European Review for Medical and Pharmacological Sciences 2021; 25: 6154-6155

Comment on "Clinical outcomes of 201 neonates born to mothers with COVID-19: a systematic review"

J.-H. CAI[1], Y.-H. LIN[2], M.-J. WU[3]

[1]Department of Pharmacy, Chengdu Women's and Children's Central Hospital, School of Medicine, University of Electronic Science and Technology of China, Chengdu, China
[2]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, China
[3]Department of Anesthesiology, Chengdu Women's and Children's Central Hospital, School of Medicine, University of Electronic Science and Technology of China, Chengdu, China

We read with great interest the study by Yoon et al[1]. In short, the authors aimed to evaluate the clinical manifestations and outcomes of neonates born to women with COVID-19. The authors should be rewarded for establishing a timely and informative systematic review of this disease in neonates. Certainly, the findings of Yoon et al[1] add to the literature on neonatal outcomes and SARS-CoV-2 infections. While agreeing with the conclusions made by Yoon et al[1], we would like to draw their attention towards the following issue.

A total of 28 articles involving 223 pregnant women and 201 infants fulfilling the study criteria were included in this systematic review. However, the authors should exclude studies suspected of containing duplicate reporting. More precisely, it is important to note some pregnant women or neonates with COVID-19 may have been included in multiple publications, as admission dates overlap for reports from the same hospital.

The cases from Yang et al[2] should be considered a duplicate as the larger retrospective case series from Chen et al[3] reported by the same hospital with the periods of recruitment overlapped. Of note, by comparing the characteristics of the pregnant woman (e.g., maternal age, gravida, gestational age at delivery, drug treatment, delivery mode, chest CT results) and newborn (e.g., gender, Apgar scores, birth weight). We have identified that these seven cases reported by Yang et al[2] were the same person (patient 1, 2, 4, 6, 3, 7, and 8) in the case series reported by Chen et al[3], which implies that the two studies had duplicate reporting.

Isolated case reports and case series from the same hospital/region should be excluded to avoid duplicate data from large retrospective studies as duplication can give a potentially biased picture[4]. Studies suspected of including duplicate reporting can be identified based on hospital location, recruitment periods, maternal and neonatal characteristics. Although duplicate reporting has small numbers in this systematic review and a reanalysis are not likely to change the results, we humbly suggest that the authors extract the name of hospitals. When a hospital had published their cases more than once, if the recruitment periods overlapped, only the most informative study with the bigger sample size was included to minimize the possibility of double counting[5].

Conflict of Interest

The Authors declare that they have no conflict of interests.

Funding

This manuscript did not receive any funding.

Authors' Contributions

JC conceived the design of the comments and made critical revision. JC, MW and YL drafted the manuscript. All authors have read and approved the final version for publication..

References

1) Yoon SH, Kang JM, Ahn JG. Clinical outcomes of 201 neonates born to mothers with COVID-19: a systematic review. Eur Rev Med Pharmacol Sci 2020; 24: 7804-7815.
2) Yang P, Wang X, Liu P, Wei C, He B, Zheng J, Zhao D. Clinical characteristics and risk assessment of newborns born to mothers with COVID-19. J Clin Virol 2020; 127: 104356.

Corresponding Author: Jianghui Cai, MD; e-mail: 776773221@qq.com

3) Chen H, Guo J, Wang C, Luo F, Yu X, Zhang W, Li J, Zhao D, Xu D, Gong Q, Liao J, Yang H, Hou W, Zhang Y. Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. Lancet 2020; 395: 809-815.
4) Bauchner H, Golub RM, Zylke J. Editorial Concern-Possible Reporting of the Same Patients With COVID-19 in Different Reports. JAMA 2020; 323: 1256.
5) Cai J, Tang M, Gao Y, Zhang H, Yang Y, Zhang D, Wang H, Liang H, Zhang R, Wu B. Cesarean Section or Vaginal Delivery to Prevent Possible Vertical Transmission From a Pregnant Mother Confirmed With COVID-19 to a Neonate: A Systematic Review. Front Med (Lausanne) 2021; 8: 634949.