



# A STUDY ON ANTENATAL CARE DURING COVID-19 PANDEMIC AMONG RURAL PREGNANT WOMEN

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## ABSTRACT:

*COVID-19 pandemic has posed unprecedented challenges to public health, food systems and economic structure of the world leading to dramatic loss of human life and income. Antenatal care is one such non-emergency yet essential health service which got overlooked and hence was compromised. However, in the current pandemic situation such frequent visits to hospital for seeking care; will expose the expectant mothers and their fetuses to COVID-19 infection. The present study was envisaged with broad aim to study Impact of pandemic situation on antenatal care of pregnant women living in rural area. A sample of 75 of pregnant women of the age group of 23 to 26 years from rural area, kanakapura was randomly selected for the present study. The tool was used to elicit the information was a developed scale by Dr.Muhaidat.N, Fram K, Thekrallab.F, Qatawneh A and Al.Btoish.A(2020). The data obtained was tabulated and analyzed by student t-test and chi-square test. The results show that the mean score of 9.23 and mean percentage of 19.2 of the respondents got affected with pandemic during covid-19.*

Keywords: antenatal care, pandemic condition

## INTRODUCTION:

Corona virus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, some will become seriously ill and require medical attention. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness. Anyone can get sick with COVID-19 and become seriously ill or die at any age.

In human pregnancy, prenatal development is also called **antenatal development**. The development of the human embryo follows fertilization, and continues as fetal development. By the end of the tenth week of gestational age the embryo has acquired its basic form and is referred to as a fetus. The next period is that of fetal development where many organs become fully developed. This fetal period is described both topically (by organ) and chronologically (by time) with major occurrences being listed by gestational age. Apart from the vulnerability factors associated with the expected changes of pregnancy, women may also experience increased psychological symptoms associated with the pandemic. Uncertainty about the new virus, anxiety and fear has significantly affected the wellbeing of pregnant woman. The main causes of anxiety, depression and stress were associated with fear of being infected while in public places, using public transport, during delivery at hospital, along with fear of vertical transmission of SARS-CoV-2. These variables have led women to avoid contacting hospitals/health units, withdrawing scheduled prenatal appointments, which ultimately led to reduced medical control during pregnancy. Furthermore, fake information communicated through social media has increased pessimistic thoughts in pregnant women

Without being healthy herself, a mother cannot completely provide her child with the adequate nourishment that an infant needs, and only with active attention, awareness, and invention can the world home come closer to reaching zero material and newborn mortality late.

Pregnancy period is a precious time for an expected mother, full of excitement and anticipation. Pregnant women need be aware of various events of pregnancy, including how the fetus will develop and grow in the maternal womb. In this case establishing appropriate strategies to address the physical and mental health of the pregnant women is very important and these groups are very venerable in the society, especially during pandemic period.

The period between 23-26 years is a time of heightened psychological vulnerability and onset during pandemic situation, Promoting healthy lifestyles and taking steps to better to educate and protect prenatal group from health risks will ensure longer, more productive lives. Knowing the significance of the care of prenatal period a researcher felt a need to undertake the study on impact of pandemic situation on antenatal care. It is the need of hour to understand importance of care of prenatal period during pandemic for their betterment of life, thus the study was undertaken and entitled as to “Impact of pandemic situation on antenatal care of pregnant women”.

## METHODOLOGY:

The aim of the study is to study antenatal care of pregnant women living in rural area during covid-19 pandemic.

### Objectives:-

1. To study the antenatal care of pregnant women during covid-19 pandemic in rural area.

### Hypothesis: -

1. There is a no impact of covid-19 pandemic circumstance on antenatal care among pregnant women.

### Procedure:

A survey method was done to identify the hospitals situated in rural area of kanakapura. A random sampling method was applied for selection of sample. A tool developed by Dr.Muhaidat.N, Fram K, Thekrallab.F, Qatawneh A and Al.Btoish.A (2020), Department of Obstetrics and Gynecology, University of Jordan was used for data collection. The tool is comprised of two parts; Basic data and specific data. The basic data was self constructed tool. Specific data contains information related to dimensions of care of pregnancy during pandemic. The question for specific information comprises of 48 statements having 2 points scale covering 11 dimensions.

## RESULT AND DISCUSSION:

The result of the study is discussed as below.

