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Clinical and epidemiological profile of patients admitted to a COVID-19 Maternal ICU in the city of Teresina-PI

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Kátya Coeli da Costa Loiola

Bruna Oliveira Evangelista

Natália de Sousa Alves

ABSTRACT

Objective: To trace the clinical and epidemiological profile of pregnant and postpartum women admitted to the COVID-19 intensive care unit in a highly complex maternity hospital in the city of Teresina-PI. Methods: This is a quantitative, descriptive, retrospective chart review study carried out in a maternity hospital located in the city of Teresina-PI. The medical records of pregnant women with a clinical or serological diagnosis of COVID-19 were included. Records with a lot of incomplete data (more than 20), patients without a diagnosis of COVID-19 and whose symptoms appeared after childbirth were excluded. Results: The total sample of this study consisted of 43 medical records of patients who met the established criteria, the majority being women aged between 18 and 30 years (60.4%; N=26), weighing more than 65 kg (60.4%; N=26), multigravida (55.8%; N=24), who had prenatal consultations (88.3%; N=38) and had at least one complication during pregnancy (67.4%; N=29). The most frequently reported clinical manifestations were dyspnea (95.3%; N=42) and cough (81.3%; N=35). In addition, the survey revealed a high rate of premature birth (80%; N=20) and caesarean section (100%; N=25). 69.7% (N=30) of the sample required ventilatory support. Further studies are needed to understand the true profile of this population and the other consequences that the disease has for pregnant women.

Keywords: Sars-CoV-2, COVID-19, Pregnant.

1 INTRODUCTION

The COVID-19 disease, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has rapidly evolved into a global pandemic, which has generated a serious public health problem at a global level.1

Transmission of the virus occurs mainly through contact with respiratory droplets from infected people and the disease causes serious disorders in the respiratory system, but it can also compromise other systems, such as the gastrointestinal system.2 The most prevalent symptoms of COVID-19 are: fever, dry cough, dyspnea, and fatigue, but complications such as pneumonia, severe acute respiratory syndrome, and death are frequent in the most severe cases of the disease.3.4

According to the Ministry of Health, people who have lung disease, cardiovasculopathies, obesity, hematological diseases, metabolic disorders, or are pregnant at any gestational age, are included in conditions and risk factors to be considered for possible complications of flu-like syndrome.5

Pregnancy causes immunosuppressive conditions, so factors such as altered immunity, reduced respiratory capacity, vascular and hemodynamic changes make pregnant women vulnerable to infectious diseases, and consequently, with a higher risk of complications. In addition, the possibility of vertical transmission of the infection from the mother to the fetus is not ruled out.6

The impact of SARS-CoV-2 infection on pregnant women continues to be debated and new information is constantly being published, however, studies end up contradicting each other.7 While early data from China indicate that pregnant and non-pregnant women infected with COVID-19 have had similar reports of the disease, more recent data show that pregnant women are more likely to be admitted to the intensive care unit (ICU), preterm birth, and at increased risk of maternal death.8

Research by Badr et al. (2020) indicated that pregnant women diagnosed with of COVID - 19 in ≥20 weeks of gestation when compared to non-pregnant women, had a higher risk of ICU admission, in addition to greater respiratory decompensation, requiring supplemental oxygen therapy (OT) and endotracheal intubation (FTE). 9 In contrast, a cohort study conducted by Vouga et al. (2021) observed severe outcomes in women exposed to the virus before 20 weeks of gestation.7

Despite the existence of studies that address the repercussions of the coronavirus on pregnant women, more research is still needed to expand scientific knowledge and assist in the early diagnosis and treatment of the disease. Once we are aware of the prevalent risk factors for the worsening of the disease, it will be possible to minimize cases of death and sequelae in pregnant patients.

Thus, the present study aims to outline the clinical and epidemiological profile of pregnant and postpartum women hospitalized in the COVID-19 intensive care unit in a high-complexity maternity hospital, and to allow reflection on possible forms of prevention and care for this public.

