

COVID – 19 and Breastfeeding Information Update

Introduction

The Breastfeeding Promotion Network of India (BPNI) presents this technical information update in partnership with Trained Nurses Association of India (TNAI) that describes how to practice breastfeeding during the Covid-19 pandemic, having been alerted to mothers and babies being separated after birth and bottle-fed. It analyses guidance from various agencies to make recommendations for India. The WHO, UNICEF, and the Indian Council of Medical Research (ICMR) & National Institute on Research in Reproductive Health (NIRRH) have made specific recommendations on the subject matter. We hope this update will be useful for the policy

Breastfeeding and Covid-19

Optimal breastfeeding and infant and young child feeding practices from birth to 2 years and beyond are critical to fulfill the rights of infants and young children to attain highest attainable standards of health, development and survival. According to the guidelines by World Health Organisation¹ and Government of India², optimal practices include: breastfeeding should be initiated within one hour of birth, exclusive breastfeeding for the first six months (nothing else, not even water), continued breastfeeding for two years or beyond along with introduction of adequate and appropriate complementary feeding beginning at completion of six months. Both these guidelines urge the national and state governments to make every possible effort to implement these. A recent study on the cost of not breastfeeding has underlined the importance of optimal practices. Inadequate breastfeeding results in 100,000 preventable child deaths (mainly due to diarrhoea and pneumonia), 34.7 Million cases of diarrhoea, 2.4 Million cases of pneumonia, and 40,382 cases of obesity annually in India³.

Breastmilk contains several anti-microbial and bioactive components like immunoglobulins, cytokines, cellular factors like T- and B-lymphocytes, neutrophils and

macrophages, which provide passive immunity to the infant and play an important role in preventing viral, bacterial and fungal infections.⁴ Breastmilk also contains large number of antibodies, which prevent infection by many pathogenic organisms. The antibodies present in the maternal circulation, whether acquired after natural infection or vaccination, cross placenta and reach the fetus before delivery near term gestation. Some antibodies are secreted in the breastmilk and reach neonatal gut on breastfeeding. A case study of pregnant mother with severe acute respiratory syndrome (SARS) published in 2004, antibodies against the SARS virus were detected in the cord blood and breastmilk.⁵ A study, which detected specific IgA and IgG antibodies against respiratory syncytial (RS) virus in the colostrum, has reported that breastfeeding provides protection against infection with this virus.⁶ Currently, there is no study that has measured Covid-19 disease causing severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) antibodies in the cord blood or breastmilk. It is reasonable to believe that anti SARS-CoV-2 IgG antibodies will be transferred to fetus through placenta in a pregnant mother suffering from Covid-19 after a week of contracting SARS-CoV-2 infection and mother will secrete anti SARS-CoV-2 IgG antibodies in the breastmilk.

This update is issued with the aim to contribute to the health, nutrition, survival and development of infants and young children. Given the rapidly changing information, the update may be suitably revised during coming months.

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Human milk oligosaccharides (HMO) present abundantly in human milk promote healthy gut colonization and block adhesion of microbial pathogens to epithelial surfaces, thus prevent infection. These factors make breastfeeding the first vaccine for the infant. It is, therefore, essential that newborn infant is fed only mother's milk for prevention of Covid-19 disease and quality survival on long- term basis.

The COVID -19 pandemic caused by the SARS-CoV-2 virus has posed challenges for providing optimal care to pregnant and lactating women and infants. There are concerns about practicing skin-to-skin touch,

Vertical transmission of the SARS-CoV-2 virus

Available scientific information from studies in SARS-CoV-2 virus positive mothers suggests that this virus does not pass through the breastmilk.^{7,8,9,10} The World Health Organisation stated that there was no evidence as of now of mother-to-child transmission. Samples from amniotic fluid, cord blood, vaginal discharge, neonatal throat swabs or breastmilk from for SARS-CoV-2 virus positive mothers have been found negative for the virus.¹¹ However, if a mother is SARS-CoV-2 virus positive, the

breastfeeding and optimal infant and young child feeding in the SARS-CoV-2 virus suspected, probable or confirmed mothers. Even in normal situations there are many challenges in practicing breastfeeding, COVID-19 pandemic has compounded the situation. This is mainly due to paucity of information on the subject, which includes a worry about transmission of the virus through breastmilk and through contact from a positive mother to the infant. Thus, the need for correct information and support for breastfeeding become important during the pandemic.

