Interim Guidance

Breastfeeding Promotion during COVID-19 pandemic

General Directorate of Nutrition
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Background

Novel coronavirus infection disease (COVID-19) has become a public health emergency of international concern since the SARS-CoV-2 outbreak in Wuhan, China, in December 2019. Despite the ongoing efforts to fight this global pandemic, it is a devastating infection with high morbidity and mortality, particularly among the adult and elderly population. Although uncommon, pregnant women, lactating women, newborns, infants, and young children are not exempt from this infection. The impact on pregnant women and pediatric cases have, so far, been reported as less severe than the disease occurring among the older infected people. Programs and services to protect, promote, and support optimal breastfeeding (early and exclusive) and age-appropriate and safe complementary foods and feeding practices should be implemented for young children in the context of COVID-19. Here, based on the available evidence, we present urgent guidance on breastfeeding in the context of COVID-19.

Scope

This guidance has been developed for frontline workers concerned with maternal and child health at health care institutes. Considering community quarantines and the possible shortage in health care staff during the pandemic, the need for community support, social associations, Islamic shareah commissions, and families are considered sources of support for breastfeeding mothers.

The infant nutrition emergency is relevant across sectors and disciplines, particularly nutrition department, but also health, including reproductive health, maternal, newborn and child health, curative services, mental health, and psychosocial support services, infectious disease management, and child protection.

Target population

The target populations for interventions are newborns, infants, young children aged under two years old, pregnant and lactating women.

Evidence

In both developed and developing countries, breastfeeding has an important role in the prevention of infections, especially respiratory infections and gastroenteritis. Breast milk is rich in immune system boosters, including macrophages, immunoglobulins, oligosaccharides, and lactoferrin.

COVID-19 has variable severity and might even be asymptomatic. The mode of transmission is by respiratory droplets and close contacts, and other modes of transmission are as yet unproven. In limited studies with a small number of cases, the virus has not been detected in breast milk. A small number of cases of newborns are infected secondary to contact with infected mothers, yet they have a favorable outcome. E-health is a promising future mode of work, especially during
this pandemic. E-health utilization in breastfeeding promotion and management has been addressed in the literature, and works in education, triaging, motivation, and support.

Dealing with new illness and ambiguous causative factor makes it difficult to identify sound evidence. Almost all available recommendations, guidelines, and statements recommend that a lactating mother who gets infected with COVID-19 should continue to feed her infant breast milk. However, the experts have not reached complete consensus, and guidelines could change rapidly as we continue to learn more about COVID-19. There are debates in literature about what is best when a mother becomes infected with COVID-19 particularly new mothers and their newborns: rooming-in vs. temporary separation; feeding breast milk directly vs. indirectly; involving the mother and the family in the decision of breastfeeding vs. not; voluntary action vs. obligatory; addition of a wet nurse as another infant feeding choice; addition of human donor milk as another feeding choice. Lack of vaccine and efficient drug therapy to SARS-CoV-2 added a challenge to management of this illness, and despite all efforts; prevention remains the best control of it.

Considering all of the above, “Protect, promote, and support exclusive breastfeeding in infants less than 6 months of age and continued breastfeeding in children aged 6 months to 2 years or beyond remains the standard infant nutrition”. With separation in early postpartum stage, there is a risk of undermining the establishment of breastfeeding and the negative consequences associated with breastfeeding failure. This guidance prefers broad breastfeeding options to suit different clinical and social scenario contexts for the health workers and families. Individualized risk/benefit assessment and different decision-making in the management of specific cases helps to support ideal nutrition for the infants and young children. The prevalence of COVID-19 in the area, the proportion of elderly among the population, crowdedness, feasibility of resources, risk factors in the child or the mother, cultural considerations, and social conditions are factors to be weighed during the decision. This document envisions shared action for choosing the appropriate method of feeding between health care workers and families.

An update of this guidance will be released once more data becomes available.
1. Guidelines and policies

1.1. In any COVID-19 guidance related to infant and child feeding, it is preferable to involve the health professional experts in breastfeeding and lactation. This will ensure inclusion of the best evidence and resources of promotion, support, and protection of breastfeeding, and help to avoid conflicting messages.

1.2. Multi-sectoral intervention is necessary, so planning and delivering programs of breastfeeding should be developed jointly and in both Arabic and English to suite different tasks.

2. Training and education

2.1. The training on breastfeeding and lactation management for health workers should continue via e-learning. On-site training can be continued on an individual basis.

2.2. Ensure that all staff dealing with maternal and child health are educated on infectious control measures. Saudi center for disease prevention and control (SCDC) i.e. wegaya protocols should be circulated to all staff.

