p-ISSN: 2184-2205 e-ISSN: 2184-3414 ISBN: 978-989-54815-5-2 © 2021
DOI: 10.36315/2021inpact014

EMOTIONS AND ATTITUDES OF PREGNANT WOMEN IN SOCIAL ISOLATION IN THE PERIOD OF CORONAVIRUS PANDEMIC

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Abstract

This study focuses on verifying the emotions and attitudes of pregnant women in social isolation during the COVID-19 pandemic and gathering information for the organization of psychoeducational support actions online. A questionnaire was prepared on identification, gestational and family history, emotions and attitudes toward social isolation and use of distance communication tools and search for psychological support. Were answered 59 questionnaires. 95% agreed with the social isolation measures. Family relationship conflicts were reported in 54.2%. Changes in emotions were perceived in 91.5%, of which 86.4% associated with the pandemic and 66.1% to pregnancy. The emotion of fear was aroused in 84.7% of the cases, sadness in 45.8%, loneliness in 33.9%, exhaustion in 42.4%, irritation in 50.9%. Positive emotions of solidarity occurred in 28.8%, hope in 27.1% and optimism in 15.3% of the sample. 54.2% think that talking to a psychologist can help. The content of the responses is concerned with quality of life, hygiene habits, and interpersonal relationships, special care for the baby, avoiding visits to babies, need for help with baby care, fear of contagion and going to the hospital, insecurity about returning to work and the absence of government protection measures. It is concluded that psychological support and online psycho education for pregnant women can be a protective factor for the mental health of pregnant women during the pandemic.

Keywords: *Covid-19, pandemic, pregnancy.*

1. Introduction

The direct and indirect effects of the COVID-19 pandemic on maternal health have been studied and have indicated that it is likely an increased risk of distress and psychiatric problems during pregnancy in the pandemic (Kotlar et al, 2021). Although there are no studies with enough follow-up to know these effects on the mental health of pregnant women. Indirect effects of the COVID-19 pandemic on the vulnerable groups of pregnant women can be seen in the reduction of antenatal care, ANC, and increased maternal-fetal and newborn mortality in many low and middle income countries (Menendez et al, 2020; Thapa et al, 2020).

The World Health Organization data indicate that worldwide about 10% of pregnant women suffer from mental disorders, mainly depression. During pregnancy and in the first year after delivery, events such as poverty, migration, extreme stress, exposure to violence, emergencies and conflict, natural disasters and low support often increase the risk of specific mental disorders. The pandemic context associated with social isolation, confinement, health protection routines, reduction of the social and family support network, preoccupation about contagion and transmission to the fetus, and financial problems have shown to have increased risk for physical and mental health disorders to pregnant women (López-Morales et al, 2020). Besides that, pregnant women have an increased risk of invasive ventilation when compared to non-pregnant women, due to changes in their bodies produced by pregnancy in the pulmonary and immune systems (Allotey et al, 2020). They are potentially more likely to need intensive care treatment for COVI-19. There seems to be greater risk associated with pre-existing medical conditions, hypertension, diabetes, maternal age and overweight. Further studies are needed to understand whether and how maternal SARS-CoV-2 infection is associated with long-term maternal and newborn health.

Some research was found focusing on attitudes and emotions of pregnant women since the beginning of the pandemic (Ng at al, 2020; Lee at al, 2020; Anikwe at al, 2020; Yassa et al, 2020; Ding et al, 2021; Parra-Saavedra et al, 2020; Sahin & Kabakci, 2020).

The level of anxiety and knowledge about COVID-19 in 324 healthy pregnant women, patients at the hospital antenatal clinic in Singapore, was assessed using standard scales, from March to April 2020, the results demonstrated the commonest source of information was the Internet, and a significant proportion were unaware or associated COVID-19 infection with fetal distress, intrauterine death, fetal anomalies, miscarriages, preterm labour and rupture of membranes, 35.8% screened positive for anxiety, 18.2% for depression and 11.1% for stress (Ng at al, 2020). A cross-sectional online survey using the Google platform was conducted on the attitudes and precaution practices of 167 non-infected pregnant women toward the COVID-19 seen at antenatal clinics from April to June 2020 (Lee at al, 2020). It was concluded that the factors age older than 36 years, Malay ethnicity, employment in frontline jobs, and attendance at high-risk clinics are likely to influence the positive attitudes and precautionary practices among pregnant women towards COVID-19 in Singapore.