2 METHODOLOGY

This is a quantitative, descriptive and retrospective study, based on the analysis of medical records of a high-complexity maternity hospital in the city of Teresina, Piauí. The maternity hospital is the only one in the state that has a maternal intensive care unit for the treatment and isolation of pregnant women with suspected and/or confirmed COVID-19. The study was initiated after its approval by the Research Ethics Committee of the State University of Piauí (CEP/UESPI) and the Ethics Committee of the co-participating institution, by opinion 5.206.814, respecting the ethical precepts in research with human beings, according to resolution CNS/MS 466/12.

The sample consisted of patients admitted to the COVID-19 Maternal ICU of the aforementioned maternity hospital, admitted from January to July 2021, totaling 83 medical records. Of these, 28 were not found and 12 did not meet the inclusion criteria, resulting in the 43 medical records used in this study. Pregnant women with a clinical or serological diagnosis of COVID-19 were included. Patients with very incomplete medical records (>20 blank variables), without a diagnosis of

COVID-19 (clinical or serological), and those who had flu-like symptoms after delivery were excluded.

Data collection was carried out from February to May 2022, in the room of the Medical Archive and Statistics Service (SAME) of the maternity hospital, lasting about 4 hours a day. The medical records were accessed randomly, following the order in which they were made available by the sector team. For data collection, a data collection form developed by the researchers (Appendix B) was used.

Data related to the patient's gestational/clinical history were collected, identifying aspects such as: prenatal, perinatal and postnatal history of the current pregnancy; information on flu-like syndrome, ventilatory and medication support during hospitalization, as well as the need for cardiopulmonary resuscitation.

In addition, prenatal care, number of consultations, maternal weight, mode of delivery, gestational complications, testing for COVID-19 by RT-PCR or through rapid test, hospitalization period, clinical condition during hospitalization, invasive and non-invasive ventilatory support, use of vasoactive drugs and antibiotic therapies were other variables studied. Information on the socioeconomic and demographic conditions of the sample was also collected.

The data were organized and tabulated in an Excel 2007 spreadsheet and then analyzed in the open-source statistical program JASP 16.3 of the University of Amsterdam. Simple descriptive statistics were presented as percentages (%) and absolute frequencies (N), according to the normality of the data collected, which was evaluated by the Shapiro-Wilk test.To identify the association between positive testing, weight and clinical outcome, Pearson's chi-square test ($p<0.05$) was used.

3 RESULTS

A total of 43 pregnant women participated in the study. Of these, 26 were between 18 and 30 years old (60.4%), 13 were between 31 and 40 years old (30.2%), 3 had not yet reached the age of majority (6.9%) and 1 was over 40 years old (2.3%). Regarding demographic data, it was found that 14 mothers were born in Teresina-PI (32.5%), 2 in Timon-MA (4.6%), and the vast majority (62.7%; n=27) from the interior of Piauí. All information regarding the mothers' social and demographic variables is shown in Table 1.

Table 1- Characterization of the studied sample according to sociodemographic variables (N=43), Teresina-PI, 2021.

Characteristics	N	%
Age range (years)		
<18 AM	03	6,9
18 a 30	26	60,4
31 a 40	13	30,2
>40	01	2,3
Weight (kg)		
50 a 65	12	27,9
>65	19	44,1
Obesity	07	16,2
Not in the medical record	05	11,5
Schooling		
Complete Fundamental	03	6,9
Complete High School	18	41,8
Full Superior	02	4,6
Not in the medical record	20	46,5
Marital status		
Single	19	44,1
Married woman	10	23.2
Stable union	13	30,2
Not in the medical record	01	2,3
Colour		
White	01	2,3
Curtain	22	51,1
Black	01	2,3
Not in the medical record	19	44,1
Profession		
Student	03	6,9
From home	03	6,9
Administrative Assistant	01	2,3
Crediarist	01	2,3
Receptionist	01	2,3
Cashier	01	2,3
Rural worker	01	2,3
Not in the medical record	31	72,0
Naturalness		
Teresina-PI	14	32,5
Timon-MA	02	4,6
Interior of Piauí	27	62,7
TOTAL	**43**	**100,0**

Source: SAME from survey site, 2022.

