The Emotional Experience of Mexican Women with SARS-CoV-2 during Pregnancy—A Qualitative Study

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Article

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Abstract: Pregnant women have been considered a high-risk group for SARS-CoV-2 infection; the impact of the disease on the health of a mother and her child is still being studied. The emotional impact of the pandemic on pregnant women has been extensively studied. Emotional distress is proposed as a perspective to explain the emotional manifestations of women during this stage as something common rather than pathological. The objective of this study was to know the emotional experience of women who tested positive for SARS-CoV-2 towards the end of their pregnancy, during the first and second waves of COVID in Mexico. A qualitative study was carried out: 18 pregnant women with COVID were interviewed. A thematic analysis of the data was performed, resulting in three main themes and 14 subthemes. The COVID-infected mothers-to-be experienced mild to moderate emotional distress. It was more intense for those with comorbidities. This distress was aggravated during obstetrical complications and comorbidities, as well as during COVID and postpartum. The emotional distress was appeased by both the perception of medical care and social support. The emotional distress of pregnant women with COVID requires emotional accompaniment to reduce its impact.

Keywords: emotional distress: pregnancy; comorbidities; COVID-19; emotional support

1. Introduction

Since the official declaration of the pandemic and the health emergency caused by COVID-19 in March 2020 [1], pregnant women were considered a high-risk and vulnerable group given that the impact of the disease on their health and the babies' was unknown [2]. The specialists were mainly concerned about the possible vertical transmission of the mother's disease to the fetus, the seriousness of it in the mother, and the complications it would cause during pregnancy or labour [3,4]; they were also questioning its impact on the mental health of mothers-to-be [5].

To contain the disease, the World Health Organization globally established measures to supress contagion like lockdowns and social distance, which had a significant impact on different aspects of life of the population, particularly on mental health [6].

The emotional impact of the pandemic on pregnant women has produced various studies focused on identifying the presence of anxiety [7,8], depression [9,10], stress [11], and post-traumatic stress disorder [12] by means of screening instruments; nevertheless, Ahmad and Vismara [13] have warned that their use does not allow for the distinction between transitory maternal discomfort and a more structured psychopathology, which is an important aspect to fully comprehend said impact and define the ideal type of intervention.

According to the American Psychological Association [14], emotional distress is a set of painful physical and mental symptoms that are associated with the normal fluctuations of mood in most

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people. In some cases, it can indicate the start of more severe disorders, but in others it is only a set of temporary emotional reactions expected within a specific context [15].

The proposal to explain emotional distress as something common and not necessarily pathological emerged more than two decades ago, in the field of psychiatry, by questioning the prevailing systems of diagnostic classification and the problem of labelling emotional reactions to different circumstances as disorders [16]; on the other hand, it has also been associated with the medicalisation of the problems daily faced by people [17], as well as with other perspectives on the topic.

Derived from this, Velasco [18] suggests that women get sick more often due to the sociocultural pressures and the gender determinants they live with, which produces them mental distress; additionally, Burin [19] proposed an explanation of emotional distress in women from a point of view that is closer to their daily lives and farther from psychopathology, defining it as transitory emotional expressions of varied nature that occur as a response to different situations faced in life and a given social context. The emotional health of pregnant women has also been studied from this point of view, based on a perspective that helps to understand and explain the main emotional manifestations that occur in this stage [19]. This is a wider perspective that contributes to the comprehension of emotional health in women during pregnancy rather than establishing psychopathological labels of diagnosis.

To date, few studies have addressed the psychological impact of COVID-19 on women infected during pregnancy, and their findings show significant percentages of moderate depression and anxiety [20], as well as a fear of dying, concern for the baby, the impact of isolation, and social stigma [21].

In Mexico, some studies on pregnant women [22] have been carried out to know the prevalence of depression, anxiety and stress, obtaining high percentages for these conditions; likewise, the emotional support provided via social media was also researched [23].

According to previous studies [24,25], qualitative research on the impact of COVID-19 on mental health is necessary to deepen and understand the emotional responses of people before the pandemic, as well as their experiences, perceptions, fears and disruption, given the very few studies done from this approach. Additionally, it has been suggested that qualitative studies performed during the COVID-19 pandemic may help to better understand the hypothetical cases of quantitative epidemiological models to improve their use [26].

In this regard, several studies [25,27,28] have used this methodology to deepen the comprehension of the psychological impact that pregnant women have gone through during this pandemic. Nevertheless, none of them has focused on researching the emotional impact of the disease in mothers-to-be, therefore it is necessary to continue doing qualitative research with this population.

Likewise, it is important to note that this pandemic has demonstrated the lack of adequate protocols to provide psychological care that addresses its impact on the mental health of people. In the case of Mexico, perinatal mental health is a pending matter, for even though there already is an official standard [29] that highlights the need to provide psychological care to this population, up to now the psychological care for pregnant women remains excluded from their comprehensive medical care [19].

