

## A STUDY ON: COVID-19 AND BREASTFEEDING

**Author's name:** <sup>1</sup>Samreen Naqvi, <sup>2</sup>Dr. Taj Mohammad

**Affiliation:** <sup>1</sup>PhD Nursing Scholar, Bareilly International University, Bareilly, Uttar Pradesh, India

<sup>2</sup>PhD Guide, Bareilly International University, Bareilly, Uttar Pradesh, India.

**Email:** [samreenaqqvi5@gmail.com](mailto:samreenaqqvi5@gmail.com)

**DOI No. – 08.2020-25662434**

### *Abstract*

*The COVID-19 epidemic has presented a variety of challenges for mother support, breastfeeding, and family involvement programmes for newborn nutrition and care. Italy was the first nation in Europe to contract SARS-CoV-2. One of the strategies used by the Italian government during the COVID-19 outbreak was the complete shutdown of cities and imprisonment at home. We were interested in how COVID-19 would impact breastfeeding.*

**Keywords:** COVID-19, Breastfeeding, Coronavirus, Mother-infant mothers

### INTRODUCTION

The life, sustenance, and growth of newborns and early children, as well as the health of mothers, depend on breastfeeding. The World Health Organization advises breastfeeding exclusively for the first six months of life, then continuing with the appropriate supplemental foods for an additional two years. [1]

The pandemic brought on by the brand-new Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) that was identified towards the end of 2019 in Wuhan, China, disturbed people's daily lives and severely impacted Italy's public health and economy. One of the first nations to contract SARS-CoV-2 was Italy, which was also the first nation in Europe to experience the pandemic. The Italian government issued an executive order on March 9, 2020, declaring a state of emergency to stop the virus from spreading and the healthcare system from failing. One of the actions adopted by the Italian government was the entire lockdown of cities, complete confinement at home, and factory closures. The Italian government implemented a number of measures, including complete city lockdown, house confinement, factory closures, restrictions in both private and public transportation, school holidays, and home-based employment. [2,3]. Routines at several hospitals have changed. Even though hospitals forbid partners from being there during labour and guests are not allowed in the postpartum ward, giving birth is still considered one of life's most important occurrences. In many hospitals, a newborn unit is only allowed one visitor each day, which can cause long-term problems with the newborn's bonding as well as psychosocial problems and depression in the parents. After discharge, the new family remained isolated from relatives and friends due to social distance restrictions [4]. Early in the COVID-19 pandemic, both the risk of vertical or horizontal transmission to the unborn child and the risk of adverse outcomes for pregnant women infected with SARS-CoV-2 were unknown. [5-7].

The best practises for nursing during a mother's COVID-19 infection are in jeopardy because there isn't enough information to determine whether SARS-CoV-2 can be vertically transmitted in milk or during breastfeeding [8-11].

Delivering baby nutrition and care interventions including breastfeeding, kangaroo mother care, and family participatory care has become more challenging as a result of the COVID-19 outbreak. Both the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend starting breastfeeding as soon as possible and focusing only on it for the first six months of a child's life. Increased infant survival and significant health benefits for mothers and babies have both been linked to breastfeeding. Public health concerns include the promotion and support of breastfeeding beginning, continuing, and exclusively [12, 13] In a policy statement, the Italian Society of Neonatology urged clinicians to support breastfeeding among all women, including those who had SARS-CoV-2 [14, 15].

The initial strike in Italy lasted for two months. According to epidemiological research, the COVID-19 pandemic has altered adolescent eating patterns across many nations and exacerbated psychological issues like depression and anxiety disorders as well as behaviours that could have a long-term impact on health [16–18].

### WHO RECOMMENDATIONS GUIDELINES FROM THE WHO

The WHO recommends that breastfeeding be initiated or continued by mothers who have COVID-19, whether it is suspected or proven. Mothers who are nursing should be informed that the advantages of breastfeeding much outweigh the risks of transmission.[ 19]

### SCIENTIFIC BRIEF

One of the ways breastfeeding shields newborns from illness and death is the presence of IgA in breast milk. IgA antibodies reactive to the COVID-19 virus have been found in breastmilk from moms who have already contracted the virus, but their potency and longevity have not yet been sufficiently investigated to address COVID-19 protection in breastfed infants.

