



# Impact Of Educational Program On Knowledge Related To Covid-19 & Its Prevention Among Antenatal Mothers In Selected Rural Area

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## Abstract

The current study has been undertaken to assess knowledge score regarding Covid-19 & its prevention among antenatal mothers by educational program in Gram Tharol, Aklera, Rajasthan. The research design used for study was pre- experimental in nature. The tool for study was self-structured knowledge questionnaire which consists of 2 parts-PART- I consisted questions related to Socio-demographic data, PART-II consisted of self -structured knowledge questionnaire to assess knowledge score regarding Covid-19 & its prevention among antenatal mothers. The data was analyzed by using descriptive & inferential statistical methods. The most significant finding was that 20.5% of antenatal mothers were having average knowledge regarding Covid-19 & its prevention whereas 79.5% had fair knowledge after post-test. It was suggested that nurses must educate antenatal mothers regarding Covid-19 & its prevention.

**Keyword-** Impact, educational program, knowledge & Covid-19 & its prevention.

## 1. INTRODUCTION

The coronavirus outbreak became visible on December 31, 2019 when China informed the WHO regarding a bunch of pneumonia cases of idiopathic reason in Wuhan City in Hubei Province. In this way the illness spread to more Provinces in China, and to the remainder of the world. The WHO has now announced it a pandemic. The infection has been named SARS-CoV-2 and the infection is presently known as COVID-19. The infection that causes COVID-19 is primarily transmitted through beads produced when a contaminated individual sneezes, coughs, or breathes out. These beads are too overwhelming to even think about hanging noticeable all around, and rapidly fall on surfaces or floors. You can be affected by taking in the infection in the event that you are inside nearness of somebody who has COVID-19, or by contacting a defiled surface and afterward your eyes, nose or mouth.

## 2. NEED FOR STUDY

According to the Ministry of Health and Family Welfare, Government of India, 51401 people have been infected with 2649 deaths in the country so far. High level Group of Ministers (GoM) on COVID-19 held inside and out consultation on regulation methodology and the executives parts of COVID-19, just as the measures being taken by the middle and different States particularly according to 284 district in orange zone, 319 district in green zone and 130 district in red zone subtleties.

### 3.OBJECTIVE OF THE STUDY

1. To assess the pre-test & post-test Knowledge score regarding Covid-19 & its prevention among antenatal mothers.
2. To assess impact of educational program on knowledge regarding Covid-19 & its prevention among antenatal mothers.
3. To find out association between pre-test knowledge score regarding Covid-19 & its prevention among antenatal mothers with their selected demographic variables.

### 4. HYPOTHESES:

**RH<sub>0</sub>:** There will be no significant difference between pre test & post-test knowledge score on Covid-19 & its prevention among antenatal mothers.

**RH<sub>1</sub>:** There will be significant difference between pre test & post-test knowledge score on Covid-19 & its prevention among antenatal mothers.

**RH<sub>2</sub>:** There will be significant association between pre-test score on Covid-19 & its prevention among antenatal mothers with their selected demographic variables.

### 5. ASSUMPTION

1. Antenatal mothers may have deficit knowledge regarding Covid-19 & its prevention.
2. Educational program will enhance knowledge of antenatal mothers regarding Covid-19 & its prevention.

### 6. METHODOLOGY:

An evaluative approach was used and research design pre-experimental one group pre-test post-test research design was used for the study. The samples consisted of 44 antenatal mothers selected by Non probability purposive sampling technique. The setting for the study was Gram Tharol, Aklera, Rajasthan. Data was gathered with help of demographic variables & administering a self-structured knowledge questionnaire by analyst prior & after educational program. Post-test was done after seven days of pre-test. Data were analysis using descriptive & inferential statistics.

