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Level of Psychological Impact of Covid-19 among Antenatal Mothers

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Coronavirus disease 2019 is a communicable disease caused by severe acute metabolic process respiratory syndrome coronavirus. Symptoms begin one to 14 days after exposure to the virus (81%) develop mild to moderate symptoms, while 14% develop severely and 5% suffer critical symptoms. The present study aimed to formulate psychological interventions to enhance mental state and psychological resilience throughout the COVID-19 pandemic. To correlate the level of Psychological impact of COVID 19 among antenatal mothers and to find out association between the Psychological impact of COVID 19 among antenatal mothers with their selected demographic variables. This study was conducted with 60 antenatal mothers in a quantitative approach, non-experimental descriptive design by purposive sampling technique. Demographic variables data were collected by using a multiple-choice questionnaire followed by assessing the psychological impact of COVID 19 among antenatal mothers were assessed using completely three different standardized tools. The results showed that 42(70%) had a high level of anxiety of COVID-19 among antenatal mothers, and 18(30%) had no anxiety. 46(76.6%) had had moderate stress, 10(16.7%) had high perceived stress, and 4(6.7%) had low stress. 35(58.3%) had probable depression, 14(23.3%) had a fairly high possibility of depression, 10(16.7%) had depression possible, and only 1(1.7%) had depression not likely among antenatal mothers. Psychological impact of COVID-19 has moderate to severe levels of stress, anxiety, and depression among antenatal mothers in the second and third trimesters. So it is vital to formulate Psychological interventions to enhance mental state, and maternal mental health should be prioritized during the pandemic.

Introduction

Coronavirus illness a pair of COVID-19 can be an illness disease caused by severe acute metabolism syndrome coronavirus 2 (SARS-CoV- 2). The first case was known in urban center (Wuhan) China, in December 2019. The disease has since unfolded worldwide, leading to an associate-in-progress pandemic. The coronavirus-2019 occurrence poses an important risk to public health, as well as mental health [1]. A survey conducted in China showed that 28% reported moderate to severe anxiety symptoms and stress levels. Throughout maternity, ladies might expertise stress and anxiety associated with potential adverse obstetrical outcomes like vertebrate death or vertebrate abnormalities. Stress and anxiety levels might increase during infectious outbreaks. Currently, there is not any far-famed info on the psychological impact, the effect on an individual's social and/or psychological aspects, and the mental state of pregnant ladies throughout the COVID-19 pandemic [2].

Severe acute metabolism syndrome coronavirus, a combination of (SARS-CoV-2) is that the virus that causes coronavirus illness 2019 (COVID-19). This subject can discuss problems related to SARS-CoV-2 and COVID-19 in pregnant persons throughout the antepartum amount. Labour, delivery, and postpartum issues are discussed separately. Information about the virus and COVID-19 are evolving rapidly, and interim guidance by multiple organizations is continually being updated and expanded. Links to society and government-sponsored guidelines from selected countries and regions around the world are provided separately [3]. The first case was identified in the city of Wuhan, a Chinese food market, and since then, it's been exponentially increasing with lucid human to human contact via metabolism droplets whereas sneezing and coughing. Throughout this era, most of the analysis has been targeted on understanding and preventing transmission, exploring treatment options, and issues with global governance [4].

The mode and transmission and different connected details concerning the virus still be updated every few weeks, resulting in increased uncertainty. However, we expect that the psychological

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impact of this pandemic, like stress and anxiety among the overall Population is additionally a grave concern [5]. All cases infected within the trimester and 1/3 of cases infected within the trimester had an abortion to terminate the pregnancy. 22.2% of pregnant patients were stricken by post-traumatic stress disorder or depression at 3 months after delivery or abortion. Among 57 live births, just one neonate was positive of macromolecule testing for throat swab, but negative in repeated tests subsequently. The Covid-19 pandemic also would end in additional maternal and child deaths thanks to the potential disruption of health systems and decreased access to food, particularly in low-income and middle-income countries. Besides such direct and indirect effects on the body's physical health, however, evidence concerning the impact of Covid-19 in pregnancy on the neuropsychological function of pregnant patients and their offspring is unknown [6]. All cases infected among the trimester associate degreed 1/3 of cases infected among the trimester had an abortion to terminate the physiological state. 22.2% of pregnant patients were full of post-traumatic stress disorder or depression at three months when delivery or abortion. Among fifty-seven live births, only one baby was positive of macromolecule testing for throat swab, however negative in continual tests afterward. The COVID-19 pandemic also would finish in further maternal and kid deaths because of the potential disruption of health systems and attenuate access to food, particularly in low-income and middle-income countries [7].

The objectives of the present study were, to assess the level of the psychological impact of COVID 19 among antenatal mothers; to correlate the level of psychological impact of COVID 19 among antenatal mothers and to find out the association between the Psychological impact of COVID 19 among antenatal mothers with their selected demographic variables.