As a result, the objective of this study is to know the emotional experience of pregnant Mexican women who tested positive to SARS-CoV-2 during their last trimester based on two models: a) the biopsychosocial health model by Velasco [18], which suggests that the concept of health-disease is an interactive process where both biological and physiological aspects of the body intervene, along with its impact on the social context and the subjective aspects of how people experience it and face it; and b) the explanatory model of psychological distress in pregnant women with obstetrical complications [19], which suggests that emotional distress is a series of unpleasant emotional manifestations, of transitory nature, expressed by women during pregnancy, as part of their experience during the reproductive event. Additionally, it is a constant process whose intensity may vary depending on the medical diagnosis of the complication and the experience of pregnancy.

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2. Materials and Methods

This qualitative study is part of a broader project. To collect the sample, a subgroup of women who had participated in the first stage of the project [30] was intentionally invited to participate. The qualitative analysis of the data was done by means of a thematic analysis proposed by Braun [31], following six steps: 1) Familiarisation with the data; 2) Creation of a list with categories and preliminary codes; 3) Searching for the main topics; 4) Revision of potential topics; 5) Definition and naming of topics; and 6) Writing the final report.

2.1. Study design

The design is a collective case study [32]. The sampling method was homogenous and intentional, and the data were obtained by means of semi structured interviews based on an interview guide specifically created for this study (S1 Interview Guide). The invitation to participate was done via telephone to those women whose babies were part of the group of mothers who tested positive to SARS-CoV-2 during the first stage of the project "Neurodesarrollo de neonatos de madres con y sin COVID-19" ("The neurodevelopment of neonates birthed by mothers with and without COVID-19") published by Aldrete-Cortez et al. [30], to which this study belongs. When the obtained data reached saturation, the recruitment of participants stopped. The mothers recruited for this study tested positive to SARS-CoV-2 from April 23, 2020, to February 8, 2021, which corresponded to the first and second waves of the COVID-19 pandemic in Mexico; however, the interviews were carried out from November 24, 2020, to August 12, 2021. The interviews were recorded and approximately lasted an hour.

2.2. Study Participants and Setting

The interviews were done to women who tested positive to SARS-CoV-2 during the last trimester of their pregnancy. Overall, 18 women of age were interviewed. The inclusion criteria were: 1) the gestational age of the babies could not be more than 36 weeks; 2) no serious diseases during the pregnancy or delivery, and no need of intensive care for the mother; 3) a positive RT-PCR-SARS-CoV2 test during the last weeks of the pregnancy (≥31); 4) they had to be patients at the tertiary-care public hospital specialised in obstetrics and gynaecology in Mexico City where the study was performed; and 5) they had to be part of the project "The neurodevelopment of neonates birthed by mothers with and without COVID-19". Excluded from the study were those women who had a neurological or psychiatric disorder that would have prevented them from answering the interview on their own, as well as those who did not accept to be recorded or who did not finish the interview.

The interviews were made by phone call with a set appointment and lasted approximately an hour; they were recorded and then transcribed by the researchers' support group. The sociodemographic and medical information was obtained from the hospital records. The age of the participants ranged from 18 to 39 (± 5.39) years old.

2.3. Data Analysis

The studied was guided by means of the criteria established by the COREQ (Consolidated Criteria for Reporting Qualitative Research) [33].

For the thematic analysis of the data: 1) two of the researchers (M.E.G.L. and A.G.C.) read the interview transcripts to familiarise themselves with the data; 2) the main researcher (M.E.G.L.) created a list of categories and preliminary codes; 3) both researchers (M.E.G.L. and A.G.C.) looked for the main themes stemming from the data; 4) both (M.E.G.L. and A.G.C.) also reviewed the list to get a consensus; 5) the themes obtained were reviewed once more along with their relation to the data and the research questions (M.E.G.L. and A.G.C.); and 6) the final report was written (M.E.G.L., R.M., V.A.C., L.B. and A.G.C.).

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2.4. Ethical Considerations

The study was approved by the hospital's Research and Ethics Committee (R-2020-785-151, CIP-PI-054-2020-1 and E2003), and it was developed in accordance with the ethical principles of research.

The informed consent form was sent electronically to the participants—via WhatsApp—before the study and their authorisation to record the interviews was requested; likewise, their participation and the purpose and content of the study were thoroughly explained to them.

3. Results

The average age of the participants was 28.9 years old (±5.3); most of them had a partner (90%); the majority (90%) had ≥ 12 years of schooling; around 44% were housewives; almost half of them (49.3%) were experiencing their first pregnancy; and 63.6% of the participants had obstetrical complications or comorbidities. Among the most frequent were the threat of miscarriage and/or preterm delivery, gestational diabetes and preeclampsia; however, the most frequent health antecedents were overweight or obesity, and metabolic, cardiac and hepatic diseases. Similarly, 67% of the women interviewed stated that their pregnancy was unexpected, while 27.7% reported having lost a family member to COVID-19. Also, all the mothers presented mild to moderate symptoms consistent with COVID-19, according to Gandhi et al. [34]. None of them needed intensive care or mechanical ventilation. All women were discharged at home without complications.

