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Community Section

Perceived Anxiety and Stress among Pregnant Women during COVID-19 Pandemic: A Cross-sectional Study

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ABSTRACT

Introduction: Mental health and well-being is as important as physical health during pregnancy. But the Coronavirus Disease-2019 (COVID-19) pandemic has caused more anxiety and stress among pregnant women. The augmented levels of anxiety and stress may have detrimental effects on antenatal women. Anxiety and depression in pregnancy can lead to adverse pregnancy outcomes like increased risk of abortions, preterm labour and even foetal deaths.

Aim: To assess the anxiety and stress levels among pregnant women attending a tertiary care hospital in Thiruvananthapuram, Kerala during the COVID-19 pandemic and to determine the associated factors.

Materials and Methods: A cross-sectional study was conducted among 348 pregnant women attending a tertiary care teaching hospital in Thiruvananthapuram District in Kerala during the period between October 2020 to November 2020 using a validated tool, Pandemic Anxiety Stress Scale for pregnant women (PASSP). Higher scores indicating higher perceived anxiety stress with a maximum score of 60, categorised as normal, mild, moderate and severe with score between 0-14, 15-29, 30-44, and 45-60, respectively. Qualitative variables were expressed in frequency and percentage. Multivariate logistic regression was done to determine the factors associated with anxiety and stress. The p-value <0.05 was considered significant.

Results: Mild anxiety and stress were seen in 160 (45.98%) pregnant women, 89 (25.57%) had moderate and 7 (2.01%) had severe anxiety and stress, 92 (26.44%) women had no anxiety. A total of 145 (41.67%) pregnant women were scared of vertical transmission to their baby. Multivariate logistic regression revealed that residents in urban area and pregnant women with other co-morbidities associated with pregnancy were the two significant factors (p<0.05) associated with anxiety-stress.

Conclusion: About one-fourth of pregnant women had moderate or severe level of anxiety and stress. Antenatal women with pregnancy related diseases and those living in urban area had more anxiety and stress during pandemic. Measures need to be taken by health system to address the mental health of pregnant women.

Keywords: Antenatal women, Coronavirus-2019, Logistic regression, Mental health, Risk factors

INTRODUCTION

The COVID-19 has spread rampantly worldwide, and the World Health Organisation (WHO) declared it as a pandemic on 11th March 11, 2020 [1]. The pandemic control measures and restrictions that followed to reduce the COVID-19 spread like lockdowns, travel restrictions, social distancing, wearing masks, quarantine, isolation, border closures have knowingly or unknowingly, taken a huge toll on the mental health of the people. Pregnancy period should be a time of emotional well-being for the expecting mother. COVID-19 epidemics created stress and anxiety among pregnant population [2]. Elevated levels of anxiety and stress may have adverse effect on pregnant women [3]. Anxiety and depression in pregnancy can lead to increased risk of abortions, preterm labour and even foetal deaths. Children born to mothers who had high levels of stress in pregnancy may develop behavioural and cognitive problems [4]. Pregnant women are concerned not only about themselves but also about the health of their in-utero babies and thus COVID-19 pandemic pose as a risk factor that may increase the stress of pregnant women who are already prone to develop anxiety and depression.

Although many recent studies have proven that there is no risk of foetal transmission of COVID-19 and that pregnant women are not at risk of serious COVID-19 infection, still many are anxious [5-8]. So, women who got pregnant during this COVID-19 pandemic may have had to experience a lot more emotional variance, especially due to the pandemic control measures, which may increase their anxiety and stress and thus affect the health of the developing foetus. Main concerns of pregnant women were that, they were unable to interact with others as earlier, not able to go out, not able to see their dear ones who live far away, unable to engage in regular physical activity, fear of going to hospital for regular antenatal visits and not having authentic information about the effects of COVID-19 on pregnancy [9]. Anxiety during pregnancy is estimated to affect between 15% and 23% of women and is associated with increased risk for a range of negative maternal and child outcomes [3,10]. Patients with co-morbidities are more at risk to COVID-19 [11]. Naturally, pregnant women with co-morbidities might have higher level of anxiety and may be in need of support than usual. However, it is possible to improve the mental well-being of pregnant women by identifying those who have the symptoms of anxiety and stress and give adequate care and counselling.

