

SEVERE MATERNAL PERINATAL OUTCOMES IN PREGNANCY WITH COVID-19 IN TERTIARY HOSPITAL INDONESIA

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OBJECTIVE

To analyse the differences in maternal perinatal outcome between confirmed and unconfirmed COVID-19 cases in Dr. Kariadi General Hospital Medical Centre Semarang.

METHODS

This is an analytic observational study with a case-control design. The unpaired case-control sample size formula was used for sampling. A total of 135 samples were divided into two groups. The case group consists of 42 confirmed COVID-19 pregnant women and the control group of 93 unconfirmed COVID-19 pregnant women. The data were analysed using univariate tests, bivariate tests, and multivariate tests by logistic regression tests or multiple linear regression tests.

RESULT

Maternal outcomes of multiple organ dysfunction were significantly higher in the confirmed

COVID-19 case group (11.9% vs 1.1%), a higher significant difference was also found in the used of mechanical ventilators in the case group (9.5% vs. 1.1%), maternal mortalities was significantly higher in the case groups (9.5% vs. 1.1%). Mother with multiple organ function failure based on the calculation of the maximum SOFA score. Anaemia were more common in the case group (66.7%) compared to the control group (49.5%) with $P=0.063$. Pregnant women with kidney disease were more common in the case group (4.8%) than the control group (3.2%) $P=0.496$. The severity of COVID-19 and thromboembolic prophylactic therapy have a significant effect on multiple organ failure. Postpartum bleeding complications were only found in the case group (2.4%) $P=0.311$. Sepsis was higher in the case group (9.5%) than in the control group (3.2%) $P=0.135$. COVID-19 complication ARDS were significantly higher in the case group (7.1%) compared to the control group (1.1%) with $P=0.089$. DIC complications were only found in the case

group (2.4%) with $P=0.311$. Preterm delivery was higher in the case group (19%), compared to the control group (16.1%) with $P=0.676$. The perinatal outcome of asphyxia and foetal distress was higher in the case group. Perinatal COVID-19 status was checked only in confirmed COVID-19 mothers with a positive 18.9% of infants with confirmed COVID-19 status in the case group. There were five cases of perinatal death entirely caused by foetal death in utero, which were more common in the case group (7.1%) than the control group (2.1%)

CONCLUSION

There are differences in maternal and perinatal outcomes between confirmed and non-confirmed COVID 19 pregnant women, namely multiple organ failure, use of mechanical ventilators, and maternal mortality

Keyword: COVID-19, maternal outcomes, perinatal outcomes