newborn/ infant/ young child becomes susceptible through person-to-person spread of the virus. As the SARS-CoV-2 virus infection spreads through droplets, contact with infectious respiratory secretions from a positive mother or the care giver while sneezing, coughing or talking can infect the infant.^{12, 13}

Guidance of various agencies can be accessed on their respective websites; we provide excerpts of these in the **Box 1-3**).

Box-1: The World Health Organisation Guidance^{11,14} (Excerpts)

The World Health Organisation has provided following recommendations for IYCF when COVID-19 disease is suspected or confirmed in the mother:

1. Infants born to mothers with suspected, probable or confirmed COVID-19 infection, should be fed according to standard infant feeding guidelines*, while applying necessary precautions for IPC [infection protection and control]"
2. In case the mother is sick and unable to breastfeed, her expressed breastmilk should be given to the infant with a clean cup and/or spoon.
3. In a situation when the mother is unable to breastfeed or expressed breastmilk, relactation, wet nursing, donor human milk or appropriate breastmilk substitutes should be used. Appropriate precautions should be taken to avoid promotion of breastmilk substitutes and feeding bottles by the health facility and the health care providers.
4. Rooming-in should be practiced throughout the day and night, whether the mother and her infant has suspected, probable or confirmed COVID-19 virus infection.
5. Provide breastfeeding counselling, basic psychosocial support, practical feeding support to manage common breastfeeding difficulties, including IPC measures to all pregnant women and mothers with infants and young children, whether they or their infants and young children have suspected or confirmed COVID-19.
6. Mothers who are breastfeeding should practise respiratory hygiene, including during feeding which includes wearing a mask, washing hands before touching the baby and routinely cleaning and disinfecting surfaces, which they have touched.

**Breastfeeding should be initiated within 1 hour of birth. Exclusive breastfeeding should continue for 6 months with timely introduction of adequate, safe and properly fed complementary foods at age 6 months, while continuing breastfeeding up to 2 years of age or beyond*

For detailed, please see: [https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected)

WHO has also developed a document titled [Frequently asked questions: Breastfeeding and COVID-19 for health care workers](#). BPNI suggests adaptation of the decision tree in this document by replacing 'infant formula milk to the baby until the mother recovers' with 'suitable breastmilk substitute including locally available, unmodified, boiled animal milk to the baby until the mother recovers'

Box-2 UNICEF Guidance¹⁵ (Excerpts)

UNICEF, in a brief on **infant & young child feeding in the context of covid-19** has recognised that in settings where diarrhea, respiratory infections and infectious morbidity are common in infants, any possible risk of transmission of COVID-19 through breastfeeding (not reported to date) is outweighed by the known risks associated with replacement feeding. UNICEF has provided several context specific recommendations for infant and young child feeding by mother COVID-19 suspected and positive mothers. Some of the recommendations are given below:

1. Mothers with suspected or confirmed COVID-19 and isolated at home should be advised to continue recommended feeding practices.
2. In the health facilities, mothers or their infant with suspected, probable, or confirmed COVID-19 should be provided with skilled breastfeeding support if needed and enabled to practice skin-to-skin contact, kangaroo mother care and to remain together and to practice rooming-in throughout the day and night, especially immediately after birth during establishment of breastfeeding.
3. In situations when severe illness in a mother with COVID-19 or other health complications, prevents her from caring for her infant or prevents her from continuing direct breastfeeding, mothers should be encouraged and supported to express milk, and safely provide breastmilk to the infant, while applying appropriate hygiene measures.
4. If the mother is too unwell to breastfeed or express breastmilk or donor milk is unavailable, an appropriate breastmilk substitute, informed by cultural context, acceptability to the mother, and service availability should be provided.
5. Programmes and services to protect, promote and support optimal breastfeeding (early and exclusive) and age-appropriate and safe complementary foods and feeding practices should remain a critical component of the programming and response for young children in the context of COVID-19.
6. Full adherence to the International Code of Marketing of Breast-milk Substitutes and subsequent WHA resolutions (including WHA 69.9 and the associated WHO Guidance on ending the inappropriate promotion of foods for infants and young children) in all contexts in line with the recommendations of IFE Operational Guidance.
7. Donation of BMS by manufacturers has been shown to lead to increased use of substitutes and a reduction in breastfeeding. For this reason, there should be no donations of free or subsidized supplies of breastmilk substitutes in any part of the health care system. Any required breastmilk substitutes should be purchased, distributed and used according to strict criteria.
8. Breastfeeding mothers should be counselled/advised to continue breastfeeding, should the infant or young child become sick with suspected, probable, or confirmed COVID-19 or any other illness.

For detailed, please see: https://mcusercontent.com/fb1d9aabd6c823bef179830e9/files/235ff424-1f6d-48c6-a10a-ad5f631c7914/IYCF_Programming_COVID_19_Brief_2_v130March2020_for_distribution.pdf

Box-3 :Guidance by the Indian Council of Medical Research (ICMR) & National Institute on Research in Reproductive Health (NIRRH)⁹ (Excerpts)

ICMR and NIRRH in their 'Guidance for Management of Pregnant Women in COVID-19 Pandemic' Suggests that:

1. Facilities should consider temporarily separating (e.g. separate rooms) the mother who has confirmed COVID-19 or is a PUI (Person Under Investigation), from her baby until the mother's transmission-based precautions are discontinued.
2. If rooming-in of the newborn infant with the ill mother in the same hospital room occurs in accordance with the mother's wishes or is unavoidable due to facility limitations, facilities should consider implementing measures to reduce exposure of the new-born to the virus that causes COVID-19 like physical barrier between the mother and the baby with a curtain or keeping a distance of ≥6 feet between the mother and the baby.
3. If the COVID-19 positive or PUI mother herself is looking after the baby, she should practice hand hygiene before each feeding or other close contact and put facemask during contact with the new-born.
4. During temporary separation, mothers who intend to breastfeed should be encouraged to express their breastmilk while observing proper hand hygiene to establish and maintain milk supply. Expressed breastmilk should be fed to the baby by a healthy caregiver.
5. If a mother and new-born do room-in and the mother wishes to breastfeed, she should put on a facemask and practice hand hygiene.

For details, please see:

https://icmr.nic.in/sites/default/files/upload_documents/Guidance_for_Management_of_Pregnant_Women_in_COVID19_Pandemic_1_2042020.pdf

Box-4 Guidance by Ministry of Health and Family Welfare (MOHFW)¹⁶

BPNI shared the concerns of separating babies from their mothers with the Ministry of Health and Family Welfare, Government of India, who responded with an E-mail communication with the guidance as given below.

- “Ideally the mother and newborn should not be separated and continue skin to skin contact and initiate breastfeeding within first 60 minutes after the birth with precautionary measures of respiratory hygiene.
- In the context of COVID 19 pandemic, with the regards to breast feeding it is stated that there is no evidence of perinatal or trans placental transmission of virus from pregnant women with COVID -19 to child. However newborn is susceptible to person-to-person spread via droplets and inadequate infection prevention measures like hand washing.
- Based on the clinical condition of mother and newborn, the decision may be taken on case-to-case basis.
- The main risk of breastfeeding is close contact between mother and baby. If mother coughs or sneezes, this could contain droplets, which are infected with the virus, leading to infection to the baby.
- Therefore, during breastfeeding by mother with COVID -19, following precautions are necessary-
 1. Mother should wear a mask and practice respiratory hygiene
 2. Mother should wash hands (for 40 seconds) before each feeding session
 3. Routinely disinfect and clean the surfaces
- If a woman with COVID -19 is too unwell to breastfeed, she can be supported to safely provide her baby with breast milk in other ways, including by- expressing milk and using donor human milk. Following precautions need to be taken while using expressed milk-
 1. Practice hand hygiene: Washing hands before touching breast pump or bottles
 2. A dedicated breast pump should be used.
 3. After each pumping session, all parts that come into contact with breast milk should be thoroughly washed and the entire pump should be appropriately disinfected per the manufacturer’s instructions.
- Expressed breast milk should be fed to the newborn by a healthy caregiver.”

