# Editoria

# Prof. Dr. B H Nazma Yasmeen MBBS, MCPS, MD, FRCP (Glasgow) Editor Northern International Medical College Journal

Professor and Head
Dept. of Paediatrics
Northern International
Medical College, Dhaka
e-mail:
prof.nazma.yasmeen@gmail.com

**Breastfeeding during the COVID-19 pandemic** 

B H N Yasmeen<sup>1</sup>

The outbreak of a novel coronavirus (SARS-CoV-2) was first detected in Wuhan City, Hubei Province, China in December 2019 and since then it kept spreading to at least 213 countries attributing 3.85 million deaths and 178.1 million confirmed cases till 17 June 2021 and has persisted until this day.1 In the meantime on March 11, 2020 the World Health Organization (WHO) declared this disease a pandemic as it has affected every continent except Antarctica.<sup>2</sup> The first Covid-19 case was recorded in Bangladesh on March 8, 2020. Since then the exponential rise in case number and death rates have made Bangladesh one of the worst-hit countries in the world. Up to 17 June 2021, Bangladesh reported 0.83 million infected cases and 13, 282 deaths.<sup>3</sup>

The Corona virus is transmitted mainly via respiratory droplets and/or contact, and human-to-human transmission and family clustering have been reported. 4-6 Transmission may also occur through fomites in the immediate environment around the infected person. 7 Undoutably, this highly transmissible disease is disrupting every area of life including Breastfeeding.

The benefits of breastfeeding is undisputed and based on evidence. Breast milk provide the best nutrition, immune protection, and plays a great role in the regulation of growth and development of the infants.<sup>8</sup> The World Health Organization (WHO) recommends exclusive breastfeeding for newborns starting any time within the first hour of life until 6 months with the introduction of nutritionally adequate and safe complementary (solid) foods at this

age, in addition to continued breastfeeding up to 2 years of age. 9 Breastfeeding within the first hour of birth protects newborn babies from infections and reduces their mortality. The risk of mortality due to diarrhoea and other infections can increase in infants who are either partially breastfed or not breastfed at all. 10 Breast milk is also an important source of energy and nutrients in children aged 6-23 months. It can provide half or more of a child's energy needs between the ages of 6 and 12 months, and one third of energy needs between 12 and 24 months. Breast milk is also a critical source of energy and nutrients during illness and reduces mortality among children who are malnourished.<sup>9</sup> It has already been proved that "Breastfeeding is best for babies" and disruption of breastfeeding can lead to a drop in milk supply, refusal by the infant to take the breast and a decrease in protective immune factors contained in breastmilk.

Therefore, during this pandemic situation, question arises whether Coronavirus can be passed on through breastmilk to their infant or young child and how they protect themselves and their babies. Fortunately, a systematic review by Duran et al. and a study by Lu and Shi reported that the Corona virus does not transmitted through breastmilk. 11,12 Several studies have shown that the expressed breast milk of mothers infected with COVID-19 is safe for their newborns. 13,14 Currently the International Confederation of Midwives (ICM) agrees with UNICEF and Royal College of Obstetricians and Gynaecologists (RCOG) in

DOI: https://doi.org/10.3329/nimcj.v13i1.73540

Northern International Medical College Journal Vol. 13 No. 1-2 July 2021-January 2022, Page 563-565

that there is no evidence of transmission of respiratory viruses via breast milk. Therefore, breastfeeding should be continued when general infection control measures are applied in symptomatic mothers.<sup>15</sup>







Counselling and psychosocial support

If you, you inferts, or young children have supported or confirmed COVID-19, or presented and confirmed COVID-19, or presented and processing the party of the proposal support. or practical feet support. You may get support from supportaintly trained health commission and also commissionally places by and poor breakfelt or discovered confirmed to the procession of the

Continue exclusive breastfeeding for 6 months, then introduce adequate and safe complementary foods at age 6 months.

 Continue breastfeeding up to 2 years of age or beyond.

World Health Organization oods at age or FCCOVID19
F

In this pandemic situation as new information emerges, reliable evaluation of them and universally acceptable guidelines for breastfeeding is urgently needed. Recommendations on mother-infant contact and breastfeeding should consider the potential risks of COVID-19 infection of the infant. But also, the risks of morbidity and mortality associated with not breastfeeding should be kept in mind. In comparison with exclusively breastfed infants, the risk of mortality is 14-fold higher in infants who are not breastfed. Considering all these issues current WHO recommendations regarding breastfeeding are as follows-

## WHO recommendations<sup>17</sup>

# Mother with suspected or confirmed COVID-19and baby is well

Mothers in a good clinical condition should be encouraged to breastfeed, she should be counselled about the benefits of breastfeeding which is substantially outweigh the potential risks for transmission.

# **Both Mother and Infant SARS-CoV-2-Positive**

Breastfeeding was strongly encouraged where both members of the dyad were positive.

