

In Northern Germany, A Transit Survey of Pregnancy-Related Variables Among Females in The Phases of The Coronavirus Pandemic (COVID-19) Was Conducted

¹Amirhossein Jahromi ²Maryam Jahromi ³Narges Mohammadpour ⁴Abdolreza Jahromi

^{1, 2, 3, 4} Department of Laboratory and Microbiology, Medical University of Tehran, Gastrointestinal Bacteria Reference Unit, Public Health of Tehran, Iran

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Corresponding Author:

Amirhossein Jahromi

Email: amirhossein1121@gmail.com

Abstract— During the COVID-19 pandemic, women who are pregnant confront particular obstacles that may increase the risk for mental health issues. However, many large-scale and bridge research investigating modifiable pandemic-related behavioral or cognitive variables that may impact mental health in this susceptible demographic have been undertaken to yet. During the COVID-19 pandemic, these worldwide studies attempted to detect and quantify the effects of pandemic-related knowledge seeking, concerns, and preventive behaviors on prenatal psychological health. Between March 29, 2020, and July 17, 2020, in Germany performed an anonymously, online, bridge survey of pregnant women. The survey, which was accessible in a Germany and English language, was housed on the Registry portal for COVID-19 research and promoted through social networks and internet parental communities. Researchers carried out questionnaires on their demographics, COVID-19 contact and concerns, information search, COVID-19 preventive practices, or psychological symptoms such traumatic stress, anxiety/depression, as well as lonely. Significant percentages of women rated well above the cutoffs of high traumatic events (4,475 [42 percent]), anxiety/depression (3,538 [35 percent], and lonely (2,238 [30 percent]) amongst those 6,491 respondents (3,626 [52 percent]). In multivariate analysis, accessing information from whatever channel five or more times day per (e.g., social networks, television, chatting to others) was linked with more than double the chances of increased posttraumatic stress and nervousness. The number of females (86%) said they were concerned about COVID-19 in some way. Relatives would be unable to visit following birth (60 percent), the infant contracting COVID-19 (58 percent), absence of a patient advocate throughout the delivery (55 percent), and COVID-19 leading modifications to a planning process were one of the most often expressed concerns (42 percent). Markedly expanded probabilities of post-traumatic stress, anxiousness, and loneliness appeared connected with greater concerns for children (i.e., insufficient daycare, their illness risk) and skipping medical visits. COVID-19 preventive measures such as using a face mask, handwashing, and cleaning surfaces were not associated with mental health symptoms or lonely. As during COVID-19 epidemic, pregnant and postpartum females in Berlin reported significant levels of psychological distress, nervousness, and lonely. Explicit statement searching and concerns for children as medical services were linked to increased symptoms, but not taking hygiene-related preventative actions. Because preventing virus transmission doesn't really reduce the pandemic's psychological health influence, health promotion and basic healthcare institutions must specifically review the effect of COVID-19-related stresses on postpartum women's health. In furthermore to monitoring psychological symptoms, prenatal and postnatal women's prevention strategies should include tackling excessive led to the discovery and women's concerns about access to medicine and their children's excellently, as well as developing strategies to combat aloneness.

Keywords: Covid, Women, Health, Research, Pregnant

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I. INTRODUCTION

The epidemic caused by the unique emergent coronavirus was devastating, infecting nearly the entire world. This crisis

compelled the entire world to adhere to stringent healthcare procedures in order to contain it. On March 11, 2020, the WHO proclaimed COVID-19 a worldwide pandemic. According to

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WHO statistics through February 4, 2021, this virus caused 103,979,980 cases reported and 2,268,260 fatalities in the second phase. COVID-19 spreads quickly when it comes into touch with. Such outbreaks have been linked to psychological disorders and distress in vulnerable populations, including such pregnant women and the fetus, and have been linked to psychological disorders and distress in the past. It might remain for a long period, again after disease control. Preterm birth, the prolonged maternal-fetal connection, and impaired cognitive development throughout the neonate are all linked to depression and anxiety. This must be remembered in order to give sufficient assistance during the COVID-19 epidemic. Thus, according current research, just few other pregnant women and fetuses were infected with COVID-19, although proof of vertical transmission is limited. The literature's riddle concerning COVID-19, as well as the correct and erroneous data available on the Web, causes psychological anguish in susceptible groups such as pregnant women. Furthermore, human activities are concentrated on illness, treatment, with just few other researches examining the impact on healthcare professionals and the broader public. Nevertheless, owing to the prescribed limitations, social distance, isolation, difficulty to receive regular prenatal care visits, and dread of feeding a baby, pregnant women might suffer greatly. As a result, the goal of this study was to assess anxiety and sadness amongst pregnant women during the COVID-19 pandemic. Despite the reality that psychological distress has a wide range of effects on pregnant mothers and their children, there is indeed a vacuum in our understanding of the rate or severity of these distresses. Furthermore, psychological discomfort of pregnant moms during in the COVID-19 pandemic has been documented in a few investigations, and it may be revealed as a health risk for child developmental issues. As a result, the focus of this research was to look at the sadness, anxiety, and stress levels of expectant women in the early stages of COVID-19 infection. In the north of Germany.