To date, there are only limited studies on the psychological state of pregnant women during this pandemic [12-16]. Hence, objectives of this study were to assess the level of anxiety-stress among the pregnant women and to identify the factors associated with anxiety and stress among pregnant women during the COVID-19 pandemic in Kerala.

MATERIALS AND METHODS

A cross-sectional study was carried out among 348 pregnant women attending the Obstetrics and Gynaecology Outpatient Department (OPD) of a tertiary care hospital at Sree Gokulam Medical College and Research Foundation, Thiruvananthapuram, Kerala, India, between 10th October 2020 to 10th November 2020. Institutional Ethics Committee approval was obtained before data collection (IEC No. SGMC IEC/37/600/06/2020/F).

Inclusion criteria: Pregnant women who were willing to take part in the study.

Exclusion criteria: Antenatal women with eclampsia, preclampsia, placenta previa, any disease to heart or kidney and foetal anomalies were excluded from the study.

Sample size calculation: Sample size was calculated using the formula:

$$\frac{Z^2_{1-\alpha/2}p(1-p)}{d^2}$$

The calculated sample size for this study was 234 with proportion of pregnant women with moderate/severe anxiety-stress obtained as 74% (p) from pilot study on 30 samples; relative precision of 10% (d) and level of significance 1% (α). Eventually 348 women, attending the hospital were included in the study.

Study Procedure

Pregnant women who were willing to participate were directly asked to fill a validated self-administered structured questionnaire in the Obstetrics and Gynaecology Outpatient Department (OPD), after obtaining their informed consent. The filled-up questionnaire was collected before leaving the OPD. Consecutive sampling technique was employed. The self-reported questionnaire consisted of two sections. First part is socio-personal and obstetrics characteristics such as age, education level, occupational status, socio-economic level, area of residence, parity, gestational age, living arrangement and history of anxiety disorder [17]. Moreover, two more questions to assess the knowledge regarding COVID-19 and its control measures and how they follow the instructions of Government authorities to prevent the spread of COVID-19.

Second part contained fifteen items tapping the respondent's COVID-19 related anxiety and stress as reflected in their perception regarding several aspects of the situation using a validated questionnaire "Pandemic Anxiety Stress Scale for Pregnant women" (PASSP) [18] [Appendix 1]. This tool contains fifteen items to assess the anxiety and stress among pregnant women during COVID-19 pandemic. The reliability coefficient, Cronbach's alpha of the tool was 0.88 demonstrating good reliability. Response options were "never", "rarely", "sometimes", "often", and "always" and scored as 0, 1, 2, 3 and 4, respectively. The total score ranges from 0 to 60 with higher scores indicating higher perceived anxiety stress. Those women who had a scores ranging from 0-14 were considered as normal, 15-29 as mild, 30-44 as moderate and from 45-60 were considered as severe perceived anxiety-stress. During the study period, 364 women filled the questionnaire, 348 records were included in the analysis after excluding incomplete records.

STATISTICAL ANALYSIS

Statistical analysis was carried out using Statistical Package for Social Sciences (SPSS) software Released 2009, version 18.0. Chicago: SPSS Inc. Qualitative variables were expressed in frequency and percentage. Chi-square/Fisher's-exact test was done to find out the socio-personal variables associated with anxiety. Binary logistic regression model was used to compute the Odds Ratio (OR) and 95% confidence interval among the variables which are found to be significant. Multivariate logistic regression was done on the variables with p-value <0.10 using the forward step-wise method.