To analyse the data according to the obtained information, the sample was divided into two groups: 1) Women with comorbidities/with obstetric complications (WwC/wOC) (11 participants); and 2) Women without comorbidities/without obstetric complications (WwoC/woOC) (7 participants). Table 1 shows the main characteristics of the sample:

Table 1. Characteristics of the participants.

Characteristics	Group WwC/wOC (11 participants) n (%)	Group WwoC/woOC (7 participants) n (%)
Age		
range	22-39 ± 4.52*	18-29 ± 4.05*
mean	31.5	24.8
Marital status		
with partner	9(81.7)	7(100)
without partner	2(18.2)	0
Education level		
≤ junior high school	2(18.2)	0
≥ senior high school	9(81.8)	7(100.0)
Occupation		
housewife	5(45.4)	3(42.8)
employee	3(27.3)	3(42.8)
trader	1(9.1)	0
technical	1(9.1)	1(14.3)
professional	1(9.1)	0
Pregnancies		
1	3(27.3)	5(71.4)
≥2	8(72.7)	2(28.6)
Pregnancy planning		
Yes	4(36.3)	2(28.5)
No	7(63.6)	5(71.4)
Type of pregnancy resolution		
delivery	3(27.3)	3(42.8)

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C-section	8(72.7)	4(57.1)
Loss of relatives due to COVID-19		
Yes	2(18.2)	3(42.8)
No	9(90.8)	4(57.1)
Comorbidities		
cardiac	2(18.2)	N/A
metabolic	2(18.2)	N/A
advanced maternal age	3(27.3)	N/A
overweight/obesity	5(45.4)**	4(57.1)
other	4(36.3)	N/A
Obstetrical complications		
premature rupture of membranes	3(27.3)	N/A
preeclampsia	2(18.2)	N/A
gestational diabetes	4(36.3)	N/A
other	2(18.2)	N/A

Initially, 19 participants agreed to be interviewed; 18 of them completed the interview. WwC/wOC: Women with comorbidities/obstetrical complications. WwoC/woOC: Women without comorbidities/obstetrical complications. *DE **Participants with more than one comorbidity; N/A: Not applicable.

Three main themes and 14 sub-themes emerged from the data analysis, all of which are shown in Table 2.

Table 2. Themes and subthemes.

Main themes	Subthemes
1. Getting pregnant during the pandemic	a) Perception of health during pregnancy: care and complications b) Perception of medical care during pregnancy and its resolution c) Social support: environment and pandemic d) Prenatal emotional distress
2. Getting infected with SARS-CoV-2 before giving birth	a) COVID-19 information and care measures b) Infected mother c) Resolution of a pregnancy with COVID-19. d) Isolation and recovery from the disease e) Impact of the disease on the family and losses f) Emotional distress due to COVID-19 and life changes
3. Coming back home after the delivery and COVID-19	a) Health, complications and postpartum recovery b) The search for medical care c) Family and social support d) Emotional distress due to COVID-19 and life changes

3.1. Getting pregnant during the pandemic

Experiencing their pregnancy during the pandemic had a significant emotional impact on the participants because of what the disease could mean for their health and that of their babies.

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3.1.1. Perception of health during pregnancy: care and complications.

Two thirds of the respondents (67%) did not plan their pregnancy, which provoked emotional reactions ranging from joy and worry to surprise, fear, tension, confusion, and uncertainty.

Additionally, the 11 participants were also concerned about their own comorbidities and obstetric complications.

"(...) during my pregnancy I found out that I had hypothyroidism. Soon after I got pregnant, I was diagnosed with high blood pressure. To be honest, I was very controlled–obviously–in case I got preeclampsia. It was a complicated pregnancy indeed" (P11).

Nevertheless, the participants followed the care instructions given to them by their doctors, including going to their medical appointments, eating healthy, drinking more water, exercising, not exerting themselves, and not going outside.

3.1.2. Perception of medical care during pregnancy and its resolution.

The unprecedented situation caused by the global pandemic and confinement represented a change in pregnancy care measures and access to medical care, as well as insufficient information about the impact that the disease could have on mothers-to-be and their babies. This created a context of uncertainty in which the participants experienced their pregnancy.

The search for medical care was a concern for the interviewees from the beginning of their pregnancy because having a monthly follow-up was prioritary, but so was attending a hospital that would guarantee their care during labour. This led many of them to seek dual medical care: private (with a private doctor they knew and trusted) and public (a hospital that could treat them during the resolution of their pregnancy). However, several women expressed fear of going to the hospital or clinic for fear of contracting SARS-CoV-2: "(...) at the beginning I kept going (to my appointments) obviously afraid of getting infected there, but going itself was already stressful enough, because you didn't know if there were any (appointments) or not, or what is going on..." (P10).

