High-Risk Pregnancy Influence Anxiety Level during the Covid-19 Pandemic

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Abstract

Our goal was to examine how pregnant women with and without high-risk indications experienced differing levels of anxiety during the COVID-19 pandemic in a tertiary care facility in Turkey's capital that also treated COVID19 patients. Surveys were used to create a case-control and cross-sectional research. Outpatient pregnant women with high-risk pregnancies were given the validated Turkish versions of the Spielberger State Trait Anxiety Scale and Beck Anxiety Inventory, while pregnant women without high-risk pregnancies served as the control group. 446 women in total were hired. In terms of Trait-State Anxiety scores with COVID-19 pandemic, there was a statistically significant difference between those with high-risk pregnancies and those without it. We discovered that high-risk pregnant women experienced more anxiety during the COVID-19 pandemic than pregnancy without any risk elements. In terms of anxiety scores, there was a statistically significant difference between education levels among high-risk pregnant women, with high school graduates having the highest Beck Anxiety scores. The degree of trait anxiety was highest in high-risk pregnancies with threatened preterm labour and preterm membrane ruptures, while it was lowest in people with thrombophilia. In contrast to individuals with thrombophilia, those with maternal systemic illness had the highest state anxiety level and Beck anxiety score. Those who were hospitalised at least once during the pandemic had statistically higher Trait Anxiety, State Anxiety, and Beck Anxiety scores. During the COVID-19, high-risk expectant women need regular anxiety and depression screenings as well as psychological assistance pandemic. Patients with high-risk pregnancies frequently have coexisting disorders, which increases their risk of infection as well as their anxiety levels because to the stress that COVID-19 causes.

Keywords: COVID-19 pandemic; High-risk pregnancy; Anxiety; Comorbid diseases

Introduction

Huang from Wuhan, China, was the first to describe the novel coronavirus disease, which is a highly contagious illness brought on by the severe acute respiratory syndrome-coronavirus-2 [1]. On March 11, 2020, the World Health Organization proclaimed it to be a pandemic. The WHO reports that as of August 18, 2020, there had been a total of 21,756,357 cases registered worldwide, and there had been 771,635 fatalities [2]. In Turkey, there were 250,542 cases with a confirmed diagnosis as of August 18, 2020, and 5996 people had passed away [3]. In the literature, there are still not many cases of pregnant women who have the 2019 new corona virus [4]. Although the majority of individuals had modest symptoms, infection can cause serious lung involvement and multiorgan failure [5]. Occasionally with a terrible illness the current state of information regarding pregnant women and their difficulties is inadequate [6]. Our scant information implies that symptoms in pregnant women are comparable to those in non-pregnant people and that there is no reason to believe that the mother or foetuses are at greater risks [7]. A pandemic might cause worry in everyone, including pregnant women everywhere [8]. A pregnancy that has an unanticipated medical or obstetric issue linked to the foetus or that is pregnant and poses a risk to the mother's health is referred to as a high-risk pregnancy [9]. Various disorders that increase the risk of morbidity or mortality for the mother, the foetus, or the baby, either before or after birth, are included in this [10]. Around 10% of every pregnancy is regarded as high-risk. Pregnant women are reported to develop prenatal depression and anxiety in amounts ranging from 13% to 21.7%, respectively [11]. Antenatal depression rates among women who are hospitalised due to obstetrical risk can reach 19%. Although hospitalisation can exacerbate a high-risk pregnant woman's anxiety and depression, high-risk pregnancies raise the chances of depression and anxiety. Pregnant women expressed significant levels of fear and worry about contracting the disease during the SARS outbreak in