2.3. An update about lactation within the context of COVID-19 is mandatory. Health care workers should be informed on the rapid national guidelines released concerning pediatric, obstetric, and breastfeeding during COVID-19.

3. Infection and control measures

3.1. Infection control measures should be fully practiced according to the Saudi control and disease guidelines and recommendation.

3.2. Precautions for lactating women with COVID-19 (suspected or confirmed), regardless of feeding mode, who must be with their infant:

   A. Practicing respiratory hygiene, including wearing a mask covering the mouth and nose, especially during feeding or breast expression.
   B. Washing hands with soap and water for 40 seconds before and after touching the baby, breast expression equipment, or feeding utensils.
   C. Routinely cleaning and disinfecting surfaces they have touched.
   D. Maintain physical distancing from other people (2 meters).
3.3. Before preparing or eating food, caregivers should ensure they practice the recommended hygiene behaviors, such as handwashing with soap and regular cleaning and disinfecting of food preparation areas.

3.4. In communities where eating at a common bowl or feeding children by hand is common, it is preferable to use the child’s own plate and spoon to avoid transmission.

3.5. Quarantines: the history of lactation among women should be taken and referred for breastfeeding counsellors for appropriate support when in quarantine.

3.6. Curfew: at time of curfew and maternal infant separation, all means to facilitate breast milk delivery should be provided.
4. Non-COVID mother-infant dyads

4.1. Plan continuation of health support breastfeeding to the rest of the population who are not infected as possible including healthy or sick. Using telemedicine might be appropriate in some situations.

4.2. Continued routine health care to support all new postpartum mothers to initiate breastfeeding.

4.3. Follow up of postpartum mothers discharged from hospital to provide support using e-health services and identify those that need outpatient follow-up visit.

4.5. Facilitate telemedicine for lactation by expert health professionals.

4.6. Families who will feed their infants milk formula should be educated about its preparation.

4.7. for non-COVID dyads and neonates admitted in NICU:

A. Encourage and facilitate visitation of neonates who are admitted in NICU by their mothers, with the application of the recommended screening procedures set by the facility, particularly for direct breastfeeding.

B. If the admitted nursing mother will not directly breast feed, facilitate the delivery of expressed milk to NICU with recommended screening procedures set by the facility.

C. Optimized utilization of feeding expressed breast milk for NICU cases.

D. Expressed milk delivery difficulties should be solved; solutions may include providing hospital delivery services/ maternal hospital admission or providing a nearby accommodation.

5. COVID-19 (suspected or confirmed) mother-infant dyads

5.1. The mother and her child could be at home, or at the quarantine place, or in the hospital, depending on the case situation which can affects each separately.

5.2. There are multiple situations for the mother-infant dyad, as summarized below:

A: Isolation, rooming-in (co-location), and direct breastfeeding: When mothers are suspected or a confirmed mild-moderate case for coronavirus, the mother and baby stay in the same room, with the infant kept in a bassinet 2 meters from the mother’s bed (with or without a curtain between them) and taking precautions to avoid spreading the virus to her infant, including washing her hands before touching the infant, and wearing a face mask for direct contact with the infant and while feeding at the breast. The infant will be brought to the mother for direct
breastfeeding sessions only. Ideally, there should be another healthy adult who cares for the infant in the room. In this scenario, one designated caregiver will provide care for both. Rooming-in reduces stress to the mother and increases the milk ejection reflex.

B: **Isolation, temporary separation, and breast milk expression:** When mother is a confirmed case of coronavirus, while difficult, temporary separation of the mother and her infant in different rooms can minimize the risk of infection from maternal respiratory secretions or contacts. Mothers who intend to breastfeed/continue breastfeeding should be encouraged to express their breast milk to establish and maintain milk supply. A dedicated breast pump should be provided. Prior to expressing breast milk, mothers should practice hand hygiene. 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 according to the manufacturer’s instructions. This expressed breast milk should be fed to the infant by a healthy caregiver. In this scenario, two designated caregivers will be involved. Psychosocial support is mandatory.

C: **Isolation, separation, and temporarily ceased breastfeeding:** When mothers are unwell or extremely sick, or intubated in the ICU, milk expression is not feasible. Breast examination for the mother should be done periodically to prevent engorgement or other breastfeeding complication. Suppression of lactation may be needed. Re-lactation will be resumed when the mother has recovered. Refer to lactation support when the mother improved. The wet nursing choice is preferred to her infant if the family wishes.

D: **Livelong absence of the biological mother:** If the mother dies due to COVID-19, the infant will be separated from his mother for life. The wet nursing choice (start with expressed breast milk then shift to direct breast feeding when infant is declared free of the disease) would be the preferred method after family approval.

