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The Importance of Continuing Breastfeeding during Coronavirus Disease-2019: In Support of the World Health Organization Statement on Breastfeeding during the Pandemic

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There are many questions and concerns about the coronavirus disease 2019 (COVID-19), including its implications for breastfeeding.¹ This commentary draws on a statement and recommendations recently issued by the Regional Office for Europe of the World Health Organization with the contribution of the European Pediatric Association-Union of National European Pediatric Societies and Associations and other main European pediatric organizations.¹ Our aim is to provide pediatricians with further guidance on breastfeeding and related safety measures during COVID-19, particularly in instances where a mother has or may have COVID-19.

The COVID-2019 epidemic, caused by severe acute respiratory syndrome coronavirus 2, was first identified in Hubei Province China in December 2019, and has subsequently spread globally, placing extensive pressure on health systems and posing a major public health challenge worldwide.² On March 11, 2020, the World Health Organization (WHO) declared the outbreak a pandemic.³ At the time, little was known about COVID-19 or its effects on the general population, and even less was known about how it could influence specific populations such as pregnant women, infants, or children. Reports show that children at all ages are sensitive to COVID-19, with no significant gender difference.⁴ Clinical manifestations of children's COVID-19 cases are less severe than in adults' patients, and a review of 72 314 cases by the Chinese Center for Disease Control and Prevention showed that <1% of the cases were in children <10 years of age.⁵ Additional information about COVID-19 infection among children is increasing over time, but questions remain, including questions about breastfeeding, particularly in instances when a mother may be infected with COVID-19.^{6,7} The protection, promotion, and support of breastfeeding are a priority for public health and WHO has been continuously compiling evidence on the effect of COVID on mothers and children.^{3,8,9}

Breastfeeding during the COVID-19 Pandemic

According to the WHO, mothers with COVID-19 (or suspected COVID-19) can breastfeed their babies as long as they take appropriate precautions.^{9,10} Breast milk encloses various antimicrobial substances, anti-inflammatory components, and factors that promote the development of immune system and reduce the occurrence of respiratory tract infections.¹¹ The WHO statement⁹ emphasizes again that breast milk contains all the nutrients in appropriate proportions essential for the healthy growth of infants, who can benefit from breastfeeding also from mothers with COVID-19 infection confirmed or suspected. Breastfeeding guarantees many health benefits for both the mother and infant and it is recognized as the ideal food for children in the first 6 months of life, constituting a primary form of promoting the child's health and development.⁷ Breast milk is perfectly adjusted to the infant's nutrition requirements and growth, because it contains all the nutrients an infant needs.¹² It enhances the immature immune system of the infant and strengthens defense mechanisms against infectious and other agents throughout the breastfeeding period.¹² Several studies demonstrated that continued, frequent breastfeeding is associated with greater linear growth and further protects child health by delaying maternal fertility postpartum and decreasing the child's risk of morbidity and mortality.¹³

The Risk of COVID-19 Transmission during Pregnancy and Breastfeeding

Data are lacking about whether pregnant women who are infected by the novel coronavirus can pass it to their fetuses across the placenta during pregnancy. Current data do not

COVID-19 Coronavirus disease 2019
WHO World Health Organization

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support this possibility. Although vertical maternal-fetal transmission cannot be ruled out, several small studies of pregnant women infected with COVID-19 found no evidence of vertical transmission, because no infant tested positive at birth and it is likely that the sources of severe acute respiratory syndrome coronavirus in the neonates' upper respiratory tracts or anuses are maternal in origin.¹⁴ Furthermore, the virus was not detected in samples of amniotic fluid, umbilical cord blood or placental tissue.¹⁵⁻¹⁸ Few cases of newborns infected by the novel coronavirus have been reported; however, it remains unclear whether they were infected before, during, or after delivery and by what means.^{14,19}