### DISCUSSION

The presence of COVID-19 viral RNA in breastfeeding does not indicate that a live, contagious virus is present. It would take a replicative and contagious virus that could penetrate the infant's defences and reach specific places in the toddler to transmit COVID-19. If the COVID-19 virus from breastfeeding is later shown to be capable of replication in cell culture, it will need to penetrate the child's defences and reach certain areas of the infant to be transmitted. The implications of transmission risk must be framed in terms of COVID-19 prevalence in breastfeeding women and the scope and severity of infection, as well as the negative effects of separation and utilising breastmilk substitutes, as well as separation of newborns and early babies from mothers. COVID-19 appears to be a low-risk infection in children. The implications of transmission risk must be defined in terms of COVID-19 prevalence in breastfeeding moms and the scope and severity of COVID-19 infection in newborns when transmission occurs. Most children that were diagnosed with COVID-19 only had mild or subclinical disease. [20,21]

Moms who had previously been infected with COVID-19 had secretory IgA in their breastmilk. Since Lars A. Hanson first described sIgA in breastmilk in 1961, numerous bioactive components have been discovered in breastmilk that not only help a child develop neurocognitively and immunologically, but also protect against infections. [22,23]

### KNOWLEDGE GAPS

Whether or not the virus can spread through breast milk is currently unknown. The advantages of

breastfeeding and fostering the mother-infant bond have not been quantified, compared, or modelled against the risk of transmission associated with different feeding practices.

## CONCLUSION

The vertical transmission of COVID-19 during nursing cannot currently be determined because to a lack of sufficient data. Although COVID-19 infection in infants is uncommon and typically mild or asymptomatic, the consequences of stopping breastfeeding and being separated from the mother and child can be severe. Compared to other illnesses from which breastfeeding can protect infants and children, COVID-19 seems to pose a much lower threat to their lives and health. The advantages of breastfeeding and nurturing mother-infant connections to prevent infection and enhance health and development are especially substantial when health and other community services are disrupted or limited. Infection prevention and control methods must be implemented in order to prevent contact transmission between COVID-19 suspected or confirmed women and their newborns and small babies.

The WHO recommends that mothers with suspected or confirmed COVID-19 initiate and continue breastfeeding their newborns and young children, based on the evidence at hand.

## REFERENCES

1. World Health Organization, UNICEF. Global Strategy for Infant and Young Child Feeding. Geneva, Switzerland: World Health Organization; 2003
2. Remuzzi A, Remuzzi G. COVID-19 and Italy: what next? *Lancet*. 2020;395(10231):1225–8. [https://doi.org/10.1016/S0140-6736\(20\)30627-9](https://doi.org/10.1016/S0140-6736(20)30627-9).
3. Atalan A. Is the lockdown important to prevent the COVID-19 pandemic? Effects on psychology, environment and economy-perspective. *Ann Med Surg (Lond)*. 2020;56:38–42.
4. Verweij EJ, M'hamdi HI, Steegers E A. P, Reiss IKM, Schoenmakers S. Collateral damage of the Covid-19 pandemic: a Dutch perinatal perspective. *BMJ*. 2020;369:m2326.
5. Stuebe A. Should infants be separated from mothers with COVID-19? First, do no harm. *Breastfeed Med*. 2020;15(5):351–2. <https://doi.org/10.1089/bfm.2020.29153.ams>.
6. Rasmussen SA, Smulian JC, Lednicky JA, Wen TS, Jamieson DJ. Coronavirus disease 2019 (COVID-19) and pregnancy: what obstetricians need to know. *Am J Obstet Gynecol*. 2020;222(5):415–26. <https://doi.org/10.1016/j.ajog.2020.02.017>.
7. Juan J, Gil MM, Rong Z, Zhang Y, Yang H, Poon LC. Effect of coronavirus disease 2019 (COVID-19) on maternal, perinatal and neonatal outcome: systematic review. *Ultrasound Obstet Gynecol*. 2020;56(1):15–27. <https://doi.org/10.1002/uog.22088>.
8. Lackey, KA, Pace, RM, Williams, JE, et al. SARS-CoV-2 and human milk: What is the evidence? *Matern Child Nutr*. 2020;16:e13032. <https://doi.org/10.1111/mcn.13032>.
9. Dong L, Tian J, He S, Zhu C, Wang J, Liu C, et al. Possible vertical transmission of SARS-CoV-2 from an infected mother to her newborn. *JAMA*. 2020;323(18):1846–8. <https://doi.org/10.1001/jama.2020.4621>.
10. Groß R, Conzelmann C, Müller JA, Stenger S, Steinhart K, Kirchhoff F, et al. Detection of SARS-CoV-2 in human breastmilk. *Lancet*. 2020;395(10239):1757–8. [https://doi.org/10.1016/S0140-6736\(20\)31181-8](https://doi.org/10.1016/S0140-6736(20)31181-8).

