supplement it (for at least two years) afterwards (WHO, 2003). The pandemic had changed the conventional atmosphere for mothers, resulting in a need to explore how these changes have impacted their breastfeeding experience. Based on the model above (figure 1), it is evident that participants perceived breastfeeding as a protective component of their role. Improvement and increase in the breastfeeding schedule were a considerable step in creating a sense of responsibility and security against the possibility of an infection. This emphasizes these mothers' role in intrinsically motivated protectiveness in fulfilling parental nursing obligations. Recognizing that satisfactory breastfeeding is instrumental to physical and cognitive development is one thing. Still, strategies to boost its frequency are more beneficial in extreme contexts (like the pandemic). For mothers subjected to the governmental lockdown restrictions, the maternal instincts were directed towards a well-regulated breastfeeding approach (Moccia et al., 2020; Tull et al., 2020). This virtual drive towards ensuring that the child's nourishment is prioritized becomes a mechanism to cope with current challenges

Polarised Attitudes towards Immunization and Vaccination: Postnatal immunization and vaccination protect newborn babies from life-threatening diseases (Saso & Kampmann, 2020). To underscore its importance, health care centres provided mothers with the resources and education to inspire their adherence to the immunization schedules. Furthermore, campaigns are implemented to give mothers from low-income communities this knowledge (Streatfield et al., 1990). With the governmental limits on movements and (in some cases) unavailable transport services, most admitted that they were either indisposed or unwilling to attend due to the fears of getting the child infected with COVID-19.

The perception (and beliefs) of mothers' immunization and vaccination may have impacted their adherence to its schedules. Possessing a positive attitude could serve as the extra stimulation parents need to push through, even in the most unfavourable conditions (like the pandemic). While studies have emphasized the magnitude of dispositional factors in shaping child immunization (Santos et al., 2011), this study's findings underscore the role of situational factors. Although it is fair to say that pandemic is an unconventional situation, it helped reveal the tensions these mothers faced in their quest to safeguard the health of their babies. They resolved these difficulties by adopting preventive strategies when attending to postnatal care or the desire to avoid exposure entirely.

The Adjustment Components

This refers to actionable behaviours that adapt to the current climate. Mothers gave an account of the degree of changes to their routines and the flexibility required to fulfil them. Additionally, it describes the nature of support systems they were exposed to and how much it was utilized.

Reinforced Support Systems: Utilizing the specific nutritional benefits of breastfeeding can be achieved when mothers have access to suitable support systems (Baño-Piñero et al., 2018). With the added pressure caused by the pandemic, it was essential to explore

the nature or degree of support received and its impact on overall psychological wellbeing. The intensity of care required for newborn babies leaves mothers with little or no chance for rest. Susin and Giugliani (2008) confirmed that fathers' active participation in household responsibility and pro-breastfeeding interventions could significantly optimize the child's nutrition.

As the effect of the global pandemic heightened, health care professionals were overwhelmed by the number of daily cases they had to endure. The need for stable provision and access to health services for mothers cannot be overemphasized (Dol et al., 2021; Renfrew et al., 2020). This provision is made possible by professionals working within the sector. This is due to the intensity of their medical training and knowledge of the process (Kathirvel, 2020; Schwartz et al., 2020). Thus, with the tremendous pressure they faced during this period, breastfeeding mothers did not get the quality of attention they previously received.

With advances in technology and access to postnatal preparation, mothers should be provided with the resources to enhance their nursing experience. But the abrupt emergence of COVID-19 and its initial uncertainties, health care professionals had insufficient time to prepare mothers to handle the situation. This study's findings highlight the desire for breastfeeding mothers to obtain practical advice for navigating these novel challenges. Successfully dealing with nursing anxieties during a pandemic also required a strengthened household support structure and a core network from family and loved ones. This will guarantee less vulnerability to postpartum depression and have the best psychological conditions to care for their child (Gavin et al., 2020; Gregory, 2020).