Concerns about the economic situation resulting from the health emergency also played a role in their decision to seek care in a public hospital.

All participants received several follow-up visits during their pregnancy, and once they started care at the tertiary hospital specialised in obstetrics and gynaecology where this study was conducted, none of them had problems accessing said care despite the circumstances: "I went to my appointments every month; well, when I started seeing the gyno they were weekly, and there were several—around 10 appointments, I think" (P8).

Most of the interviewees also mentioned that the medical care was good, that they were given the necessary tests for their condition, and that they were provided with the medicines they required. However, some expressed that the change in hospital care protocols due to the pandemic had also led to confusion and misunderstandings with the health personnel.

3.1.3. Social support: environment and pandemic.

For the participants, living their pregnancy in confinement meant changing their daily routine, being locked up and, in some cases, away from their families, working at home or having to go out to work at the risk of infection, having to support their children with their remote classes, putting aside their plans, worrying about the economy and unemployment, or even being separated from their partner; but, at the same time, most agree that the confinement allowed them to simultaneously enjoy their pregnancy more.

"I felt calm and happy–the pandemic didn't affect me much. I was at home because I was taking care of myself. It did affect me socially 'cause people wanted to visit me but they couldn't" (P9).

The confinement allowed them to strengthen their relationship with their children and their partner, but they also sought support from family and friends, both during their pregnancy and later on. These circumstances meant a time of adjustment for the members of their families, who had to assimilate the arrival of a new member along with the adaptation to the changes generated by the confinement.

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3.1.4. Prenatal emotional distress.

The participants went through their pregnancy with a lot of worry, fear, anxiety and tension. These emotions revolved around two main themes: 1) their health and that of their baby; and 2) the impact of COVID-19. Nevertheless, a significant difference was found in the emotional alterations shown by those women who had comorbidities (group WwC/wOC) and those who did not (group WwoC/woOC), because the former lived their pregnancy not only worried about the pandemic but also about their health status and possible complications.

Regarding their health and that of their baby, group WwC/wOC reported the following emotional manifestations: concern about medical care; anxiety about feeling the baby move; isolation; fear of their own death, that of their baby, or both; fear for the baby's health; fear of losing the baby; concern about being pregnant with comorbidities; fear and shock about complications, nervousness due to the actual labour; fear of pain, pent-up emotions, crying, anger, frustration, helplessness, sadness, anguish, decay, discomfort, sadness for not being able to play with their older children, weight gain due to stress.

As for the impact of COVID-19, this same group presented: tension due to unemployment, insomnia, sadness due to the loss of a family member, suffocation, nervous breakdowns, pressure, depression, fear of falling ill, fear of leaving their children alone, financial worries, despair, and anxiety.

"I was afraid and anxious because of money. I was nervous about labour because it was my first baby, I was more nervous about that than about the disease (COVID-19)" (P6).

On the other hand, the main emotional manifestations of group WwoC/woOC were less intense and more related to the impact of COVID-19, such as: financial worries, sadness about getting Covid, concern for the health of their children and their pregnancy, and depression due to being separated from their partner.

3.2. Getting infected with SARS-CoV-2 before giving birth

Getting COVID-19 during the last weeks of their pregnancy had a great emotional impact on the participants due to the risks this implicated for them and their babies, and also for being separated from their newly born children and kept in isolation at the hospital.

3.2.1. COVID-19 information and care measures.

The participants already had some general information about the disease, the symptoms and risks of catching it. They perceived it as dangerous not only because people could die, but also because it was unknown and new, with little information about its effect on pregnant women. It created fear and panic as it affects more people with chronic diseases, has long-term side effects and is rapidly spread. This perception contributed to increasing their emotional discomfort; however, some also perceived it as a flu or a myth, and felt it was better not to be informed or pay attention to alarmist news to avoid getting upset.

"I knew COVID-19 was dangerous, that's why I worried, because they said it was really dangerous; whenever I knew of someone who had got Covid, it was because they had died" (P17).

Likewise, the participants knew the preventive measures to protect themselves from the disease, like the use of masks, washing their hands, changing their clothes, using hand sanitisers and face shields, not going outdoors, and disinfection.

3.2.2. Infected mother.

The participants tested positive for SARS-CoV-2 between weeks 31 and 39 of their pregnancy. They all assumed their infection was caused by either their partner or a close relative. The most commonly reported symptoms of COVID-19 were: sleepiness, vomiting, diarrhoea, stomach-aches, sore throat, lack of smell and taste, fatigue, dry and irritated throat, chills, back pain, cough, breathing difficulties, flu-like symptoms, no feeling of foetal movements, headaches, fever, suffocation, chest pain; and there was one asymptomatic case.

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"That Thursday I decided to visit the doctor because I was feeling really bad. I was quite thirsty and nothing quenched it. I had the chills too. I was already feeling too weak, I couldn't get out of bed, and when I got to the hospital and said I had those symptoms, I was taken to a restricted area…" (P9).