Materials and Methods

Study design

Ethical approval in this study was obtained from the research unit committee at Saveetha College of Nursing, Saveetha Institute of Medical and Technical Science, Thandalam, Chennai, with approval number 053/04/2021/IRB-HS/SIMATS on April 9th 2021. A non-experimental descriptive study was carried out among antenatal mothers. Sixty antenatal mothers were selected by purposive sampling technique in antenatal OPD, Saveetha Medical College, and hospital. During the initial interview, the purpose of the study and the nature of the study was explained to the participants, and informed consent was obtained from the participants. The participants have been informed that participation is voluntary, and they can withdraw from the study at any time. Confidentiality of information was achieved by maintaining the anonymity of the participants.

Data collection

After obtaining ethical clearance from the Institutional Ethical Committee (IEC) and formal permission from the Medical Superintendent and Departmental Head of Obstetrics and Gynecology of Saveetha Medical College and Hospital, the main study was conducted. Then, the investigator provided a self–structured questionnaire to obtain the demographic and obstetrical information. Followed by that, the investigator assessed the level of psychological impact (stress, anxiety, and depression) by providing different types of standardized (Perceived stress scale, Coronavirus Anxiety scale, and Edinburg's Postnatal Depression scale) tool and assessed the various categories of psychological impact.

Statistical analysis

Descriptive statistics were used to describe the demographic variables, clinical variables, and the level of the psychological impact of COVID-19 among antenatal mothers. Demographic variables and level of the psychological impact of COVID-19 among antenatal mothers were given in frequencies with percentages. Association between the level of the psychological impact of COVID-19 among antenatal mothers with their selected demographic variables was analyzed using the Chi-Square test [8]. Correlation between level of the psychological impact of COVID-19 among antenatal mothers was analyzed using Karl Pearson correlation coefficient $P<0.05$ was considered as statistically significant. SPSS program version 20 was used for statistical analysis [9].

Results

About 60 antenatal mothers participated in the study. Based on the demographic variables, 22 (36.6%) were ranged in age from 20 – 24 years, 20 (33.3%) had primary and high school education, 50 (83.4%) were housewives, 33 (55%) belonged to the nuclear family, 47 (78.3%) had a consanguineous marriage, all 60 (100%) had no family history of psychological problems, 37 (61.7%) were residing in an urban area [10].

Based on the clinical variables, 49 (81.7%) had planned pregnancy, 50(83.3%) had booked for pregnancy, 29 (48.4%) were in the first trimester (up to 12 weeks), 36 (60%) were primigravida, 36 (60%) had no living children, 54 (90%) had no previous abortion, 58 (96.7%) had no history of any specific health problem identified in the present pregnancy, and 44 (73.3%) had no history of COVID-19 positive in their family or with their neighbors [11].

Level of psychological impact

The level of anxiety among antenatal mothers was assessed using the Coronavirus Anxiety Scale. The results showed that 42(70%) had a high level of anxiety of COVID-19 among antenatal mothers, and 18(30%) had no anxiety of COVID-19 among antenatal mothers.

The level of stress among antenatal mothers was assessed using Perceived Stress Scale. The results showed that 46(76.6%) had had moderate stress, 10(16.7%) had high perceived stress, and 4(6.7%) had low stress of COVID-19 among antenatal mothers (figure 1) [12].

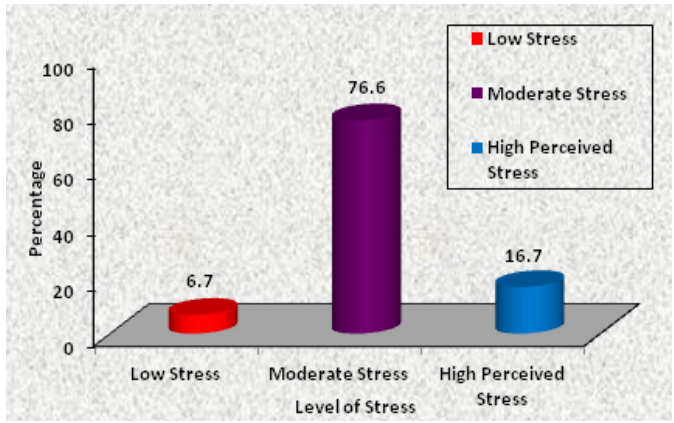

Figure 1: Level of the stress of COVID 19 among antenatal mothers

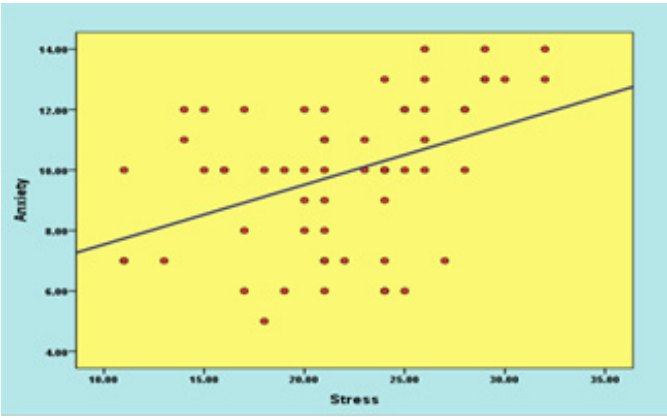

Figure 2: Correlation between stress and anxiety of COVID 19 among antenatal mothers

The level of depression among antenatal mothers was assessed using Edinburg's Postnatal Depression Scale. The results showed that 35(58.3%) had probable depression, 14(23.3%) had a fairly high possibility of depression, 10(16.7%) had depression possible, and only 1(1.7%) had depression not likely among antenatal mothers.

