



Clinical profile of pregnant women during COVID-19: A retrospective analysis

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Abstract

Background: This year, the corona virus disease has affected so many pregnant women and in such a dreadful way. Pregnancy is a known immune compromised state.

Aim: In this retrospective analysis, we studied clinical profile of pregnant women during COVID-19.

Methods: This was a retrospective observational study done in a community health centre in a rural area of Himachal Pradesh. A total of 470 COVID-19 positive pregnant women were included in the study who were either post abortion, early pregnancy, late pregnancy, laboring and delivered from 1 Jan 2021 to 31 Jun 2021.

Results: In this study, majority of the women aged 30-39 years. 50.4% were multigravida and 42.3% had gestational age <34 weeks. In this study, 310 women were symptomatic while 160 were asymptomatic. Mortality was reported in 14 women.

Conclusion: In conclusion, with or without COVID-19 each pregnancy is precious. Attending antenatal care remains an integral part of maternity care.

Keywords: COVID-19, pregnant women, retrospective analysis

Introduction

The corona virus infection (COVID-19) is an unsolved public health emergency till date. It all started in Wuhan, Hubei province of China when the first case of coronavirus infection was identified & notified to the WHO on 31st December 2019 [1]. It was declared as a (PHEIC) Public Health Emergency of International Concern by 30th January 2020 [2].

According to the current evidence, COVID-19 virus is primarily transmitted through respiratory droplets & contact routes. In an analytical report of 75,465 COVID-19 cases in China, air borne transmission was not reported [3]. Transmission can occur through droplet when a person is in close contact within 1 meter or may also occur through fomites in the immediate environment around the infected person [4]. In respect to COVID 19 air borne transmission may be possible in special circumstances in which procedures that generate aerosols are performed, for example – endotracheal intubation, turning patient prone, tracheostomy. The health care fraternity was more concerned as there were several reports on suspected vertical transmission of virus.

The incubation period is estimated to be 2-14 days. However, a case of incubation period of up to 27 days has been reported in Hubei, China [5].

One important thing to remember is that Incubation period may vary from person to person. In a study conducted in Wuhan in 181 patients the period from onset of symptoms to death ranged from 6 to 41 days with a median of 14 days and case fatality rate of 2.3% [6].

The most common classic presenting symptoms are fever, cough, sore throat, malaise, headache and itching of eyes. Experts are still learning the symptoms of this new infection with the new upcoming atypical symptoms in 2021. The list included loss of smell, taste, delirium, dizziness, nausea,

vomiting, diarrhea, rash, hives, chickenpox like lesions and cardiovascular, renal and neurological complications [7].

Presently, as recommended by ICMR the standard test is detection of viral RNA by RTPCR from nasopharyngeal mucosa. For past infections confirmation antibody test on blood are recommended but the effectiveness needs further validation and research.

This year, the corona virus disease has affected so many pregnant women and in such a dreadful way. Pregnancy is a known immune compromised state. But this year compared to last year 2020, the virus took so many lives and left so many children motherless.

In this retrospective analysis, we studied clinical profile of pregnant women during COVID-19.

Methods

This was a retrospective observational study done in a community health centre in a rural area of Himachal Pradesh.

A total of 470 COVID-19 positive pregnant women were included in the study who were either post abortion, early pregnancy, late pregnancy, laboring and delivered from 1 Jan 2021 to 31 Jun 2021.

Social distancing, compulsory mask with proper hand hygiene. Covid positive patients were shifted to the respective Covid Wards. Cleaning and disinfection of labour room and OT complex was done on regular intervals. All the parameters were analysed using descriptive statistics that is percentage and proportions calculated and compared.

Results

Demographic characteristics

In this study, majority of the women aged 30-39 years. 50.4% were multigravida and 42.3% had gestational age <34 weeks (Table 1).

Table 1: Demographic characteristics

	Frequency	Percentage
Age (years)		
21-25	103	21.9
26-29	121	25.7
30-39	137	29.1
>40	109	23.2
Gravida		
Primi	233	49.6
Multi	237	50.4
Gestational age (weeks)		
<34	199	42.3
34-37	167	35.5
>37	104	22.1

Symptoms

In this study, 310 women were symptomatic while 160 were asymptomatic (Figure 1).

