



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.

Regarding: “Vertical transmission of coronavirus disease 2019: a systematic review and meta-analysis”



TO THE EDITORS: We read with great interest about the study by Kotlyar et al (Volume 224, issue 1).¹ In short, the authors aimed to estimate the vertical transmission of COVID-19 based on early RNA detection of SARS-CoV-2 after birth from various neonatal or fetal sources and neonatal serology. We want to congratulate the authors for establishing an informative systematic review and shed some light on this infection in a vulnerable group. Certainly, the findings of Kotlyar et al¹ add to the literature on neonatal SARS-CoV-2 infections. However, we believe that some concerns should be discussed about this important study.

First, the statement ‘included 68 studies that fulfilled the eligibility criteria in the qualitative synthesis’ in the search strategy, study selection, and data extraction should read ‘included 69 studies that fulfilled the eligibility criteria in the qualitative synthesis.’ The ‘38 studies included in quantitative synthesis’ in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses flowchart (Figure 1) should be corrected to ‘39 studies included in quantitative synthesis.’ Although they are minor issues, these should be clarified.

Second, the authors should exclude the studies suspected of including duplicate reporting. More precisely, some pregnant women or neonates may have been included in multiple publications, as the recruitment periods overlap for reports from the same hospital. The case from Wang et al² should be considered as duplicate, as that and the larger retrospective case series from Yu et al³ reported by the same hospital overlapped, with respect to the periods of recruitment. It should also be noted that the data from Yu et al³ were mixed with the demographics of 7 cases from Hu et al.⁴ The cases from Yang et al⁵ likely replicated the data from Chen et al⁶ for similar reasons.

Isolated case reports and repeat case series from the same hospital or region should be excluded to avoid duplicate data from large retrospective studies. The studies suspected of including duplicate reporting can be identified based on the hospital location, recruitment periods, and the maternal and neonatal characteristics. Although duplicate reporting has small numbers in this systematic review and a reanalysis is not likely to change the results, we humbly suggest that the authors extract the hospital’s name and recruitment periods. When a hospital has published their cases more than once and if the recruitment periods overlapped, only the most informative study with the bigger sample size should be

included to minimize the possibility of double counting. ■

Jianghui Cai, MD
Department of Pharmacy
Chengdu Women’s and Children’s Central Hospital
School of Medicine
University of Electronic Science and Technology of China
Chengdu, 611731, China

Yonghong Lin, MD
Department of Obstetrics and Gynecology
Chengdu Women’s and Children’s Central Hospital
School of Medicine
University of Electronic Science and Technology of China
Chengdu, 611731, China

Meng-jun Wu, MD, PhD
Department of Anesthesiology
Chengdu Women’s and Children’s Central Hospital
School of Medicine
University of Electronic Science and Technology of China
No 1314 Riyue Ave., Qingyang District
Chengdu City 611731, China
wumengjuncd@126.com

The authors declare no conflict of interest.

This manuscript did not receive any funding.

REFERENCES

1. Kotlyar Am, Grechukhina O, Chen A, et al. Vertical transmission of coronavirus disease 2019: a systematic review and meta-analysis. *Am J Obstet Gynecol* 2021;224:35–53.e3.
2. Wang S, Guo L, Chen L, et al. A case report of neonatal 2019 coronavirus disease in China. *Clin Infect Dis* 2020;71:853–7.
3. Yu N, Li W, Kang Q, et al. Clinical features and obstetric and neonatal outcomes of pregnant patients with COVID-19 in Wuhan, China: a retrospective, single-centre, descriptive study. *Lancet Infect Dis* 2020;20:559–64.
4. Hu X, Gao J, Luo X, et al. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) vertical transmission in neonates born to mothers with coronavirus disease 2019 (COVID-19) pneumonia. *Obstet Gynecol* 2020;136:65–7.
5. Yang P, Wang X, Liu P, et al. Clinical characteristics and risk assessment of newborns born to mothers with COVID-19. *J Clin Virol* 2020;127:104356.
6. Chen H, Guo J, Wang C, et al. Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. *Lancet* 2020;395:809–15.

© 2021 Elsevier Inc. All rights reserved. <https://doi.org/10.1016/j.ajog.2021.09.028>