The gynecological and obstetric profile of the sample is described in Table 2. In it, it can be observed that only 5 participants (11.6%) did not have records of prenatal consultations in their medical records, and 29 of them (67.4%) had at least four consultations. Regarding complications during pregnancy, the most recurrent were urinary tract infection (18.6%; N=8) and oligohydramnios (18.6%; N=8) and that more than half had at least one coexisting disease (67.4%; N=29). The sample had 25 deliveries, of which 20 (80%) were premature.

Table 2- Descriptive results of the gynecological and obstetric profile of mothers admitted to the COVID-19 ICU. (N=43) Teresina-PI, 2021.

Characteristics	N	%
Number of pregnancies		
1	16	37,2
2	11	25,5
3	07	16,2
4 or more	06	13,8
Ignored	03	6,9
She received prenatal care during her current pregnancy		
Yes	38	88,3
No	00	0,0
Ignored	05	11,5
Number of antenatal visits		
1 a 3	09	20,9
4 a 6	20	46,5
7 a 10	09	20,9
Ignored	05	11,5
Complications in the current pregnancy		
Gestational Diabetes Mellitus	04	9,3
Hypertension	04	9,3
Preeclampsia	04	9,3
Oligohydramnios 08 18.6	08	18,6
Polyhydramnios	01	2,3
Anemia	03	6,9
Urinary tract infection	08	18,6
Vulvovaginite	03	6,9
Syphilis	01	2,3
Candidiasis	01	2,3
Bleeding	02	4,6
HELLP Syndrome	01	2,3
Lupus	01	2,3
Breast cancer	01	2,3
Asthmatic bronchitis	01	2,3
Pielonefrite	01	2,3
Uneventful	14	32,5
Type of delivery performed (current pregnancy)		
Cesarean	25	58,1
Vaginal	00	0,0
She did not give birth during her hospital stay	17	39,5
Classification of newborns* according to GA at birth**	**N=25**	**%**
Preterm	20	80,0
Full-term	05	20,0
TOTAL	**43**	**100,0**

Source: SAME from survey site, 2022.
*NB= newborn; **GA= Gestational age

Table 3 presents data regarding flu-like symptoms, gestational period in which they started, and the drug treatment administered in the sample. All participants in the research were tested for COVID-19, of which 40 (93%) obtained a positive result. Dyspnea was the most common symptom (95.3%; N=41), followed by cough (81.3%; N=35) and fever (46.5%; N=20).

The pharmacological treatment of these patients was predominantly with corticosteroids (97.6%; N=42), with dexamethasone being the most commonly used drug (88.3%; N=38). Among antibiotics (90.6%; N=39), the use of azithromycin prevailed (92.3%; N=36), followed by ceftriaxone (84.6%; N=33) and, in its minority, vasoactive drugs, in which noradrenaline was the only one mentioned in this group (4.6%; N=2).

Table 3 - Description of flu-like symptoms presented, period of initiation and drug treatment used (N=43), Teresina-PI, 2021.

Symptoms	N	%
Dyspnoea	41	95,3
Cough	35	81,3
Fever	20	46,5
Body aches	10	23,2
Headache	05	11,6
Tiredness	04	9,3
Nausea	04	9,3
Diarrhoea	02	4,6
GI* symptom onset (weeks)	**N**	**%**
1-13	00	0,0
14-26	12	27,9
27-40	31	72,0
Drug treatment	**N**	**%**
Steroids	42	97,6
Antibiotics	39	90,6
Vasoactive drugs	02	4,6
TOTAL	**43**	**100,0**

Source: SAME from survey site, 2022.
*GI: Gestational age

A total of 37 (86%) participants had breathing difficulties; of these, 30 (69.7%) required ventilatory support, of which 27 used noninvasive ventilation (NIV) and 9 (20.9%) used invasive mechanical ventilation (IMV). Most mothers (69.7%; N=30) had a record of computed tomography of the lung in their medical records, which mostly showed pulmonary involvement ranging from 26-50% (23.2%; N= 10) and 51-75% (27.9%; N=12) (Table 4).