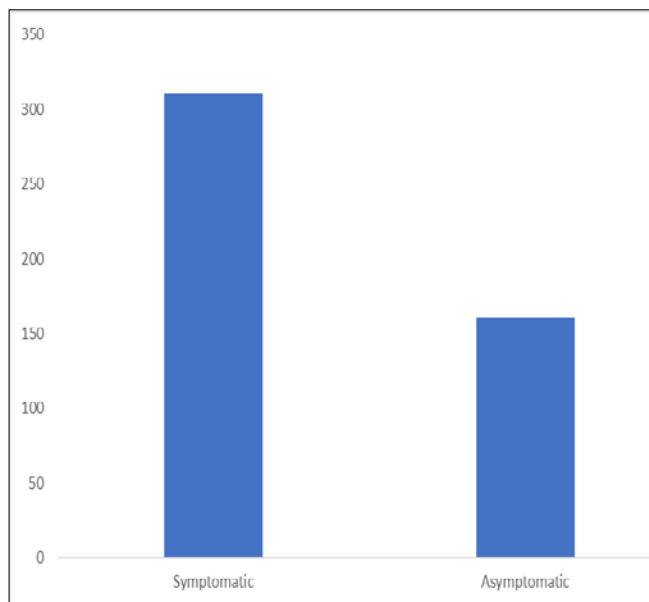


Fig 1: Symptoms

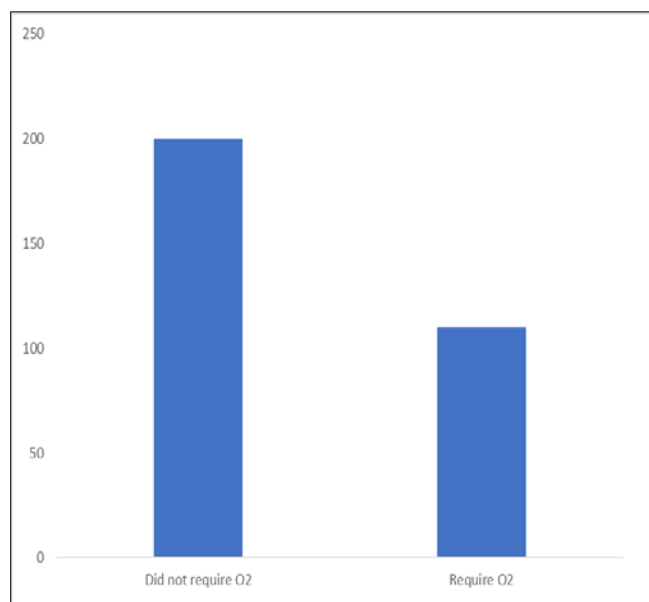


Fig 2: Requirement of oxygen

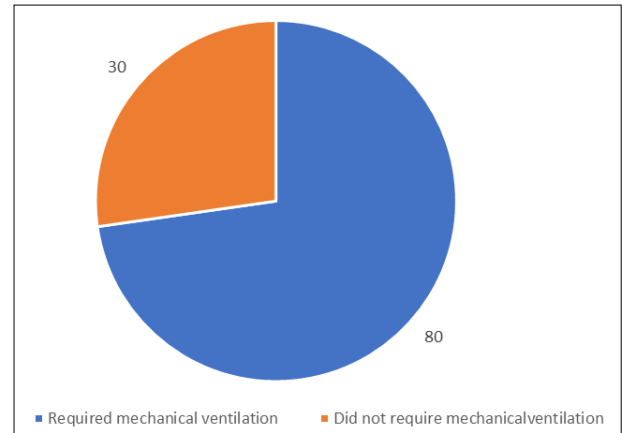


Fig 3: Requirement of mechanical ventilation

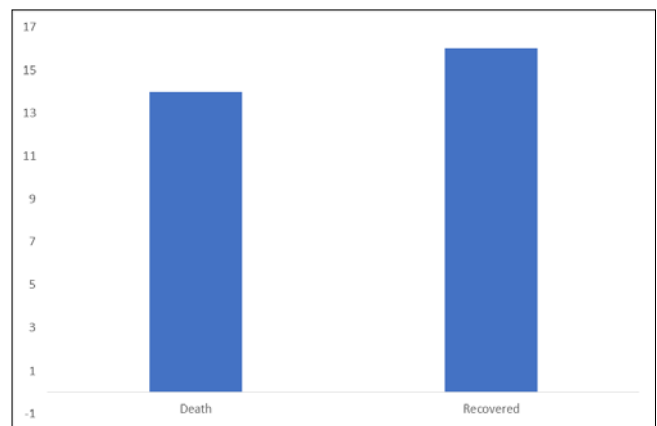


Fig 4: Outcome

Outcome

Mortality was reported in 14 women.

Discussion

COVID-19 pandemic has affected the health system globally. During the pandemic, where social distancing is the key for survival, non-emergency yet essential antenatal services had to be compromised.

In this study, 66% women were asymptomatic. Since February 2020, there have been reports of persons who were infected with SARS-CoV-2 but did not develop symptoms of COVID-19. In some cases, the viral load of such asymptomatic persons has been equal to that of symptomatic persons, suggesting similar potential for viral transmission. Mortality was reported in 14 women (47%).

In conclusion, with or without COVID-19 each pregnancy is precious. Attending antenatal care remains an integral part of maternity care. COVID-19 has changed the approach to the care of pregnant women.

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