

# KNOWLEDGE LEVEL OF STAFF NURSES ON PRECAUTIONS AND HEALTH IMPROVEMENT STRATEGIES AMONG ANTENATAL MOTHERS DURING COVID-19 AT VARDAAN HOSPITAL, REWA, MADHYA PRADESH

## Abstract

**Background:** The systemic supervision of a woman during pregnancy is called antenatal care. Regular antenatal visits are mandatory to ensure the well being of mother and fetus. As per WHO, there must be minimum of 4 and maximum of 12 antenatal visits are necessary for all pregnant mothers. Early and proper AN visits will identify the risk factors and helps in initiating the management in time. Thereby safe pregnancy and delivery can be achieved.

**Aim:** The aim of the study was to assess the knowledge level of staff nurses on precautions and health improvement strategies among antenatal mothers during Covid-19.

**Objectives:** 1. To assess the knowledge of staff nurses on precautions and health improvement strategies among antenatal mothers during Covid-19.  
2. To associate the knowledge scores of staff nurses with their selected demographic variables.

**Methodology:** 50 staff nurses working in Vardaan Hospital, Rewa, Madhya Pradesh were selected by using probability purposive sampling technique.

**Results:** The study showed that almost all the nurses (98.3%) had average knowledge and only 1.6% had poor knowledge and no one had good knowledge regarding precautions and health improvement strategies during Covid-19 in ante-natal mothers.

**Keywords:** Knowledge, Staff nurses, Precautions, Health improvement strategies, Antenatal mothers, Covid-19.

## Authors

**Rai Swati Chouksey**

M.Sc.Nursing

Department of OBG

Saudamini Institute of Nursing

Rewa, Madhya Pradesh, India.

**Dr. Suman Singh Parihar**

Professor & Principal

Department of OBG

Saudamini Institute of Nursing

Rewa, Madhya Pradesh, India.

## I. INTRODUCTION

The systemic supervision of a woman during pregnancy is called antenatal care. Regular antenatal visits are mandatory to ensure the well being of mother and fetus. As per WHO, there must be minimum of 4 and maximum of 12 antenatal visits are necessary for all pregnant mothers. Early and proper AN visits will identify the risk factors and helps in initiating the management in time. Thereby safe pregnancy and delivery can be achieved. Antenatal healthcare is defined by the WHO as the “care a pregnant mother receives before birth”, and involves education, screening, counseling, treatment of minor ailment, and immunization services.

The recent corona virus disease (COVID-19) pandemic has had a disastrous effect on the health-care delivery system, of mainly pregnancy-related healthcare. In order to fill the information gap in the scientific literature and in response to the limited evidence in the country, this study aims to assess the impact of the COVID-19 pandemic on antenatal care utilization among pregnant women attending public facilities in Northeast Ethiopia. Therefore, the result will be beneficial to design strategies for prioritizing maternal healthcare even with the COVID-19 pandemic period.

## II. NEED FOR THE STUDY

Globally 303,000 maternal deaths occur due to pregnancy and childbirth-related complications each year, with 99% of them occurring in SSA (sub-Saharan Africa) and Southern Asia. Antenatal care helps to reduce the occurrence of maternal morbidity and mortality by providing information about danger signs, health promotion, birth preparedness, and care for pregnancy complications. Even though, WHO recommends a minimum of four ANC visit a for pregnant women, the maternal mortality during pregnancy or within 42 days of termination of pregnancy still remains high in sub-Saharan Africa, including Ethiopia.

## III. STATEMENT OF THE PROBLEM

An explorative study to assess the knowledge of staff nurses on precautions and health improvement strategies among antenatal mothers during Covid-19 at selected hospital, Rewa, Madhya Pradesh.

## IV. OBJECTIVES

1. To assess the knowledge of staff nurses on precautions and health improvement strategies among antenatal mothers during Covid-19.
2. To associate the knowledge scores of among staff nurses with their selected demographic variables.

## V. HYPOTHESIS

**H1:** There will be an association between knowledge score with selected demographic variables among staff nurses at  $P < 0.05$  level of significance.

## VI. DELIMITATIONS

The study is limited to

1. Nurses who completed their GNM or B.SC(N) or MSC (N).
2. Staff nurses working in Vardaan hospital, Rewa.
3. Both male and female staff nurses.
4. Sample size is 50 only.

## VII. METHODOLOGY

1. **Research Approach:** A quantitative research approach was adopted for the present study.
2. **Research Design:** Non-experimental descriptive design was adopted for the present study.
3. **Setting:** This study was conducted among nurses working in Vardaan Hospital, located at Rewa, Madhya Pradesh.

## VIII. POPULATION

1. **Target Population:** The target population includes all staff nurses.
2. **Accessible Population:** Staff nurses who are working in Vardaan Hospital, Madhya Pradesh.

## IX. SAMPLE

Samples of the study were staff nurses who are working in Vardaan Hospital, Madhya Pradesh and who fulfilled the inclusion criteria.

## X. SAMPLE SIZE

The sample size of the study was 50 staff nurses.

## XI. SAMPLING TECHNIQUE

Probability, purposive sampling technique sampling technique was adopted to select the samples.

## XII. SAMPLING CRITERIA

### 1. Inclusion Criteria

- Staff nurses who are willing to participate in this study.
- Staff nurses, who can read and understand Hindi or English.

## 2. Exclusion Criteria

- Staff nurses who are not willing to participate in this study.
- Staff nurses, who cannot read or understand Hindi or English.
- Staff nurses who are not present at the time of data collection.

## XIII. VARIABLES

1. **Independent Variable:** Staff Nurses

2. **Dependent Variable:** Level of knowledge

3. **Extraneous Variables:** In this study socio demographic data is extraneous variables are age, marital status, education, occupation, types of work, monthly income & type of family.

