

# Pregnancy Rate during COVID-19 Pandemic: Single Center Experience in Bangladesh

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## Abstract

**Background:** There is no significant change in the maternal mortality ratio and neonatal mortality rate, an analysis of data in the Directorate General of Health Services dashboard shows that since the beginning of the COVID-19 crisis, there is a significant reduction in the uptake of maternal and newborn health services from the health facilities. **Objective:** The aim of the study was to evaluate Pregnancy rate of during COVID-19 pandemic: Single center experience in Bangladesh. **Method:** The present study was prospective observational study of Pregnancy rate of during COVID-19 pandemic in 101 cases of Pregnancy rate in between 18-45 years women with pregnancy, from April 2011 to September 2011. Patients with medical complications like anemia, preexisting hypertension, diabetes, vascular or renal disease, multiple gestations, uterine or fetal anomalies etc. are excluded from the study. Detailed history, physical examinations were carried out and appropriate management instituted as per individual patients need. Statistical analysis of the results was obtained by using window-based computer software devised with Statistical Packages for Social Sciences (SPSS-22). **Results:** In table-I shows age distribution of the patients where most of the patients (24.75%) belong to during covid-19 31-35 years age group. Birth distribution of the patients of the months where most of the 8 birth frequency belong to during covid-19 Jun (2020). **Conclusion:** Continue breastfeeding their baby even if they are infected or suspect being infected as the virus has not been found in samples of breastmilk. Mothers with COVID-19 should wear a mask when feeding their baby; wash hands before and after touching the baby; and routinely clean and disinfect surfaces. The study found that maternal pregnancy rates were higher than during the Covid-19.

**Keywords:** Pregnancy; Covid-19.

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## INTRODUCTION

The SARS-CoV-2 pandemic has brought enormous change in our personal lives and in the lives of the communities themselves. Almost all countries have imposed severe lockdowns to limit the spread of the virus. Bangladesh was one of the most affected areas globally, especially during the spring of 2020 [1]. A total General Holiday was placed in this region starting from 10 March to 4 May 2020, followed by a gradual reopening in the subsequent weeks [2].

In Bangladesh, an estimated 2.4 million babies will be born under the shadow of the COVID-19 pandemic [3]. The country ranks at number 9 in terms of the highest expected number of births for the period of 9 months from the date of the pandemic declaration

on 11 March [4]. There is no significant change in the maternal mortality ratio and neonatal mortality rate, an analysis of data in the Directorate General of Health Services dashboard shows that since the beginning of the COVID-19 crisis, there is a significant reduction in the uptake of maternal and newborn health services from the health facilities. Only 33 district hospitals in Bangladesh are performing all key functions of emergency obstetric care out of 63. Countries with the expected highest numbers of births for the period of 9 months from the date of the pandemic declaration (11 March) are: India (20.1 million), China (13.5 million), Nigeria (6.4 million), Pakistan (5 million) and Indonesia (4 million). Most of these countries had high neonatal mortality rates even before the pandemic and may see these levels increase with COVID-19 conditions [5, 6]. We compared the number of births

occurring between March 2020 to February 2021 (One year from the country and end dates of the general holiday during COVID-19 pandemic) in Single center experience in Dhaka, Bangladesh.

### OBJECTIVE

The aim of the study was to evaluate Pregnancy rate of during COVID-19 pandemic: Single center experience in Bangladesh.

### METHODS

The present study was prospective observational study of Pregnancy rate of during COVID-19 pandemic in 101 cases of Pregnancy rate in between 18-45 years women with pregnancy, from April 2020 to September 2021. The study was carried out Department of obstetrics and gynecology, Ashiyan Medical college hospital. Patients with medical complications like anemia, preexisting hypertension, diabetes, vascular or renal disease, multiple gestations, uterine or fetal anomalies etc. are excluded from the study. Detailed history, physical examinations were

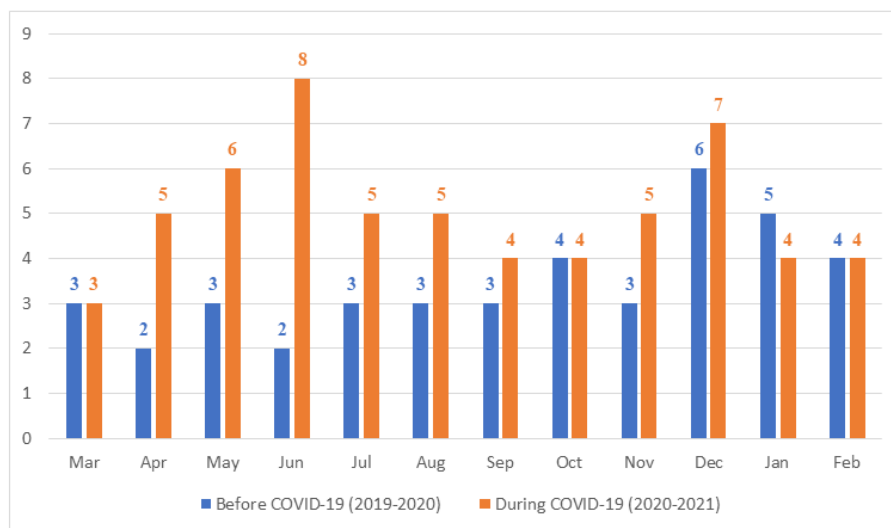
carried out and appropriate management instituted as per individual patients need. Statistical analysis of the results was obtained by using window-based computer software devised with Statistical Packages for Social Sciences (SPSS-22).

