COMMENTARY

https://doi.org/10.1590/1806-9282.67.Suppl1.20200844

Comment on "Current evidence of SARS-CoV-2 vertical transmission: an integrative review"

Jianghui Cai¹* D, Hongxi Zhang¹ D, Mi Tang² D, Xiaoqin Gan² D

Dear Editor.

We read with great interest the study by Oliveira et al.\footnote{1}. In their article, the authors have reviewed the current scientific evidence of vertical transmission related to coronavirus disease 2019 (COVID-19). However, some concerns should be addressed.

First, only MEDLINE (via PubMed) and LILACS databases were searched for potential articles, which resulted in a significant reduction in the number of search results. Currently, they were more than 15 studies with available clinical characteristics of pregnant women and detailed neonatal outcomes. Other articles published up until 17th June 2020 meeting inclusion criteria can be seen in Table 1²⁻²⁰.

Second, the authors stated that "This review was performed according to a standard protocol for systematic reviews, which was based on the methodological manuals of the Preferred

Table 1. Other published reports with available clinical characteristics of pregnant women and detailed neonatal outcomes until 17th June 2020.

Study	Date of publication	Country	Study design	Language of publication	Admission date	No. of pregnant women confirmed with COVID-19 (n)
Zhu et al. ²	Feb. 6, 2020	China	Case series	English	1.20~2.05	9
Wang et al. ³	Feb. 28, 2020	China	Case report	English	2.05~2.18	1
Khan et al.4	Mar. 19, 2020	China	Case reports	English	1.28~3.01	3
Yu et al.⁵	March 24, 2020	China	Case series	English	1.01~2.08	7
Dong et al. ⁶	Mar. 27, 2020	China	Case report	English	1.28~2.22	1
Chen et al. ⁷	Mar. 28, 2020	China	Case series	English	1.20~2.10	5
Lee et al.8	Mar. 31, 2020	Korea	Case report	English	3.06~3.11	1
Gidlöf et al.9	Apr. 6, 2020	Sweden	Case report	English	Not mention	1
Breslin et al. ¹⁰	Apr. 9, 2020	USA	Case series	English	3.13~3.27	43
Xiong et al. ¹¹	Apr. 10, 2020	China	Case report	English	3.7~3.10	1
Khassawneh et al. 12	Apr. 14, 2020	Jordan	Case report	English	3.23~3.26	1
Zamaniyan et al. ¹³	Apr. 17, 2020	Iran	Case report	English	3.7~3.26	1
Al-Kuraishy et al. 14	Apr. 21, 2020	Iraq	Case report	English	3.13~3.30	1
Wu et al. ¹⁵	May 5, 2020	China	Case series	English	1.31~3.09	13
Perrone et al. ¹⁶	May 11, 2020	Italy	Case reports	English	3.01~4.30	4
Xia et al. ¹⁷	May 17, 2020	China	Case report	English	1.23~2.20	1
Lowe et al. ¹⁸	May 28, 2020	Australia	Case report	English	Not mention	1
Wang et al. ¹⁹	Jun. 8, 2020	China	Case series	English	12.08~4.01	30
Bani Hani et al. ²⁰	Jun. 12, 2020	Jordan	Case report	English	3.28~4.12	1

¹University of Electronic Science and Technology of China, Chengdu Women's and Children's Central Hospital, School of Medicine, Department of Pharmacy – Chengdu, China.

Conflicts of interest: the authors declare there are no conflicts of interest. Funding: none.

Received on September 27, 2020. Accepted on October 21, 2020.

²University of Electronic Science and Technology of China, Chengdu Women's and Children's Central Hospital, School of Medicine, Office of Good Clinical Practice – Chengdu, Sichuan, China.

^{*}Corresponding author: 776773221@qq.com

Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)²¹". But we can't find the PRISMA checklist in the manuscript or supplementary material.

Third, the authors didn't exclude studies suspected of including duplicate reporting. The data from reference 15 (Yan et al.²²) in this review were pooled from a national registry including 25 hospitals with study dates overlap. We suggest that when a hospital had published their cases more than once, only the

paper with the biggest data was included to minimize the possibility of double counting.

AUTHOR'S CONTRIBUITION

JC: Conceptualization, Writing – Review & Editing. **HZ:** Writing – Original Draft. MT: Data Curation, Writing – Original Draft. **XG:** Data Curation, Formal Analysis.