**TABLE – 1**

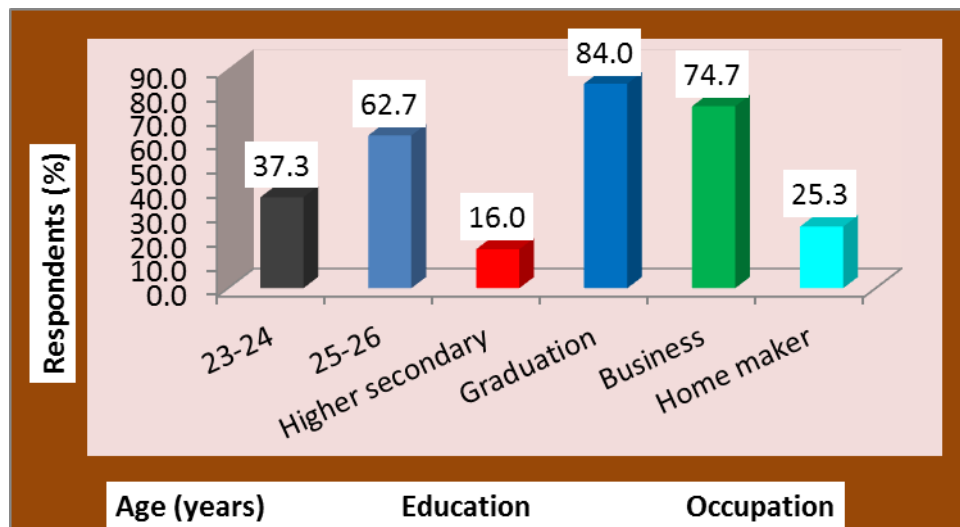
### Classification of Respondents by Age group, Educational level and Occupational status

N=75

Characteristics	Category	Respondents	
		Number	Percent
Age group (years)	23-24	28	37.3
	25-26	47	62.7
Educational level	Higher secondary	12	16.0
	Graduation	63	84.0
Occupational status	Business/Self employed	56	74.7
	Home maker	19	25.3
<b>Total</b>		<b>75</b>	<b>100.0</b>

Table 1 and Figure 1 depicts that the classification of respondents by age group, educational level and occupational status. It reveals that around 63% of the respondents were belongs to 25 to 26 years of age and 37.3% of the respondent were belongs to 23 to 24 years of age. Majority (84%) of the respondent were done

with their graduation whereas, 16% of the respondents had higher secondary education. Around 75% of the respondents were self employed and 25.3% of the respondents were home makers.



**Figure .1: Classification of Respondents by Age group, Educational level and Occupational status**

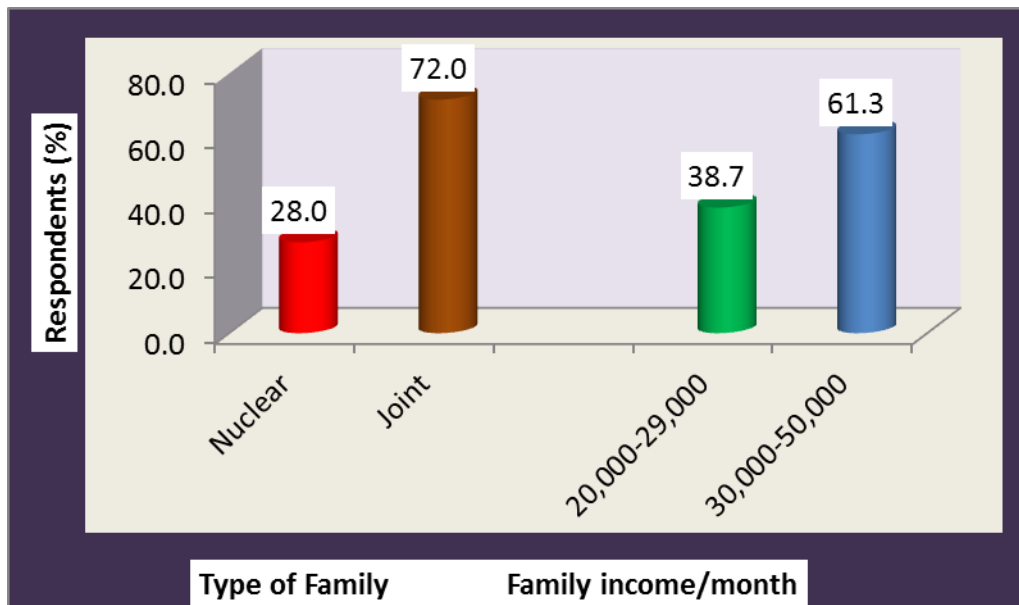
**TABLE – 2**

**Classification of Respondents by Type of family and Family income**

N=75

Characteristics	Category	Respondents	
		Number	Percent
Type of family	Nuclear	21	28.0
	Joint	54	72.0
Family income/month	Rs.20,000-29,000	29	38.7
	Rs.30,000-50,000	46	61.3
<b>Total</b>		<b>75</b>	<b>100.0</b>

The table 2 and figure 2 indicates that types of family and income of the family of respondents. Majority (72%) of the respondents were belongs to joint family and 28% of the respondents were belongs to nuclear family. 61.3% of the respondents has earning between Rs. 33,000/- to 50,000/- per month whereas around 39% of the respondent earning was between Rs. 20,000/- to 29,000/- per month.



