

**COMPARATIVE
STUDY OF PREGNANT
WOMEN ASSISTED
WITH CORONAVIRUS
(COVID-19) IN THE
INTENSIVE CARE UNIT
- ICU OF A HOSPITAL
IN THE WESTERN
AMAZON, IN THE YEARS
2020/2021**

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INTRODUCTION

According to Chan et al. (2020), at the end of 2019, in the city of Wuhan, China, a disease emerged that had the respiratory system as the main target, called coronavirus 2019, or COVID 19. According to the studies and research carried out by the author, it was discovered that this disease is caused by the coronavirus 2, from severe acute respiratory syndrome, acronym SARS-CoV-2.

Evolved to pandemic status in March 2020 as recorded by World Health Organization. It has since reached 220 countries and territories, leading to massive numbers of infections and thousands of deaths in at least 208 countries. In Brazil, the number of cases of Covid-19 has been increasing significantly. As of December 2019, we started to have records of deaths and new infections, possibly with the emergence of the P1 variant in the city of Manaus, State of Amazonas.

According to Mullin (2021), there are about 4,000 variants of the coronavirus circulating around the world. However, only a select group of variants have the ability to generate mutations in genes consistent with the SARS-CoV-2 virus. Among these variants, the ones that most worry scientists are the mutations that have an alteration in the SPIKE protein, in particular one known as E484K. This has the ability to connect to human cells very quickly, enabling an easier infection and a great predisposition to the development of resistance to current vaccines. It is found in its African (B1351) and Brazilian (P1) form.

This new variant, when compared with the hospitalization data and evolution of pregnant and puerperal women in the previous year, seems to be associated with greater virulence and development of an even more severe clinical picture than the strain that circulated in the first wave in the Western Amazon. With regard to pregnant women, although reports in the literature show that most pregnant women

have mild or moderate clinical conditions and only a small number need ventilatory support and/or care in an intensive care unit (ICU). With the increase in the number of cases in several countries, a greater risk of maternal complications was observed, especially in the last trimester of pregnancy and in the puerperium, including cases of maternal death. This work was based on the observation and registration of sick patients who demanded an intensive care unit and who tested positive for covid, on the systematic bibliographical analysis, in which articles published between the years 2016 and 2022 were reviewed, that is, in the last 7 years, in order to establish a good bibliographic base, concomitantly with the promotion of knowledge in the most complete way possible. In addition, through a study and analysis of a case in person over a period of 2 years, between the years 2020 and 2021, which occurred through a comparative study using the database of the Intensive Care Unit of a Hospital in the Western Amazon, including only pregnant and postpartum women hospitalized with COVID-19 in 2020 and January to March 2021.

At the present time, it is understood that pregnant women and puerperal women constitute a risk group for Covid-19. In Brazil, the Ministry of Health advises that pregnant and postpartum women up to the 14th postpartum day must be considered a risk group for Covid-19. Currently, there has been a considerable increase in pregnant women affected by COVID-19 with an unfavorable evolution.

GOALS

To compare the cases of pregnant women with COVID-19 treated in the Intensive Care Unit in the first three months of 2021 in relation to the same period in 2020, analyzing the obstetric profile and maternal outcome between the first and second wave of

METHODS

Cross-sectional study of data collected from the statistical base of an Intensive Care Unit in the Western Amazon.

RESULTS

Within the period from March to December 2020, about 14 patients from the Intensive Care Unit were treated, namely: 8 pregnant women and 6 puerperal women. Of these, 50% evolved in relation to the need to perform orotracheal intubation, in addition to registering 3 deaths, which is equivalent to 21% of the total amount.

CONCLUSION

COVID-19 is a viral strain that originated in 2019, but which has already occurred at other times, and is also called SARS-CoV-2. This virus is responsible for corrupting and weakening the respiratory system of the affected individual. Among the victims affected by COVID-19, those who suffer most from its symptoms are those with comorbidities, who have a physiology susceptible to the pathophysiology of the virus.

Pregnant women have increasingly shown themselves to be a group at risk for the virus, taking into account the morbidity and mortality statistics of the social group of pregnant women and the expanded symptomatology within this group. Therefore, this study demonstrated the influence on pregnant women in the second wave where the variant circulated.

When focusing on the question of the influence exerted by the P1 variant, which is the main focus of the article, the increase in morbidity and mortality among pregnant women affected by the viral strain that carries the Gamma/P1 variant is noted. In addition, there was a greater demand for an Intensive Care Unit among women affected by the strain and being pregnant at the same time.

In short, the article managed to achieve its objective, detailing both the gestational amount of individuals who were affected by the coronavirus in the first wave and the statistical variation of pregnant women affected in the second wave, as well as the predominance of the circulating strain, the P1 variant.

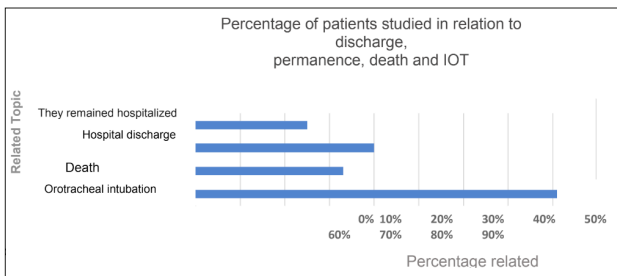


Figure 1 – Percentage graph of patients studied in relation to discharge, stay, death and OTI

Source: Adapted from HOSPUB/HBAP (2021)

In the background, within the period from January to March 2021, 27 hospitalizations were recorded in the Intensive Care Unit, namely: 10 pregnant women and 17 postpartum women with COVID-19. Of these 17 patients, 81% required orotracheal intubation, while 33% died, 40% were discharged, and 25% remained hospitalized in serious conditions. Respectively, the number was: 22 patients required intubation, 9 died, 11 were discharged from hospital and 7 remained hospitalized in serious condition. These data are demonstrated by the graph