In a cross-sectional survey on knowledge, attitude and practice of 430 pregnant women attended at a prenatal clinic hospital in Nigeria carried out between March and May 2020 using non-validated pre-tested questionnaires was observed as results that main source of information was the mass media in 61% of the respondents, 82% believed that COVID-19 is real, 88% thought that the disease is caused by a virus, 52% believes the disease is curable with 56% believing that medication for cure of COVID-19, regarding prevention the majority reported positive attitudes of knowing and practices of handwashing, wearing a mask, sneezing into the elbow, avoiding touching the face, interestingly 24% think that individuals infected with COVID-19 should be killed (Anikwe at al, 2020). Perhaps the search for information by the mass media explains the belief about the specific drug cure perceived in the initial months of restrictive social measures. To better understand the negative attitude of thinking about killing the infected, it would be interesting to characterize the sample of the group that presented this response and describe how the question was asked. Although the authors considered that this can be attributed to fears about the disease and indicated the need for adequate disclosure of information.

The attitude toward concern about and knowledge of COVID-19 of 172 women with healthy pregnancies over 30th gestational week who applied to the outpatient clinic of the referral center "Coronavirus Hospital" in Turkey were researched using a non-validated questionnaire in March 2020 (Yassa et al, 2020). Positive attitudes of trusting authority were observed in 65% of the pregnant women, trusting in healthcare staff in 92.4%, comply with the self-quarantine rules in 87.2%. Negative attitudes of vulnerability in 52%, concern in 80%, thinking they might get infected in delivery in 35.5% or babies might be infected in 42%, thinking the breastfeeding is not safe in 50%, not knowing if COVID-19 might cause birth defects in 76% or preterm birth in 64.5%. The positive attitudes presented are important for maternal-fetal well-being and health, however, the negative attitudes that were shown in the study due to lack of knowledge of the consequences of the disease should be considered for postnatal monitoring, as concluded by the authors. In a qualitative study also conducted in Turkey interviews were carried out via mobile phone about the concerns, problems and attitudes of 15 pregnant women in relation to the pandemic determined. The content analysis method identified three themes: not understanding the seriousness and fear of the unknown; coronavirus pandemic and disruption of the routine prenatal care; disrupted routines and social lives. In conclusion, the results have shown that pandemic has a negative emotional effect on pregnant women due a significant potential for creating anxiety, adversity and fear (Sahin & Kabakci, 2020).

Data on knowledge, attitudes, practices (KAP), sociodemographic information and influencing factors of anxiety among 817 pregnant women were collected in Wuhan in March 2020 (Ding et al, 2021). There was a prevalence of 20.8% of prenatal anxiety, 55.8% demonstrated not knowing that there is no effective treatment available, 19.7% did not know that the general population is susceptible to contagion, 83.4% were anxious about the possibility of being infected. The official media was considered to be the most reliable information source by 55.7% of the participants. Only 10.2% were worried about contracting COVID-19 through the ultrasound transducer during obstetric gynecological examination, 64.6% delayed or canceled the antenatal visits, 50.2% related to use of two personal protection equipment in hospital visits. It is observed that in some parts of the text the authors still use the word outbreak to refer to the pandemic.

A systematic evidence review research was carried out on the psychological impact seen in previous outbreaks of infectious diseases such as H1N1 and SARS in pregnant women (Brooks et al, 2020). The result identified themes: negative emotional states, uncertainty, concerns about infection and uptake of prophylaxis or treatment, disrupted routines, non-pharmaceutical protective behaviours, social support, financial and occupational concerns, disrupted expectations of birth, prenatal and postnatal care, and sources of information. These results could structure a global instrument of needs assessment of pregnant women. Managing a unified needs assessment could facilitate the analysis and comparison of different regions and populations groups. The most frequent result in the aforementioned studies on the attitudes of pregnant women towards COVID-19 was the search for information over the internet,

considering that there is no unified and validated instrument for data collection for use in emergency situations. It would be necessary to develop global management tools to protect pregnant women in pandemic crises related to infectious and contagious respiratory diseases.