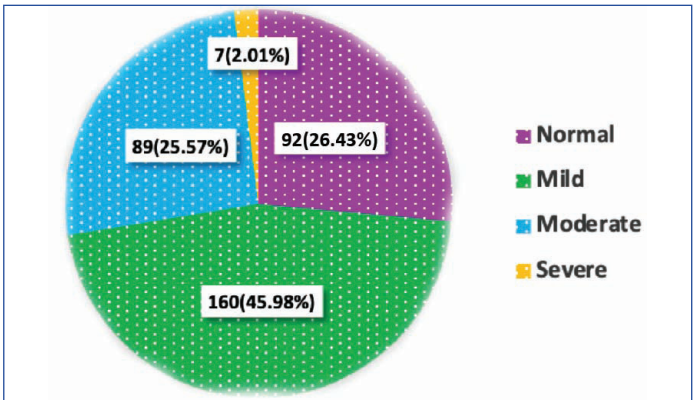
RESULTS

The response rate of the study was 348 (95.6%). The mean age of the 348 participants was 26.18 years with standard deviation of 3.67 years with a minimum age of 18 years and maximum age of 39 years. Forty two (12.07%) of antenatal women were in the first trimester, 118 (33.91%) in the second trimester and 188 (54.02%) in the third trimester. There were 203 nulliparous women (58.3%). Pregnancy related co-morbidities were reported by 176 (50.57%) participants. History of past or current anxiety disorder was reported by only 13 (3.73%) participants. The socio-demographic patterns of the study participants are given in [Table/Fig-1].

Variables		Frequency (%)
Age (years)	<25	173 (49.71)
	25-30	132 (37.93)
	30-35	38 (10.92)
	>35	5 (1.44)
Education	Upto high school	20 (5.75)
	Higher secondary (Plus 2)	67 (19.25)
	Graduate	132 (37.93)
	Postgraduate	67 (19.25)
	Professional	62 (17.82)
Employment status	Currently employed	88 (25.29)
	Previously employed	96 (27.59)
	Not employed	164 (47.13)
Socio-economic status	Lower class	15 (4.31)
	Lower middle class	35 (10.06)
	Middle class	244 (70.11)
	Upper middle class	42 (12.07)
	Upper class	12 (3.45)
Area of residence	Corporation	33 (9.48)
	Municipality	51 (14.66)
	Panchayath	264 (75.86)
Living status	With husband	122 (35.06)
	With husband and child/children	71 (20.40)
	With husband, child/children, parents	41 (11.78)
	With husband and child/children parents/in laws	114 (32.76)

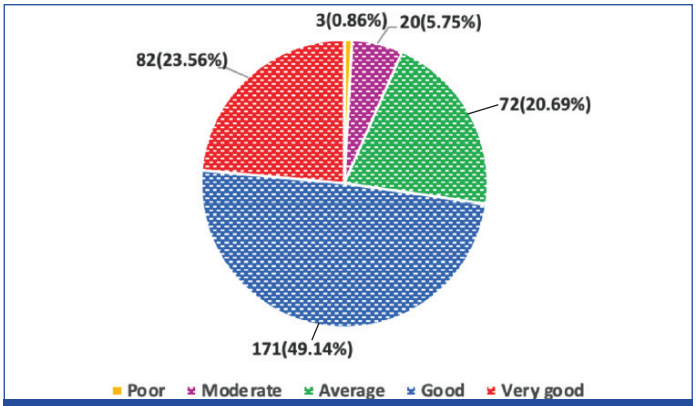
[Table/Fig-1]: Socio-demographic pattern of study participants (n=348).

Among the pregnant women 7 (2.01%) had severe perceived anxiety-stress followed by 89 (25.57%) had moderate and majority 160 (45.98%) had mild anxiety [Table/Fig-2].



[Table/Fig-2]: Level of anxiety stress among pregnant women during COVID-19 pandemic.

The tool opens with a question to assess the self-rated knowledge regarding the measures to prevent COVID-19 infection among them. Among the 348 participants, 171 (49.14%) responded that they had good knowledge followed by 82 (23.56%) opined of very good knowledge. The distribution is given in [Table/Fig-3]. The first part of the tool ended with a question to assess how well they follow the recommendations of Government authorities to prevent the spread of disease, 317 (91.09%) replied that they were very much following, 25 (7.18%) were of the opinion that they were rather much following, 6 (1.72%) responded as to some extent/only a little/not at all. Total 208 (59.77%) presumed that COVID-19 become serious if affected in pregnancy. Response of participants to PASSP questionnaire is mentioned in [Table/Fig-4]. Anxiety regarding vertical transmission of disease to baby was reported by 145 (41.67%). The association between socio-demographic variables and anxiety is seen in [Table/Fig-5]. Gestational age, education, parity and past history of mental illness had no statistically significant association with anxiety-stress.



[Table/Fig-3]: Self-rated level of knowledge.