There is no evidence to date to suggest the novel coronavirus can pass to infants through breast milk, because the virus was not found in breast milk. This possibility cannot be completely ruled out, because the data available are based on limited clinical experience developed over few months during the novel COVID-19 pandemic, studies performed in women affected by COVID-19, and data collected during previous infectious outbreaks caused by other types of coronavirus, including severe acute respiratory syndrome, severe acute respiratory syndrome coronavirus, and Middle Eastern respiratory syndrome coronavirus. However, on the basis of available data, this circumstance is excluded.¹⁰ Public health officials and healthcare professionals are intensely engaged in the process of learning while doing. Clinical features of the infection and the dynamics of the COVID-19 spread among human populations and between individuals and the risks for infants, including those whose mothers carry the infection, are key elements of this accelerated learning process. Breast milk samples collected at first lactation from mothers affected by COVID-19 during pregnancy were tested and proved negative for the presence of virus in a study performed in Wuhan, China, during the first 3 months of the local outbreak.¹⁵ A case study from Australia described a mother with COVID-19 not separated from her infant; breast feeding seems to be possible and safe when viral precautions are observed.²⁰ Further studies are needed to confirm these results. Even if the virus is transmitted occasionally, the risks and benefits would have to be balanced, and the long-term risks of not breastfeeding would need to enter the equation. Because the data currently available show that the clinical features of COVID-19 in children and infants are generally mild and risks for viral transmission from mother to child are likely to be directly related to a COVID-19 infection affecting the respiratory tract of mothers, the potential risks for newborns seem to be minimal.¹⁴

How to Manage the Risk of Infection in Breastfed Infants

Women with confirmed or suspected COVID-19 infection are encouraged to breastfeed in absence of other limitations.

However, precautions should be taken to minimize potential problems (**Table**). Room sharing and uninterrupted mother-infant proximity is recommended as an important factor for establishing good breastfeeding for mothers with COVID-19 as well, providing that specific and appropriate respiratory and skin hygiene measures are taken (**Table**). If mothers are unable to breastfeed owing to severe health conditions caused by COVID-19, they should receive support from competent health care professionals. They may be advised to provide breast milk to their infants via safe alternative methods, such as the provision of expressed milk or relactation (the process of restarting breastfeeding after a gap or very little breastfeeding). If that is not possible, other alternatives can be considered, such as the use of certified donor milk bank services, designed to protect the incoming milk supply by rigorous screening criteria for milk donors.^{21,22}

The current WHO recommendations indicate that mothers should provide exclusive breastfeeding to their babies during the first 6 months of life.^{23,24} After the addition of solid food, mothers are advised to continue breastfeeding for at least 6 additional months and, if possible, to continue this practice up to the age of 2 years and beyond. Therefore, COVID-19-affected or -suspected mothers should be informed about the importance to continue providing their infants breast milk, and that this goal can be achieved by adopting appropriate hygiene and safety practices.

Conclusions

The document on COVID-19 and breastfeeding developed by the WHO Regional Office for Europe strongly supports the

Table. COVID-19 safety measures: Essential advices for mothers and staff working in maternity and newborn services

<p>Advised measures for breastfeeding mothers</p> <ul style="list-style-type: none"> Regularly practice respiratory hygiene including during feeding (covering mouth and nose with bent elbow or tissue when coughing or sneezing and promptly dispose of the used tissue) In case of respiratory symptoms (ie, short breath): use a medical mask when near to breastfed infant. Wash hands thoroughly with soap or sanitizer for a least 20 seconds before and after touching the baby. Routinely clean and disinfect any surfaces have been touched. If severely ill with COVID-19, if COVID-19 is suspected, or in case of other complications that are an obstacle to continue a direct breastfeeding, express milk to safely provide breastmilk to infants. If clinical conditions prevent to breastfeed or express breastmilk, explore the possibility to practice relactation (restarting breastfeeding after a gap), or using donor human milk through certified donor milk banking. (The adopted approach will depend on cultural context, patients acceptability, and availability of services.) <p>Advised measures for staff working in maternity and newborn services</p> <ul style="list-style-type: none"> Breastmilk substitutes, feeding bottles, teats, pacifiers, or dummies should not be promoted by staff providing maternity and newborn services. Mothers and infants should be enabled to remain together, practice skin-to-skin contact and room-in throughout the day and night, whether or not the mother or child has suspected, probable, or confirmed COVID-19, especially straight after birth during establishment of breastfeeding.

continuation of this practice during COVID-19, which is key for ensuring the health of children. European Paediatric Association-Union of National European Paediatric Societies and Associations, on behalf of its National European pediatric societies and associations, strongly and actively collaborates with the WHO regional office in promoting the position that breast milk is the ideal food for infants, because it is safe, clean, and provides all the energy and nutrients that the infant needs for the first months of life. Breast milk contains antibodies, which help to protect children against many common childhood illnesses, and breastfeeding confers many short- and long-term health benefits for both the mother and child. Efforts should be made to properly advise and support mothers with breastfeeding, even in instances when the mother has confirmed or suspected COVID-19 infection. ■

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