### 7.ANALYSIS AND INTERPRETATION

**SECTION-I Table -1 Frequency & percentage distribution of samples according to their demographic variables.**

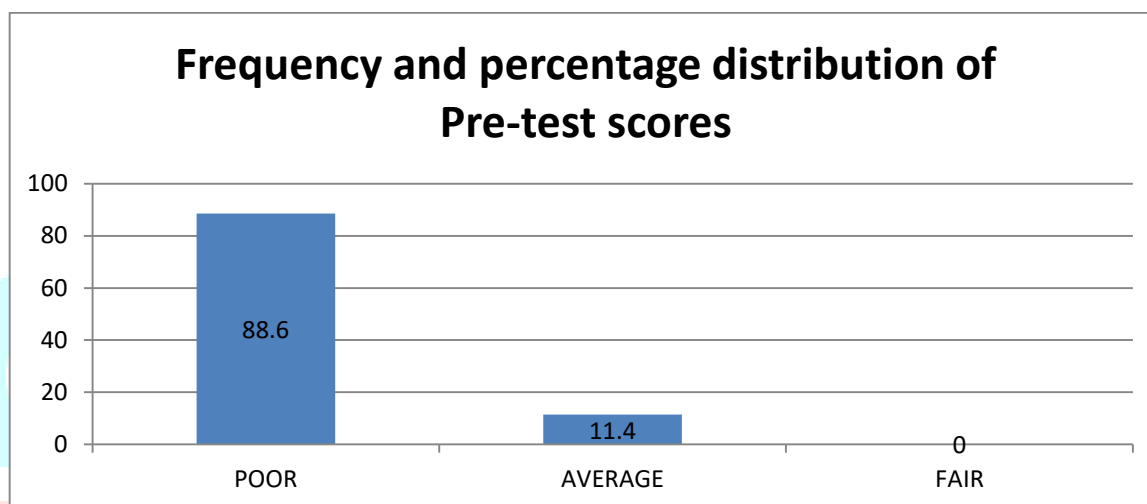
n = 44

S. No	Demographic Variables	Frequency	Percentage
<b>1</b>	<b>Age in Years</b>		
a.	22-28	6	13.6
b.	29-35	23	52.3
c.	≥36	15	34.1
<b>2</b>	<b>Types of family</b>		
a.	Extended	1	2.3
b.	Nuclear	19	43.2
c.	Joint	24	54.5
<b>4</b>	<b>Educational Status</b>		
a.	No formal education	16	36.4
b.	Primary	15	34.1
c.	Secondary	13	29.5
d.	Higher secondary	0	0.0
e.	Graduate and above	0	0.0
<b>5</b>	<b>Previous knowledge related to Covid-19 and its prevention</b>		
a.	Yes	5	11.4
b.	No	39	88.6

**SECTION-II- Table- 2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects:**

Category and test Score	Frequency (N=44)	Frequency Percentage (%)
POOR(1-10)	39	88.6
AVERAGE (11-20)	5	11.4
GOOD (21-30)	0	0.0
<b>TOTAL</b>	<b>44</b>	<b>100.0</b>

The present table 2.1.1 concerned with the existing knowledge regarding Covid-19 & its prevention among antenatal mothers were shown by pre-test score and it is observed that most of the antenatal mothers 39 (88.6%) were poor (01-10) knowledge & some antenatal mothers have 5 (11.4%) were from average category.



**FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects**

**Table-2.1.2. - Mean ( $\bar{X}$ ) and standard Deviation (s) of knowledge scores:**

Knowledge Pre -test	Mean ( $\bar{X}$ )	Std Dev (S)
Pre-test score	1.11	0.32

The information regarding mean, percentage of mean and standard deviation of test scores in shown in table 2.1.2 knowledge in mean pre-test score was  $1.11 \pm 0.32$  while in knowledge regarding Covid-19 & its prevention among antenatal mothers in Gram Tharol, Aklera, Rajasthan.

