Helping Breastfeeding Mothers Succeed - Allison Scott, DNP, CPNP-PC, IBCLC 6/2021 Update

COVID-19 (SARS-CoV-2 transmission) and Lactation Guidelines: The Current Evidence

Breastmilk Protection

Morbidity and mortality from COVID-19 is rare among infants and young children. Several factors are being investigated to determine this mystery. Maternal antibodies (specifically pneumococcal, IgA and IgG antibodies) and anti-viral milk proteins, such as lactoferrin are suspected to be protective through breastmilk. Lactoferrin inhibits the growth of many pathogens by disrupting cell membranes, sequestering iron, and inhibiting microbial adhesion and is found in mammalian milk, peaking in the colostrum phase (Peroni & Fanos, 2020). Early breastfeeding could provide vital protection based on this pathophysiology. Further study is needed but evidence, thus far, indicates breastmilk is protective against the SARS-CoV-2 virus.

Breastmilk Transmission

COVID-19 is uncommon in newborns born to mothers who had COVID-19 during pregnancy (CDC, 2021). Current evidence, including a systematic review of 37 studies of COVID positive mothers, supports evidence that SARS-CoV-2 transmission through breastmilk is highly *unlikely* but this continues to be studied (Siebach, et al., 2021, ABM, 2020, CDC, 2021, DiLorenzo, et al., 2021). No confirmed evidence of vertical transmission has been confirmed, as of June 2021 (Shah & Saugstad, 2021). Evidence does support the presence of antibodies directed to SARS-CoV-2 in human milk (Shah & Suagstad, 2021, ABM, 2020, DiLorenzo, et al., 2021).

Recommendations on Breastfeeding and COVID-19

**All guidance documents agree breastfeeding is safe and should be supported. Evidence is present that disruption of skin-to-skin care, rooming-in, and direct breastfeeding is associated with maternal stress and the infant is significantly less likely to be exclusively breastfed* (Bartick, et al., 2021).
The following are the current recommendations regarding breastfeeding by any mother confirmed or suspected of having COVID-19: (Shah & Saugstad, 2021, WHO, 2020, CDC, 2021, AAP, 2021).

- Continue skin-to-skin contact and rooming in after birth
- Mothers of NICU infants may express breastmilk for their infants during any time that their infection status prohibits visitation in the NICU. Pasteurization methods inactivate SARS-CoV-2 virus.
- Direct breastfeeding should be encouraged in mothers with mild to moderate COVID-19. If mother has severe illness, preventing her from direct breastfeeding, expression of milk to maintain supply should be encouraged.

- Measures to minimize risk of transmission should be taken: 1) the mother should wash hands prior to feeding and wear a mask during infant contact or when less than 6 feet from the infant 2) Infants should be bathed after birth to remove potential virus present on skin surfaces. * Once the mother has been afebrile for 72 hours without the use of antipyretics AND at least 7 days have passed since symptoms first appeared, these measures can be discontinued.
- If mother is strictly expressing milk or desires to express milk, her hands as well as all pump parts, bottles and artificial nipples should be thoroughly cleaned, and the mother should wear a mask. The expressed breastmilk can be fed to the infant by a healthy caregiver.
- If the mother chooses not to breastfeed during the first week after birth, the provider should consider asking if the family might reconsider this choice and engage in a discussion about the importance of breastfeeding and expressed human milk in protecting against infections during this vulnerable time (AAP, 2021).

Vaccines and Breastfeeding

Current evidence indicates it is safe for lactating women to get the COVID-19 vaccine (CDC2, 2021, ACOG2, 2021). This is based on the mechanism of action of the vaccines and that fact they use the body's own cells to generate the coronavirus spike protein (antigens in mRNA vaccine), which similar to all other vaccines, stimulates antibodies (in this case against COVID-19) (ACOG, 2021). There is no recommendation to avoid initiation or discontinue breastfeeding in mothers receiving the COVID-19 vaccine (ACOG2, 2021, ABM, 2021).
There is a small amount of data indicating antibodies and T-cells stimulated by the vaccine passively transfer into human milk, thus, the infant may receive protection from SARS-CoV-2. (Spatz, 2021, CDC2, 2021) IgA antibodies are detectable in milk within 5 to 7 days after vaccination against other viruses (ABM2, 2020). It is expected the same passive transfer by the COVID-19 vaccine will occur in breastmilk.