

Assessment of Pregnant Females' Anxiety and Health Concerns During COVID-19 Pandemic

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Sarwat Memon¹, Nisa Mohsin¹, Amber Naeem¹, Fauzia Rahim¹, Amna Salman¹ and Andsaba Memon²

ABSTRACT

Objective: To determine level of anxiety in pregnant females during covid-19 using CAS scale and to determine pregnant women's maternal and fetal health concerns during COVID-19.

Study Design: Descriptive Cross sectional study

Place and Duration of Study: This study was conducted at the Outpatient department of Obstetrics and Gynaecology Isra University Hospital Hyderabad from January 2021 to March 2021 for a period of 03 months.

Materials and Methods: A convenience sampling technique was used to collect data from 180 pregnant women who had no previous psychiatric, missed abortion, or ectopic pregnancy history. A standardized CAS scale was used to assess each participant's level of anxiety about COVID-19, followed by a self-structured questionnaire to assess women's concerns about foetal and maternal health in the context of COVID-19. Frequency was calculated for all variables.

Results: The bulk of our patients were over 35 years old and multigravida, according to our results. Corona related anxiety was found in 63.8% of patients, and it had an impact (58%) on their lives, both in terms of their health (41.3%) and the health of their unborn child (53.8%).

Conclusion: Anxiety was shown to be present in majority of pregnant females with most of them being worried about the health of their unborn child.

Key Words: CAS scale, anxiety in pregnancy, corona related anxiety, health concerns, pandemic, mental health

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INTRODUCTION

One of the most crucial milestones in a woman's life is her pregnancy. It affects their health and behavior in a variety of ways, including physical, emotional, and social changes¹. They are prone to sleep disturbances, mood swings, negative thoughts, exhaustion, and difficulties concentrating, among other circumstances that make them exceedingly worried, such as duties of other children, family caregiving, work shores, and so on^{2,3,4,5}. Although anxiety is a natural response to any stressful event, its severity can impair not just women's mental and physical health but also that of their children, putting their pregnancy at risk⁴⁻⁷.

Pregnant mothers are frequently concerned about the health of their unborn child and the outcome of childbirth. Anxiety has been associated to preeclampsia, low birth weight, intrauterine growth restriction⁸, premature birth⁹, cleft lip and palate, still birth, neonatal death¹⁰, autism, ADHD, and neurodevelopmental disorders¹¹.

Many additional questions have led a strong psychological impact amongst this population relating to continuation of pregnancy, its results on newborns, probabilities of vertical transmission, concerns of isolation just in case of positive result of Covid -19³. Similarly, imbalances in availability of health care, uncertainty in the provision of routine essential medical services, antenatal services, staff deployment and shortages, lengthy and crowded appointments has affected also impacted their quality of life³. As pregnant women need daily antenatal care from maternity services and other reproductive health services, there are increased possibilities of exposure towards infection to both mother and therefore the child^{2,12}.

According to the literature, the prevalence of anxiety and its impact on pregnant women differs depending on specific circumstances. Pregnancy-related anxiety affects 10–25% of women in underdeveloped nations¹³. According to other studies, it is 53.8% 83.3%^{14,15}. In Italy, a survey of 178 pregnant women found that 46.6% of them were concerned about foetal

¹. Department of Obstetrics and Gynaecology, Isra University Hospital, Hyderabad.

². Department of Obstetrics and Gynaecology, Liaquat University of Medical and Health Science, Jamshoro.

Correspondence: Dr. Sarwat Memon, Assistant Professor of Obstetrics and Gynaecology, Isra University Hospital, Hyderabad.

Contact No: 0331 3010400

Email: dr.sarwatememon@gmail.com

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malformations, 65% were concerned about intrauterine growth limits, and 51% were concerned about premature birth⁶. Another study in Iran used general anxiety questionnaires to assess pregnancy related anxiety (PRA) and found prevalence rates of 32.5% and 40% respectively^{16,17}

In light of the above prevalence of anxiety and its impact on maternal and foetal health in international studies, as well as the facts that we lack infrastructure, inadequate provision of proper and timely antenatal and postnatal care, limited access to health-care facilities, and the added burden of this pandemic, this study was conducted on the local population with the aim of determining the level of increased anxiety and assess their concerns about both fetal and maternal health during COVID-19 so that timely management, proper referrals and employment of strategies for anxiety reduction, and provision of appropriate measures for antenatal and postnatal can be arranged during COVID-19 to avoid any negative outcomes both to the mother and the fetus, to ensure safe and health pregnancy for patients.