5.3. There are multiple options for infant feeding in this dyad:

A. Direct breastfeeding from the biological mother.

B. Expressed breast milk (EBM) from the biological mother.

C. Wet nursing: the family will be asked to provide a designated wet nurse for the newborn/infant to help in both breastfeeding and care during her illness. A social worker should be involved to support the family in this choice.
D. Donor expressed human milk (DEBM) from the designated wet nurse: home pasteurization of milk is advisable. The social worker should be involved in this case to support the family in this choice.

E. Breast milk substitutes (milk formula) as the last choice.

5.4. The individualized – case by case – approach is the preferred method in this guidance for infant feeding.

A: The risks and benefits of each situation and infant feeding method should be discussed with the mother and husband by pediatric consultant. The counselling session includes maternal risk, infant risk, availability, caregiver, latest evidence, local infection control measures etc. The family choice should be incorporated into infant feeding management and given a chance to make a decision.

B: It is essential to record the shared action about the mother and the child in the medical record.

C: In an emergency situation, the health care staff will take the decision.

5.5. Re-lactation: A non-breastfeeding mother who wishes to practice breastfeeding after cessation will require skilled breastfeeding support until breastfeeding is re-established. Success will depend on the mother’s wellbeing and motivation, the age of the infant, how long the mother has ceased breastfeeding, and her access to sustained skilled support. Infants less than 6 months will benefit the most.

5.6. Wet nursing: Investigate the cultural acceptability of wet nursing and availability of wet nurses as part of early preparedness assessments. Wet nursing and re-lactation can work together, where the wet nurse provides supplemental milk until the mother has sufficient milk production. Prioritize wet nurses for the youngest infants.

5.7. The local infection control guidelines of the facility should also be respected and considered.
Breastfeeding and COVID-19 Guidelines Algorithm

Mother-Infant Dyad

Shared Action (health professionals and parents)

Non-COVID Mother-Infant Dyad
- No separation
- Routine practice for early initiation of breastfeeding
- Skin to skin contact

Suspected or confirmed COVID-19 Mother-Infant Dyad
- Well situation *
- Isolation, rooming in, Direct breastfeeding with caution

Confirmed COVID-19 Mother-Infant Dyad
- Unwell situation
- Isolation, temporarily separation, Breast milk expression with caution

OR

OR

Isolation, temporary separation
Breast milk expression with caution

*Caution with newboms

Isolation, separation, breastfeeding ceased temporarily
Wet nursing or milk formula
6. Human milk expression

6.1. All pregnant and postpartum women should be educated on techniques of milk expression, regardless of COVID status.

6.2. The use of breast pumps should only be considered when vital. Manual (using hands), manual breast pump (using equipment), or electric breast pumps are all possible choices. Avoid using pumps that are difficult to clean.

6.3. Keep the breast pump kit clean, see breast pump fact sheet below.

6.4. Feeding expressed breast milk:

Each institute should have a protocol for handling the mother’s expressed milk. The protocol should have:

A. Prior to administrating stored breast milk, it must be checked by two people – a member of the clinical staff, and another staff member or the infant’s parent – and this should be documented in a special chart.

B. Check the date of collection.

C. Check that the ID number and name documented on the container of breast milk matches the details on the ID bracelet of the baby who is to receive the milk.

D. No milk is to be given to the infant unless it is appropriately labelled and dated.

E. The administration will be decided by the neonatologist, pediatrician, or lactation consultant depending on the case scenario (nasogastric tube, small cup, or syringe or spoon).

F. Feeding of expressed milk by bottle should be used with caution to selected infants.
How to Keep Your Breast Pump Kit Clean

Providing breast milk is one of the best things you can do for your baby's health and development. Pumping your milk is an easy way to provide breast milk to your baby. Keeping parts of your pump clean is critical, because germs can grow quickly in breast milk or breast milk residue that remains on pump parts. Following these steps will keep your breast pump clean and help protect your baby's health.

Before Every Use

- Wash your hands well with soap and water for 20 seconds.
- Inspect and assemble the clean pump kit. If your tubing is moldy, discolored, or cracked, replace it immediately.
- Clean pump, pump disk, power switch, and all plastic parts with disinfectant wipes or a laundry detergent and water.

After Every Use

- Store milk safely. Cap milk collection bottle or seal milk collection bag, label with date and time, and place in a refrigerator, freezer, or cooler bag with ice packs.
- Clean pumping area, especially if using a shared pump. Clean the disk, power switch, and all plastic parts with disinfectant wipes.
- Take apart breast pump tubing and separate all parts that come in contact with breast milk.
- Rinse breast pump parts that come into contact with breast milk by holding under running water to remove remaining milk. Do not place parts in soapy water.
- Clean pump parts that come into contact with breast milk as soon as possible after pumping. You can clean your pump parts in a dishwasher or by hand in a wash basin used only for cleaning the pump kit and infant feeding items.
- Follow the disinfecting steps given on the next page.