2. Objectives

The survey aimed to verify attitudes, concerns and emotions of pregnant women, their perceptions of impact of social isolation and pandemic COVID-19 upon their pregnancy to think about subsequent proposals for psychoeducational and preventive interventions using social media to disseminate specific and reliable content for promote the mental health of pregnant women during the pandemic.

3. Methods

This study was conducted by the research and assistance group "Apoiar Online" at Institute of Psychology of the University of São Paulo - IPUSP. The survey was operationalized by an online electronic questionnaire and was made available on the Google platform disseminated on social networks from April to July 2020. The introduction informed about voluntary and anonymous participation, including indication of the institutional email for optional immediate support. The non-validated questionnaire was adapted from the research questionnaires previously applied to the general population on the same topics (Tardivo et al, 2020).

The current online survey was formed by 34 multiple choice questions and two discursive questions. The following topics were asked: 1. Identification socio demographic and obstetric history (age, educational level, professional activity, region of residence; gestational age, number of pregnancies, number of children, and children's age). 2. Emotions and attitudes toward social isolation (time of social isolation, agreement with isolation, remote professional and domestic activity, number of people in the house, family support and help, family relationship, and use of social networks). 3. Emotions about pregnancy and pandemic (perception of own emotions toward pandemic and pregnancy, awareness of emotional reactions and feelings). 4. Health and psychotherapy (sleep quality, practice of physical activity, and follow-up related to pregnancy and pandemic). The discursive questions were "Do you think the pandemic will change your life in any way? How?" "Do you have any thoughts or feelings about caring for yourself and your baby related to the pandemic and social isolation? Which ones?". These questions were not mandatory.

The included participants were pregnant women from the general population with reading ability in Portuguese, any gestational age. They were informed that the data would be published anonymously. The average time to fill out each questionnaire was ten minutes. The electronic data were compiled in an Excel spreadsheet and graphs on the Google platform with access restricted to researchers.

4. Results and discussion

A total of 59 survey responses were obtained. The majority, 61% were between 31 and 40 years old, 28% between 21 and 30, and only 6.8% between 41 and 50 and 3.4% less than 20 years old. The educational level was 39% postgraduate, 39% university, 13.6% secondary and 8.5% primary. Before the pandemic 78% of them had work. The majority, 78% lived in São Paulo, 3 participants lived abroad and the rest in other regions of Brazil. The participant's obstetric history showed that the largest in the group had advanced gestational age, the most frequent were 23.7% of them between 31 and 35 weeks of gestation, 23.7% between 17 and 21 weeks, 13.6% between 27 and 30 weeks and 11.9% between 22 and 26 weeks. 54.2% of them were primiparous. More than half of the participants, 55.9% have no other children. Among those who had children 30.5% had only one child, 13.6% had two to three, and only 1.7% had four to five children's. 11.9% of these children was seven years old, 8.5% was five years old and the most children were under four years old.

It was observed that 86.4% of pregnant women had been in social isolation for more than thirty days, 6.8% between fifty and thirty days, and 6.8% were not in social isolation. 95% agreed with the social isolation measures of which 66.1% agree and think it is important to prevent the spread of the coronavirus, 15.3% partially agree, and 13.6% agree because they are a risk group. In social isolation 54.2% report doing remote work in the home office, and 100% do housework, 76.3% had family support and help.

Only one participant reports being alone at home during social isolation, 40.7% was with three or four people, and 25.6% in two people including the pregnant woman. Family relationship conflicts were reported in 54.2%. Conflicts that already existed before isolation are reported in 33.9% of cases,

while 20.3% mention new conflicts that occur or worsen with the daily living of the isolated family at home. All participants responded positively to the use of social networks. The use of Facebook appeared in 88.8% associated with Instagram, WhatsApp, email and YouTube, 10.2% excluded Facebook and used the other media. The time spent using social networks during social isolation increased to 76.3%, remained the same to 20.3% and decreased to 3.4%. The purpose of using social networks to talk to friends was 89.9%, to read news at 81.4%, and to talk to family at 72.9%. Watch movies at 79.5% and play 21.8%. Few participants reported using it for work, 10.3%, or for the study, 8.5%. It is important to note that the main media used was Facebook and the second main purpose of use was reading news, which may indicate that the sources of information about the pandemic are not official or scientific. This can intensify negative emotions and attitudes toward the disease. And hinder the development of emotional balance strategies.