11. Bastug A, Hanifehnezhad A, Tayman C, Ozkul A, Ozbay O, Kazancioglu S, et al. Virolactia in an asymptomatic mother with COVID-19. *Breastfeed Med.* 2020;15(8):488-91. <https://doi.org/10.1089/bfm.2020.0161>.
12. Brown A. Breastfeeding as a public health responsibility: a review of the evidence. *J Hum Nutr Diet.* 2017;30(6):759-70. <https://doi.org/10.1111/jhn.12496>.
13. Gianni ML, Bettinelli ME, Manfra P, Sorrentino G, Bezze E, Plevani L, et al. Breastfeeding difficulties and risk for early breastfeeding cessation. *Nutrients.* 2019;11(10):2266. <https://doi.org/10.3390/nu11102266>.
14. Davanzo R, Moro G, Sandri F, Agosti M, Moretti C, Mosca F. Breastfeeding and coronavirus disease-2019: ad interim indications of the Italian Society of Neonatology endorsed by the Union of European Neonatal & perinatal societies. *Matern Child Nutr.* 2020;16:e13010.
15. Davanzo R. Breast feeding at the time of COVID-19: do not forget expressed mother's milk, please. *Arch Dis Child Fetal Neonatal Ed.* 2020;105:455.
16. Ruiz-Roso MB, Knott-Torcal C, Matilla-Escalante DC, Garcimartín A, Sampedro-Nuñez MA, Dávalos A, et al. COVID-19 lockdown and changes of the dietary pattern and physical activity habits in a cohort of patients with type 2 diabetes mellitus. *Nutrients.* 2020;12(8):2327. <https://doi.org/10.3390/nu12082327>.
17. Guessoum SB, Lachal J, Radjack R, Carreier E, Minassian S, Benoit L, et al. Adolescent psychiatric disorders during the COVID-19 pandemic and lockdown. *Psychiatry Res.* 2020;291:113264. <https://doi.org/10.1016/j.psychres.2020.113264>.
18. Di Renzo L, Gualtieri P, Pivari F, Soldati L, Attinà A, Cinelli G, et al. Eating habits and lifestyle changes during COVID-19 lockdown: an Italian survey. *J Transl Med.* 2020;18(1):229. <https://doi.org/10.1186/s12967-020-02399-5>.
19. World Health Organization. Clinical management of COVID-19: Interim guidance (27 May 2020). Geneva, Switzerland: World Health Organization; 2020
20. Zimmermann P, Curtis N. COVID-19 in Children, Pregnancy and Neonates, *The Pediatric Infectious Disease Journal*: June 2020 - Volume 39 - Issue 6 - p 469-477 doi: 10.1097/INF.0000000000002700.
21. Zimmermann P, Curtis N. Coronavirus Infections in Children Including COVID-19: An Overview of the Epidemiology, Clinical Features, Diagnosis, Treatment and Prevention Options in Children. *Pediatr Infect Dis J.* 2020;39(5):355-368.
22. Hanson LA. Comparative immunological studies of the immune globulins of human milk and of blood serum. *Int Arch Allergy Appl Immunol.* 1961;18:241-267. doi:10.1159/000229177.
23. Bardanzellu F, Peroni DG, Fanos V. Human Breast Milk: Bioactive Components, from Stem Cells to Health Outcomes. *Curr Nutr Rep.* 2020;9(1):1-13. doi:10.1007/s13668-020-00303-7.