 Infected mothers should perform hand hygiene before breastfeeding and wear a mask during breastfeeding.

- If an infected mother chooses not to breastfeed her newborn, she may express breast milk after appropriate hand hygiene, and this may be fed to the infant by other uninfected caregivers.
- Mothers of NICU infants may express breast milk for their infants during any time that their infection status prohibits their presence in the NICU. Centers should make arrangements to receive this milk from mothers until they are able to enter the NICU.
- Measures for expressing breastmilk should also be applied as in normal situations,
- No equipment should be shared between mothers.
- All equipment used to express milk should be rinsed with cold water and then washed with warm water and soap and finally, if possible, sterilize.

Breastfed infants have an advantage in receiving additional protection against SARS-CoV-2, therefore, the benefits of breastmilk outweigh the risk of a potential transmission of the coronavirus. During the COVID-19 pandemic breastfeeding is the best protective measure available for healthy and at-risk infants.

Therefore, breastfeeding should not be discontinued up to 2 years of age of a baby during this COVID-19 period.

### References

- 1. https://www.worldometers.info > coronavirus
- Gumbrecht, J., & Howard, J. (2020, March 11).WHO Declares Novel Coronavirus Outbreak a Pandemic. www.cnn.com/2020/03/11/health/ coronavirus-pandemic-world-health-organization/index.html

- Coronatracker Bangladesh, 2021https://www.worldometers.info/coronavirus/ country/bangladesh/
- Liu J, Liao X, Qian S et al. Community transmission of severe acute respiratory syndrome coronavirus 2, Shenzhen, China, 2020. Emerg Infect Dis 2020 doi.org/10.3201/eid2606.200239
- Chan J, Yuan S, Kok K et al. A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. Lancet 2020 doi: 10.1016/S0140-6736(20)30154-9
- World Health Organization. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19) 16-24 February 2020 [Internet]. Geneva: World Health Organization; 2020 Available from: https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf
- Ong SW, Tan YK, Chia PY, Lee TH, Ng OT, Wong MS, et al. Air, surface environmental, and personal protective equipment contamination by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) from a symptomatic patient. JAMA. 2020 Mar 4 [Epub ahead of print].
- Goldman AS. Evolution of immune functions of the mammary gland and protection of the infant. Breastfeeding Medicine. 2012;7(3):132–42. [PubMed] [Google Scholar]
- https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding 9 June 2021
- https:// www.unicef.org/ press-releases/ who-unicef-issue-new-guidancepromote-breastfeeding-globally 11 April 2018
- Dumpa V, Kamity R, Vinci AN, Noyola E, Noor A. Neonatal coronavirus 2019 (COVID-19) infection: a case report and review of literature. Cureus. 2020;12(5):e8165.
- Duran P, Berman S, Niermeyer S, Jaenisch T, Forster T, Gomez Ponce de Leon R, et al. COVID-19 and newborn health: systematic review. Rev Panam Salud Publica. 2020;44:e54.

- Chen H., Guo J., Wang C., Luo F., Yu X., Zhang W., Zhang Y. Clinical Characteristics and Intrauterine Vertical Transmission Potential of COVID-19 Infection in Nine Pregnant Women: A Retrospective Review of Medical Records. Lancet. 2020;395:809–815. doi: 10.1016/S0140-6736(20)30360-3. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- 14. Pandey A.K., Shukla A., Lal P. SARS-CoV-2 Transmission Risk through Expressed Breast Milk Feeding in Neonates Born to COVID-19 Positive Mothers: A Prospective Observational Study. Iran. J. Neonatol. IJN. 2021;12:53–57. doi: 10.22038/ijn.2021.53028.1958. [CrossRef] [Google Scholar]15.Sankar, M.J., Sinha, B., Chowdhury, R., Bhandari, N., Taneja, S., Martines, J., Bahl, R., Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis, Acta Paediatric 2015;104:3–13.
- International Confederation of Midwives, (ICM). Official statements on novel coronavirus (COVID-19) and pregnancy. Available at: https:// www.internationalmidwives.org/icm-news/unfpa-statement-on-novelcoronavirus-(covid-19)-and-pregnancy.html. Issued 7 Mar 2020. Accessed 20 Mar 2020.
- Sankar, M.J., Sinha, B., Chowdhury, R., Bhandari, N., Taneja, S., Martines, J., Bahl, R., Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis, Acta Paediatric 2015;104:3–13.
- World Health Organization. Clinical management of COVID-19: Interim guidance (27 May 2020). Geneva, Switzerland: World Health Organization; 2020
- WHO frequently asked questions: breastfeeding and COVID-19 for health care workers . J Hum Lact. (2020) 36:392–6. 10.1177/0890334420939556 [PubMed] [CrossRef] [Google Scholar