**Figure.2: Classification of Respondents by Type of family and Family income**

**TABLE – 3**

**Classification of Respondents by Educational and Occupational status of respondents' husband**

N=75

Characteristics	Category	Respondents	
		Number	Percent
Educational status of husband	Graduation	49	65.3
	Post graduate degree	26	34.7
Occupation of Husband	Government	28	37.3
	Private	29	38.7
	Business/Self employed	18	24.0
<b>Total</b>		<b>75</b>	<b>100.0</b>

Table 3 and figure 3 depict that education and occupational status of the respondent's husband. 65.3% of the respondent's husband has pursued graduation and around 38% of the respondent's husband was completed post graduate degree. Majority (38.7%) of the respondent's husband selected private sector as their occupation followed by 37.3% of respondent's husband were working under government sector and 24% of the respondent's husband have chosen business for their occupation.

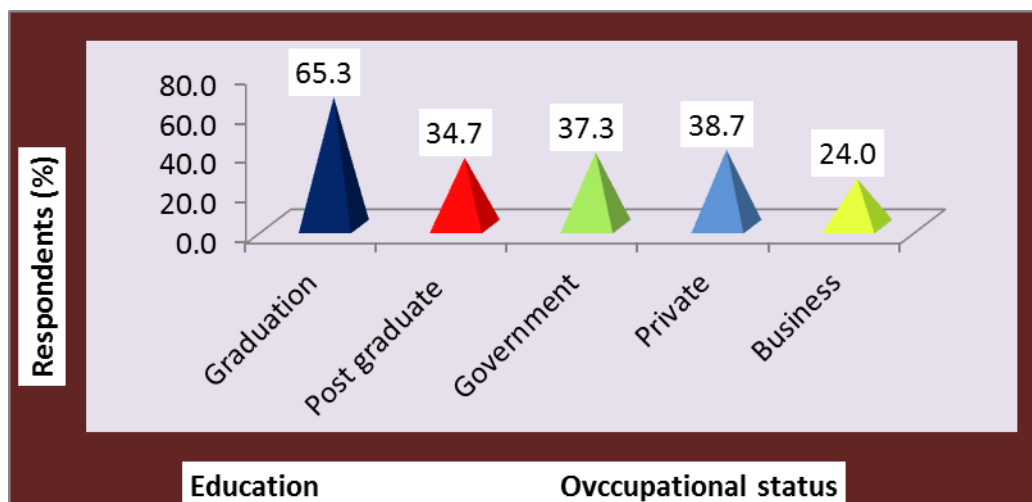


Figure .3: Classification of Respondents by Education and Occupational status of Husband

TABLE – 4

Classification of Respondents by Antenatal care provider prior to lockdown

N=75

Characteristics	Category	Respondents	
		Number	Percent
Antenatal care provider prior to lockdown	Private health worker	56	74.7
	Public health worker	19	25.3
Trimester of Pregnancy	Second	10	13.3
	Third	65	86.7
Type of Delivery	Vaginal delivery	56	74.7
	Caesarean section	19	25.3
<b>Total</b>		<b>75</b>	<b>100.0</b>

Table 4 indicates that classification of respondents by antenatal care provider prior to lockdown. Majority (74.7%) of the respondents were taken health checkup from private health workers, followed by 25.3% from public health sectors (government hospitals). Around 87% of the respondents were in 3<sup>rd</sup> trimester and 13.3% of the respondents were belongs to 2<sup>nd</sup> trimester. Majority (74.7%) of the respondents had gone through normal delivery and 25.3% of the respondents were delivered under caesarean section.

TABLE – 5

## Classification of Respondents on Impact of Pandemic Circumstances

Impact Level	Category	Respondents	
		Number	Percent
Very Low	< 15 % Score	32	42.7
Low	15-30 % Score	43	57.3
High	> 30 % Score	0	0.0
Total		75	100.0

The score obtained by the respondents have been totaled up and divided and has been categorized into three level of impact.