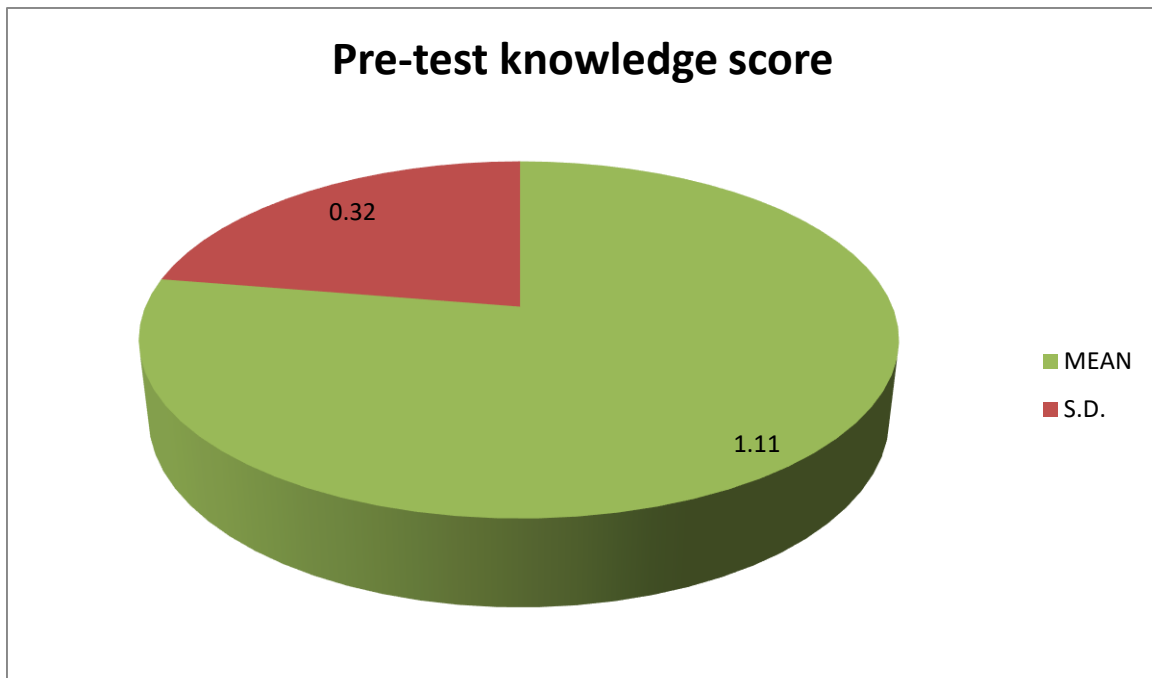


FIG.-2.1.1. - Mean ( $\bar{X}$ ) and standard Deviation (s) of knowledge scores

Table-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects:

Category and post-test Score	Frequency (N=44)	Frequency Percentage (%)
POOR(01-10)	0	0.0
AVERAGE (11-20)	9	20.5
GOOD (21-30)	35	79.5
TOTAL	44	100%

The present table 2.2.1 concerned with the existing knowledge regarding Covid-19 & its prevention among antenatal mothers was shown by post test score and it is observed that most of the antenatal mothers 35 (79.5%) were **FAIR** (21-30) knowledge & other antenatal mothers have 9 (20.5%) category which are **AVERAGE** (11-20) post test knowledge score in present study.