Changes in emotional state were perceived in 91.5% of which 86.4% associated with the pandemic and 66.1% to pregnancy. When compared to before the pandemic, emotional changes in primiparous were perceived as worse for 51.4%, better for 25.7% and equal to 22.95. While for pregnant women who already had other children there was a perception of worsening for 68%, improvement for 28% and equal for 4%. Having other children in seems to cause emotional worsening for the pregnant women because there was an interruption of classes, the leisure's spaces in the city were closed, so the children are confined and can be more agitated. The emotion of fear was aroused in 84.7% of the cases, sadness in 45.8%, loneliness in 33.9%, exhaustion in 42.4%, irritation in 50.9%. Positive emotions of solidarity occurred in 28.8%, hope in 27.1% and optimism in 15.3% of the sample.

The content of the answers to the two discursive questions showed concerns about the future social changes brought by the pandemic, such as unemployment, reduced interactions and family support, lack of celebration rituals for the baby, and baby protection and care practices. In addition to thoughts and feelings about the period of pregnancy and childbirth, such as fear of contagion in hospital, lack of specific guidelines for pregnant women about COVID-19, doubts about risk for the baby as much as the contagion as well as the implications for the baby psychological development, and absence of government protection measures.

The speech clipping of some participants showed hopelessness, insecurities, doubts and fear as an example of the impact of the pandemic for pregnant women. One of the participants wrote: "[...] *we are waiting for the next events. However, my insertion in the work ... will be more difficult. I also see, on the personal side, changes in the care of my son. Today I will no longer have a baby shower or something to celebrate, without the closeness that one usually has in pregnancy and I believe that the distance will remain even after the birth of my child*".

The social and economic impact of the pandemic is more damaging, financially and emotionally for the pregnant women, as explained by the participant's writing: "*We lost our jobs. Without receiving. We will go through difficulties. We are already going through rely*".

The emotions and attitudes that occurred during the gestation period that were described in the reports of two participants evidenced the helplessness resulting from the pandemic: "[...] *it is my baby that gives me the strength not to go crazy with all this*". "*Experiencing a pregnancy during a pandemic is an experience that will mark me deeply. I am grieving at having to pass the isolated pregnancy*".

The prenatal care services were reduced, an aggravating factor for the emotional imbalance of the pregnant women, as noted in the following report: "*What saddens me, since the pandemic, my consultations have been canceled, since the 27th week I should have fetal echocardiography and analyzes and an ultrasound, because I am hypertensive and I don't know if my baby has already turned because he is sitting and I am afraid at the delivery time that all the care he needs is not provided*".

Finally, fear was the predominant emotion and the attitude was the attempt to cope with the crisis, as recorded by one of the research participants: "*I am afraid of the hospital, visits, of being contaminated and not being able to stay close to the baby. I feel safe with the measures we have taken, related to social distance. However, there is an insecurity of whether it is still certain whether babies will suffer something if the mother suffers from COVID-19 during pregnancy. I try to dismiss that thought when it appears. Another issue is our sociable need, I am eager to be physically close to my parents right now. It is difficult to deal with the unpredictable and sometimes imagine that I can get through the whole pregnancy accompanied only by my husband. It causes some anxiety*".

5. Conclusions

There are two fundamental aspects to conclude this study, the first is that psychoeducational interventions are imperative to enable pregnant women to recognize the negative emotions derived from the pandemic and to control its harmful effects, both physical and psychological over time. Psychological support groups are prophylactic measures to avoid problems in the relationship of post pandemic mothers

and babies. The second fundamental aspect is that learning about the skills of psychological crisis management developments in the emergency situation of the pandemic must become part of planning actions to reduce the suffering of pregnant women, a vulnerable group, in crisis situations in the future.

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