Table 5 and figure 4 depicts that level of impact of pandemic circumstance on antenatal care among pregnant women. According to the score obtained 57.3% of the respondent had been affected with the 15 to 30 percent and about 42.7% of the respondents were got affected with the less than 15 percent. The results are in line with the study conducted on “Clinical update on COVID-19 in pregnancy” (2020) by Ryan GA, et.al, which reviled that impact of covid-19 pandemic on antenatal care among pregnant women, is low.

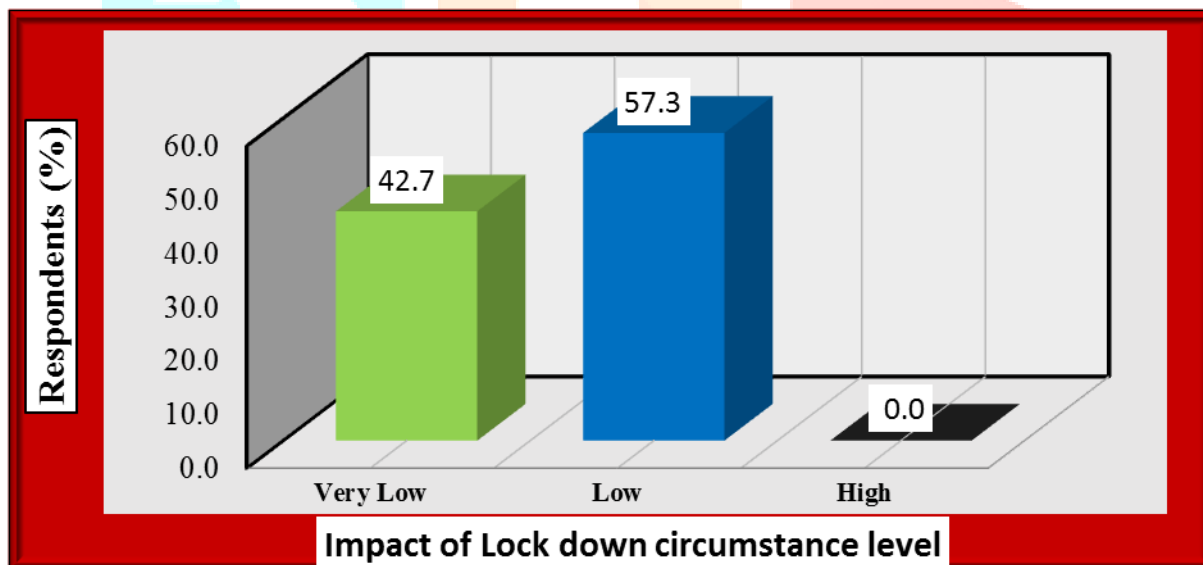


Figure .4: Classification of Respondents on Impact of pandemic Circumstances

TABLE -6

## Overall Mean Impact of Pandemic Circumstances scores

N=75

No.	Aspect	Statem ents	Max. Score	Scores			
				Mean	SD	Mean (%)	SD (%)
1	Impact of Pandemic Circumstances	48	48	9.23	4.07	19.2	8.5

Table 6 interprets that overall impact of pandemic circumstances. The results shows that the mean score of 9.23 and mean percentage of 19.2 of the respondents got affected with pandemic during covid-19. Thus rejecting the null hypothesis there is no impact of covid-19 pandemic circumstance on antenatal care among pregnant women.

**CONCLUSIONS:**

Pregnant women do not appear more likely to contract the infection than the general population. However, pregnancy itself alters the body's immune system and response to viral infections in general, which can occasionally be related to more severe symptoms and this will be the same for COVID-19. This is a time when purposeful prevention and intervention strategies may still alter trajectories and decreases threats to health along with the newborn life course.

**REFERENCES**

1. Kotlar, B., Gerson, E. and Petrillo, S. The impact of the COVID-19 pandemic on maternal and perinatal health: a scoping review. *Reprod Health* 18, 10 (2021). <https://doi.org/10.1186/s12978-021-01070-6>
2. Ryan GA, Purandare NC, McAuliffe FM, Hod M, Purandare CN. Clinical update on COVID-19 in pregnancy: A review article. *J Obstet Gynaecol Res.* 2020 Aug; 46(8):1235-1245. doi: 10.1111/jog.14321. Epub 2020 Jun 4. PMID: 32500549; PMCID: PMC7300676.



3. Jelly P, Chadha L, Kaur N, et al. (January 23, 2021) Impact of COVID-19 Pandemic on the Psychological Status of Pregnant Women. Cureus 13(1): e12875. doi:10.7759/cureus.12875