Items	Never n (%)	Rarely n (%)	Sometimes n (%)	Often n (%)	Always n (%)
1. In the last month, how often have you been worried about getting infected with coronavirus?	65 (18.68)	89 (25.57)	125 (35.92)	49 (14.08)	20 (5.75)
2. In the past month, how often have you been worried that you will get infected by COVID-19 due to hospital visits?	48 (13.79)	76 (21.84)	124 (35.63)	72 (20.69)	28 (8.05)
3. In the last month, how often have you been upset because of the recent changes happened unexpectedly?	40 (11.49)	34 (9.77)	72 (20.69)	117 (33.62)	85 (24.43)
4. In the last month, how often have you felt that you were unable to control the important things in your life?	92 (26.44)	74 (21.26)	92 (26.44)	69 (19.83)	21 (6.03)
5. In the last month, how often have you felt nervous and stressed?	89 (25.57)	76 (21.84)	94 (27.01)	67 (19.25)	22 (6.32)
6. In the last month, how often have you felt that you could not tackle all the things that you had to do?	115 (33.05)	90 (25.86)	86 (24.71)	44 (12.64)	13 (3.74)
7. In the last month, how often have you been angered because of things that are outside your control?	108 (31.03)	88 (25.29)	88 (25.29)	54 (15.52)	10 (2.87)
8. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	129 (37.07)	111 (31.90)	82 (23.56)	21 (6.03)	5 (1.44)
9. In the past month, how often have you worried about getting medical supplements?	119 (34.20)	99 (28.45)	80 (22.99)	40 (11.49)	10 (2.87)
10. In the past month, how many times have you worried about any medical illness associated with pregnancy	127 (36.49)	84 (24.14)	87 (25.00)	45 (12.93)	5 (1.44)
11. In the past month, how many times have you worried about your unborn baby being affected by COVID-19?	110 (31.61)	93 (26.72)	99 (28.45)	36 (10.34)	10 (2.87)
12. How often have you worried that the new born will have to go through this epidemic?	80 (22.99)	123 (35.34)	91 (26.15)	40 (11.49)	14 (4.02)
13. In the past month, how often have you worried about your family and other children, if any?	61 (17.53)	102 (29.31)	91 (26.15)	73 (20.98)	21 (6.03)
14. In the last month, how often had you been unable to sleep comfortably due to thoughts related to this pandemic?	137 (39.37)	90 (25.86)	79 (22.70)	36 (10.34)	6 (1.72)
15. In the last month, how often have you worried of contracting COVID-19 when a stranger came close to you?	116 (33.33)	80 (22.99)	80 (22.99)	57 (16.38)	15 (4.31)

[Table/Fig-4]: Response of participants to PASSP questionnaire.

Variables	Normal/ mild	Moderate/ severe	Total	χ^2/Fisher's-exact test value	p-value
Age (years)					
<25	134 (53.17)	39 (40.63)	173	4.606	0.197
25-29	90 (35.71)	42 (43.75)	132		
30-35	25 (9.92)	13 (13.54)	38		
>35	3 (1.19)	2 (2.08)	5		
Education					
High school	14 (5.56)	6 (6.25)	20	6.456	0.168
Higher secondary (Plus 2)	51 (20.24)	16 (16.67)	67		
Graduate	99 (39.29)	33 (34.38)	132		
Postgraduate	51 (20.24)	16 (16.67)	67		
Professional	37 (14.68)	25 (26.04)	62		
Occupational status					
Currently working	51 (20.24)	37 (38.54)	88	12.327	<0.001**
Not working	201 (79.76)	59 (61.46)	260		
Socio-economic status					
Lower class	13 (5.16)	2 (2.08)	15	6.524	0.033*
Middle class	234 (92.86)	87 (90.63)	321		
Upper class	5 (1.98)	7 (7.29)	12		
Place of residence					
Corporation	17 (6.75)	16 (16.67)	33	19.794	<0.0001***
Municipality	28 (11.11)	23 (23.96)	51		
Panchayath	207 (82.14)	57 (59.28)	264		
Pregnancy related co-morbidity					
No	104 (41.27)	68 (70.83)	172	24.306	<0.0001***
Yes	148 (58.73)	28 (29.17)	176		
Parity					
0	147 (58.32)	56 (58.31)	203	0.001	0.999
≥1	105 (41.68)	40 (41.69)	145		
Gestational weeks					
≤3	30 (11.90)	12 (12.50)	42	0.922	0.631
>3-6	82 (32.54)	36 (37.50)	118		
>6	140 (55.56)	48 (50.00)	188		
Living status					
With husband	83 (32.94)	39 (40.63)	122	3.374	0.185
With husband and children	57 (22.62)	14 (14.58)	71		
With husband, children, parents, in-laws	112 (44.44)	43 (44.79)	155		