Alterations to Routines: Routines are pivotal in engendering an environment for a child's nourishment and wellbeing in the present context. It requires mothers to grasp the child's demand and structure repeated activities to improve their health constantly. Predictably, childbirth disrupts the conventional routines, allowing mothers to observe their child's behavioural patterns to create new ones. Efficacy in balancing household chores, job responsibilities, and breastfeeding is contingent on formulating adaptable routines (Chung et al., 2020; Crook, 2020). Furthermore, an organized routine diminishes the stress experienced and is pivotal in the child's psychosocial adjustment.

The Heightened Attachment

This refers to that sense of attachment with a higher level of an enduring relationship, greater sensitivity, or affection for each other (in this case, mother, and child). Undoubtedly, the global health crisis in 2020 adversely affected families, but most mothers in this study conceded to fostering stronger attachment with their babies. In this sense, the attachment means an enduring connection, enhanced sensitivity, and affection for each other (Redshaw & Martin, 2013). Research has revealed that breastfeeding goes beyond the nutritional provisions and furnishes bonds with the child (Gribble, 2006). Findings from this study, consolidated this; by identifying attachments as a product of a well-enhanced protective instinct and the constructive adjustment to the current situation.

Mothers also admitted that the experience has equipped them with more insights into their optimal coping mechanisms. The process had inspired them to learn more and develop a deeper appreciation for their baby (Bowlby & Ainsworth, 2013; Moullin et al.,). With the evidence in the present study, more collaborative research will help comprehend the underlying psychological fallout on primary caregivers. This will facilitate support from the public health system and ensure that they incorporate practical interventions in preparation for a post-pandemic era (Gavin et al., 2020).

Implications, Limitations and Recommendations for Future Research

Implication of Study

This study revealed that breastfeeding mothers experienced anxiety, discomfort, and fear resulting from the uncertainties of the pandemic. This finding is like the study conducted by Kumar et al. (2020), which suggest that breastfeeding mothers experienced severe stress and anxiety that affected their mental health during the pandemic. These mental health issues primarily emanate from the magnitude of the pandemic, holistic changes, and uneasiness associated with isolation. Psychologically, for new/breastfeeding mothers to function well during the COVID-19 lockdown entailed having control over routines, less fatigue, and support systems needed to help mothers breastfeed babies adequately.

This study also affirmed that the global lockdown during the pandemic had a positive 'protective component' (e.g., increased breastfeeding frequency and attachment) and negative 'polarised attitude' (e.g., clinic dislikes, stress, and panic attack) impact on breastfeeding mothers. This similarity of this is related to the study conducted by Brown and Shenker (2020) that breastfeeding mothers negatively experienced (e.g., isolation, worries, panic attack) and positively (e.g., spending more time bonding with baby and breastfeeding) during the COVID-19 lockdown. As seen in the analysis, polarised attitudes experienced by breastfeeding participants originate from fear of allowing access to baby during immunization but realized its importance.

The lack of support from health care professionals can affect trust in health services, especially in the COVID-19 era. It may be fair to suggest that breastfeeding mothers are incredibly cautious of exposing their babies to the virus due to various reasons related. However, this should be interpreted with caution because it may be a one-off situation elicited due to the negative experiences solely associated with the impact of the COVID-19 pandemic. In addition, the protective component such as increased breastfeeding and attachment suggest that during breastfeeding, mother's secret hormones on the central nervous system that leads to maternal affection (Kim et al., 2011) and reduced postpartum depression (Dias & Figueiredo, 2015)

The implication of this study also revolves around the level of support needed to cope with challenges faced. It is ideal to say good gestures to get help and support from loved ones, and society helped alleviate maternal breastfeeding and reduce anxiety. Another interpretation is that for first-time mothers or those new breastfeeding, adequate reinforced support systems and access to technical assistance are essential and helpful.

Another issue of importance was how their daily routine changed during the pandemic; a mother revealed that the art of working from home and nursing has been incredibly overwhelming and challenging. Consequently, there was evidence that the pandemic influenced balancing work, house chores, and breastfeeding/nursing. Therefore, it is ideal to suggest that if routines are well organized and maintained, it may reduce the stress that accompanies breastfeeding and juggling job responsibilities in the long run.

