

COVID-19 in Pregnancy: What We Have Learned in a Year

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It has been a year since the beginning of the pandemic, and more than 120 million people around the world have been infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) [1]. Our knowledge of this virus has developed at an unprecedented speed. Initially, studies reported that the risk of morbidity and mortality from coronavirus disease 2019 (COVID-19) in pregnant people was similar to the non-pregnant population [2]. Nevertheless, after months of data collection around the world it became clear that pregnancy was a risk factor for severe and critical COVID-19 [3, 4].

The symptomatology of COVID-19 in pregnant people has been evaluated in several studies. We now know that more than 75% of pregnant patients diagnosed with SARS-CoV-2 infection have an asymptomatic course [5]. As with non-pregnant people, the most common complaints of COVID-19 in symptomatic pregnant people are cough, headaches, muscle pain, and fever [3].

The risks of COVID-19 during pregnancy are mainly maternal. Compared to non-pregnant women, pregnant people are three times more likely to be admitted to intensive care unit and 2.7 times more likely to require mechanical ventilation. Unfortunately, pregnancy is associated with a 70% increased risk of death from COVID-19 [3]. Other independent risk factors for severe and critical disease in pregnancy include 35 years old or older, pregestational diabetes, chronic hypertension, and obesity [5].

COVID-19 is associated with higher rates of preterm birth, both iatrogenic and spontaneous, and cesarean delivery. The risk of preterm birth is as high as 60% in critical cases [4]. A few studies have looked at the association between hypertensive disorders of pregnancy and SARS-CoV-2 infection with varying results [4-6].

Prevention is still the most important strategy to decrease maternal morbidity and mortality. Pregnant people should follow the current recommendations of social distancing, wash-

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ing hands and using masks. During the last months, attention has been taken to vaccination. Unfortunately, pregnant and lactating people were excluded from the initial trials. Recently, a report from the Centers for Disease Control and Prevention (CDC) showed that vaccination with the current Food and Drug Administration (FDA)-approved messenger ribonucleic acid (mRNA) vaccines was not associated with adverse maternal or fetal outcomes [7]. Based on current data, the American College of Obstetrics and Gynecologists and the Society of Maternal Fetal Medicine strongly recommend that pregnant and lactating people have access to COVID-19 vaccines regardless of gestational age. The decision should be made in conjunction with the patient, based on potential benefits and unknown risks.

Finally, adequate prenatal care during this pandemic is crucial. If possible, prenatal care should be a combination of faceto-face and telemedicine appointments. When face-to-face is required, several measures should take place to decrease the risk of infection, including open waiting areas, decreasing the waiting time, hand sanitizer available and screening of symptoms for every patient and staff member.

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Conflict of Interest

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Author Contributions

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Data Availability

The authors declare that data supporting the findings of this study are available within the article.

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References

- COVID-19 Map Johns Hopkins Coronavirus Resource Center 2020. Available from: https://coronavirus.jhu.edu/ map.html.
- 2. Osanan GV, Escobar MF. Ludmir, J. Do not forget our pregnant women during the COVID-19 pandemic. Women & health. 2020;60(9):959-962.
- Zambrano LD, Ellington S, Strid P, Galang RR, Oduyebo T, Tong VT, Woodworth KR, et al. Update: characteristics of symptomatic women of reproductive age with laboratory-confirmed SARS-CoV-2 infection by pregnancy status - United States, January 22-October 3, 2020. MMWR Morb Mortal Wkly Rep. 2020;69(44):1641-1647.
- 4. Adhikari EH, Moreno W, Zofkie AC, MacDonald L, McIntire DD, Collins RRJ, Spong CY. Pregnancy Outcomes Among Women With and Without Severe Acute Respiratory Syndrome Coronavirus 2 Infection. JAMA Netw Open. 2020;3(11):e2029256.
- 5. Allotey J, Stallings E, Bonet M, Yap M, Chatterjee S, Kew T, Debenham L, et al. Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis. BMJ. 2020;370:m3320.
- 6. Rosenbloom JI, Raghuraman N, Carter EB, Kelly JC. Coronavirus disease 2019 infection and hypertensive disorders of pregnancy. Am J Obstet Gynecol. 2021.
- 7. CDC. COVID-19 vaccine safety update 2021. Available from: https://www.fda.gov/media/146269/download.