History of mental illness					
No	247 (98.02)	94 (97.92)	341	0.003	0.953
Yes	5 (1.98)	2 (2.08)	7		

[Table/Fig-5]: Association between anxiety and socio-demographic variables.
† Fisher's exact value; *Significant at 5% **Significant at 1% ***Significant at 0.1%

Univariate logistic regression was done on the significant variables to estimate the OR and 95% CI. Place, occupational status, socio-economic status and pregnancy related co-morbidities of antenatal women were associated with anxiety-stress. Results are given in [Table/Fig-6].

Variables	OR	95% CI	p-value
Place			
Corporation	3.418	1.626-7.185	0.001**
Municipality	2.983	1.597-5.571	0.001**
Panchayath	1		
Occupational status			
Currently working	2.472	1.479-4.129	0.001**
Not working	1		
Socio economic status			
Lower class	2.417	0.534-10.928	0.252
Middle class	9.100	1.389-59.169	0.021*
Upper class	1		
Any other disease associated with pregnancy			
Yes	3.456	2.083-5.735	<0.0001***
No	1		
Living status			
With husband	1.224	0.729-2.055	0.445
With husband and children	0.640	0.323-1.266	0.199
With husband, children, parents, in-laws	1		

[Table/Fig-6]: Results of univariate logistic regression analysis.
*Significant at 5% **Significant at 1% ***Significant at 0.1%

Multivariate logistic regression with forward step-wise method was done on variables which are found to be significant at 10% in the univariate analysis. Results are given in [Table/Fig-7].

Variables	OR	95% CI	p-value
Place			
Corporation	2.149	1.092-4.231	0.027*
Municipality	1.836	0.800-4.211	0.151
Panchayath	1		
Occupational status			
Currently working	1.696	0.968-2.973	0.065
Not working	1		
Socio economic status			
Lower class	0.468	0.128-1.713	0.251
Middle class	0.297	0.039-2.257	0.241
Upper class	1		
Any other disease associated with pregnancy			
Yes	2.468	1.418-4.296	0.001**
No	1		
Living status			
With husband	0.823	0.392-1.727	0.606
With husband and children	0.965	0.548-1.699	0.901
With husband, children, parents, in-laws	1		

[Table/Fig-7]: Results of multivariate logistic regression analysis.
**Significant at 1% ***Significant at 0.1%

Multivariate logistic regression revealed that women residing in corporation area and having co-morbidities associated with pregnancy are the two socio-demographic variables associated with higher levels of anxiety and stress.

DISCUSSION

Pregnancy is most important period of every woman's life and it is considered as stressful and challenging period for women [19]. The pandemic might have caused elevated levels of anxiety and stress among the people specifically the antenatal women. The result of this study showed that 45.98% had mild, 25.57% had moderate and 2.01% had severe anxiety. Based on multiple logistic regression model, place of residence and co-morbidities associated with pregnancy are the two factors affecting anxiety and stress. Anxiety regarding vertical transmission of disease was reported by 41.67%. Global estimated prevalence of prenatal anxiety fluctuates between 14% and 24% [20-22]. But in this study period those with moderate and severe anxiety was 27.58%, higher than the global range [13]. The findings of the present study were compared with similar studies and are tabulated in [Table/Fig-8] [12-15].