### RESULT

The total study population was 101 Patients aged 18 years to 45 years, (before covid-19) 41 and (during covid-19) 60 population in this study. 9(8.91%) and 15(14.85%) were 18 years to 25 years, 12(11.88%) and 9(8.91%) were 26 years to 30 years, 15(14.85%) and 25(24.75%) were 31 years to 35 years, 3(2.97%) and 7(6.83%) were 36 years to 40 years, 2(1.98%) and 4(3.96%) were 41 years to 45 years before Covid-19 and During Covid-19 respectively. 3 and 3 were month of Mar, 2 and 5 were month of Apr, 3 and 6 were month of May, 2 and 8 were month of Jun, 3 and 5 were month of Jul & Aug, 3 and 4 month of Sep, 4 and 4 month of Oct, 3 and 5 month of Nov, 6 and 7 month of Dec, 5 and 4 month of Jan and 4 and 4 month of Feb before Covid-19 and During Covid-19 respectively.

**Table I: Age Distribution of the Study**

Age Distribution (years)	n=101		%	
	Before Covid-19	During Covid-19	Before Covid-19	During Covid-19
18 years to 25 years	9	15	8.91	14.85
26 years to 30 years	12	9	11.88	8.91
31 years to 35 years	15	25	14.85	24.75
36 years to 40 years	3	7	2.97	6.93
41 years to 45 years	2	4	1.98	3.96
Total	41	60	40.59	59.41



**Figure-I: Pregnancy of the single center study, the figure of the birth frequency of the city of Dhaka before COVID-19 (2019-2020) and the same period of the following year during COVID-19 (2020-2021)**

### DISCUSSION

There are several reasons why COVID-19 and preventive measures could have affected the birth rates. First, the necessary restrictions on freedom of movement might have led to a decrease in the

frequency of sexual intercourse, both in healthcare professionals and the general population, inevitably reducing the chances of conception [7]. Second, the restrictive measures introduced by many countries have led to an unavoidable reduction in gross domestic

product (GDP) with loss of jobs and declines in profitability and employee wages, particularly in certain sectors. These, coupled with emotions such as melancholy, fear and uncertainty about the future that characterized this historical epoch, may have led to a lowered desire for pregnancy [8]. Last, due to healthcare system overload [9] and government-issued recommendations to contain the spread of SARS-CoV-2, many non-urgent medical-care services have been temporarily reduced or completely suspended. In the majority of healthcare facilities, only emergency surgery and non-surgical oncological treatments have been guaranteed, and unfortunately, at times, even those were delayed. Therefore, due to reduced outpatient andrology consultations, it is understandable how men's health has been negatively impacted. Similarly, fertility centers reduced their activities, postponing most medically assisted procreation procedures [10]. We are aware that our data may have several limitations and may somehow be influenced by local factors, thus not fully reflecting the reality of other communities. However, we observed a substantial downward trend in birth rates. Considering all these elements, immediate fertility rebound and birth rate escalation after the end of the COVID-19 pandemic are more than desirable, as was the case after many other previous catastrophic events [11-15].

#### Limitations of the study

This was an observational study with a small sized sample. So, the findings of this study may not reflect the exact scenario of the whole country.

#### CONCLUSION

Continue breastfeeding their baby even if they are infected or suspect being infected as the virus has not been found in samples of breast milk. Mothers with COVID-19 should wear a mask when feeding their baby; wash hands before and after touching the baby; and routinely clean and disinfect surfaces. The study found that maternal pregnancy rates were higher than during the Covid-19.

#### RECOMMENDATION

This study can serve as a pilot to much larger research involving multiple centers that can provide a nationwide picture, validate regression models proposed in this study for future use and emphasize points to ensure better management and adherence.

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**Conflicts of Interest:** The authors state that the publishing of this paper does not include any conflicts of interest.

**Ethical approval:** The study was approved by the informed consent of the participant patients.

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