

COVID-19 infection and perinatal outcomes: A systematic review

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We conducted a systematic review to evaluate the current evidence on the effect of COVID-19 infection on maternal, fetal, and neonatal outcomes. Available literature was searched using MEDLINE, Embase, and Cochrane library from December 2019 to 30 June 2021. A combination of keywords for COVID-19 and perinatal outcomes was used. The quality assessment of the included studies was done using the National Institute of Health quality assessments tools for observational studies. A total of 21 observational studies that assessed the adverse perinatal outcomes in pregnant women with COVID-19 infection compared to non-infected pregnant women were selected. Out of the total, only 12 studies reported the incidence of COVID-19 among pregnant women, which was ranged from 1.3% to 29.1%. Six studies reported that COVID-19 in pregnancy was not associated with adverse perinatal outcomes. One study found no difference in the overall rate of adverse perinatal outcomes, but the symptomatic status was associated with a modest increase in preterm delivery and intrapartum fetal distress. Cesarean section deliveries, preeclampsia, prelabour rupture of membranes and maternal death were among reported adverse maternal outcomes, while preterm birth, low Apgar score at 5th minute, low birth weight and admissions to neonatal intensive care units were among reported adverse neonatal outcomes. Cases of fetal distress and intrauterine deaths were also reported. The majority of the studies included in this systematic review reported one or more significant adverse perinatal outcomes associated with COVID-19 in pregnancy regardless of the symptomatic status. This finding stresses the need for special attention to prevent COVID-19 infection among pregnant women.

Biography

Malshani Pathirathna completed her BSC in Nursing degree from University of Peradeniya, Sri Lanka and PhD from Niigata University, Japan. Currently she is serving as a senior lecturer in nursing at University of Peradeniya, a premier public university in Sri Lanka. She has published several articles in reputed peer-reviewed journals.