This study also revealed that the more time spent breastfeeding, the stronger the bond between mother and child. This finding also confirmed studies that reported that nursing a child furnishes bond, sensitivity, and attachment (Redshaw & Martin, 2013). Hence, the emergence of COVID-19, which led to the global lockdown, was unpleasant and thought-provoking for breastfeeding mothers on the one hand. On the flip side, it may have functioned as an additional basis for increased feeding and maternal attachment.

Limitations and Recommendations for Future Research

It must be emphasized that this was an exploratory study, and therein were the study's limitations. The study had only 6 participants, and based on that number, the findings cannot be generalized. This is because we essentially sought to obtain an introductory (but detailed) account and understanding of their experiences.

The study used IPA as the method of gathering and analyzing data. IPA as a qualitative approach has its limitation in the research process, which we should take into cognizance. One of the limitations include that IPA does not seek to solve problems but instead seeks to throw more light on a given phenomenon. Therefore, the current research is foundational and a framework for further research to build upon. It will be beneficial to consider using other qualitative methods like grounded theory to help develop the approach to explain people's experiences in these kinds of scenarios.

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Appendix - 1

Stage 1

Analysis

<p>Participant: Yes, it is Ok...</p> <p>Researcher: Thank you very much... So, may I just ask, how are you today?</p> <p>Participant: I am doing very well. Thank you.</p> <p>Researcher: Can just briefly tell us ab.</p> <p>Researcher: Yeah, you said the question is broad, so I just said yes, it is broad because it is an opportunity to say in your own word, what you feel about yourself or I mean, what you can say about yourself. Yes</p> <p>Participant: Okay I am a stay at home, and I work from home. That's it.</p> <p>Researcher: Oh, that's fine... Can you confirm you are a nursing mother?</p> <p>Participant: Oh yes! I am and erm I had my baby in September and she will be nine months old in two days. And yeah, we are still nursing.</p> <p>Researcher: Well, congratulations!!</p> <p>Participant: Thank you sir!</p> <p>Researcher: Yes! So, we are basically interested in how you have been able to adjust with this kind of pandemic. And we all know that the pandemic has brought some restrains or constrains in our movement. So, with this, can you just tell us about your experience about breastfeeding during this pandemic?</p> <p>Participant: Ok eerm, yes, I assume it has brought its own challenges [COVID -19], because prior to the lockdown, I use to have a domestic staff that tend to assist with the cleaning of the house and all that. But now, I have to do everything by myself and sometimes I have migraine, and anytime I am stressed, it affects the milk supply. So, I get that once in a while and I am adjusting now but I still have.... Anytime I over stretch myself you know, go to the mall to shop, cook and everything, I start having headache and it kind of affect the product 'milk production.' So, the baby won't have enough and yeah but she eats solid now, so it is fine.</p> <p>Researcher: Yeah! So, the point I want to now understand is that how regular has your breastfeeding being throughout this period?</p>	<p>Background Information</p> <p>Nursing mother of nine months old baby</p> <p>Experience of Nursing during COVID</p> <p>Inadequate assistance</p> <p>Stress affecting milk supply</p> <p>Insufficient milk for baby</p> <p>Feeding on demand</p> <p>Higher feeding frequency</p> <p>More aggressive feeding (to boost immune system for pandemic)</p>
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<p>Participant: Its regular like every day, like it has not stopped... supply has not stopped but some days it is more and some days it is less. It is not like... so the baby is still nursing, she is still healthy you know. But sometimes it is not enough to like fill her up like she wants if the supply is low. But other than that, it is still regular, business as usual, feeding on demand. I don't have any schedule I just feed her on demand.</p> <p>Researcher: Okay! That is very good. So due to this pandemic, would you say there has been a difference in how you are breastfeeding before the pandemic and how you are breastfeeding during this pandemic?</p> <p>Participant: I would say I am feeding more; I am doing my best do feed more because I know I know the breast milk is very nutritious and it boost the baby's immunity with the immune system. So, I am feeding more, I will say am feeding more, I am feeding more aggressively. So that it can help her immune system to avoid being sick because my biggest fear is her falling sick during this pandemic, having to go to the hospital and her contacting the disease. And this is winter here, so this is the flu season and I know that if the baby have good immunity they are unlikely to or they have a lesser chance of getting flu and you know flu symptoms are quite similar to that of COVID. So, I will say I am feeding more. Yes!</p> <p>Researcher: Now erm, some people may have suggest or may want to think that effect of the pandemic, you know people are told that stay two meters away from the other person them because of the pandemic. Was there any precautionary measures you took or was there anything took note of or was there anything that was behind your mind when you are doing the breastfeeding?</p> <p>Participant: Hello! Please say that again, was there any?</p> <p>Researcher: Yes, can you hear me? Okay you know during this pandemic that was saying about some distance between you and the other person. But you know that as a breastfeeding mother there has to be 100% contact with your baby.</p>	<p>Impossible to social distance from baby</p> <p>High risks of panic attacks</p> <p>Pandemic aggravates postpartum depression.</p> <p>Seek therapy (to help postpartum depression)</p>
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Participant: Yes!

