

# Emerging Coronavirus and Adverse Pregnancy Consequences

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**Received** June 13, 2020; **Accepted** August 16, 2020; **Online Published** September 07, 2020

**Keywords:** COVID-19, Novel Coronavirus Infection, Pregnancy

## Dear Editor

Today, the world is witnessing a massive pandemic of a respiratory disease caused by the emerging coronavirus, COVID-19. This disease first spread in the Chinese city of Wuhan in December 2019, quickly crossing geographical boundaries and becoming a threat to the public health all around the world. On March 11, 2020 the World Health Organization (WHO) declared it as a pandemic situation.<sup>1</sup> Coronaviruses are a family of RNA viruses that have previously been the cause of two deadly diseases, Severe Acute Respiratory Syndrome (SARS) and the Middle East Respiratory Syndrome (MERS).<sup>2</sup> The difference between COVID-19 and the two other mentioned diseases is the number of deaths. As a matter of fact, the death rate of COVID-19 has been reported to be much higher compared to the other mentioned diseases. According to the WHO, there have been 1914916 people with COVID-19 and 123010 deaths worldwide since April 15, 2020.<sup>3</sup>

Among the different sections of every society, pregnant women are considered as one of the most vulnerable groups to COVID-19 due to specific physiological changes in their body and the suppression of the immune system.<sup>4</sup> About four months have passed since the onset of this disease, and although many studies are published daily on its various aspects, there is still not enough research and evidence to support the effects of COVID-19 on the consequences of pregnancy. Due to the fact that the cause of the COVID-19 virus is similar to the cause of SARS and MERS, a look at the different effects of these two diseases on pregnancy will definitely lead to more attention to pregnant women at risk for COVID-19. Evidence suggests that SARS and MERS have the following adverse effects on pregnant women:

spontaneous abortion, preterm delivery, premature rupture of membrane, preeclampsia, intrauterine growth retardation, the possibility of cesarean section increases and perinatal mortality and hospitalization in neonatal intensive care unit increases.<sup>5</sup>

In the current situation, due to the recommendation of home quarantine and the concerns that pregnant women have during the COVID-19, they may be less likely to appear in health care centers during pregnancy. Since COVID-19 has the potential to be at least similar to SARS and MERS, therefore, it is recommended to reduce maternal mortality and the adverse consequences of pregnancy. Continuous telephone or online screening for COVID-19 must be done by health providers in pregnant women and any suspicious cases should be seriously investigated.

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