REFERENCES

- Oliveira LV, Silva CRAC, Lopes LP, Agra IKR. Current evidence of SARS-CoV-2 vertical transmission: an integrative review. Rev Assoc Med Bras (1992). 2020;66(Suppl 2):130-5. https://doi.org/10.1590/1806-9282.66.S2.130
- Zhu H, Wang L, Fang C, Peng S, Zhang L, Chang G, et al. Clinical analysis of 10 neonates born to mothers with 2019nCoV pneumonia. Transl Pediatr. 2020;9(1):51-60. https:// doi.org/10.21037/tp.2020.02.06
- 3. Wang X, Zhou Z, Zhang J, Zhu F, Tang Y, Shen X. A case of 2019 novel coronavirus in a pregnant woman with preterm delivery. Clin Infect Dis. 2020;71(15):844-6. https://doi.org/10.1093/cid/ciaa200
- Khan S, Peng L, Siddique R, Nabi G, Nawsherwan, Xue M, et al. Impact of COVID-19 infection on pregnancy outcomes and the risk of maternal-to-neonatal intrapartum transmission of COVID-19 during natural birth. Infect Control Hosp Epidemiol. 2020;41(6):748-50. https://doi.org/10.1017/ice.2020.84
- Yu N, Li W, Kang Q, Xiong Z, Wang S, Lin X, et al. Clinical features and obstetric and neonatal outcomes of pregnant patients with COVID-19 in Wuhan, China: a retrospective, singlecentre, descriptive study. Lancet Infect Dis. 2020;20(5):559-64. https://doi.org/10.1016/S1473-3099(20)30176-6
- Dong L, Tian J, He S, Zhu C, Wang J, Liu C, et al. Possible vertical transmission of SARS-CoV-2 from an infected mother to her newborn. JAMA. 2020;323(18):1846-8. https://doi.org/10.1001/jama.2020.4621
- Chen S, Liao E, Cao D, Gao Y, Sun G, Shao Y. Clinical analysis of pregnant women with 2019 novel coronavirus pneumonia. J Med Virol. 2020;92(9):1556-61. https://doi.org/10.1002/jmv.25789
- Lee DH, Lee J, Kim E, Woo K, Park HY, An J. Emergency cesarean section performed in a patient with confirmed severe acute respiratory syndrome Coronavirus-2: a case report. Korean J Anesthesiol. 2020;73(4):347-51. https://doi.org/10.4097/kja.20116
- Gidlöf S, Savchenko J, Brune T, Josefsson H. COVID-19 in pregnancy with comorbidities: More liberal testing strategy is needed. Acta Obstet Gynecol Scand. 2020;99(7):948-9. https://doi.org/10.1111/aogs.13862
- Breslin N, Baptiste C, Gyamfi-Bannerman C, Miller R, Martinez R, Bernstein K, et al. Coronavirus disease 2019 infection among asymptomatic and symptomatic pregnant women: two weeks of confirmed presentations to an affiliated pair of New York City hospitals. Am J Obstet Gynecol MFM. 2020;2(2):100118. https://doi.org/10.1016/j.ajogmf.2020.100118
- Xiong X, Wei H, Zhang Z, Chang J, Ma X, Gao X, et al. Vaginal delivery report of a healthy neonate born to a convalescent mother with COVID-19. J Med Virol. 2020;92(9):1657-9. https://doi.org/10.1002/jmv.25857

- Khassawneh M, Khasawneh W, Al-Zaghal L, Hayajneh W, Abdelal F. The first Jordanian newborn delivered to COVID-19 infected mother with no evidence of vertical transmission: a case report. Research Square. 2020. https://doi.org/10.21203/ rs.3.rs-22938/v1.
- Zamaniyan M, Ebadi A, Aghajanpoor S, Rahmani Z, Haghshenas M, Azizi S. Preterm delivery, maternal death, and vertical transmission in a pregnant woman with COVID-19 infection. Prenat Diagn. 2020;40(13):1759-61. https://doi.org/10.1002/ pd.5713
- Al-kuraishy H, Al-Maiahy T, Al-Gareeb A, Musa R, Ali Z. COVID-19 pneumonia in an Iraqi pregnant woman with preterm delivery. Asian Pacific Journal of Reproduction. 2020;9(3):156-8. https://doi.org/10.4103/2305-0500.282984
- Wu Y, Liu C, Dong L, Zhang C, Chen Y, Liu J, et al. Coronavirus disease 2019 among pregnant Chinese women: case series data on the safety of vaginal birth and breastfeeding. BJOG. 2020;127(9):1109-15. https://doi.org/10.1111/1471-0528.16276
- Perrone S, Deolmi M, Giordano M, D'Alvano T, Gambini L, Corradi M, et al. Report of a series of healthy term newborns from convalescent mothers with COVID-19. Acta Biomed. 2020;91(2):251-5. https://doi.org/10.23750/abm.v91i2.9743
- 17. Xia H, Zhao S, Wu Z, Luo H, Zhou C, Chen X. Emergency Caesarean delivery in a patient with confirmed COVID-19 under spinal anaesthesia. Br J Anaesth. 2020;124(5):e216-8. https://doi.org/10.1016/j.bja.2020.02.016
- Lowe B, Bopp B. COVID-19 vaginal delivery A case report. Aust N Z J Obstet Gynaecol. 2020;60(3):465-6. https://doi. org/10.1111/ajo.13173
- 19. Wang Z, Wang Z, Xiong G. Clinical characteristics and laboratory results of pregnant women with COVID-19 in Wuhan, China. Int J Gynaecol Obstet. 2020;150(3):312-7. https://doi.org/10.1002/ijgo.13265
- Bani Hani DA, Alsharaydeh I, Bataineh AM, Al Athamneh M, Qamileh I, Al-Baik A, et al. Successful anesthetic management in cesarean section for pregnant woman with COVID-19. Am J Case Rep. 2020;21:e925512. https://doi.org/10.12659/AJCR.925512
- Moher D, Liberati A, Tetzlaff J, Altman DG, PRISMA Group. Preferred reporting items for systematic reviews and metaanalyses: the PRISMA statement. PLoS Med. 2009;6(7):e1000097. https://doi.org/10.1371/journal.pmed.1000097
- 22. Yan J, Guo J, Fan C, Juan J, Yu X, Li J, et al. Coronavirus disease 2019 in pregnant women: a report based on 116 cases. Am J Obstet Gynecol. 2020;223(1):111.e1-111.e14. https://doi.org/10.1016/j.ajog.2020.04.014