Researcher: Yes... So, did you have any fears or did you take any precautions or what was it that was going on during this time?

Participant: Okay between me and the baby?

Researcher: Yes.

Participant: Errm I can't... it is impossible to social distance myself with my baby [laugh], it is quite impossible. So, but the only social distancing I observed is with people outside my family. So when I go to the

Researcher: Okay I said is it possible that someone can experience mental health challenges?

Participant: Yes it is especially for first time mum.... I can't imagine if this was my first I will be having some panic attack and a little bit of maybe postpartum depression.

Researcher: Okay!

Participant: Yeah I had a little bit of postpartum with my first. So yeah with this pandemic will just aggravate it. Because even without having babies, I know quite a few people who are already getting depressed and falling into and having little minor mental issues. Yes it is absolutely a huge trigger for mental sickness for mothers with new babies.

Researcher: Yes, so it will be advisable for... So would you advise mothers of this nature to seek help if possible?

Participant: Hmm, yes but I don't think there is a lot of help now because even in the hospital the priority is for people with Corona virus. Nobody is attending to other issues..... so they can get help from maybe an experienced mom or who has gone through postpartum that can share experience or if they can see a therapist, because there are many therapists that can render help. So yes they can seek help.

Researcher: So before we go, could you confirm a few more things for me? You are now resident in South Africa

Appendix - 2

Stage 2

Generation of Themes (Clustering and Categorization of Subthemes)

<i>Superordinate Theme</i>	<i>Codes or Sub-Themes</i>	<i>Generated Themes</i>	<i>Participants Contributing to theme</i>
<i>Nursing Experience during COVID</i>	Inadequate assistance	Experienced Stress	Kim, Amy, Liz, Zoe
	Emotional strain at the start of the pandemic		
	Physically stressful and demanding (Could not get much help)		
	Experienced severe stress due to fasting		
	Overwhelmed by the financial and physical strain caused by pandemic		
	Insufficient milk supply	Experienced breast-feeding challenges	Kim, Sue, Amy
	Higher feeding frequency		
	Insufficient breast-feeding experience		
	Pressured to increase the frequency of breast-feeding (to boost immune system)		
	Impossible to social distance from baby	Increased Attachment to Baby	Kim, Ivy, Amy, Liz
	More time for the baby due to being self-employed		
	Bonded more with the baby		
	Feels more attached to the babies		
	Extra sanitary caution	Increased Precautionary Measures	Kim, Ivy, Amy, Liz, Zoe, Sue
	Kept Informed by watching the news		
Isolating baby from others			
Husband keeps distance after restring home			
Access to baby restricted to only the dad and sister			
Husband takes his birth before touching the baby			
Increased consciousness and awareness on hygiene			
Extra precautionary measures (bathing and sanitization)			