2003, according to studies on the incident. Despite the fact that the COVID-19 pandemic has been widespread for a while, little is known about the virus's potential effects on pregnant women and how it spreads from mother to child [12]. In addition to all other unknowable repercussions, pregnant women face a significant risk of despair and anxiety due to the lack of knowledge about such a serious sickness [13]. There is little information examining the impact of the COVID-19 pandemic on high-risk pregnant women, despite past studies showing that anxiety and sadness rise in high-risk pregnancies [14]. Patients with concomitant conditions are reportedly more susceptible to COVID-19 [15]. Therefore, comorbid patients, like the majority of high-risk pregnant women, may have a higher level of anxiety and may require support more often than usual. First-ever analysis of pregnant women's fluctuating levels of anxiety during the COVID-19 epidemic, both with and without high-risk indications on their own. The study group consisted of 246 randomly chosen pregnant women who were admitted to the high-risk pregnancy outpatient clinic during the pandemic. 200 individuals with comparable ages and gestational weeks who were admitted to the antenatal pregnancy outpatient clinic during the same time period made up the control group. Information on sociodemographic and obstetric history Through the use of a questionnaire, sociodemographic data and obstetric medical history

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were gathered. Maternal age, gestational age, gravida, parity, history of abortions, level of education, employment status, disposable income, vitamin and drug use, whether the pregnancy was planned or not, spousal support, smoking habit, whether an invasive procedure was done during pregnancy, access to daily news, and the presence of mental disorders were the factors.

Discussion

The Spielberger State-Trait Anxiety Scale, which has two subscales and was validated in Turkish, was used to gauge how anxious the pregnant women were about the circumstance in general and specifically. Participants were asked to reply to the state scale, which was a situational anxiety test, "How you are feeling right now." When participants were asked to react based on "how you normally feel," the trait anxiety scale served as a general indicator of the propensity to feel anxious. Each subscale had 20 items, each of which was given a 4-point Likert scale score. The completed form was deemed invalid and not scored if more than three statements were left unanswered. The four answer categories for the state anxiety scale were None, Some, In the Trait Anxiety Scale, the options were Almost never, Sometimes, Much time, and Almost usually. On the scales, there were two different expressions. The first kind of phrases was referred to as straight or direct expressions and the second kind as inverted expressions. Reversed expressions convey pleasant feelings, whereas direct expressions convey negative feelings. Values of 1 and 4 were swapped while scoring inverted expressions. Direct expressions of the answers with a value of 4 indicated that anxiety levels were high. Answers with a score of 1 indicated significant anxiety, while those with a value of 4 showed little anxiety in inverted statements. A direct example of an inverted expression is "I feel tranquil," while "I am restless" is an example of a direct expression. Ten of them were inverted. The scale of state anxiety statements there were seven statements that were inverted on the trait anxiety scale. The theoretical range of the scores from the two scales during interpretation was 20 to 80. Low scores indicated low anxiety while higher values indicated significant anxiety. Several applications show average scores between 36 and 41. Standard values and quality criteria were included in the STAI questionnaire. The trait scale's retest reliability coefficients ranged from 0.68 to 0.96, while the internal consistency coefficient was 0.90. In this study, participants were instructed to complete the STAI questionnaire twice: once to describe their situational and trait anxiety as they might have done in the days leading up to the pandemic, and once to describe their current condition. During the epidemic at the time the questionnaire was filled out. To undertake a comparative study of the Trait anxiety scores of these two periods, the State Anxiety score was only examined for the later, but the Trait Anxiety score was evaluated for both the pre pandemic and during the pandemic periods.

Conclusion

The BAI was also used to evaluate anxiety. Beck created the BAI to measure the frequency of anxiety symptoms in adults and adolescents. Ulusoy created the Turkish version of the BAI, which has a Cronbach's alpha of 0.93. The inventory consists of 21 items that describe physical, subjective, or panic-related anxiety symptoms. Self-reported responses describing the experience of that symptom over the previous month ranged from "not at all" to "severe" on a 4-point Likert scale. Anxiety levels are more severe when the total score is high. The lead researcher and an assistant researcher administered each and every questionnaire. The lead researcher scored the data by analysing the survey respondents'

