

## **CHRD 2020: Abstract Submission Form**

#### **Submitter Name**

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#### Title

COVID-19 National Lockdowns and Perinatal Outcomes: A Rapid Review

#### Background

Since the emergence of COVID-19, preventative public health measures, including lockdown strategies, were declared in many countries to control viral transmission. Recent studies and anecdotes have reported changes in the prevalence of perinatal outcomes during national COVID-19 lockdowns.

#### Objective

We conducted a rapid review to evaluate the impact of COVID-19 lockdowns on the incidence of low birth weight (LBW), preterm birth (PTB), and stillbirth.

#### Methods

A single reviewer searched EMBASE, CORD-19, LitCovid (PubMed), WHO Global research on coronavirus disease (COVID-19), and MedRxiv for studies published in English from the first reports on COVID-19 until 24 August 2020. Perinatal outcomes of interest included LBW (<2500 g), PTB (<37 weeks), and stillbirth.

#### Results

Of the screened articles, 5 publications met the inclusion criteria (5 cohort studies). Studies included data from Denmark, UK, Ireland, Nepal and Netherlands. The total sample size ranged from 3399 to 1,599,547 pregnant women.

Four studies examined PTB with conflicting results, reporting both an increase and a decrease in PTB incidence. These studies reported odds ratios [95% CI] ranging from 0.09 [0.01, 0.40] to 1.11 [9.75, 1.61]. Two studies found a decrease in LBW rates during lockdowns, one of which was statistically significant, with a rate ratio of 3.77 [1.21, 11.75]. Two studies reported a statistically significant increase in stillbirth, with p values of 0.0042 [aRR 1.46, 1.13, 1.89] and 0.01 [95% CI 1.83, 12.0].

#### Conclusion

This review provides clues about the severity of the indirect influence of COVID-19 lockdown implementation; however, the criteria that lead to unexpected changes in LBW, PTB, and stillbirth remain unclear. Further studies examining the differences in other countries' lockdowns and sociodemographic groups from low to middle-income countries are needed. Exploration of perinatal outcomes during COVID-19 lockdown poses an opportunity to learn from and make changes to promote the reduction of the leading causes of childhood mortality worldwide.

#### Theme:

Community Health / Policy

#### Do you have a table/figure to upload?

No

Are you willing to participate in Goodbear's Den? No

#### **Presenter Status:**

**Undergraduate Students** 

#### What was your role in the project?

Search, data extraction, wrote abstract

### **Authors**

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