Conclusion and Recommendations

BPNI and TNAI team and independent experts did an analysis and found that WHO and UNICEF guidelines are comprehensive to address early and exclusive breastfeeding, rooming in and skin -to -skin contact as well as inappropriate marketing by baby food companies. To facilitate exclusive breastfeeding, the Academy of Breastfeeding Medicine (ABM) recommends rooming in with the mother in the same room 6 feet apart.¹³ Available evidence inclines to keep mother and baby together. To practice optimal breastfeeding, mothers require comprehensive lactation support and counselling. ICMR or MOHFW guidance does not touch the issues of baby food marketing/donations. Moreover, ICMR guidance advises health facilities to consider ‘separation’ of babies. While separation of babies is being practiced at some places, we recommend the following actions to keep in line with the standard international recommendations and existing Indian guidelines to help mothers to achieve the optimal IYCF in this COVID-19 pandemic.

For the health care system

1. Mothers with suspected, probable or confirmed SARS-Co-V2 infection should practice optimal infant and young child feeding practices.
2. Necessary precautions for IPC [infection protection and control]” such as hand washing before touching the baby, face mask, cleaning the surfaces and physical distancing should apply.
3. Rooming-in should be practiced throughout the day and night, whether the mother and her infant has suspected, probable or confirmed SARS-Co-V2 infection while observing appropriate IPC measures.
4. In case the mother is sick and unable to breastfeed directly, she can express her breastmilk, which should be given to the infant with a clean cup and/or spoon by a healthy care giver.
5. In a situation when the mother is unable to breastfeed or express breastmilk (on ventilator/ICU), as WHO advises, wet nursing, donor human milk, relactation or appropriate breastmilk substitutes should be used.
6. Health care facilities should not accept any donations

of free or subsidized supplies of breastmilk substitutes from any source.

For policy makers and programme managers

1. The Infant Milk Substitutes Feeding Bottles, and Infant Foods (Regulation of Production, Supply and Distribution) Act 1992, and Amendment Act 2003 should be enforced effectively. Any promotion of breastmilk substitutes, feeding bottles by respective companies in the health facilities and public should not be allowed.
2. Free and subsidised supply /donations of infant milk substitutes/infant foods for children under the age 2 should not be allowed by anyone to anyone.
3. Provisions of the National Disaster Management Plan 2019¹⁷ including "Supply of provisions to meet the needs of infants/ small children and Counselling for lactating mothers", should be implemented throughout the country.
4. All breastfeeding mothers should receive skilled breastfeeding counselling and support during antenatal, natal and post-natal period, basic psychosocial support¹⁸ and practical feeding support to manage common breastfeeding difficulties during the post-natal period in the health facility. A trained health care provider, who is looking after Covid-19 parturient mother, should help mother and infant for breastfeeding.
5. Sensitization of Covid-19 disease managers and training of the health care workers looking after SARS-Co-V2 positive parturient mothers in initiation of breastfeeding and supporting mother and family to breastfeed should be included as a part of management strategy of Covid-19 pandemic.
6. Mothers should have access to appropriate guidance and logistics like masks, water and soap etc. to practice respiratory hygiene in the health facility and at home.
7. Efforts to protect, promote and support breastfeeding should be further strengthened to boost immunity of infants and young children.
8. Mothers should be counselled/advised to continue breastfeeding, if the infant or young child becomes sick with suspected, probable, or confirmed COVID-19 or any other illness.

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