Table 4 - Sample distribution based on the use of ventilatory support and pulmonary involvement (N=43), Teresina-PI, 2021.

Classification	N	%
Length of hospital stay (days)		
1 a 5	21	48,8
6 a 15	15	34,8
>15	07	16,2
Ventilatory support	N	%
Yes	30	69,7
No	13	37,2
Non-invasive ventilation	N	%
Yes	27	62,7
No	16	37,2
NIV support time (hours)		
< 12	17	62,9
12-24	08	29,6
25-48	02	7,4
Invasive ventilation		
Yes	09	20,9
No	34	79,0
VMI Support Time (days)		
1-7	01	11,1
8-15	03	33,3
>15	05	55,5
Pulmonary involvement (%)		
0	01	2,3
5-25	04	9,3
26-50	10	23,2
51-75	12	27,9
>75	03	6,9
Not in the medical record	13	30,2
Clinical outcome		
Loud	40	93,0
Death	03	7,0
TOTAL	**43**	**100,0**

Source: SAME from survey site, 2022.

The relationship between positive testing for COVID-19 disease, weight, and hospitalization outcome, as shown in table 5, was researched, and it resulted in a p of 0.005, which is statistically significant, which indicates that obese patients infected with the SARS-CoV-2 virus had higher death rates.

Table 5 - Chi-square test: Association of the sample regarding testing for COVID-19 disease and weight with hospital clinical outcome (N=43). Teresina-PI, 2021.

Test Result*	**Hospitalization outcome**		
	Death	**Loud**	**Total**
Negative	0	3	3
Positive	3	37	40
Weight (kg)**	**Death**	**Loud**	**Total**
50 a 65	0	12	12
>65	0	19	19
Obesity	3	4	7
Not listed	0	5	5
Total	**3**	**40**	**43**

Source: SAME from survey site, 2022.
*p=0,623; **p=0.005

When performing Pearson's chi-square test to evaluate the comparison between the variables COVID-19 test and hospitalization outcome, the p-value found was 0.623 and it was verified that the relationship is not statistically significant, therefore, it is inferred that death rates in pregnant women with COVID-19 may be related to some pre-existing comorbidities and not only to infection by the virus.

While correlating weight and hospitalization outcome, it can be observed that obesity is related to death, with a value of $p<0.05$.

4 DISCUSSION

Studies show that cough, fever, body aches, and shortness of breath are part of the predominant symptoms in COVID-19 patients.10-12 In the study conducted by Molina et al., 70% of the sample had fever, 65% cough and 35% myalgia, in addition, only 20% of the participants had a single symptom, which is in agreement with the result found in the present study, where 96.7% of the sample showed a combination of symptoms.13

A study by Yan et al. found that 85 out of 99 pregnant women admitted to hospitals in Hubei Province, China, had a cesarean section.14 These data corroborate the findings of this investigation, in which 100% (N=25) of the deliveries in the sample were surgical. However, a survey conducted by Dollinger et al. between April 2020 and February 2021, with 193 pregnant women positive for SARS-CoV-2, showed 144 (74.6%) deliveries and of these, 115 (80%) were vaginal; however, 43% of their total sample was asymptomatic for COVID-19.15 Therefore, it is suggested that further studies be conducted to compare symptomatic and asymptomatic patients and the type of delivery.

A systematic review published by Matar et al., concluded that the rate of preterm labor (PPT) is considerably higher in pregnancies of coronavirus-infected mothers (especially in the 3rd trimester), when compared to pregnancies without this infection.16 In this context, a study by Antoun et al. reveals

that 37% (N=7) of patients who acquired the infection in the 3rd trimester had preterm birth, a figure that remains higher compared to the national rate of preterm birth (7.3%).17th

The present study found results similar to those of the researchers mentioned above, since 58% (N=18) of the mothers who acquired the virus in the last 3 months of pregnancy had a premature birth. However, it is still believed that it is valid to carry out studies with a larger sample that correlate the trimester of pregnancy in which the disease was contracted with the incidence of premature birth.