	Husband wears masks indoors		
	Concern that babes could not express how they felt	Communicative concerns	Liz
	Perceives it as a learning process	Knowledge and Learning Process	Sue, Amy, Zoe
	Learned how to multitask better		
	Increased knowledge about how to handle the baby		
	Knowledge helped cope		
	Struggles adapting to the uncertainties of nursing in a different country	Adaptation Struggles	Sue, Liz
	Babies now experience anxiety when seeing strangers		
	Concerned babies might struggle to adapt after COVID		
	Panic Attacks	Fear and Anxiety	Kim, Sue, Zoe,
	Experience fear (Husband is a medical doctor)		
	Experienced anxiety of transmitting to baby (balancing work routines and breast-feeding)		
	Relied on spirituality and religion to conquer fear	Reliance on Spirituality	Amy
	Experienced boredom	Confined to staying indoors	Ivy, Sue, Liz
	Confined to staying permanently at home		
	Confined to staying at home (to breast-feed more effectively)		
	Minor symptoms of postnatal depression	Experienced postnatal depression	Sue
	Difficulty adapting to motherhood		
<i>Immunization and Vaccination</i>	Fears of going out for vaccine or immunization	Lack of adherence to the attendance of immunization	Kim, Ivy, Sue, Zoe
	Fear of allowing access to baby		
	Dislikes going to the clinic (pressure for baby to wear a mask)		
	Scared to attend immunization but realized its importance		
	Satisfied with the new immunization schedule	Regularly adhered to the immunization schedule	Sue, Amy
	More preventive measures are taken when attending immunization		

	Immunization attendance unaffected by pandemic		
<i>Support Systems</i>	Support from husband	Spousal Support	Kim, Ivy, Sue, Amy, Zoe
	Husband supported business (distribution and supply of masks)		
	Regular check-ins from family	Sufficient Family Social support	Kim, Ivy, Sue, Liz
	Reassurance from friends		
	A regular checkup from friends		
	Lack of support from health care professionals	Lack of Support	Ivy, Sue, Zoe
	Stressed due to lack of general household help		
	An active member of support groups (check-ins from other members of the group)	Participation in Support Groups	Liz
	Support systems established by the pharmacy to ease access to medication		
<i>Effect on Routines</i>	Disrupted work routine (due to nursing responsibilities)	Disrupted work routines	Sue
	Unpredictable nursing routines (dependent on the state of the baby)		
	Maintained balanced diet	Maintained Diet Routine	Amy
<i>Advice for Single Mothers</i>	Enjoy the company of baby	Maintaining a Positive attitude	Kim, Amy, Zoe
	Think and worry less		
	Should display gratitude (The kids are worth the stress)		
	Seek therapy (to help postpartum depression)	Seek Support	
	Should seek spousal support		
	Continue breast-feeding	Improve safety procedures	
	Restrict access of others to babies		

Appendix - 3

Stage 3

Generation of superordinate themes and Definition

<i>Superordinate Themes</i>	<i>Thematic Categorization</i>	<i>Definition of Theme</i>
<i>Psychological Impact</i>	Anxiety and Fear	Explores the accounts of mothers regarding the psychological toll news of the pandemic took on them. Examines the degree of apprehension they experienced living within the lockdown resections imposed by the government
	Discomfort and Uneasiness	
<i>Protective Component</i>	Increased Breast-feeding Frequency	Explores the amount of protective responsibility absorbed by mothers in an attempt to eliminate the risk of potential infection
	Polarized Attitude towards Immunization	
<i>Adjustment Component</i>	Alterations to Routines	Explores the actions taken by mothers to adapt to the current climate and the nature of support received during the adjustment phase
	Reinforced Support Systems	
<i>Heightened Attachment</i>	Increased Sensitivity to baby's needs	Explores the intensified connection between mothers and babes. It also investigates the factors for the improved compassion felt by mothers.