MATERIALS AND METHODS

This cross sectional study was conducted at out-patient department Obstetrics and Gynaecology Isra University Hospital Hyderabad from January 1st 2021 to 15th march 2021. Using a convenience sampling technique, data from 180 pregnant females with the exception of those with past psychiatric, ectopic pregnancy, or missed abortion history was acquired after informed consent. The confidentiality of each patient was respected. A standardised CAS scale was used to measure each participant's anxiety level about covid-19, followed by a self-structured questionnaire to assess the concerns of women regarding fetal and maternal health amid of covid-19. Frequency was calculated for all the qualitative variables.

RESULTS

The majority of pregnant females in our sample were in the above 35-year-old age group, according to sociodemographic data. Most of them were in their second trimester and multigravida (Table:1).

Table No.1: Sociodemographic Data of Pregnant Females

Age	Frequency	Percentage	Total
Below 25 years	29	21.66%	180
25-35 years	56	31.11%	
>35 years	85	47.23%	
Gestational phase			180
1 st trimester	11	6.11%	180
2 nd trimester	86	47.7%	
3 rd trimester	83	46.1%	
Parity			180
Primigravida	53	29.4%	180
Multigravida	127	70.5%	

Anxiety level concerning covid-19 was measured using CAS scale, it was evident in 63.8% of patients (table: 2).

Table No.2: Corona Virus Related Anxiety Based On Cas Scale

	Frequency	Percentage
Positive	115	63.8%
Negative	65	36.1%
Total	180	100%

58% of patients were affected by this pandemic outbreak with 53.8% showing concerns about unborn child while 41.3 % were worried about themselves. (Table:3)

Table No.3: Concerns of Patients Regarding Maternal and Foetal Health During COVID-19

	Frequency	Percentage
Concerns about self	56	41.3%
Concerns about unborn child	43	53.8%
Concerns about both	05	4.8%
Positive impact on total	104	58%

DISCUSSION

This study was aimed to assess the level of anxiety and health concerns of patients regarding maternal and foetal health during covid 19 pandemic. Demographic data was divided into three aspects i-e age, gestational age and parity. Majority of patients fall into age range of over 35 years (47.3%), followed by 25-35 years (31.11%), and finally below 25 years (21.66 %). Comparing our findings with other studies, 71.4% of patients were between the ages of 26-35 and 10.1% in the over 35 year age group²⁰. Another study reported 89.06% of patients in below 35-year age group whereas 10.94% in the over 35 year age group¹⁸.

Most of the participants of our study were either in their 2nd or 3rd trimester with only minimum difference respectively i-e (47.7%) & (46.1%) followed by 6.11% in first trimester. When compared to other studies, one found quite similar results i-e 2nd trimester 48.7% and 3rd (51.2%) whereas majority of studies have reported their patients in 3rd trimester 53.5%¹⁹, 49.8%²⁰ and 33.6%¹⁹, 40.7%²⁰.

A large number of patients (70.5%) were multigravida in present study. Other studies shows contradicting outcomes, with the majority being primigravida individuals, i.e. 59.7% vs 31.4% (multigravida)¹³, 61.9% vs 38.1% (multigravida)¹⁹, and 38.7% vs 4.8%²⁰ (multigravida). Table:1

Using a cutoff score of > 9 on the CAS scale to measure corona-related anxiety in pregnant females, 63.8% were found to suffer from anxiety (Table 2). Another study conducted in Pakistan shows 84% of patients had covid-19-related anxiety¹⁷, compared to 24.5%¹⁸ and 29.19%¹⁹ in Wuhan. However, researches

have also reported patients with minimal anxiety level i.e 63.6%¹⁴ and 69.4%¹⁹.

53.8% patients were found to be concerned about the health of their unborn child, while 41.3% about themselves (Table 3). When we compared our findings to other literature, 63.4% were worried about their child while 50.7% about themselves¹³. Another study reported fetal health concerns amongst pregnant women to be 46.6% whereas 22.1% showed self concerns¹⁴.

CONCLUSION

Anxiety was shown to be present in majority of pregnant females with most of them being worried about the health of their unborn child.

Author's Contribution:

Concept & Design of Study: Sarwat Memon
 Drafting: Nisa Mohsin, Amber Naeem
 Data Analysis: Fauzia Rahim, Amna Salman, Andsaba Memon
 Revisiting Critically: Sarwat Memon, Nisa Mohsin
 Final Approval of version: Sarwat Memon

Conflict of Interest: The study has no conflict of interest to declare by any author.

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