In addition to SARS-CoV-2 contamination, multiparity is another risk factor for preterm labor.18 Alves et al. point out that women who have more than three deliveries have a higher risk of PPT and this fact may be linked to the way the fertilized egg is implanted in the uterine wall.19,20 This information is in agreement with the results of this study, in which 13 of the 20 preterm newborns came from multiparous mothers, and of these, 8 were at least in their third pregnancy.

The literature shows that prenatal care is important for the identification of gestational risk factors and aid in prevention and early treatment during pregnancy, and this is of paramount importance for reducing preterm birth rates and for maternal and child health.19,21,22

Regarding complications during pregnancy, most pregnant women presented, in addition to the coronavirus, at least one type of disease, predominantly urinary tract infection (18.6%; N=8) and oligohydramnios (18.6%; N=8), followed by preeclampsia (9.3%; N=4) and gestational diabetes (9.3%; N=4), and that, during prenatal care, some of them could be identified and treated early, such as urinary tract infection and oligohydramnios. When comparing the list of pre-existing comorbidities, it was noticeable that obese patients had the worst outcome of the disease. Of the 7 pregnant women who had BMI above adequate, 3 (42.8%) of them died. One of them, in addition to obesity, also had GDM and chronic arterial hypertension and another had oligohydramnios and urinary tract infection during pregnancy.

Studies show that obesity is a risk factor for hospitalization, ICU admission, and the development of serious consequences leading to death, in case of COVID-19 infection.23-26 During pregnancy, obesity is a risk for several pathologies and complications, such as gestational diabetes, preeclampsia, breathing difficulties, and preterm birth.27 There is a lack of research that addresses this specific topic, so the correlation between obesity, COVID-19 and pregnancy should be further studied, bringing better conclusions.

Regarding drug treatment, the vast majority of the sample in this study used corticosteroids (97.6%; N=42) and antibiotics (90.6%; N=39). The use of corticosteroid administration includes fetal lung maturation, acute flare-up of autoimmune disease, prophylaxis for pneumonia, and relief of inflammation.28 D'Souza et al., in their research conducted in May 2020, state that the use of dexamethasone is proven and recommended for pregnant patients with COVID-19 who are mechanically ventilated or who require supplemental oxygen.29th

The most commonly used antibiotics in this study were Azithromycin (89.7%) and Ceftriaxone (84.6%), most of the time (76.9%), being a combination of these medications, which corroborates the instructions of the Manual of Recommendations for the Care of Pregnant and Postpartum Women in the Face of the Covid-19 Pandemic.30th

Computed tomography (CT) is considered the reference standard for diagnosing pulmonary changes resulting from COVID-19.12 Scientific evidence shows that the majority of patients diagnosed with COVID-19 have CT scans with abnormal results.14,16,31 In the cohort study conducted by Antoun et al., 20 of the 23 COVID-19-positive pregnant women had pulmonary involvement.17 This corroborates the results of the present study, in which only one patient had a CT scan of the lung with no abnormalities.

Respiratory distress was present in 37 patients in this study. To treat this insufficiency of the cardiorespiratory system, 62.7% (N=27) of the sample was submitted to the use of noninvasive ventilation, as in the study by Chen et al, in which all patients received NIV support.32 This type of support is a good alternative to avoid orotracheal intubation and its complications, in addition to reducing the risk of nosocomial pneumonia.

In the sample of this study, 6 patients used both forms of ventilatory support; when NIV proved to be ineffective in supplying the respiratory failure of these mothers, it was necessary to migrate to invasive ventilation. Another 3 patients used only invasive support.

This study had some limitations. The main one was the size of the sample, since 28 medical records were not found on the premises of the maternity hospital, and among them, 12 were from patients who died. Therefore, the results found in this study may not be in accordance with what actually happened with the total number of patients admitted in the study period. Another difficulty encountered was that some of the medical records used were not completely completed, leaving gaps in some of the variables studied and making it difficult to discuss them. Therefore, it is difficult to assess the risk factors for disease severity and mortality.

