



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

## Letter: Pregnancy Outcomes During the COVID-19 Pandemic in Canada, March to August 2020

We read with great interest the article by Liu et al.<sup>1</sup> titled “Pregnancy outcomes during the COVID-19 pandemic in Canada, March to August 2020.” We appreciate the authors for offering data on the possible effects of the pandemic on pregnancy outcomes, still an area of uncertainty and ignorance. However, we would like to put forth some queries to better comprehend the study.

The study observed a decline in preterm deliveries, preterm labour inductions, and cesarean deliveries in 2020 (online Appendix Tables 3–5<sup>1</sup>). It also reported an increase in the stillbirth rate for a specific gestational age (Tables 2 and 3<sup>1</sup>). We would like to know more about the causes of stillbirth during that period, their percentage contribution, and whether they were preventable by intervention. This may explain and link the aforementioned observations—did a drop in labour inductions and cesarean deliveries in a specific population give rise to an increased stillbirth rate? Perhaps the authors could also compare the causes of stillbirth in 2020 with those in previous years. This would further drive home the point we are trying to make: It is important to determine whether there was a shift in the causes of stillbirth.

We are grateful to the authors for bringing forth data on this subject. It would make policymaking more reasonable regarding delivering antenatal care services while minimizing physical contact with health care service providers.

**Prerana Nagabushana, MD;<sup>1</sup> Avir Sarkar, MD;<sup>1</sup> Isha Wadhawan, MD<sup>2</sup>**

<sup>1</sup>Department of Obstetrics and Gynecology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

<sup>2</sup>Department of Obstetrics and Gynecology, Fortis Escorts Hospital, Faridabad, Haryana, India  
[avirsarkar93@gmail.com](mailto:avirsarkar93@gmail.com)

## REFERENCE

1. Liu S, Dzakpasu S, Nelson C, et al. Pregnancy outcomes during the COVID-19 pandemic in Canada, March to August 2020. *J Obstet Gynaecol Can* 2021. S1701-2163(21)00581-8.

*J Obstet Gynaecol Can* 2022;44(1):9

<https://doi.org/10.1016/j.jogc.2021.10.007>

© 2021 The Society of Obstetricians and Gynaecologists of Canada/La Société des obstétriciens et gynécologues du Canada. Published by Elsevier Inc. All rights reserved.

## Reply to Letter to the Editor Re: Liu et al., Pregnancy Outcomes During the COVID-19 Pandemic in Canada, March to August 2020

We thank Nagabushana et al. for their interest in our study and for the question they raised regarding a potential causal relationship between the observed reduction in preterm labour induction and preterm caesarean delivery rates and the increase in stillbirth rates in April 2020 in Ontario. The possibility of a causal connection did concern us, although as mentioned in our paper, we were unable to establish the relative likelihood of competing explanations, including incomplete data, type 1 error, and a pandemic-related disruption in obstetric services.

Stillbirths in our study were identified from maternal delivery records, which contain diagnoses and procedures, including specific diagnosis codes signifying fetal death. Although our data source, the Discharge Abstract Database of the Canadian Institute for Health Information, routinely creates separate records for mothers, stillbirths, and live births, we did not have full access to stillbirth records in its open-cut (i.e., monthly updated) format. However, it should be noted that identifying the cause of death remains challenging even with access to such records. Although each stillbirth record contains up to 25 diagnoses and up to 20 procedures, an underlying cause of