II. MATERIALS AND METHODS

This bridge research was done in Hamburg, Germany's eighth most populated city, between March 26 and April 15, 2021. Hamburg is located in the northwestern part of the nation. The survey strategy was authorized by the MSH Medical School Hamburg Ethics Committee and was founded on the Hamburg ethical guidelines for medical research (MSH). The volunteers were expecting moms who were enrolled at MSH-affiliated maternity clinics. So, every maternity clinic secretary called women to inform them about the research and its objectives. Upon being reminded of their privileges, the participants were invited to complete an online survey. The volunteers were expecting women who were enrolled at MSH-affiliated maternity clinics. Moms were selected and interviewed by the secretary within each maternity clinic, who explained the research and its aim. Participants were invited to complete an online questionnaire upon being reminded of respective privileges. The ladies were assured that the information was private. The survey was completely anonymous. The study's goal was communicated to the women who were eligible, and they gave informed written permission before being enrolled. Participants who were receiving prenatal treatment in the obstetrics and gynecology department's outpatient clinic completed a questionnaire. The questionnaire consists of three sections:

- Section (one) demanded to discover well participants' socioeconomic variables.
- Section (two) some seemed unwilling to accept participate, included questions for anxiety.
- Section (three) Prior towards the research, participants had not resided within Hamburg for at least six months, included questions about depression, contained depression-related queries.

Several of the research projects conducted the interviews amongst each patient and collected the data. In a secluded room, participants were interviewed. Whenever patients required assistance or explanation, the relevant researcher was there to assist. The questionnaire took an average of 15–20 min to finish.

A. Ethical Approval

All methods in the research were carried out in compliance with the institutional and global health committee's ethical requirements, as well as the Hamburg statement and its subsequent modifications or similar ethical standards. The Research Ethics Committee (REC) approved the project, and it was performed out.

B. Statistical Analysis

When applicable, the results were statistically characterized using standard deviation, frequency (number of occurrences), or percentages. Statistical significance was determined by P-values of below 0.05. SPSS (Statistical Package of social Science; SPSS Inc., Zurich, IL, America) version 23 for Microsoft Windows was used to do all statistical computations. With statistical analysis, the chi-square testing has been used for categorical variables, while the (T) test was used for continuous data.

III. RESULTS AND DISCUSSION

The online survey was answered by 1080 registered pregnant moms in total (58.7 percent). Participants were 36.8 (5.7) years old on average. The Marriage lasted an average of 9 years, spanning from 1 to 32 years. The average number of pregnancies, along with the present one, was two, with the range being one to eight (Table 1).

Table 1 Presents the Demographics of The Volunteers.

<i>Variable</i>	<i>Mean (±SD)</i>	<i>Median (Min-Max)</i>
Maternal age (year)	36.8 (5.9)	32 (17–52)
Marriage duration	8.9 (5.3)	9(1-31)
Number of	2.4 (1.1)	3 (1–8)

The Overall majority of women (902; 83.5 percent) had no comorbidities, whereas 118 moms (10.9 percent) had one, 58 moms (5.4 percent) had two, and one mom (0.2 percent) had three. Although hypothyroidism (84; 7.8%) and diabetic mellitus/gestational diabetes (62; 5.7%) were the two least prevalent comorbidities, Idiopathic Thrombocytopenic Purpura (ITP), which was described through one pregnant woman, was the least common (0.2 percent). 334 moms (30.9 percent) were discovered to be on medicine, with 272 (25.1 percent) taking

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medication such as ferrous sulphate, folic acid, even perinatal mineral supplements (Table 2).

Table 2 Mothers' Medical History During Pregnancy

<i>Comorbidities</i>	<i>Frequency (%)</i>	<i>Medication</i>	<i>Frequency (%)</i>
HTN	34 (3.1)	Aspirin	84 (7.8)
CVD	18 (1.7)	Other	114 (10.6)
Other endocrine	40 (3.7)	Multi-vitamin	90 (8.3)
Headache	19 (3.5)	levothyroxine	84 (7.8)
Hypothyroidism	84 (7.8)	Ferrous sulfate	152 (14.1)
DM/GDM	62 (5.7)	Folic acid	118 (10.9)
Renal diseases	18 (1.7)		
Respiratory	14 (1.3)		
ITP	3 (0.2)		
Seizure	14 (1.3)		

Predicated on the patients' socio-economic variables, illustrates the distribution of symptomatic individuals in the DASS sub - scales. The claimant's health status and self-rated health (SRH) level were significantly related to having well above the DASS-D score (Table 3).

