

Guidance for use of human milk in India in the context of COVID-19



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Background

Breastfeeding and use of human milk (expressed breastmilk and donor human milk) are important for improved neonatal outcomes at all times and are of particular importance during emergencies and natural calamities.

The current COVID-19 coronavirus pandemic is an acute illness caused due to a novel (new) mutation in this virus, now called SARS CoV-2. Though data is limited, this respiratory virus shows characteristics of similar viruses such as SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome) virus.

In a report of nine COVID-19 positive pregnant mothers from China in the current epidemic, the virus has not been demonstrated to show vertical transmission and was not detected in breastmilk or amniotic fluid. Though a couple of anecdotal reports of potential in utero transfer have been reported, according to the Centre for Disease Control mother-to-child **transmission of coronavirus during pregnancy is unlikely, but after birth the newborn infant is susceptible to person-to-person spread** [1,2,3].

Considering the pandemic of COVID-19, all international public health guidelines agree that breastfeeding should continue and should be supported in these difficult times, with due precautions taken [1,3-6].

For the purpose of use of human milk by healthcare facilities and the Comprehensive Lactation Management Centres (with Human Milk Banks), the following is the guidance.

A. Regarding Rooming-in and Breastfeeding:

- For mothers who have no exposure to COVID-19, breastfeeding should continue as per standard infant feeding guidelines and health care providers should provide adequate breastfeeding support [3]. Lactating mothers should be advised to increase their social distancing with others to reduce the risk of infection and practise hand and respiratory hygiene.

- For mothers diagnosed to be COVID-19 positive or as a PUI (person under investigation), there is concern of postnatal transmission to her child by infected respiratory secretions. Vulnerability of neonates to severe complications of COVID-19 infection is uncertain due to lack of evidence. Hence, based on ICMR (Indian Council for Medical Research) & NIRRH (National Institute on Research in Reproductive Health) guidance, depending on mother's and baby's health status and hospital policy on facilities available, the following options are available:

a) Rooming-in with Breastfeeding: When isolation of suspected / infected mother with her neonate is possible, rooming-in with direct breastfeeding to be done. For initiation of lactation a woman needs support, a healthy willing family member who is not positive for COVID-19, not under direct contact with suspected or confirmed COVID-19 and asymptomatic may be allowed in the room to provide support for breastfeeding and taking care of neonate [7,8]. Elderly family member or member with co-morbidities like diabetes mellitus, hypertension, cardiac disease, etc should not be allowed. The accompanying person should be provided appropriate PPE. This is vital to success of breastfeeding. Appropriate precautions should be followed to prevent transmission of infection to the neonate. Mother should practice all precautions including a) respiratory hygiene, b) hand hygiene before and after contact with the baby, c) wearing a triple layer surgical mask while feeding her baby and d) frequent cleaning and disinfecting all the surfaces and objects she is touching / using [3]. When not feeding, she should keep a distance of > 6 feet from the neonate or at least keep a mechanical barrier like curtain in between [7]. If she alone is taking care of the baby, this becomes difficult, then she may be allowed to take care of other needs of the baby taking all precautions.

b) Temporary separation with feeding expressed breastmilk: If facilities do not have provision to keep mother and baby together, temporary separation of mother and baby to be done, till mother is confirmed negative. The neonate should be fed with expressed breast milk of the mother, with katori and spoon (bottle feeding to be discouraged) by a nurse or healthy family member who has not been in contact with the mother. Mother needs to be supported for frequent manual expression of her breastmilk to maintain her milk output. If expression is done by pump, a dedicated breast pump

should be used and recommendations for proper pump cleaning should be followed meticulously. Depending on available facility a dedicated refrigerator be used for storing expressed breastmilk or a dedicated shelf be provided in existing common facility to be used with proper sanitization of the storage containers. Strict hygiene procedures to be followed while supporting expression, transportation and handling of milk. In case of temporary separation, expressed breastmilk is the first choice followed by pasteurised donor milk and then appropriate (term or preterm) infant formula.

- **During mother's sickness if she was unable to breastfeed fully or express her milk, she should be supported for re-lactation on her recovery.**
- In these times, lactating mothers and their families need more psychosocial and technical support in confidence building and other aspects of breastfeeding especially in establishing and maintaining the milk supply. Offer extra support to the mothers and their family members in counselling in view of education regarding the COVID-19 behaviours. Dedicated counsellor with PPE for mothers serves the purpose well.

B. Regarding Donor Human Milk:

- Human milk is essential for the vulnerable group of very low weight babies who do not have access to their own mother's milk. Transmission of this respiratory virus through breast milk has not been demonstrated in the small study from China and is reported to be less likely by CDC. Previous studies have shown thermal inactivation (specifically heat treatment of 60°C for 30 minutes of donor human milk) of respiratory virus particularly the MERS corona virus [6,9,10].
1. Hence, human milk donation continues to be supported in accordance with and as per the requirements stated in the National Guidelines for Lactation Management and Indian Academy of Paediatrics Guidelines [11,12].
 2. Greater vigilance must be exercised in donor screening procedures.
 3. In addition to routine donor screening criteria for milk banking, the donor screening history and examination findings should be modified to include a detailed history regarding the risk of being a suspected or probable case of COVID-19 and the details should be documented.

4. Mothers are not eligible to donate milk in any of the following COVID-19 related situations additionally to standard criteria:
 - a) COVID-19 positive donor till she is declared free of infection.
 - b) History of having stayed or transited in a high containment zone during the previous 14 days.
 - c) History of close contact with a confirmed or probable case of COVID-19 in previous 14 days.
 - d) Suffering from symptoms like cough, fever, sore throat, running nose till found to be COVID-19 negative on nasopharyngeal sample PCR.
 - e) Person who worked in or attended a health care facility in which a case of COVID-19 infection has been confirmed.
5. Strict hygienic procedures during milk collection, pasteurization, storage and disbursal; and meticulous record keeping should be followed as per the routine guidelines [11,6].
6. Maintain COVID-19 precautionary disinfection procedures for all the areas of the CLMC like that of its doors, doorknobs, floor, furniture, computers, etc. and personal protection hygiene by the all the staff within CLMC and outside also while visiting mothers or motivating donors or alike. Group counselling and mass donation to be avoided till situation is declared safe. Use more of digital and individual modes of motivating and counselling donors [7].
7. In the likelihood of shortage of pasteurized donor human milk (PDHM), the PDHM disbursal policy of the unit may require modification to be reserved for more vulnerable babies, such as for <30 weeks gestation / <1250 grams birth weight, instead of use for all needy VLBW babies (<1500 grams).
8. Health care providers should create a plan to address the possibility of a decreased healthcare workforces, potential shortage of personal protective equipment, limited isolation rooms and should maximise the use of tele-health across as many aspects of postnatal care as possible [7].

Note: As information on the COVID-19 virus and its behaviour is evolving, the guidance is likely to undergo periodic modifications as more data becomes available. The guidelines in this document are based on evidence as available now. As new evidence accumulates, some of the recommendations may change. Users should use these guidelines in accordance with the latest government regulations and ICMR advisories.

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