3.2.3. Resolution of a pregnancy with COVID-19.

Giving birth while being infected with COVID-19 was quite a difficult situation for the participants, filled with uncertainty and fear of complications. Out of the participants in both groups, 66.6% had a C-section and the rest opted for a natural birth.

In this context, the women in group WwC/wOC suffered from complications during the resolution of their pregnancy, such as: premature rupture of membranes, pre-eclampsia, and a low-lying placenta. As for the babies, the most common complication was oligohydramnios and only one baby had temporary breathing problems that required oxygen (via the use of prongs).

"Yes, I had Covid. I no longer felt my baby moving so I left for the hospital and I was told I no longer had any liquid in me, so they told me I needed an urgent C-section" (P15).

In contrast, the women from group WwoC/woOC had no complications; nevertheless, and like in the previous group, some of their babies had oligohydramnios.

Regarding the perception of medical care, some participants described it as good, attentive, with good care from the staff; others, however, stated that in some cases it was slow due to lack of staff, with bad treatment and cancelled appointments, with little information given to their relatives during hospitalisation, little communication with the family, lack of indications for post-Covid care, and lack of a discharge protocol for both patients and babies after the disease.

3.2.4. Isolation and recovery from the disease.

The participants' recovery after COVID-19 involved being in isolation during their hospital stay and afterwards, which meant that they had to be separated from their babies and family members for a few days up to four weeks. Those who were hospitalised mentioned that what affected them most was being separated from their babies, not receiving information about them and not being able to be in touch with their families. "I met my boy almost a month after because I was hospitalised for 14 days, and they told me I had to be in isolation for another 15 days" (P1).

Others mentioned they decided to isolate themselves as a family, or that it was hard for them because they had to look after their older children.

All participants perceived different signs of recovery from the disease such as: being moved to a non-COVID area in the hospital; being able to get up, go to the toilet and fend for themselves; communicating with their family; having an appetite, tasting food and sensing smells again; no longer being contagious; being able to breathe well; testing negative for SARS-CoV-2; and being discharged from the hospital.

They also all mentioned having been left with aftereffects of the disease that they had to deal with for some time, such as joint pain, fatigue, shaky legs, coughing, lack of smell and taste, hives, memory problems, suffocation, back pain, weak lungs, headache, body aches, secretions, hair loss, a bitter taste in food, and decompensation of blood pressure.

The post-COVID care that followed was: isolation from their family, cleaning and disinfecting with alcohol; changing clothes, bathing; using masks, hand sanitisers, and face shields; putting themselves in quarantine, washing their hands, taking vitamins, going somewhere else, and only approaching the baby for feeding.

3.2.5. Impact of the disease on the family and losses.

The emotional experience of the participants when facing the disease was also nuanced by its impact on their families and the losses it caused. All participants reported that one or more members of their family were ill, some mildly, some severely; and several suffered one or more losses. The grief experienced in this situation was characterised by: disbelief, crying, sadness, depression, pain, worry,

stress, the need to vent, resignation, acceptance; pain because the deceased family members were unable to meet the baby; thinking that they no longer suffer; not being able to experience grief well; grieving in solitude; the grief in itself being a heavy blow, a difficult situation, a traumatic event; difficulty to assimilate the loss; stopping their grieving to care for the baby; distracting themselves with the baby; and the fear of getting sick and infecting their children.

"My mum got infected and they both passed away, my dad on May 3 and her on May 7. But I didn't know because I was hospitalised. I still had hopes for my mum to resist and get to know my son but it didn't happen. A month later, my sister dies, and I told myself: 'We can't be living this situation'; for me it was more like a dream or a nightmare" (P3).

3.2.6. Emotional distress due to COVID-19 and life changes.

The emotional experience of the participants with COVID-19 during their pregnancy as primarily focused on worrying about the baby and their family, and it was more intense for the women in group WwC/wOC. This group experienced the disease with tension, crying crises, anxiety, memory problems, despair, anguish, fear, depersonalisation, uncertainty, doubt, lack of acceptance, worry, avoidance, grief, anger, rage, irritability, sadness, loneliness, instability, shock, trembling, surprise, tension, difficulty to manage emotions, a feeling of losing control, feeling "contaminated", fear of getting worse, fear of falling asleep under anaesthesia, fear of affecting the baby, fear of the baby forgetting them because of the separation, suffering from not being able to be with the baby, worrying about the birth, and fear of not seeing their family again.

"I was so struck by it… from the moment I was put inside that capsule [during the birth of my baby] I said, 'Oh my God, what is going on?'—I felt contaminated. I was afraid because the doctors were using their suits; it was something really weird and so different from my other deliveries" (P8).

On the other hand, the emotional alterations of the participants in group WwoC/woOC were less intense and were characterised by a concern for the health of the baby and that of their family, sorrow, poor appetite, sleepiness, solitude, sadness caused by the separation from their baby, the fear of getting them infected, fear of the surgery and fear of dying.