Table 3 Comparing of Abnormal DASS Scores Based on The Pregnant Patients

<i>Claimed Socioeconomic Status</i>	<i>Frequency (%)</i>	<i>Abnormal Depression Score</i>	<i>Abnormal Anxiety Score</i>	<i>Abnormal Stress Score</i>
High	84 (7.8)	4 (4.8)	36 (21.4)	2
Middle	512 (47.4)	26 (5.1)	94 (18.4)	4 (0.8)
Low	484 (44.8)	26 (5.4)	98 (20.2)	6 (1.2)
P Value		1.8	16	1.4
<i>Self-Rated</i>				
Poor	244 (22.6)	38 (15.6)	92 (37.7)	4 (1.6)
Intermediate	514 (47.6)	16 (3.1)	90 (17.5)	6 (1.2)
Good	484 (44.8)	2 (6.1)	28 (8.7)	3
P Value		<0.001	<0.001	0.6

Additionally, the amount of morbidities was linked to a low DASS-A score; participants with two or even more comorbidities were 4.5 times more likely to have an aberrant DASS-A level (p = 0.001; CI for OR 1.1–4.2) (Table 4).

Table 4 A Significant DASS-A Level Is Linked to A Range of Circumstances.

<i>Self-rated health</i>	<i>Odd's Ratio (OR)</i>	<i>Confidence Interval for OR</i>	<i>P Value</i>
Good	7	1.3-2.2	<0.001
Intermediate	5.3	1.2–4.4	0.01
Poor	3.9	3.5–13.7	<0.001
<i>Number of comorbidities</i>			
No comorbidity	4	0.5–2.2	0.003
comorbidity	4.5	1.1–4.2	0.1

IV. DISCUSSION

A. Principles of Stability

The objectives of this research were to see how COVID-19 affected the behavioral health of pregnant women. Pregnant women expressed higher levels of anxiety and sadness than they had prior to the epidemic. A large number of women expressed concern that the epidemic might have an impact on their pregnancies. There was a strong link between their stated scores and their apprehension. Furthermore, depressive symptoms were more common in expectant women with poor health compared to those with moderate or intermediate SRH. Pregnancy is a crucial transition time in a woman's life, with several physiologic and immunologic changes. Pregnancy, diabetes, preterm delivery, low birth weight, and postnatal problems have all been linked to psychiatric illnesses such as sadness and anxiety during pregnancy. Pregnant women who reported poor health as well as those who did not have health care coverage had greater abnormal depression ratings than others, according to the current research. Reported that poor perceived health was strongly linked to depression rates, which is consistent with these findings. I Informed on the link between mental health and COVID-19 dread among pregnant German women and their spouses. They discovered that anxiety of COVID-19 was strongly connected to the psychological distress of German pregnant women & their husbands, which is compatible with the recent research. Anxiety is also another major public health concern, since it can create problems with social, psychological, and physical functioning, leading to increased usage of healthcare services. Revealed that elevated anxiety levels during pregnancy were linked to plasma or amniotic cortisol levels. In line with the most recent findings. During the COVID-19 pandemic, pregnant ladies exhibited clinically increased pregnancy-related anxiety symptom. This research offered certain advantages as well. Several of the survey's greatest aspects is that it was done during the epidemic's early months. As a result, it represents the genuine tension and worry that pregnant women experience. Furthermore, during the COVID-19 epidemic, this subject hasn't yet been explored in German. Another importance of this research would be that women felt more at

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ease reporting their anxiety and depression on the personality questionnaire.

B. Clinical Consequences

The new adversary, the COVID-19 epidemic, is wreaking havoc throughout the globe. The main issue was determining how to treat this new illness. Some worry was expressed about the psychological impact on healthcare professionals, but less concern was expressed about at-risk groups such as pregnant women. On January 28, 2021, the whole globe recorded 100,465,529 cases, with Germany reports 160,761. Women that were recruited were both nulliparous and multiparous. The large percentage of them seem to be housewives with advanced degrees.

C. Consequences of Research

More research is needed to determine the impact of COVID-19 on pregnancy outcomes. It is necessary to conduct larger community-based research.

D. Strengths and Drawbacks

This is the first research in Germany to look at the effects of COVID-19 on pregnant women. We utilized questionnaires that have been verified in both English and Germany. The survey was carried out by making direct interaction with the respondents. This avoided the disadvantages of online surveys, such as the inability to identify the number of people who refused to fill out the survey, inaccurate replies owing to a failure to understand or comprehend the questions, and a lack of random sampling. However, since this was a hospital-based research, the results are limited in their applicability. It is necessary to conduct a community-based survey.

V. CONCLUSIONS

COVID-19 has a significant impact on the mental health of pregnant mothers. Strategies to reduce the effects of the epidemic on vulnerable communities should be prioritized. As a disease-prevention plan for cognitive and intellectual well-being, monitoring for psychological illnesses such as depression and anxiety, particularly in pregnant women, and well-known communications with consistent and accurate reports about the COVID-19 pandemic must be offered.

VI. Research funding

This is self-funded research, since the researchers are paying for it themselves.

VII. Informed consent

All people who participated in this research gave their informed consent.

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