

Antenatal mothers and COVID-19 pandemic- a KAP study

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ABSTRACT

INTRODUCTION – Pregnancy is a significant experience in a woman's life. Pregnancy during a pandemic lead to additional concern and anxiety to both mother and caregiver. Hence, it is essential to evaluate, assess and increase level of COVID awareness in pregnant women to provide better care and overall, a safe experience throughout pregnancy. **OBJECTIVE** - To assess knowledge, attitude, and practices towards COVID-19 in pregnant women. **METHODOLOGY** – A total of 100 antenatal women were interviewed for the study. Self-designed, semi-structured questionnaire was provided to pregnant women to know their level of awareness and attitude towards COVID, and their safe practices for COVID prevention. The results from their responses were analysed for descriptive statistics. **RESULTS** – 95% had good knowledge about symptoms, 44% opined that virus may get transmitted from mother to baby during pregnancy, 52% don't know about asymptomatic carriers, 100% thought that by following all the guidelines given by the health authorities may prevent spread of disease and early detection will have good outcomes. 100% were following good practices such as wearing a mask, hand sanitization and social distancing. **CONCLUSION** – The study shows that the population has good knowledge, positive attitude and follow good practices. Inclusion of COVID counselling by the attending doctor during antenatal care visits may help in relieving fear and anxiety about transmission of the virus from mother to baby.

Key word: COVID-19 pandemic, Antenatal mothers, pregnancy, Antenatal visit

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INTRODUCTION

The Novel Coronavirus, also known as SARS-CoV-2, started in China in December 2019 has spread globally in a short period, making it a pandemic disease as declared by the WHO in March 2020⁽¹⁾. There were around 33 million cases of confirmed COVID-19 with more than 1 million demises globally from beginning of pandemic till September 2020⁽²⁾. This pandemic disease has brought an enormous impact both socially and economically. The COVID-19 outbreak has disrupted the health care system of many countries. Though the number of COVID positive cases had declined, there is still a chance of re-infection. And hence, pursuing

preventive measures are essential as there is no definitive treatment available. Although plasma therapy and medications like Favipiravir, Remdesivir, Hydroxychloroquine are used as supportive mode of treatment ⁽³⁾, research are going towards development of definitive treatment and vaccination.

Pregnancy is the most important event in a woman's life; being pregnant during a pandemic adds extra concern and anxiousness to both mother and caregiver. The changes that occur during pregnancy make pregnant women more susceptible to infections ⁽⁴⁾. Immunologic alterations during pregnancy may help to explain the altered severity and susceptibility

to infectious diseases during pregnancy (4). So, it is important that every pregnant woman must be made aware about the disease and its preventive measures to have safe and uneventful antenatal period.

As of now there are no evidence found about the adverse effects of COVID-19 on pregnancy. Due to limited resources and facilities, it is a challenge for health care system to ensure safe pregnancy and wellbeing of every pregnant woman.

OBJECTIVE: To assess knowledge, attitude, and practices among pregnant women during COVID-19 pandemic.

MATERIAL AND METHODS

This was a Cross sectional study conducted in Nov.2020.Antenatal mothers attending a teaching hospital were key respondents in our study

Self-designed, semi structured questionnaire was used to collect the data. The questionnaire consists of two parts, 1st part containing socio demographic details and obstetric details, 2nd part containing questions about knowledge, attitude, and practices.

Sample size estimation: Sample size was calculated using the formula: $n = z^2pq/d^2$

Assuming prevalence of knowledge to be 50%, and taking 10% of absolute precision. $p=50$, $q(100-p) = (100-50) =50$, $d=10$.

Sample size, $n = 4x50x50/100 =100$.

Sampling method: All the pregnant women attending the Antenatal OPD who fulfilled the inclusion and exclusion criteria were taken into the study till the required sample of 100 was reached.

Inclusion criteria: All antenatal mothers attending Antenatal OPD in a teaching hospital in Guntur and those who gave consent.

Exclusion criteria: Those who were not willing to participate in the study and who were COVID-19 positive.

Ethical clearance: Ethical clearance was taken from the institutional ethics committee.

Study method: Women were explained about the study and were asked to fill the form containing questionnaire in local language.

Data analysis: The data collected was entered in MS Excel and were analyzed for descriptive statistics.

RESULTS

A total of 100 antenatal women participated in the study, and their demographic details were shown in Table 1 and Table 2 shows obstetric details. Tables 3, 4 and 5 show details of knowledge, attitude, and practices respectively.

Table 1: Demographic details of the study participants

Variable	Percentage
AGE	
≤20 YEARS	13
21-25 YEARS	53
26-30 YEARS	26
>30YEARS	8
PLACE OF LIVING	
Rural	62
Urban	38
RELIGION	
Hindu	93
Muslim	4
Christian	3
TYPE OF FAMILY	
Nuclear	78
Extended	22
OCCUPATION	
Housewife	62
Labour	31
Job holders	7
EDUCATION	
Illiterates	4
Primary education	2
Secondary education	15
Highschool/Diploma	28
Intermediate	36
Graduate	15
SOCIO ECONOMIC STATUS	
Upper middle	18
Lower middle	36
Upper lower	34
Lower	12

Table 2: Obstetric details of study participants

Gravid score	Percentage (%)
1	44
2	38
3	16
>3	2
Gestational Age	
1-12	12
13-28	57
29-40	31