responses. One of the many sectors that have been severely impacted by the COVID-19 pandemic is mental health. The many restrictions imposed by governments and communities, the uncertainty about the pandemic's future, and most crucially, the dread of contracting the disease and endangering unborn children have all had an emotional impact on pregnant women. The COVID-19 pandemic increases the burden on pregnant women, who already experience anxiety and depression risk due to pregnancy. Contrarily, high-risk pregnancies are a significant source of worry for expectant mothers. In this study, we sought to determine whether the COVID-19 pandemic had a greater impact on high-risk pregnancies than on typical, low-risk pregnancies. During COVID-19, we discovered a rise in the prevalence of anxiousness.

Acknowledgement

Conflict of Interest

None

References

1. Liu J, Dai S, Wang M, Hu Z, Wang H, et al. (2016) Virus like particle-based vaccines against emerging infectious disease viruses. Virol Sin 31: 279-287.

2. Qu G, Li X, Hu L, Jiang G (2020) An imperative need for research on the role of environmental factors in transmission of novel coronavirus (COVID-19) Environ Sci Technol 54: 3730-3732.

3. De Groot RJ, Baker SC, Baric RS, Brown CS, Drosten C, et al. (2013) Commentary: Middle East respiratory syndrome coronavirus (MERS-CoV): announcement of the Coronavirus Study Group. J Virol 87: 7790-7792.

4. Weber DJ, Rutala WA, Fischer WA, Kanamori H, Sickbert Bennett EE, et al. (2016) Emerging infectious diseases: focus on infection control issues for novel coronaviruses (severe acute respiratory syndrome-CoV and Middle East respiratory syndrome-CoV), hemorrhagic fever viruses (Lassa and Ebola), and highly pathogenic avian influenza viruses, A (H5N1) and A (H7N9) Am J Infect Control 44: e91-e100.

5. Zumla A, Chan JF, Azhar EI, Hui DS, Yuen KY, et al. (2016) Coronaviruses – drug discovery and therapeutic options. Nat Rev Drug Discov 15: 327-347.

6. Woo PC, Lau SK, Huang Y, Yuen KY (2009) Coronavirus diversity, phylogeny and interspecies jumping. Exp Biol Med 234: 1117-1127.

7. Chan JF, Kok KH, Zhu Z, Chu H, To KK, et al. (2020) Genomic characterization of the 2019 novel human-pathogenic coronavirus isolated from a patient with atypical pneumonia after visiting Wuhan. Emerg Microbes Infect 9: 221-236.

8. Wang C, Horby PW, Hayden FG, Gao GF (2020) A novel coronavirus outbreak of global health concern. Lancet 395: 470-473.

9. Gorbalenya AE, Baker SC, Baric RS, de Groot RJ, Drosten C, et al. (2020) Coronaviridae Study Group of the International Committee on Taxonomy of Viruses. The species severe acute respiratory syndrome-related coronavirus: classifying 2019-nCoV and naming it SARS-CoV-2. Nat Micro 5: 536-544.

10. Jiang S, Shi Z, Shu Y, Song J, Gao GF, et al. (2020) A distinct name is needed for the new coronavirus. Lancet 395: 949.

11. Fehr AR, Perlman S (2015) Coronaviruses: an overview of their replication and pathogenesis. Methods Mol Biol 1282: 1-23.

12. Singhal T (2020) A review of coronavirus disease-2019 (COVID-19) Indian J Pediatr. 87: 281-286.

13. Huang C, Wang Y, Li X, Ren L, Zhao J, et al. (2020) Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet 395: 497-506.

14. Rothe C, Schunk M, Sothmann P, Bretzel G, Froeschl G, et al. (2020) Transmission of 2019-nCoV infection from an asymptomatic contact in Germany. N Engl J Med 382: 970-971.

15. Li Q, Guan X, Wu P, Wang X, Zhou L, et al. (2020) Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. N Engl J Med. 382: 1199-1207.