A Study to Assess the Level of Knowledge Regarding Preventive Measures on COVID-19 among Antenatal Mothers at SMVMCH Puducherry

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Abstract: The impact of containment and preparedness policies on maternal and newborn health could be more pronounced. Even before the emergence of COVID-19, high-quality and timely maternal health-care services were unavailable, inaccessible, or unaffordable for millions of women. Now restrictions on travel and gatherings, health facilities with limited infection prevention supplies and unreliable infection control practices, and disrupted community health worker routines threaten to exacerbate limited access to care and negatively impact women's health. In this paper, we discuss knowledge regarding preventive measures on COVID-19 among antenatal mothers and maximize the health outcomes of women and infants. The main study was conducted at SMVMCH, Puducherry. The period of data collection was 1 week, and the data were collected for the 50mothers by using structured knowledge questionnaires. Convenience sampling technique was used. The findings shows that Majority of the antenatal mothers 29 (58%) had adequate level of knowledge, 18 (36%) had moderately level of knowledge and 3 (6%) had inadequate level of knowledge and the mean and standard deviation of level of knowledge regarding preventive measures on COVID-19 among antenatal mothers is (14.80+4.347) respectively. The study shows that, majority of the antenatal mothers have adequate level of knowledge regarding preventive measures on COVID-19.

Keywords: preventive measures on COVID-19, antenatal mothers

1. Introduction

Pregnant women can also be exposed to toxins in the workplace, including air born particles. The effects of wearing N95 filtering facepiece respirators are similar for pregnant women as for non-pregnant women, and wearing a respirator for one hour does not affect the fetal heart rate.

The COVID-19 pandemic is posing considerable challenges for countries to maintain the provision of high quality, essential maternal and newborn health services. Pregnant women and mothers with newborns may experience difficulties accessing services due to transport disruptions and lockdown measures or be reluctant to come to health facilities due to fear of infection. Thus, a modest decline of 10% in coverage of pregnancy related and newborn healthcare services were reported due to pandemics. This would result in 28, 000 maternal deaths. A recent study done in the US reported that ANC coverage reductions of 39.3–51.9%, due to the pandemic, would result in 56, 700 additional maternal deaths.

In addition, disruption of maternity services and diversion of resources away from essential pregnancy care, because of prioritizing the COVID-19 response, increased risks of maternal morbidity and mortality. Anxiety and obsessive-compulsive symptoms in pregnant women were found to be increased during the current SARS-CoV-2 pandemic.

Early efforts have focused on describing the clinical characteristics and outcomes of COVID-19 in the general population. Pregnant women are also considered to be a

special population group because of the unique 'immune suppression' caused by pregnancy. The immunologic and physiologic changes of pregnancy might make pregnant women at higher risk of severe illness or mortality with COVID-19, compared with the general public. There are limited case series reporting the impact on women affected by coronaviruses (CoV) during pregnancy.

To curtail the continued spread of the coronavirus disease and its associated mortality, World Health Organization has recommended series of preventive measures including regular hand washing with water and soap, social distancing, covering hand and mouth while coughing and avoiding touching eyes, nose and mouth, this preventive measures have been adopted to prevent further spread of the virus in the country. The government of India has also engaged in media campaigns to disseminate information on these preventive measures to the general public.

Aim of the study

The aim of the study was to assess the level of knowledge regarding preventive measures on COVID-19 among antenatal mothers.

Objective

- To assess the level of knowledge regarding preventive measures on COVID-19 among antenatal mothers at SMVMCH Puducherry.
- Associate between the knowledge regarding preventive measures on COVID-19 among antenatal mothers with their selected demographic variables

2. Methodology

The research approach used for this study was quantitative research approach

Research Design:

A descriptive Research Design was adapted for this study.

Research Settings:

The study will be conducted at Sri Manakula Vinayagar Medical College and Hospital. It consists of 1050-bedded hospital in Puducherry. The population of the study antenatal mothers visiting SMVMCH, Puducherry. Sample size is the number of subjects involved in the study. Sample size consists of 50 antenatal mothers. Sampling technique chosen was purposive sampling.

Description of Tool:

The tool used for this study consists of 2 sections namely.

Section A: Demographic variables:

Age, Gestational age, Religion, Education, occupation, marital status, type of family, no of children's, residence, previous history of COVID-19, PPE history, co morbid disease history, COVID-19 knowledge

Section B: Knowledge questionnaire to assess the level of knowledge regarding preventive measures on COVID-19 among antenatal mothers.

In this study knowledge questionnaire was consists of 30 items.

Data Collection Procedure

The data collection done with the permission to conduct the study was obtained from authorities of the concerned person Sri Manakula Vinayagar Medical College and Hospital, Puducherry.50 antenatal mothers were selected by using purposive sampling techniques. The tool consists of demographic variables and knowledge questions were administered to respondents and data were collected.

3. Results

- The findings shows that Majority of the antenatal mothers 29 (58%) had adequate level of knowledge, 18 (36%) had moderately level of knowledge and 3 (6%) had inadequate level of knowledge and the mean and standard deviation of level of knowledge regarding preventive measures on COVID-19 among antenatal mothers is (14.80+4.347) respectively.
- Out of the 50 antenatal mothers who were interviewed, Majority of the antenatal mothers 39 (78%) of study population were in the age group are 20-31 years. Majority of the antenatal mothers were followed by Hindu religion 44 (88%). Majority of the antenatal mothers were comes under Joined family 26 (52%). Majority of the antenatal mothers were Unemployed 36 (72%). All of the antenatal mothers Socio-economic status were Middle 50 (100%). Most of the antenatal mothers were Rural 28 (56%). Most of the antenatal mothers were completed Graduate in education 26 (52%). Most of the antenatal mothers were 3rd trimester

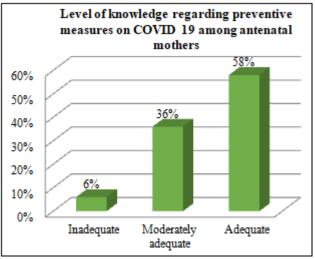
in Gestational age 37 (74%). Majority of the antenatal mothers were 1 children in Obstetrical score 25 (50%). Most of the antenatal mothers were having idea about using PPE (mask, gloves, sanitizers) 49 (98%). All of the antenatal mothers' previous history of COVID-19 was Negative 50 (100%) respectively.

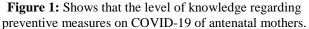
Assessment of the level of knowledge regarding preventive measures on COVID-19 among antenatal mothers.

Table 1: Frequency and percentage wise distribution of
level of knowledge regarding preventive measures on
COVID 10 among antenatal mothers $(N - 50)$

COVID-19 among antenatal mothers. (N = 50)			
Level of Knowledge	Frequency (n)	Percentage (%)	
Inadequate	3	6	
Moderately adequate	18	36	
Adequate	29	58	
Total	50	100	
Mean + Standard deviation	14.80+4.347		

Table 1 shows frequency and percentage wise distribution of level of knowledge regarding preventive measures on COVID-19 among antenatal mothers. Majority of the antenatal mothers 29 (58%) had adequate level of knowledge, 18 (36%) had moderately level of knowledge and 3 (6%) had inadequate level of knowledge and the mean and standard deviation of level of knowledge regarding preventive measures on COVID-19 among antenatal mothers is (14.80+4.347) respectively.





4. Conclusion

The descriptive Research Design was selected for this study to assess the level of knowledge regarding preventive measures on COVID19 among antenatal mothers, at Sri Manakula Vinayagar Medical College and Hospital, Puducherry.

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