



**PHAR4211**

**Assignment**

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## COVID-19 in Pregnant and Breastfeeding Women

Pregnancy and lactation are two critical conditions that encounter women worldwide and both evoke special attention to make sure that there is no danger on both the mother and foetus/baby. Some drugs and natural products may cause teratogenicity, deformations or miscarriage and death of the foetus. While the novel corona virus pandemic continue to spread all around the world, it will affect that category of population- pregnant and breastfeeding women. It is very important to know whether the virus can be transmitted from the mother to the foetus or it concentrates in breast milk because this contributes to the efforts of predicting the spread and prevalence of the disease. Moreover, it is important to figure out how this virus interact with the foetus and if there is a potential danger on the neonates.

A recent analysis revealed that at this point in the global pandemic of COVID-19 infection there is no evidence that SARS-CoV-2 undergoes intrauterine or transplacental transmission from infected pregnant women to their foetuses<sup>(1)</sup>. However, analysis of more cases is required to confirm this true. According to CDC, transmission of COVID-19 from mother to child is unlikely, but few number of babies have tested positive shortly after birth because they were in close contact with an infected person<sup>(2)</sup>. Breastfeeding is important for infants health and should be performed even at this critical situation during the pandemic. Therefore, direct breastfeeding is advisable, under strict measures of infection control unless the mother is very sick to breastfeed then the neonate will be isolated, managed separately and given a breast milk without being pasteurized as the virus does not concentrate in breast milk<sup>(3)</sup>. Moreover, pregnant women have the same risk of getting COVID-19 as other adults who are not pregnant, but they have an increased risk of severe illness if infected with the virus<sup>(4)</sup>. The analysis of 38 pregnant women infected with the virus also revealed that there were no maternal deaths unlike infections caused by SARS and MERS obtained from previous data<sup>(5)</sup>.

At this point of the pandemic of COVID-19, there is no evidence that SARS-CoV-2 is transmitted from the mother to the foetus and the recent recommendations are not against direct breastfeeding as the virus is not present in the milk. It is worth to mention that breastfeeding should be performed carefully with strict measures of infection control. An exception is considered if the mother cannot breastfeed because of symptoms of the disease then the neonate should be breastfed separately using fresh milk from the mother.

### Bibliography

1. David A. Schwartz. (2020). An Analysis of 38 Pregnant Women with COVID-19, Their Newborn Infants, and Maternal-Fetal Transmission of SARS-CoV-2: Maternal Coronavirus Infections and Pregnancy Outcomes. *Archives of Pathology and Laboratory Medicine*.
2. CDC. If You Are Pregnant, Breastfeeding, or Caring for Young Children. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy->

breastfeeding.html?CDC\_AA\_refVal=https://www.cdc.gov/coronavirus/2019-ncov/prepare/pregnancy-breastfeeding.html&fbclid=IwAR27-MOreBjomRZ4rGWh6h8HRP4bTyvsTZqc-XxYdoqEuErPWn00oOEOiZ0 (Accessed 15 May 2020).

3. Riccardo Davanzo, Guido Moro, Fabrizio Sandri, Massimo Agosti, Corrado Moretti, Fabio Mosca. (2020). Breastfeeding and coronavirus disease-2019: Ad interim indications of the Italian Society of Neonatology endorsed by the Union of European Neonatal & Perinatal Societies. *Maternal and Child Nutrition*.
4. CDC. If You Are Pregnant, Breastfeeding, or Caring for Young Children. Available at: [https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html?CDC\\_AA\\_refVal=https://www.cdc.gov/coronavirus/2019-ncov/prepare/pregnancy-breastfeeding.html&fbclid=IwAR27-MOreBjomRZ4rGWh6h8HRP4bTyvsTZqc-XxYdoqEuErPWn00oOEOiZ0](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html?CDC_AA_refVal=https://www.cdc.gov/coronavirus/2019-ncov/prepare/pregnancy-breastfeeding.html&fbclid=IwAR27-MOreBjomRZ4rGWh6h8HRP4bTyvsTZqc-XxYdoqEuErPWn00oOEOiZ0) (Accessed 15 May 2020).
5. David A. Schwartz. (2020). An Analysis of 38 Pregnant Women with COVID-19, Their Newborn Infants, and Maternal-Fetal Transmission of SARS-CoV-2: Maternal Coronavirus Infections and Pregnancy Outcomes. *Archives of Pathology and Laboratory Medicine*.