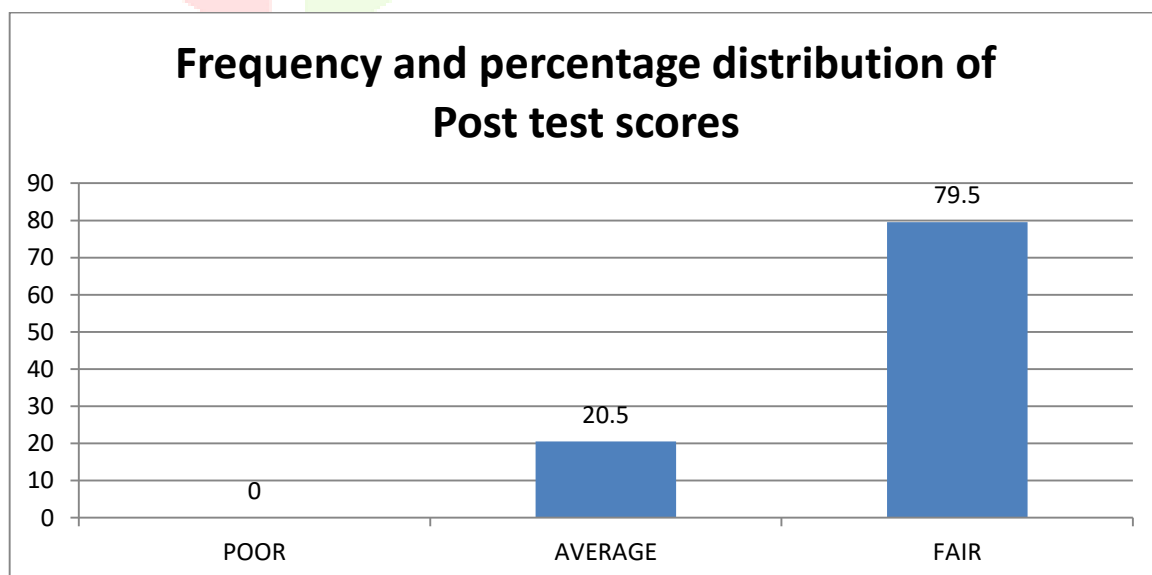


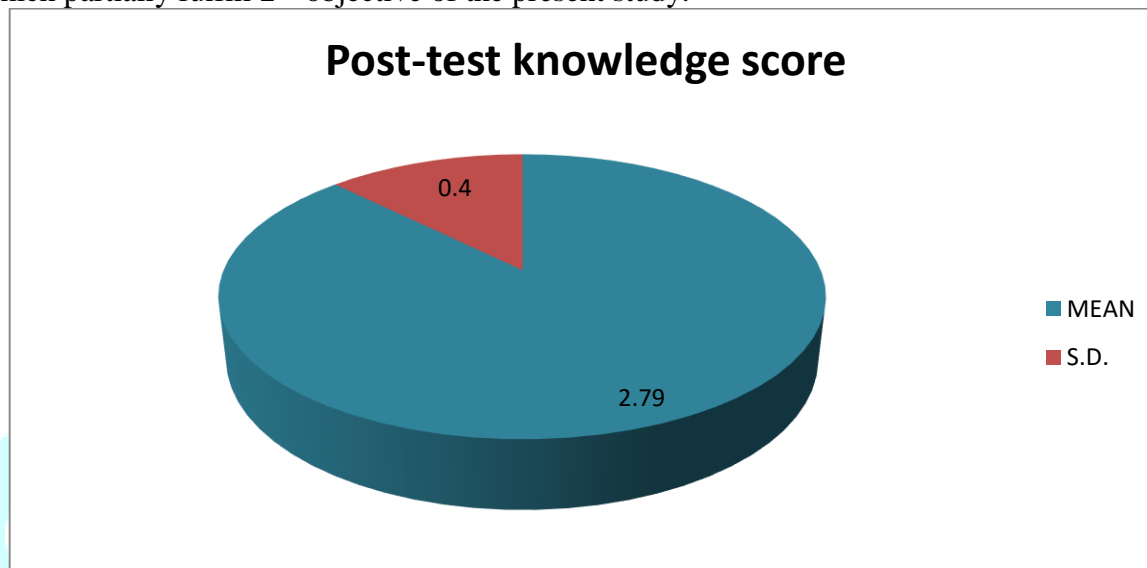
FIG.-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects

**Table-2.2.2. - Mean ( $\bar{X}$ ) and standard Deviation (s) of knowledge scores:**

Knowledge Test	Mean ( $\bar{X}$ )	Std Dev (S)
Post-test score	2.79	0.40

The information regarding mean, percentage of mean and SD of post test scores in shown in table 2.2.2 knowledge in mean post test score was  $2.79 \pm 0.40$  while in knowledge regarding Covid-19 & its prevention among antenatal mothers in Gram Tharol, Rajasthan.

Hence, it is confirmed from the tables of section-II that there is a significant difference in mean of test scores which partially fulfill 2<sup>nd</sup> objective of the present study.