Table 3: Knowledge of antenatal women towards COVID-19

Knowledge questions	Yes	No
Know about Symptoms of COVID	95%	5%
Know about Modes of transmission	93%	7%
Know about Preventive measures	100%	0%
Virus is transmitted from mother to baby during pregnancy	44%	56%
IFA must be continued even if mother gets positive for COVID	87%	13%
Can a person transmit virus without symptoms (asymptomatic carriers)	48%	52%
In case of pre-existing comorbidities, COVID has bad out comes	97%	3%
You should get self-isolated and get tested if you come in close contact with positive COVID patient	96%	4%
If COVID positive, medication given for treatment of COVID may harm baby	50%	50%
ANC services continued in all public hospitals even during lock down	96%	4%
Received Inj. T.T	97%	3%
If positive for COVID, Mother must wear face mask while breastfeeding	43%	57%
Use face mask for baby	61%	39%

Among 100 antenatal mothers, 13% were of age less than 20 years, 53% between 21-25 years, 26% 26-30 years and 8% were in age more than 30years. 62% were from rural area and 38% were from urban area. 93% were Hindus, 4% were Muslims and 3% were Christians. 78% belonged to nuclear family and 22% to extended family. 62% were housewives, 31% work as daily labourers and 7% were job holders. 4% of them were illiterate, 2% completed their primary education and 15% completed secondary education, 28% finished high school, 36% studied till intermediate and 15% were graduates. 18% of the participants belonged to upper middle-class group, 36% to lower middle-class group, 34% belong to upper lower class and 12% belong to lower class. (Table 1)

Among these 100 participants, 44% were primigravida and 38% were pregnant for 2nd time, 16% were pregnant for 3rd time and 2% were pregnant

for more than 3 times. Among them 12% were in 1st trimester, 57% were in 2nd trimester and 31% were in 3rd trimester. (Table 2)

Among all participants, 95% of participants know that symptoms of COVID are fever, cough, sore throat, loss of smell. 65% know that the disease spreads by respiratory droplets and fomites while 28% thought that disease spreads only by respiratory droplets. All the participants know that the preventive measures to be followed are wearing face mask, frequent hand sanitization and social distancing. (Table-3)

Table 4: Attitude of antenatal mothers towards COVID-19

Attitude Questions	Yes	No
Is COVID a dangerous disease?	89%	11%
Will early detection of COVID has good outcomes?	100%	0%
Health authorities should ensure that all pregnant women in containment zone get tested for COVID irrespective of symptoms.	73%	27%
Compliance with health guidelines will prevent spread of COVID	100%	0%

Table 5: Practices of antenatal women towards COVID-19

Practices questions	Yes	No
Did you wear mask every time you go outside?	100%	0%
Did you wash/sanitize your hands frequently?	100%	0%
Did you maintain physical distance when you go outside?	100%	0%
Did you avoid cultural functions?	74%	26%
Did you avoid handshake, hug or other physical contact?	82%	18%
Did you modify your diet to healthy diet to boost your immunity?	71%	29%
Did you avoid consuming outside food?	97%	3%

DISCUSSION

Corona virus, a relatively new virus had shown devastating effect on mankind in short span. Due to novelty of the disease, it took time for doctors and researchers to understand the disease and ways to prevent it. After finding the preventive measures, the government authorities had taken up task of spreading awareness enormously. Pregnant women are always among the risk group, so it's important to know their level of knowledge and attitude towards the disease and the practices they follow to prevent the disease. So, if found any deficit, necessary initiatives can be taken to improve their awareness. In this study, it is better that 95% of participants are aware of symptoms of COVID like fever, cough, sore throat, loss of smell. This implicates, the efforts taken by the health authorities to evoke public awareness about the disease to reduce its spread was successful. 65% of participants knew the modes of transmission of the disease as respiratory droplets and fomites. 28% thought that only respiratory droplets is the mode of transmission and 7% of participants didn't know what fomites are. Hence enlightening the public about fomites and their role in spreading the disease is also needed. The public must also be made aware of role of asymptomatic carriers in spreading the disease as our study shows 52% don't know that a person can be COVID positive even without symptoms. 35% of participants thought the virus may get transmitted from mother to baby, so during every antenatal visit counselling must be given to all mothers to reassure them about the safety of the baby. This counselling may also help in providing psychological support to pregnant women to relieve their anxiety, as there are studies that showed increasing number of COVID cases has brought psychological stress, anxiety and depression among pregnant women ⁽⁵⁾. 100% participants were following wearing masks when they go outside, maintain social distancing, wash hands frequently, implying good practices among antenatal mothers. Also, it is important that every pregnant woman must be educated about breast feeding of the baby by taking all preventive measures like hand washing and wearing a mask while breastfeeding if mother is positive for COVID-19⁽⁶⁾ as 57% didn't know about using mask while breastfeeding. 61% thought to use face mask for baby, so mother must be mentioned about not to put a face shield or mask for baby ⁽⁶⁾. A similar kind of study done by Kamal D et al., showed scores for adequate knowledge, positive attitude, and

good practices as 75.3%, 73.9% and 92.7% respectively ⁽⁷⁾.

CONCLUSION

The study shows that the antenatal mothers had good knowledge, positive attitude and were following good practices. Inclusion of COVID counselling by the attending doctor during antenatal visits may help in relieving fear and anxiety about transmission of the virus from mother to baby.

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