



Psychological Stress Due to Covid-19 on Pregnant Women in Post Partal Period

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i58B34225

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/71222>

Study Protocol

Received 12 November 2021

Accepted 14 December 2021

Published 16 December 2021

ABSTRACT

There is no indication that covid-19 has a long-term effect on pregnancy, the mother's psychiatric condition, or the infant's developmental delay. Between May 1st and July 31st 2020, 72 pregnant patients with covid-19 took part in a study that took place in different locations. Since giving birth these woman patients engaged in three-month follow-up surveys. The data was collected from Covid-19 medical history, maternal reports, quarantine questionnaires, mother-baby feeding separation, and assessing the mothers psychiatric illnesses.

While there is no conclusive evidence of vertical transmission of SARS-COV-2, in order to reduce the risk of infection, healthcare professionals and researchers must focus more on the mental health of pregnant women, infant feeding, and closeness to the parents. This will aid in the early development of the new born, reducing stress on the mother.

Keywords: *Psychological stress; newborn; new mother; covid-19.*

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1. INTRODUCTION

The relative scarcity of information about Covid 19 has created much apprehension amongst all, specially people with health care needs like those suffering from chronic diseases, requiring frequent follow ups and pregnant women. Pregnancy is associated with many physiological, psychological and hormonal changes, with postpartum blues, depression and psychosis being a well known phenomenon. Covid 19 pandemic has added to the stress related to pregnancy [1,2].

Possibility of vertical transmission of Covid 19 remains uncertain. However, the risk of droplet infection to newborn is a matter of concern. All the uncertainties around Covid 19 leaves a pregnant women puzzled and indecisive about matters concerning protection of her newborn, more so over pregnant women who have been infected with Covid. Experiencing quarantine during pregnancy can be tougher and can leave a psychological mark [2,3].

So this study was taken up to have a glimpse on the impact of pregnancy with Covid 19 on psychological health of mothers.

2. METHODS OF STUDY

2.1 Study Design and Participants

This study was conducted between May to July 2020 in Datta Meghe Medical College in collaboration with Jawaharlal Nehru Medical college. A total of 72 women participated in the study. Data was collected using in depth interviews in person and group discussions conducted virtually.

The inclusion criteria were

- i) Women in postnatal period who has had mild to moderate covid 19 infection in the past six months were included in the study.
- ii) Women who tested positive on Antigen/PCR testing at the time of labor.

Exclusion criteria -

Women who had severe disease were excluded.

2.2 Aims and Objectives

The aim of the study was to study the psychological impact of Covid 19 infection in pregnant women.

The objectives were to

- i) To assess the stress associated with Covid 19 infection in pregnant women.
- ii) To assess indirect affects of Covid 19 like modified lifestyle, lock down, inaccessibility to healthcare facility etc.

3. RESULTS

All the participants were between 22 to 35 years of age. 51(70.8%) of the participants were primigravida and 21(29.2%) were multipara.

Of the 72 women 18(25%) were tested positive at the time of admission for delivery. 32(44.4%) had covid infection in the third trimester and 22(30.5%).

The women were interviewed with a structured preformed questionnaire which was modified as per responses by the women. Group discussions were conducted virtually with the participants taking 8-10 participants at a time and participants were shuffled every time to ensure randomization of participants in the group.

Almost all the women reported an increased sense of fear and uncertainty, which fell between 5-10 on a scale of 1-10. 60(83.3%) women fell between 5-8, whereas 12(16.7%) women reported extreme feeling of 9 & 10. It was noted from the data that all these 12 women had their partners working as frontline workers. There were total 15 participants who had their spouses as frontline workers. The concern for newborn to get infected was reported by all the participants.

Difficulty in managing household chores were reported by 58(80.5%) of women. Of these 27(46.5%) had nuclear family and 31(53.5%) had joint family. Lack of support from the spouse was reported by 55(76.3%) of women, which included 14 women with their spouses as frontline workers. Financial insecurity was reported by 70(97.2%) of women.

Willingness for separation from the baby was nil, however after counseling and explaining about potential danger of infection to the baby 15(83.3%) out of 18 women who tested positive at the time of admission for delivery consented for the same.

4. DISCUSSION

The COVID-19 pandemic has been the most severe global public health epidemic of this

generation, and it is expected to continue for some time [4]. A few literatures have been recorded on the impact of COVID-19 on pregnant patients in various countries, and this describes the clinical features of COVID-19-infected patients, potential medical risks such as severe illness, ICU admissions, and receipt of medical admission, or mother-to-baby direct transmission /vertical transmission, and the impact on the maternity [5-8]. As a result of the disruption of health systems and decreased access to nutritious and nutritional food, this pandemic has resulted in child and maternal deaths, especially among women in low- and middle-income countries around the world. Pregnancy is a unique time in which women's immune and physiologic systems undergo changes that may exacerbate their psychological distress [9-11]. Positive testing of COVID-19 in a pregnant woman results in apprehension and uncertainty about the short and long term effects on themselves and their babies. This will exacerbate the pregnant woman's psychological discomfort and mood swings as a result of the infection. The infection during pregnancy can have a long-term effect on the mother's mental health and the infant's neurobehavioral growth [12]. Quarantine, whether mandatory or optional, may have detrimental effects on both the mother and the child, which may affect the infant's feeding and early growth. While there is no factual evidence on the long term /chronic effects of COVID-19 in pregnancy, both researchers and frontline health professionals/workers believe that more attention should be paid to the disease's long-term impact on pregnant patients and their infants [13-14].

The study's aim was to determine the impact of COVID-19 on pregnant women and new borns, with special attention to their psychological well-being and neurobehavioral development of the infant, as well as to investigate the bonding/association between the mother and the child/new born.

5. CONCLUSION

COVID-19 is not a fore warning that a pregnancy should be terminated because there is no concrete proof of infection transfer from the mother to the newborn. To reach a conclusion, further research and data on the mental health of pregnant women must be gathered, as well as an assessment of the pandemic's long-term impact on maternal and offspring during the COVID-19 outbreak. Researchers and health care professionals should pay greater attention to

maternal mental health, child feeding closeness to the mother, and early development in addition to controlling infection risk.

CONSENT AND ETHICAL APPROVAL

As per university standard guideline, participant consent and ethical approval have been collected and preserved by the authors

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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