The perception of the participants on the life changes they went through as a result of the disease can be split into negative and positive. In terms of the negative ones, they expressed living with the fear of getting infected again, not having physical contact with others, feeling uneasy about having to go out, fear of touching the baby; fear, shock, and trauma. As for the positive changes, they expressed being more cautious, feeding themselves better, following the care and hygiene measures, giving affections, being more protective, feeling grateful for having overcome the disease, feeling calmer, being more patient, appreciating more what they had, and having a more united family.

3.3. Coming back home after the delivery and COVID-19.

Leaving the hospital and returning home after giving birth and recovering from COVID-19 was a major emotional impact for the participants because some had to return without their baby, as they had to leave them in the care of a relative to avoid infecting them, and others could only see them in photos or to feed them because they continued in voluntary isolation.

"As I couldn't have him (the baby) with me, they took him away because I had Covid. A cousin of mine took care of him for me. She took the baby and took care of him while I recovered. It was more or less for about 15 days, and that was when the sadness increased" (P10).

3.3.1. Health, complications and postpartum recovery.

The health of the interviewees after the resolution of their pregnancy was characterised by some complications such as uncontrolled blood pressure and gastric problems (colitis, gastritis and constipation), but the greatest impact was observed in their emotional state, as they manifested changes in their mood (sadness, anxiety, despair, worry) related to the care of the baby and their other children, as well as to the family adjustments made around the new member, while some others

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were associated with the confinement and the fear of getting infected. Overall, they said they recovered quickly and with no special care.

"I felt so sad, I wanted to cry over everything. I'm a cry baby, and as I was kind of depressed, I cried so much more. I felt sad, disappointed, nervous, worried, and felt really bad about it later. I didn't even want my mum to leave me when I recovered from giving birth" (P17).

3.3.2. The search for medical care.

Those with complications such as uncontrolled high blood pressure had to consult a specialist for follow-up care, which was difficult to obtain because of the pandemic. Others preferred to continue without any medical follow-ups for fear of going out to a medical appointment or for the lack of time to do so; however, they all focused on getting paediatric care for their babies.

"I was checked and treated at the doctor's. I was told I didn't need to stay, it was just the postpartum. I was also going to the clinic for that, for a follow-up, but they always told me there were no doctors available" (P5).

3.3.3. Family and social support.

During postpartum, the participants had family support, mainly from their partner, but also from their parents, siblings, aunts, uncles and cousins, as well as their in-laws, specifically their mother-in-law, who supported them in terms of house chores, caring for their other children, feeding them and doing all that was needed for them to be alright. In some cases, their relatives lived in the same house; in others, they visited them despite the risk. "My sister, an aunt and my cousins supported me; and they also did so when my father got seriously ill for my brother had to be with him. And so did my mother-in-law" (P11).

Family support was also important during postpartum for emotional and instrumental support. Social media also played a relevant role in being a source of support to get some products, and it also became a network of lonely mothers who were going through bad times.

"A Facebook group I'm in was of great help. I shared what I was going through with them and the mums did some incredible work and supported us a lot. They sent us lots of things so we could remain isolated" (P2).

3.3.4. Emotional distress during postpartum and life changes.

The participants' adjustment to the changes caused by motherhood, plus those related to the pandemic, the disease, the care and recovery, as well as the grief from the loss of family members, generated a range of emotions mainly related to two themes: 1) The baby: life changes caused by COVID-19; sadness for being separated from their baby; despair caused by the COVID-19 preventive measures (masks); fear of infecting the baby, of not being able to touch them, of taking care of them, of not being able to breastfeed them; guilt; anguish for having to go out, for leaving the baby to go back to work; tension due to the increase of house chores; economic anguish; and 2) Delayed grieving: contained emotions, crying, isolation, anger, incredulity, frustration, impotence, despondency, stress, mood changes, worry, uncertainty, solitude, fatigue, anxiety and sadness.

"I felt somewhat despondent because I could not be in touch with my baby in the same way, we couldn't go out—it was really stressful being like that. I think my mood changes were more frequent. The truth is I got mad about everything" (P15).

The life changes perceived due to both COVID-19 and the arrival of the new family member mostly implied a resignification of the lived experience: valuing more what one has, enjoying life, family and their baby more, taking better care of oneself, taking into account that life can change from one moment to another, and assuming more responsibilities. However, the participants continued to be afraid of the disease, of becoming infected and of dying, and they considered that having become ill with COVID-19 was a bad experience.

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4. Discussion

The objective of this research was to know the emotional experience of women who tested positive for SARS-CoV-2 in the last trimester of their pregnancy, during the first and second waves of COVID in Mexico. In that regard, it was found that most participants experienced mild to moderate emotional distress. Nevertheless, it was intensified in those who suffered from comorbidities. Besides, it was identified that said distress increased during three times of crisis: 1) due to the complications and comorbidities of the pregnancy; 2) when getting infected with COVID-19; and 3) during postpartum. On the other hand, the perception of medical care and the social support they received were factors that contributed to reducing their emotional distress.

