

# A Study to Assess the Level of Stress Regarding COVID-19 Diagnostic Test during Antenatal Visit among Antenatal Mothers at SMVMCH, Puducherry

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**Abstract:** *Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. The level of anxiety and fear among pregnant women increased during the COVID-19 pandemic. In this paper, we discuss how the COVID-19 diagnostic test causes stress in the antenatal mothers and the association between the levels of stress regarding COVID-19 diagnostic test during antenatal visit among antenatal mothers with their selected demographic variables. The main study was conducted at SMVMCH, Puducherry. The period of data collection was 1 week, and the data were collected from the 50 antenatal mothers by using structured interview questionnaire with Perceived stress scale. The study was conducted by using convenient sampling technique. Represents antenatal mothers, majority of them had 27 (54%) had mild level of stress, 17 (34%) had moderate level of stress and 6 (12%) had normal level of stress. The demographic variable such as no of children, type of residence and having idea about using PPE had shown statistically significant association between the level of stress regarding COVID-19 diagnostic test during antenatal visit among antenatal mothers with their selected demographic variables. The other demographic variable had not shown statistically significant association between the levels of stress regarding COVID-19 diagnostic test during antenatal visit among antenatal mothers with their selected demographic variables respectively.*

**Keywords:** COVID 19 diagnostic test, Antenatal mothers, Perceived stress scale

## 1. Introduction

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. According to “the WHO FANC model”, the timely ANC visits refer to the 1st ANC visit between 8–12 weeks of pregnancy, the 2<sup>nd</sup> ANC visit between 24–26 weeks, the 3<sup>rd</sup> ANC visit at 32<sup>nd</sup> week, and the 4<sup>th</sup> ANC Visit between 36–38 weeks of gestation.

Diagnostic tests can be antigen based (“rapid antigen” tests), which look for protein markers on the outside of the virus, or they can be molecular based (including PCR, LAMP, CRISPR), which look for viral genomic material specific to SARS-CoV-2. Molecular-based tests that amplify genetic material are also called nucleic acid amplification tests.

The level of anxiety and fear among pregnant women increased during the COVID-19 pandemic. This is attributable to a number of factors including the probability of the increased risk of getting COVID-19 or presenting severe complications, the risk of death in infected pregnant women, and the uncertainty about the effectiveness of the available treatments and timely vaccine production. Fear, worry, and anxiety during pregnancy has negative physical and psychological health consequences for pregnant women.

## Aim of the Study

The aim of the study was to assess the level of stress regarding COVID-19 diagnostic test among antenatal mothers.

## Objectives

- To assess the level of stress about COVID-19 diagnostic test among antenatal mothers.
- To associate the level of stress about COVID-19 diagnostic test among antenatal mothers with their demographic variables.

## 2. Methodology

A quantitative research approach with descriptive research design was adopted. 50 antenatal mothers were selected for this study by using convenient sampling technique and the study were conducted at Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Puducherry by using Structured Interview Questionnaire.

## Research Design:

The design selected for the present study is the descriptive design.

## Research Setting:

The study has to be conducted at SMVMCH, Puducherry.

## Description of Tool

**Section A:** It consists of demographic variables including age, gestational age, religion, education, occupation, marital status, type of family.

**Section B:** Stress Scale

### Scoring Interpretation:

Interpretation	Scoring
Mild	0 – 13
Moderate	14 – 26
Severe	27 – 40

### Data Collection Procedure

The data collection done with the permission to conduct the study was obtained from authorities of the concerned person Sri Manakula Vinayagar Medical College and Hospital, Puducherry. 50 Antenatal mothers were selected by using convenient sampling techniques and according to the inclusion and exclusion criteria and after introducing and explain the purpose of the study. The tool consists of demographic variables and stress scales were administered to respondent's data was collected.

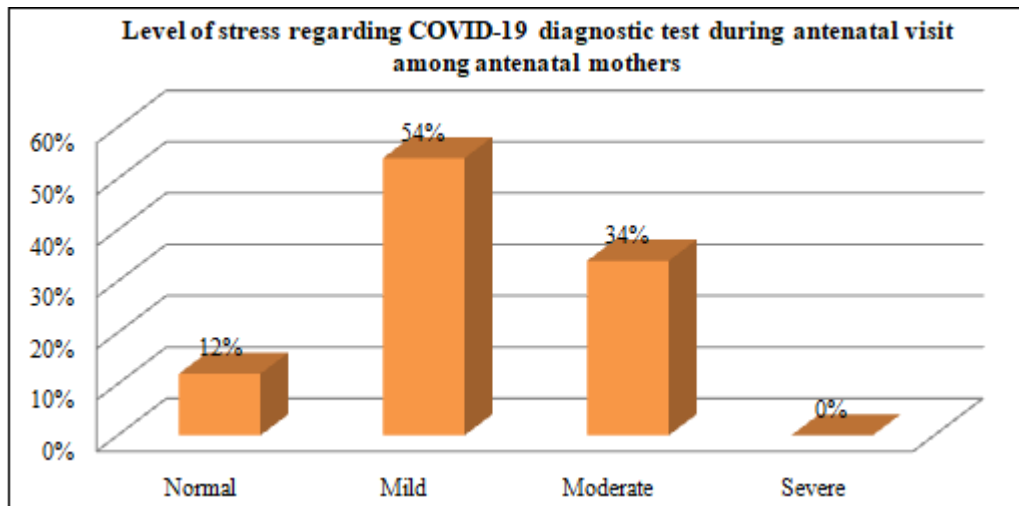
## 3. Results and Discussion

### Frequency and percentage wise distribution of level of stress regarding COVID-19 diagnostic test during antenatal visit among antenatal mothers.

Majority of the antenatal mothers 27 (54%) had mild level of stress, 17 (34%) had moderate level of stress and 6 (12%) had normal level of stress and the mean and standard deviation of level of stress regarding COVID-19 diagnostic test during antenatal visit among antenatal mothers is (33.66+11.59) respectively.

**Table 1:** Frequency and percentage wise distribution of level of stress regarding COVID-19 diagnostic test during antenatal visit among antenatal mothers, (N = 50)

Level of Stress	Frequency (n)	Percentage (%)
Normal	6	12
Mild	27	54
Moderate	17	34
Severe	0	0
Total	50	100
Mean + Standard deviation	33.66+11.59	



**Graph 1:** Frequency and percentage wise distribution of level of stress regarding COVID-19 diagnostic test during antenatal visit among antenatal mothers.

## 4. Conclusion

Descriptive research design was selected for this study to assess the level of stress regarding Covid 19 diagnostic test during antenatal visit among antenatal mothers, at Sri Manakula Vinayagar Medical College and Hospital, Puducherry.

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