**FIG.-2.2.2. - Mean ( $\bar{X}$ ) and standard Deviation (s) of knowledge scores:****TABLE 2.2.3: Impact of educational program by calculating Mean, SD, Mean Difference and 't' Value of Pre-test and Post-test knowledge.**

Knowledge Score of Antenatal mothers	Mean ( $\bar{X}$ )	S. D. (s)	Std. Error of Mean	D. F.	t-value	Significance
Pre-test	1.11	0.32	0.07812	43	-21.53	P<0.0001*
Post-test	2.79	0.40				

When the mean and SD of pre-test & post-test were compared & 't' test was applied. It can be clearly seen that the 't' value was -21.53 and p value was 0.0001 which clearly show that educational program was very effective in enhancing the knowledge of antenatal mothers.

**SECTION-III Association of knowledge scores between test and selected demographic variables:****Table- 3.1 Association of age of antenatal mothers with pre-test scores:**

Age (in years)	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
22-28	4	2	0	6
29-35	20	3	0	23
≥36	15	0	0	15
<b>Total</b>	<b>39</b>	<b>5</b>	<b>0</b>	<b>44</b>

$$X^2=4.86 \quad p>0.05(\text{Insignificant})$$

The association of age test scores is shown in present table 3.1. The probability value for Chi-Square test is 4.86 for 2 DF which indicated insignificant value ( $p>0.05$ ). Hence, it is identified that there is a insignificant association between age & test scores. Moreover, it is reflected that age isn't influenced with current problem.

**Table- 3.2 Association of types of family with pre-test scores:**

Types of family	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
Extended	1	0	0	1
Nuclear	15	4	0	19
Joint	23	1	0	24
<b>Total</b>	<b>39</b>	<b>5</b>	<b>0</b>	<b>44</b>

$X^2=3.13 \quad p>0.05$  (Insignificant)

The association of types of family & test scores is shown in present table 3.2. The probability value for Chi-Square test is 3.13 for 2 degrees of freedom which indicated a insignificant value ( $p>0.05$ ). Hence, it is identified that there is a insignificant association between types of family & test scores.

**Table- 3.3 Association of educational status with pre-test scores:**

Educational Status	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
No formal	16	0	0	16
Primary	11	4	0	15
Secondary	12	1	0	13
Higher sec.	0	0	0	0
Graduate	0	0	0	0
& above				
<b>Total</b>	<b>39</b>	<b>5</b>	<b>0</b>	<b>44</b>

$X^2= 5.71 \quad p>0.05$  (Insignificant)

The association of educational status & test scores is shown in present table 3.3. The probability value for Chi-Square test is 5.71 for 2 degrees of freedom which indicated educational & test scores. Moreover, it is reflected that educational status isn't influenced with present problem.

**Table- 3.4 Association of previous knowledge related to cervical cancer with pre-test scores:**

Previous Knowledge	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
Yes	4	1	0	5
No	35	4	0	39
<b>Total</b>	<b>39</b>	<b>5</b>	<b>0</b>	<b>44</b>

$X^2=0.41 \quad p>0.05$  (Insignificant)

The association of previous knowledge related to cervical cancer test scores is shown in present table 3.4. The probability value for Chi-Square test is 0.41 for 1 degrees of freedom which indicated previous

knowledge related to cervical cancer & test scores. Moreover, it is reflected that previous knowledge Covid-19 and its prevention isn't influenced with current problem.

## 8.RESULTS

The result of this study indicates that there was a significant increase in post-test knowledge scores compared to pre-test scores of Covid-19 & its prevention. The mean percentage knowledge score was observed  $1.11\pm 0.32$  in pre-test & after implementation of educational program post-test mean percentage was observed with  $2.79\pm 0.40$ .

## 9.CONCLUSION

Thus after the analysis and interpretation of data we can conclude that the hypothesis RH1 that, there will be significance difference between pre-test knowledge score with post-test knowledge score at ( $P<0.001$ ) is being accepted.

Furthermore, educational program related to Covid-19 & its prevention among antenatal mothers may consider as an effective tool when there is a need in bridging & modifying knowledge.

## 10.LIMITATIONS-

- This was limited to Gram Tharol, Aklera, Rajasthan.
- This was limited to 44 antenatal mothers.

## 11.REFERENCE-

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