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Letter to Editor

Novel Coronavirus Disease (COVID-19): Pregnancy Issues

Goce Kalcev[1]*, Ivan Barbov[2], Jovan Bozinovski[2] and Elizabeta Zisovska[3]

[1]International PhD in Innovation Sciences and Technologies, University of Cagliari, Italy

[2]University Clinic for Neurology, Skopje, Republic of North Macedonia

[3]University Clinic for Gynecology and Obstetrics, Skopje, Republic of North Macedonia

***Corresponding Author:** Goce Kalcev, International PhD in Innovation Sciences and Technologies, University of Cagliari, Italy.

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Immune and physiological changes that occur during a woman's pregnancy place her in a high-risk group for the physical and mental health consequences of various factors [1]. Previous studies showed high rates of maternal mortality, abortion, and preterm labor after pneumonia caused by the H1N1, MERS, influenza A, and SARS viruses [2]. However, information on the impact of COVID-19 infection on mothers and newborns outcomes is very limited. COVID-19 is becoming a global health concern.

As expected, a lot of questions arise about COVID-19 in pregnancy. These questions include: Can a COVID-19 infection be transmitted from mother to baby? Are the symptoms of COVID-19 infection different in pregnant women in comparison to the general population? Is the mortality rate of COVID-19 infection higher in pregnant women? According to some studies, infection with COVID-19 during pregnancy can be responsible for both maternal and fetal complications, including preterm delivery, respiratory distress, fetal distress, coagulopathy with liver dysfunction, and death of the mother [3].

As far as for vertical transmission of the coronavirus from mother to fetus, it is minimized. Moreover, in some studies, examples of amniotic fluid, cord blood, breast milk, placenta tissue, vaginal mucus, and throat swabs of neonates born to these infected mothers were examined with real-time polymerase chain reaction (RT-PCR) method. Up to date, the results were negative [4]. Evidence of vertical transmission was neither detected in SARS or in MERS [3]. In general, due to the lack of evidence-based medical documentation, the vertical transmission of the COVID-19 virus from the placenta during childbirth and from breast milk during the perinatal period has not yet been confirmed. Infected mothers who are suspected of being infected with the COVID-19 virus should be monitored before and after delivery.

Importantly, the clinical picture of COVID-19 did not differ significantly between pregnant and non-pregnant women. It was reported that pregnant women with COVID-19 pneumonia showed a similar model of clinical characteristics to non-pregnant adult women [5]. The most common symptoms are shortness of breath, temperature, chest pain [6]. It is important to note that the risk of developing a viral infection could later lead to adverse reactions such as an increased rate of maternal mortality, premature birth, and spontaneous abortion [7]. Premature birth and fetal distress are common in mothers infected with the coronavirus. Other side effects have not been reported [6].

Previous studies encompassing the Severe Acute Respiratory Coronavirus Syndrome (SARS-CoV) and the Middle East Respiratory Syndrome (MERS-CoV), observed numerous serious complications during pregnancy, which led to the need for endotracheal intubation, hospitalization in a Critical or Intensive care Unit (ICU), pneumonia, renal failure, low fetal oxygenation, fetal growth restriction, intrauterine abortion, and maternal/fetal death [8,9]. Coronaviruses can cause serious adverse results in pregnancy, as described above, including spontaneous abortion, premature birth, intrauterine growth restriction, ICU admission, coagulopathies, and maternal renal failure [10,11]. It should also be noted that pregnant women are associated with immunosuppression, which makes them more susceptible to infections [12].

Current evidence suggests that pregnant women do not have an increased risk of COVID-19 infection or develop more severe manifestations than the general population. Thus, attention must be growing in health surveillance and education for this group, as well as the availability of the health care system for them every time. Given the urgency of the COVID-19 virus and the lack of studies on the incidence of COVID-19 in pregnancy, and its perinatal and maternal issues, conclusions in many cases still need further studies. During this complicated period, which poses a threat to the whole world, attention must still be paid to the needs of the pregnant woman and her baby.

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Conflict of Interest

The authors declare no conflict of interest.

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