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AN INVESTIGATION INTO THE IMPACT OF CONTINUING OR TERMINATING PREGNANCY ON THE MATERNAL, FETAL AND DISEASE PROGRESSION OUTCOMES IN PREGNANT WOMEN WITH COVID-19

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ABSTRACT

Introduction: There is limited evidence regarding the potential impact of COVID-19 on pregnancy, fetuses, and its outcomes. Evaluating population-level data on these outcomes as soon as they become available will be crucial for identifying trends related to the COVID-19 pandemic and managing the disease in pregnant women and their offspring.

Material and methods: This study employed a descriptive-analytical approach based on the recorded hospital files. All pregnant mothers who presented to the hospitals and tested positive for COVID-19 were included. Data included background and initial information such as age, gender, maternal PCR positivity, COVID-19 vaccination, number of vaccinations, pregnancy count, number of deliveries after 20 weeks of gestation, miscarriage, gestational age at sonography, COVID-19 symptoms, pulmonary involvement, preterm labor, premature rupture of membranes, high blood pressure, preeclampsia, intrauterine fetal demise, deep vein thrombosis/pulmonary embolism, maternal death, pregnancy termination, age at pregnancy termination, reasons for pregnancy termination, method of pregnancy termination, hospitalization duration, maternal recovery, neonatal PCR positivity, Apgar score, neonatal weight, neonatal intensive care unit admission, and neonatal death. Blood factors at admission and discharge were also recorded.

Results: A total of 401 pregnant women were enrolled in the study, among whom 282 individuals underwent delivery due to labor pain, previous cesarean section, pain, and labor. Among the pregnant women with COVID-19, 385 (96%) tested positive for PCR. White blood cells, hemoglobin, platelet, alanine aminotransferase, serum ferritin levels, and D-dimer levels showed statistically significant differences before and after discharge. Maternal PCR positivity was significantly associated with first-trimester termination, and the number of COVID-19 vaccinations had a significant relationship with third-trimester termination. In cases of moderate to severe pulmonary involvement, white blood cells, hemoglobin, alanine aminotransferase, aspartate aminotransferase, serum ferritin levels, D-dimer levels, and thrombocytopenia showed a noticeable increase, statistically significant compared to mild cases.

Conclusion: This study suggests that the most common time for COVID-19 infection in pregnancy is the first and third trimesters, with clinical symptoms of fever and cough. Pregnancy termination during the inflammatory phase of COVID-19 in patients with severe involvement was associated with unfavorable outcomes for both the mother and fetus.

KEYWORDS: pregnancy, outcome, fetal, coronavirus, COVID-19.

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