This effort contributes to specifically establishing the emotional condition in which this population went through their pregnancy during the disease and the pandemic; it also allowed us to understand the impact that the separation from their babies and their isolation in hospitals had on these women, which eventually resulted in changes in their mothering. By means of this work, we aim to highlight the need to generate medical care models during health emergencies that include psychological care as part of the obstetrical care under this circumstances.

The results obtained in this study allow us to establish that the emotional experience of women who became ill with COVID-19 during their pregnancy generated mild to moderate emotional distress, which is consistent with that proposed by Ng [35], who suggest that the characteristics of emotional manifestations during the pandemic were reactive and responded to short-term adjustment and long-term adaptation problems, and that due to psychosocial factors such as the uncertain future, fear of contagion, confinement, life changes and economic concerns, these manifestations were expected and therefore should not be psychopathologised.

On the other hand, it is important to consider the context in which this study was carried out (during the first and second waves of the pandemic in Mexico). Up to that moment, little was known about the impact of COVID-19 on pregnant women and their babies, and neither vaccines for protection against contagion nor medication to reduce the risks of infection had been created yet. The population was in lockdown for about three months and the economic activities were gradually reinitiated.

It should be noted that, in this study, 63.6% of the interviewees had obstetrical complications (threatened miscarriage and/or preterm birth, gestational diabetes and pre-eclampsia) or comorbidities (overweight or obesity, and metabolic, cardiac and hepatic diseases). This coincides with that proposed by the explanatory model of emotional distress in pregnant women [19].

Although it is known that a pregnancy involves physical, psychological and social changes that must be assimilated by women to adapt to motherhood [36], when it is experienced with complications and comorbidities, its psychological impact is greater [19].

In that regard, an important finding made by this study that contributes to understand the emotional distress of this population is the identification of three times of crisis that exacerbate it: 1) during the pregnancy; 2) during COVID-19; and 3) during postpartum.

Regarding the former, the fact that most of the participants had obstetric complications and/or comorbidities influenced their experience of emotional distress to a greater extent, mainly due to two factors: 1) those inherent to pregnancy and 2) those related to the pandemic. In terms of the first factor, women lived their pregnancy with a lot of worry, tension and fear. Similarly, it was found that the lack of pregnancy planning was another aspect that contributed to exacerbating this distress, which is consistent with the explanatory model mentioned above [19]. As for the factors related to the pandemic, it was identified that fearing for the health of the baby, the fear of getting infected with SARS-CoV-2, and economic concerns also contributed to increasing the emotional distress of the participants during their pregnancy in the same way it is highlighted by other studies [27,37]. However, this finding is contrary to other studies that found no association between gestational complications and the emotional well-being of women [38].

In the second time of crisis, it was observed that the emotional manifestations of the participants became more acute when dealing with COVID-19 symptoms, especially in those with previous medical problems, with a predominance of fear for their health and that of their baby. However, the

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greatest impact was related to being separated from the baby and isolated in the hospital, which is consistent with similar studies [39].

In contrast, it can be seen that despite the emotional impact that living their pregnancy during the pandemic and having COVID-19 had on these women, this situation allowed them to value the life changes brought about by the pandemic, focusing more on caring for their health and that of their family, feeling grateful for having overcome the disease, spending more time with their baby and their other children, enjoying family moments, among others, which is consistent with previous findings [40].

As for the last time of crisis—postpartum—this study found that during this period women persisted in their fear of infecting the baby, but some also decided to continue their isolation at home, which prevented them from caring for their child for several more days; this is similar to what was reported by Freitas-Jesus [21]. Similarly, several participants were left with aftereffects of the disease, which also contributed to their isolation. In addition, most women reported that they had to make changes in the care of their baby, including extreme hygienic measures, such as the use of masks to approach and interact with the baby, which made them desperate and limited them, as reported in other studies [28]. It is possible that this influenced and changed the mothering of the participants, as affirmed by Chivers [27].

Another important finding of this study is that just over a quarter of the participants experienced the loss of one or more family members to COVID-19. Regarding this, it was observed that women tended to postpone their grieving process to focus on their pregnancy and health, but it was not until the postpartum period that they allowed themselves to experience their grief, which led to prolonged emotional distress. This is consistent with other findings [40]; in addition, the characteristics of the pandemic meant that women had to deal with different types of loss, as Kumar [41] has noted.

In this sense, another possible grief identified is related to having lost the opportunity to experience the medical care of their pregnancy and its resolution as they had hoped it to be and not as the experience actually was, due to the changes made in medical care to avoid contagion [40]; however, this issue needs to be further explored in future studies.

As a final part of this discussion, there are two important aspects that nuanced and contributed to mitigating the emotional distress of the interviewees: 1) their perception of medical care and 2) the social support they received.