Correlation between stress, anxiety, and depression of COVID-19 among antenatal mothers

The table 1 showed that the mean score of stress was 21.87 ± 5.18, and the mean score of anxiety was 9.88 ± 2.45. The calculated Karl Pearson's Correlation value of r = 0.418 between stress and anxiety shows a moderate positive correlation which was found to be statistically significant at p<0.001 level. This clearly infers that when the stress of COVID-19 among antenatal mothers increases, their anxiety level also increases simultaneously [13].

In the present study, none of the demographic variables had shown a statistically significant association with the level of anxiety of COVID-19 among antenatal mothers (figure 2).

Discussion

The present study results revealed that 42 (70%) had a high level of anxiety of COVID-19 among antenatal mothers, and 18 (30%) had no anxiety of COVID-19 among antenatal mothers. The results also showed that 46 (76.6%) had had moderate stress, 10 (16.7%) had high perceived stress and 4 (6.7%) had low stress of COVID-19 among antenatal mothers, and 35 (58.3%) had probable depression, 14 (23.3%) had a fairly high possibility of depression, 10 (16.7%) had depression possible and only 1 (1.7%) had depression not likely among antenatal mothers [14].

The present study was supported by Moyer's study on pregnancy-related anxiety during COVID-19 on 2740 pregnant women, included a modified pregnancy-related anxiety scale (PRAS) reflecting respondents' perception of physiological condition anxiety before COVID-19 and a current assessment of pregnancy-related anxiety. Those are coming up with a hospital birth born from 2641 (96.4%) to 2400 (87.7%) following COVID-19. Quite 1/2 women increased stress regarding food running out (59.2%, N=1622), losing employment or unit financial gain (63.7%, N=1745), or loss of service (56.3%, N=1543). The COVID-19 pandemic is deeply poignant for pregnant women's psychological state, and factors freelance of physiological condition seem to be driving changes in pregnancy-specific anxiety [15].

Table 1: Correlation between stress and anxiety of COVID-19 among antenatal mothers (n=60)

Variables	Mean	S.D	Karl Pearson's Correlation Value
Stress	21.87	5.18	**r = 0.418**
Anxiety	9.88	2.45	**p = 0.001, S*** **

Another similar study conducted by Saadati et al. on health anxiety and related factors among pregnant women during the COVID-19 pandemic, the mean total anxiety scores were 22.3 ± 9.5, 24.6 ± 9.3, and 25.4 ± 10.6 in the first, second and third trimesters of pregnancy, respectively. Nine, thirteen, and twenty {first} of women had severe anxiety within the first, second, and third trimesters of gestation, severally. Women within the trimester had considerably higher health anxiety scores than those within the trimester (p=0.045) [16].

The present study results showed that the mean score of stress was 21.87 ± 5.18, and the mean score of anxiety was 9.88 ± 2.45. The calculated Karl Pearson's Correlation value of r = 0.418 between stress and anxiety shows a moderate positive correlation which was found to be statistically significant at p<0.001 level.

The present study was supported by Leili Salehi et al. (2020) study on "The relationship among worry and anxiety of COVID19, gestation expertise, and mental state disorder in pregnant women:" The result showed considerably correlate with mental state and anxiety of COVID19 had the best positive correlational statistics conjointly among them (B = 0.32). It also showed a considerably negative correlational statistics with mental state disorder (B = 0.29) [17].

Limitations

The study has some limitations. The researcher could not generalize the study findings as the sample size is relatively small and limited to 60 antenatal mothers. Only antenatal mothers were included in the study. Another limitation is the lack of follow-up and implementation of appropriate coping strategies. Psychological well-being among antenatal mothers can differ based on their cultural differences and background. The current study has only a few supportive studies in the Indian Population due to the paucity of literature.

Conclusion

Stress and anxiety levels could increase throughout communicable disease outbreaks. Currently, there isn't any noted info on the psychological impact, the result on an individual's social and/or psychological aspects, and the mental state of pregnant ladies throughout the COVID-19 pandemic. In the present study, the psychological impact of the COVID-19 pandemic is moderate to severe among antepartum mothers within the second and trimester than to trimester of physiological condition. It was found that antepartum mothers had a moderate level of stress, high level of anxiety, and a moderate level of depression of COVID-19. Therefore it's necessary to formulate Psychological interventions and to boost mental state and psychological resilience throughout the COVID-19 pandemic and maternal mental state ought to be prioritized throughout the pandemic, and mental support ought to be created obtainable and accessible throughout and when the COVID-19 happening.

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