## XIV. DESCRIPTION OF THE TOOL

1. **Part-A:** It deals with demographic variables.

2. **Part-B:** Structured questionnaire consists of 30 multiple choice questions to assess the knowledge of staff nurses regarding precautions and health improvement strategies during Covid-19 in ante-natal mothers.

3. **Part- C:** A Self-instructional module was developed for enhancing knowledge regarding precautions and health improvement strategies during Covid-19 in ante-natal mothers.

## XV. SCORE INTERPRETATION

Knowledge Score	Grade
0-7	Poor
8-14	Average
15-20	Good

## XVI. RELIABILITY

The reliability of the instrument was established by administering the tool to 10 staff nurses. The reliability of the structured knowledge questionnaire was established by Split Half method, Karl Pearson's coefficient correlation and Spearman-Brown formula. The reliability of structured knowledge questionnaire was found to be  $r = 0.84$  which indicated that the tool is reliable.

## XVII. DATA COLLECTION PROCEDURE

A formal order was obtained from the director of the hospital to conduct the study from 20/08/2021 to 27/08/2021. The investigator collected 50 samples who fulfilled the inclusive criteria. Data collection was done at Vardaan hospital Rewa. The samples were selected using purposive sampling technique. The investigator gave brief introduction and explained the purpose of the study. Knowledge was assessed by using questionnaire.

## XVIII. DATA ANALYSIS & INTERPRETATIONS

**Table 1: Frequency and Percentage Distribution of Level of Knowledge Among Nurses**

Score	Grading	Frequency (f)	Percentage(%)	Mean	SD
0-7	Poor	01	1.6	15.05	1.67
8-14	Average	59	98.3		
15-20	Good	0	0		

**Table 2: Association Between Level of Knowledge and Demographic Variables.  
(N=50)**

S. No	Demo. Variables	Level of Knowledge			Df	Chi Square
		Poor	Average	Good		
<b>1.</b>	<b>Age in years</b>				6	3.301
	15-24	4	4	10		
	25-34	15	5	7		
	35-44	5	0	10		
	45-54	0	0	0		
<b>2.</b>	<b>Sex</b>				2	0.94
	Male	0	5	5		
	Female	25	11	14		
<b>3.</b>	<b>Area of residence</b>				2	2.94
	Village	15	12	10		
	City	10	9	4		
<b>4.</b>	<b>Family type</b>				2	4.01
	Nuclear	12	3	17		
	Joint	9	5	14		
<b>5.</b>	<b>Marital status</b>				6	15.4*
	Married	3	12	17		
	Unmarried	2	5	11		
	Widower	0	2	3		

	Divorced	2	3	0		
<b>6.</b>	<b>Monthly Income</b>					
	Rs< 5000/-	5	20	18	6	3.50
	Rs 5001-10000/-	2	1	2		
	Rs 10001-15000/-	0	0	2		
	>15000	5	2	3		
<b>7.</b>	<b>Work experience</b>					
	< 1 year	9	9	18	6	6.47
	1-5 years	4	3	7		
	6-10 years	4	2	4		
	> 10 years	0	0	0		
<b>8.</b>	<b>Source of Information</b>					
	Mass media	5	7	10	6	14.34
	CNE Programs	2	2	6		
	Friends & family	2	6	2		
	Work experience	4	5	9		

## **XIX. MAJOR FINDINGS OF THE STUDY**

1. The study showed that almost all the nurses (98.3%) had average knowledge and only 1.6% had poor knowledge and no one had good knowledge regarding precautions and health improvement strategies during Covid-19 in ante-natal mothers.
2. The mean value of knowledge score of the staff nurses was 15.05 and the standard deviation was 1.67.
3. Regarding association between level of knowledge and demographic variables showed that there was a significant association found with marital status at  $P < 0.05$  level.

## **XX. RECOMMENDATIONS**

1. A similar study may be repeated for more generalization of findings.
2. A similar study can be done on large samples.
3. Study can be replicated in different setting to strengthen the findings.
4. A longer period of intervention can be studied for more reliability and effectiveness
5. Follow-up study can be conducted to evaluate the effectiveness of planned health teaching.

## **XXI. CONCLUSION**

The study showed that almost all the nurses (98.3%) had average knowledge and only 1.6% had poor knowledge and no one had good knowledge regarding precautions and health improvement strategies during Covid-19 in ante-natal mothers. Since the pregnancy period can be complicated by many factors, Covid-19 will have serious effect on mother's health and fetus as well. Hence the planned teaching on Covid-19 prevention will help to protect the pregnant mothers from complications.

## REFERENCES

- [1] Dutta DC, "Textbook of Obstetrics" 13 th edition, New central book agency publishers, page no 12-19.
- [2] Patil.P, Dixit U.Shetter, "Risk factors affect the health of antenatal mothers- A cross sectional study. IOSR-JDMS, 2020, retrieved from <http://www.iosrjournals.org/iosr-jdms/papers/Vol2-issues5/B0250810.pdf>.
- [3] Kurubaran Ganasegaran, et al., Determinants of knowledge of staff nurses in antenatal working mothers in Malaysia Biomed Research International, Vol(2014), retrieved from <http://dx.doi.org/10.1155/2014/370273>.
- [4] Salve H, et al., COVID-19 Pregnancy issues and antenatal care, Indian J Pub Health, 2020, 54(3), retrieved from <http://www.uptodate.com/contents/covid-19-pregnancy-issues-and-antenatal-care>.
- [5] Bharathi.J, et al., Effectiveness of Structured teaching program on knowledge regarding self care management among antenatal mothers attending at Covid-19 outpatient department at selected hospital, Tiruvannamalai, Asian J of Nursing Education and Research, 2016, 237-239.