It is important to note that the Mexican health authorities published guidelines with changes in obstetric care [42], which ruled hospital care during the period in which this work was carried out. Although these modifications had some influence on the medical care received by the participants, in contrast to what has been reported in other countries [28] where medical care for pregnant women was limited and affected—which in turn caused them anxiety—in Mexico, the participants' perception of medical care was described as good and fast, with no restriction of medical visits and with all necessary studies available, even if the priority was to deal with the health emergency caused by the pandemic while having a significant lack of beds and medical staff—all of which coincides with previous studies [43]. However, this does not agree with the findings of Cigaran et al [44], who affirmed that pregnant women with emotional alterations perceived medical care in a negative way.

Nevertheless, several interviewees mentioned there were no clear protocols for the care of their babies after COVID-19, which caused them confusion. They also faced difficulties when getting in touch with their relatives or when not being able to receive any visits during their hospitalisation, which in turn influenced their perception of care and their emotional distress. This coincides with previous studies [45] stating the medical staff and maternity services were working under pressure, sometimes understaffed, which often made organisation and communication with relatives difficult.

As for perceived social support, in contrast to other countries where restrictions due to lockdowns had a strong impact on the support received by women during their pregnancy from family members and close friends [46], this study found that the perception of social support received by the participants during the three times of crisis under analysis had an influence in mitigating the intensity of their emotional distress, despite the isolation and limited contact they had with their family members during hospitalisation, which initially exacerbated their distress.

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In this regard, it is important to consider that around 23% of families in Mexico [47] are extended families (i.e., the families of origin and those of procreation live or spend a lot of time together); in addition, because of the pandemic, many Mexican families had to join in tandem to solve economic problems and to care for their children and elderly. In this sense, the extended family became an important support network during confinement [48].

Moreover, it should be noted that in Mexico only 17.5% of people remained in absolute confinement during the health emergency while the rest remained in partial confinement—they could go out for shopping or medical consultations [49]. This could also explain why most of the interviewees had the support of their relatives and other close people during their pregnancy and postpartum since, in many cases, they lived in the same house or went to help them. This support helped them to feel accompanied and helped in caring for the baby, which prevented emotional distress from flaring up, as noted in other studies [44,50].

On the other hand, the experience of the pandemic highlighted the need for health workers to be prepared to provide emotional support and accompaniment to patients during hospitalisation and isolation. Therefore, telemedicine and the use of technology to provide care was an efficient alternative in several countries [51]; however, it would be necessary to implement its use in the Mexican health system.

In terms of psychological care for pregnant women, it would be appropriate to generate alternative online self-help groups formed by other patients, which could be led and supervised by psychologists or experts in perinatal education, taking the burden of providing this care and follow-up off the shoulders of the medical personnel, considering the overload and pressure with which these personnel have had to face their work during the pandemic, while also generating new spaces that give women the confidence to work on their emotions, as proposed by Lega [52].

Despite the diversity of studies carried out on the impact of the pandemic on the mental health of pregnant women, there have not been many studies done on the subject in Mexico; therefore, having been able to carry out a qualitative study on women with COVID-19 during pregnancy also represents an opportunity to delve deeper into the subjective experience of this population in order to learn about and obtain a broader vision of this phenomenon. For this reason, the aim of this study is to provide information that contributes to understanding the impact and considering the importance of providing the necessary attention to the population in circumstances such as those experienced.

On the other hand, being able to conduct this study within one of the largest public medical institutions in the country gives us a broader picture of how medical care was experienced and how the health emergency was dealt with, and can also give us an insight into what the experience was like in the rest of the country.

As for limitations, this work was carried out with women who were entitled to social security, which guaranteed them medical care; therefore, women without care or social security should have been included in order to understand the emotional impact on a wider part of the population.

Another limitation was that the interviews were conducted by telephone, which prevented us from observing the non-verbal communication of the participants, as well as their reactions. Similarly, some of these interviews had to be conducted despite the lack of a relaxed and distractor-free environment because the women sometimes did the interviews with their baby next to them and/or near other people who distracted them. Finally, the variation in the time that elapsed between giving birth and the interview may have influenced the participants' recall and perception of the event and its emotional impact.

It is up to future research to study the grief experienced by pregnant women due to COVID-19 in depth.

5. Conclusions

The emotional experience of women who tested positive for SARS-CoV-2 during pregnancy is divided into three times of crisis where emotional distress is manifested, exacerbated and prolonged.

During pregnancy, emotional distress is mild to moderate, and its intensity is heightened in women with comorbidities and/or obstetric complications and when the pregnancy was unplanned. Its impact is greater when related to the separation from their baby and their isolation while being hospitalised.

The perception of medical care and the social support they received contribute to mitigating emotional distress, and confinement is seen as an opportunity to spend more time with their families.

Supplementary Materials: The following supporting information can be downloaded at the website of this paper posted on Preprints.org. Table S1: Interview Guide.

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