Name of the study	Place of study	Sample size	Variables	
			Level of anxiety	Factors associated with anxiety stress
Present study	India	348	Normal/mild level of anxiety/stress- 72.4%	Place of residence and co-morbidities associated with pregnancy
Effati Daryani F et al., (2020) [12]	Iran	205	Normal/mild level of anxiety-stress-73.7%	Spouse's education level, spouse's support, marital life satisfaction and the number of pregnancies were the predictive factors of anxiety symptoms and the variables of spouse's education level, household income sufficiency, spouse's support and marital life satisfaction were predictors of stress symptoms.
Yue C et al., (2020) [13]	China	308	Normal/mild level of anxiety-stress -14.3%	
Stepowicz A et al., (2020) [14]	Poland	210	Low level of anxiety-30.5% Medium level of anxiety-34.8% High level of anxiety-34.8% Low level of stress-25.2% Medium level of stress-31.4% High level of stress- 43.3%	
Shrestha D et al., (2021) [15]	Nepal	273	Mild anxiety-91.57% Mild-moderate-7.69% Moderate-severe-0.73%	

[Table/Fig-8]: Comparison with similar studies [12-15].

A case-control study conducted by Lee DT et al., to study the anxiety among pregnant women during the outbreak of COVID-19 reported that anxiety in pregnant women was slightly higher than those who were pregnant before the outbreak but no significant difference were observed between the two groups [23]. In the present study, majority of pregnant women were under the normal/mild category (72.41%). This is consistent with the study conducted by Effati-Daryani F et al., in Iran, in which the normal/mild constitutes 73.7% [12]. Trimester of pregnancy is not associated with anxiety which is also in line with study by Effati-Daryani F et al., [12]. This may be because pregnant women are following the advice of healthcare professionals such as wearing mask, keeping social distancing, using sanitisers and avoiding public transportation, giving them the confidence to keep the pandemic away. Duranku F and Aksu E conducted a study in Turkey assessed the anxiety using Becks Anxiety Inventory tool reported that pregnant women exhibited higher levels of anxiety than usual [24]. It

has been reported in a study conducted in Israel that the levels of all aspects of COVID-19 related anxiety were quite high [25]. Association between age, education, socio-economic status, gestational weeks and anxiety were also reported, but in the present study only place of residence and co-morbidities related to pregnancy were found to be associated with anxiety which may be because of the educational, cultural and social differences between the two study settings.

Yue C et al., conducted a study in China and observed that out of a total of 308 pregnant women, 14.3% reported the incidence of anxiety which is less than reported in the present study, may be because the study was conducted within one month after confirmation of the first case of COVID-19 in the study setting in China [13]. A study conducted in Poland by Stepowicz A et al., concluded that anxiety levels in pregnant women during the COVID-19 pandemic are significantly higher [14]. Age, education, parity and co-morbidities occurred to be statistically not significant whereas history of mental illness, marital status and gestational age were found to be significant, but in the present study only place of residence and co-morbidities associated with pregnancy were found to be significant. Antenatal women living in rural areas were found to be less anxious than those in urban areas. This is because of people in urban areas are using more social media and spending more time on COVID-19 related information.

Furthermore, in Stepowicz A et al., study and the one by Saccone G et al., it was shown that anxiety levels experienced by women in the first trimester are higher than in later stages of pregnancy or postpartum. This is inconsistent with the present study's findings, where the trimester of pregnancy was not associated with anxiety level [14,16]. Saccone G et al., in his research conducted on a group of 100 pregnant women in Italy, reported more than two-thirds of the women reported higher than normal anxiety which is slightly lower than that of our study [16]. In the present study, many pregnant women had apprehension regarding vertical transmission of disease, which is investigated as 41.67% which is also in line with Saccone G et al., [16]. Shrestha D et al., conducted a descriptive study in Nepal among 273 antenatal women using the Hamilton anxiety rating scale reported that about 91.6% of the participants were in mild category followed by 7.7% in the mild to moderate category and only 0.7% in the moderate to severe category, which is lesser than that reported in the present study [15].

Sukumaran SAB et al., reported that 24.2% pregnant women in Kerala missed their scheduled antenatal visit atleast once, 12.7% missed twice and 3.2% missed three or more times during the pandemic period. Missing the scheduled hospital visit due to lockdown and restrictions also could be a reason for increased the anxiety and stress among pregnant women [26]. In the current study nearly 49.14% women self-rated their knowledge on COVID-19 protective measures as good followed by 23.56% with very good knowledge. In another study in Kerala, it is reported that knowledge among pregnant women regarding COVID-19 and its preventive measures rated as very good by 22.22%, good by 50%, average by 22.22%, limited knowledge by 6.16% and poor by 0.40% by pregnant women [26].