5 FINAL THOUGHTS

The profile of hospitalized mothers was women between 18 and 30 years of age, weighing more than 65 kg, multiparous, who had prenatal consultations and had at least one complication in pregnancy. The most frequently reported clinical manifestations were dyspnea and cough.

Due to the low rate of deaths present in the study, the severity of the disease cannot be associated with the clinical outcome of hospitalization, but it can be correlated with the high rate of premature births. Maternal-fetal risk factors coincide with COVID-19 risk factors, including obesity, diabetes, hypertensive syndromes, and lung diseases.

Thus, it is necessary to carry out more studies to understand the true profile of this public and to understand the other consequences that the disease brings to pregnant women.

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APPENDIX A - Data Use Commitment Term (TCUD)

I, Kátya Coeli da Costa Loiola, researcher responsible for the research project entitled "CLINICAL AND EPIDEMIOLOGICAL PROFILE OF PREGNANT WOMEN HOSPITALIZED IN A COVID-19 INTENSIVE CARE UNIT IN THE CITY OF TERESINA PI", together with BRUNA OLIVEIRA EVANGELISTA participating researcher, committed ourselves to using the data contained in the medical records of the

Dona Evangelina Rosa Maternity Hospital (MDER) in order to obtain the following objectives: - To outline the clinical and epidemiological profile of pregnant women hospitalized in the COVID-19 intensive care unit in a high complexity maternity hospital in the city of Teresina-PI.

- Describe the clinical and socioeconomic profile of pregnant women;
- Identify the clinical severity of the disease in pregnant women;
- To assess the clinical outcome of the disease in pregnant women diagnosed with COVID-19.
- To verify whether the worsening of the disease in pregnant women is associated with the prevalence of maternal risk factors.

Thus, I inform you of the need to waive the Free and Informed Consent Form, since no nominal data will be collected.

I declare that the information collected will be used solely and exclusively for scientific purposes, unless required by law or competent institution, I also declare that it is our responsibility to take care of the integrity of the information and to ensure the confidentiality of the data.

_____ _____

Prof. Kátya Coeli da Costa Loiola Bruna Oliveira Evangelista

CPF: 038.450.854-52 CPF: 046.169.753-02

Principal Investigator Participating Researcher

APPENDIX B - DATA COLLECTION FORM

Medical Record No.: _____

Age: ( ) < 18 years old ( ) 19 to 27 years old ( ) 28 to 35 years old ( ) 36 to 40 years old ( ) > 40 years old

Weight: ()< 50kg ( ) 50 to 65kg ( ) > 65kg

Marital status: ( ) Single ( ) Married ( ) Widow ( ) Divorced ( ) Common-law union

Schooling:( ) No schooling ( ) Elementary ( ) High School

( ) Incomplete Superior ( ) Complete Superior

Color:( ) White ( ) Black ( ) Yellow ( ) Brown ( ) Indigenous

Place of Birth:___

Family income:( ) < 1 minimum wage ( ) 1 minimum wage ( ) > 1 minimum wage

Habits: Alcohol ( ) Yes ( ) No Cigarettes ( ) Yes ( ) No

Number of pregnancies: ( ) 1 ( ) 2 ( ) 3 ( ) 4 or more

CURRENT PREGNANCY

Prenatal care:( ) Yes ( ) No

Number of consultations: ( ) 1 to 3 ( ) 4 to 6 ( ) 7 to 10

Prenatal exams:

Pregnancy complications: ( ) Preeclampsia ( ) Eclampsia ( ) HELLP

( ) Bleeding ( ) Gestational DM ( ) Vulvovaginitis ( ) Chorioamnionitis

( )Oligohydramnios – ILA ( ) Polyhydramnios – ILA ( ) IUR ( ) RPMP

( ) Hospitalization _____ days ( ) Preterm labor

( ) Other: ___

Medications: ____

Prenatal corticosteroids:( ) No ( ) Yes, number of doses ____

Flu-like symptoms: ( ) Yes ( ) No

( ) Cough ( ) Fever ( ) Tiredness ( ) Body aches ( ) Headache

( ) Sore throat ( ) Nausea ( ) Diarrhoea ( ) Tiredness ( ) Dyspnoea

Gestational age at which symptoms appeared:___

COVID test:( ) Yes ( ) No Result: ( ) Positive ( ) Negative

CT scan of the lung: ( ) Yes ( ) No

( ) between 5% and 25% of pulmonary involvement

( ) between 26% and 50% of pulmonary involvement

( ) between 51% and 75% of pulmonary involvement

( ) greater than 75% of pulmonary involvement

PARTURITION

Gestational age:

Type of pregnancy:( ) Single ( ) Multiple – order _____

Type of delivery:( ) Vaginal ( ) Forceps ( ) Cesarean section – Indication ___

Anaesthesia: ( ) Local ( ) Regional ( ) General

COVID-19 Induced Labor:( ) Yes ( ) No

COVID-19 maternal ICU admission

Number of days: ____

Symptoms present: ____

Breathing difficulties:( ) Yes ( ) No

Antibiotic use:( ) Yes ( ) No

What? _____

Use of vasoactive drugs:( ) Yes ( ) No

What?_____

Use of corticosteroids:( ) Yes ( ) No

What? _____

Other medications: ____

Ventilatory support: ( ) Yes ( ) No ( ) Invasive ( ) Non-invasive

Time of invasive ventilatory support:

( ) between 1 and 7 days ( ) between 8 and 15 days

( ) greater than 15 days

Duration of non-invasive ventilatory support:

( ) <12 hours ( ) between 12 and 24 hours ( ) between 25 and 48 hours

( ) greater than 48 hours

Non-invasive support type and interface:

( ) Epap

( ) Bipap

( ) Total Face Mask

( ) Nasal Face Mask

( ) Helmet type mask

Cardiopulmonary resuscitation:( ) Yes ( ) No

Form of contamination:

( ) Contact with an infected person

( ) Presence in a crowded environment

( ) I don't know

Hospitalization outcome:( ) Discharge ( ) Death

ANNEX - EMBODIED OPINION OF THE CEP

UNIVERSIDADE ESTADUAL DO PIAUÍ - UESPI

Plataforma Brasil

PARECER CONSUBSTANCIADO DO CEP

DADOS DO PROJETO DE PESQUISA

Título da Pesquisa: Perfil clínico e epidemiológico de gestantes internas em uma unidade de terapia intensiva COVID-19 na cidade de Teresina-PI

Pesquisador: Kátya Coeli da Costa Loiola

Área Temática:

Versão: 1

CAAE: 54882221.5.0000.5209

Instituição Proponente: Universidade Estadual do Piauí - UESPI

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 5.206.814

Apresentação do Projeto:

Trata-se de um estudo de cunho quantitativo, descritivo e retrospectivo. Será feita a análise retrospectiva de prontuários registrados no período de janeiro de 2021 a julho de 2021 de gestantes internadas no setor COVID-19 em uma maternidade de alta complexidade na cidade de Teresina-PI. Serão coletados dados relacionados ao histórico gestacional/clínico da paciente identificando aspectos como: histórico socioeconômico materno, história pré, peri e pós natal da gravidez atual; informações sobre síndrome gripal, suporte ventilatório e medicamentoso durante internação, bem como a necessidade de reanimação cardiopulmonar. Para isso, além do prontuário, será utilizada uma ficha elaborada pelos pesquisadores. A análise dos dados será realizada de forma descritiva após a escolha de dados paramétricos e não paramétricos e das variáveis dependentes e independentes.

Objetivo da Pesquisa:

Objetivo Primário:

Traçar o perfil clínico e epidemiológico de gestantes internas em unidade de terapia intensiva COVID-19 em uma maternidade de alta complexidade na cidade de Teresina-PI.