Limitation(s)

The sampling population was from a tertiary care hospital in Trivandrum district in Kerala, which may limit the generalisability.

CONCLUSION(S)

Among the 348, 96 (27.58%) of pregnant women have moderate/severe level of anxiety and stress. Antenatal women with pregnancy related co-morbidities and living in urban area had more anxiety and stress. The results of the present study help to identify pregnant women at greater risk and provide them with adequate psychological support. These findings recommend actions by healthcare system with the aim of supporting pregnant women to alleviate their anxiety and stress. In the current scenario, this can be achieved best by tele-counselling facility or by setting online groups to attend their concerns and refer those with high level of anxiety or stress to counsellors. This study was conducted in a tertiary care hospital in Kerala. A nation-wide multicentric study can reveal the psychological impact of COVID-19 on antenatal women and the possible consequences during their postpartum period.

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[APPENDIX-1]

Perceived Anxiety and Stress among Pregnant women during COVID-19 Pandemic

MRD No: Name:

A. Socio-personal details

1. Age (years)
2. Phone number (optional)
3. Educational status
   Professional/PG/Graduate/Diploma/Higher Secondary/High school/Primary school
4. Employment status:
   Currently employed/Previously employed/Not Employed
5. Socio-economic status:
   Lower class/Lower middle class/Middle class/Upper middle class/Upper class
6. Your Living Status? a) With Husband; b) With Husband and child/children; c) With Parents; d) With Parents/in laws, Husband and child/children
7. Area of residence:
   Corporation/Municipality/Panchayath
8. No of children (other than the current pregnancy):
9. Which month of pregnancy are you in?
10. Do you have any medical illness related to pregnancy?
    Yes/No
11. Do you have any psychiatric illness? Yes/No
12. Have you ever been diagnosed/taken treatment for anxiety related disorders? Yes/No
13. Do you think COVID-19 infection will be more serious during pregnancy? Yes/No
14. Rate your knowledge regarding COVID-19 and its control measures:
    Poor/Moderate/Average/Good/Very Good
15. I follow the instructions provided by the Government health authorities to contain the spread of COVID-19:
    Not at all/Only a little/To some extent/Rather much/Very much

B. Pandemic Anxiety Stress Scale for Pregnant women (PASSP)

16. In the last month, how often have you been worried about getting infected with coronavirus?
    Never/Rarely/Sometimes/Often/Always
17. In the past month, how often have you been worried that you will get infected by COVID-19 due to hospital visits?
    Never/Rarely/Sometimes/Often/Always
18. In the last month, how often have you been upset because of the recent changes happening unexpectedly?
    Never/Rarely/Sometimes/Often/Always
19. In the last month, how often have you felt that you were unable to control the important things in your life?
    Never/Rarely/Sometimes/Often/Always
20. In the last month, how often have you felt nervous and stressed?
    Never/Rarely/Sometimes/Often/Always
21. In the last month, how often have you felt that you could not tackle all the things that you had to do?
    Never/Rarely/Sometimes/Often/Always
22. In the last month, how often have you been angered because of things that are outside your control?
    Never/Rarely/Sometimes/Often/Always
23. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
    Never/Rarely/Sometimes/Often/Always
24. In the past month, how often have you been worried about getting medical supplements?
    Never/Rarely/Sometimes/Often/Always
25. In the past month, how often have you worried about any medical illness associated with pregnancy?
    Never/Rarely/Sometimes/Often/Always
26. In the past month, how often have you worried about your unborn baby being affected by COVID-19?
    Never/Rarely/Sometimes/Often/Always
27. How often have you worried that the newborn would have to go through this epidemic?
    Never/Rarely/Sometimes/Often/Always
28. In the past month, how often have you worried about your family and other children if any?
    Never/Rarely/Sometimes/Often/Always
29. In the last month, how often have you been unable to sleep comfortably due to thoughts related to this pandemic?
    Never/Rarely/Sometimes/Often/Always
30. In the last month, how often have you worried of contracting COVID-19 when a stranger came close to you?
    Never/Rarely/Sometimes/Often/Always