Objetivo Secundário:

- Descrever o perfil clínico e socioeconômico das grávidas internas;

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UF: PI **Município:** TERESINA
Telefone: (86)3221-6658 **Fax:** (86)3221-4749 **E-mail:** comitedeeticauespi@uespi.br

- Identificar a gravidade clínica da doença em grávidas;- Avaliar o desfecho clínico da doença em grávidas diagnosticadas com a COVID-19;
- Verificar se o agravamento da doença em gestantes está associado à prevalência de fatores de risco materno.

Avaliação dos Riscos e Benefícios:

Riscos:

Como provável risco decorrente da pesquisa tem-se a exposição dos participantes a um possível vazamento dos dados do prontuário. O extravio do prontuário também pode aparecer como risco secundário da pesquisa. Neste sentido, com o intuito de minimizar a probabilidade desse possível extravasamento de dados os prontuários dos participantes não serão identificados e será assegurada, por parte dos pesquisadores, a confidencialidade das informações através da assinatura do Termo de Compromisso de Utilização de Dados. Mesmo com esses cuidados, no caso, se alguém entrar na sala no momento da coleta, esta, será suspensa e só retornará quando apenas o pesquisador esteja no local.

Benefícios:

Entre os benefícios desse estudo destaca-se a possibilidade de contribuir com a ciência no desenvolvimento

Comentários e Considerações sobre a Pesquisa:

Pesquisa viável e de grande alcance social.

Considerações sobre os Termos de apresentação obrigatória:

Foram apresentados:

- Folha de Rosto preenchida, assinada, carimbada e datada.
- Declaração da Instituição e Infra-estrutura em papel timbrado da instituição, carimbada, datada e assinada;
- Projeto de pesquisa na íntegra (word/pdf);
- Instrumento de coleta de dados EM ARQUIVO SEPARADO(questionário/entrevista/formulário/roteiro);
- Termo de Consentimento da Utilização de Dados (TCUD).

Conclusões ou Pendências e Lista de Inadequações:

De acordo com a análise, conforme a Resolução CNS/MS Nº466/12 e seus complementares, o

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presente projeto de pesquisa apresenta o parecer APROVADO por se apresentar dentro das normas de eticidade vigentes.

Apresentar/Enviar o RELATÓRIO FINAL no prazo de até 30 dias após o encerramento do cronograma previsto para a execução do projeto de pesquisa.

Considerações Finais a critério do CEP:

APRESENTAR/ENVIAR O RELATÓRIO FINAL APÓS O TÉRMINO DA PESQUISA.

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_DO_PROJETO_1850174.pdf	06/01/2022 16:21:38		Aceito
Outros	instrumento_de_coleta_de_dados.pdf	06/01/2022 16:18:45	BRUNA OLIVEIRA EVANGELISTA	Aceito
Cronograma	cronograma.pdf	06/01/2022 16:17:24	BRUNA OLIVEIRA EVANGELISTA	Aceito
Orçamento	orcamento.pdf	06/01/2022 16:17:07	BRUNA OLIVEIRA EVANGELISTA	Aceito
Folha de Rosto	folha_de_rosto.pdf	06/01/2022 16:08:29	BRUNA OLIVEIRA EVANGELISTA	Aceito
Projeto Detalhado / Brochura Investigador	ProjetoTCC_Bruna_Evangelista.pdf	21/12/2021 10:07:02	BRUNA OLIVEIRA EVANGELISTA	Aceito
Declaração de Instituição e Infraestrutura	CartadeAnuenciaMDER.pdf	21/12/2021 09:31:02	BRUNA OLIVEIRA EVANGELISTA	Aceito
Declaração de Pesquisadores	declaracaoDeCompromisso.pdf	29/10/2021 16:46:08	BRUNA OLIVEIRA EVANGELISTA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	dispensa_TCLE_uespi.pdf	29/10/2021 16:42:28	BRUNA OLIVEIRA EVANGELISTA	Aceito

Situação do Parecer:

Aprovado

Necessita Apreciação da CONEP:

Não

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TERESINA, 20 de Janeiro de 2022

Assinado por:
LUCIANA SARAIVA E SILVA
(Coordenador(a))

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