Clean Pump Kit

Clean by Hand

- Place pump parts in a clean wash basin, but do not place pump parts directly in the sink.
- Add soap and hot water to basin.
- Scrub items according to pump manufacturer's guidance. If using a brush, use a clean one that is used only to clean infant feeding items.
- Rinse by holding items under running water, or by submerging in fresh water in a separate basin.
- Air-dry thoroughly. Place pump parts, wash basin, and bottle brush on a clean, unused dish towel or paper towel in an area protected from dirt and dust. Do not use a dish towel to rub pump parts dry.
- Clean wash basin and bottle brush. Rinse them well and allow them to air dry after each use. Wash them by hand or in a dishwasher at least every few days.

Clean pump parts in a dishwasher. If they are dishwasher-safe, be sure to place small items into a closed-top basket or mesh laundry bag. Add soap and, if possible, run the dishwasher using hot water and a heated drying cycle (or sanitizing setting).
- Remove from dishwasher with clean hands. If items are not completely dry, place items on a clean, unused dish towel or paper towel to air dry thoroughly before storing. Do not use a dish towel to rub pump parts dry.

For Extra Protection, Sanitize

- For extra germ removal, sanitize pump parts, wash basin, and bottle brush at least once daily after they have been cleaned. Items can be sanitized using steam, boiling water, or a dishwasher with a sanitizing setting. Sanitizing is especially important if your baby is less than 3 months old, was born prematurely, or has a weakened immune system due to illness or medical treatment.
- For detailed instructions on sanitizing your pump parts, visit www.cdc.gov/healthywater/hygiene/healthhychk/intertidewash.html

Store Safely

- Store dry items safely until needed. Ensure the clean pump parts, bottle brushes, and wash basins have air dried thoroughly before storing. Items must be completely dry to help prevent germs and mold from growing. Store dry items in a clean, protected area.

Learn more about safe and healthy disinfecting and infant feeding habits at www.cdc.gov/healthywater/hygiene/healthyhychk.
7. Psychosocial support

7.1. In the context of panic, lockdown, and concern for family members, this could be a highly stressful time for pregnant and lactating mothers. Basic psychosocial support should be a key component of counselling. The stress of mother separation can also negatively affect milk supply and provoke postpartum depression.

7.2. Consideration of psychosocial support to health care workers and caregivers with COVID-19 (suspected or confirmed) should also be provided.

8. Drugs and micronutrient supplements

A. Hydroxychloroquine for the mother is compatible with lactation (L3).
B. Azithromycin for the mother is compatible with lactation (L2).
C. Other antiviral drugs are might have an infant risk or no data on it yet.
D. Infectious disease specialists and clinical pharmacist should be consulted for COVID cases.
E. Paracetamol is compatible with breastfeeding (L1).
F. Provision of vitamin D should be continued in breastfed infants.
G. The mineral supplements to breastfed or bottle fed infants might need to be individualized according to the general nutrition status of the child.

9. Family Diet

9.1. Nutritional guidelines for lactating mothers

A. Breastfeeding mothers generally need more calories to meet their nutritional needs. An additional 450 to 500 kilocalories (kcal) of healthy external food calories per day is recommended for well-nourished breastfeeding mothers.
B. A healthy, diverse diet is preferred, together with drinking plenty of water.
C. Reduced caffeine consumption (e.g., coffee, sodas, energy drinks, tea, and chocolate) is recommended.

9.2. Complementary food for the infant:

A. simple, practical, and context-specific information available using all available communication channels (digital, broadcast, and social media) to the families on healthy feeding options for young children in the context of home quarantines and financial barriers.
B. Donations, marketing, and promotions of unhealthy complementary foods (high in saturated fats, free sugar, and/or salt) should not be sought or accepted.
10. Community participation

10.1. Antenatal education programs delivered to all pregnant women about breastfeeding should continue via virtual and social media methods.

10.2. Education to families about COVID-19 and breastfeeding should continue with focus in immunity benefits during the pandemic. Delayed weaning at the time of an epidemic is preferred.

10.3 Invitation of Sharea scholar to educate the public on wet nursing and the jurisprudence rulings and of milk kinship.

10.4. Mother-to-mother support and peer counsellor courses in Arabic are expected to be ready to increase their activities during the pandemic because of an expectation of a shortage of health staff.

10.5. Trained breastfeeding counsellors should have a significant role in supporting mothers to continue breastfeeding within the period of home quarantine and with limited routine health care services. This includes 24-h virtual consultations services.

10.6. The provision of essential healthy food assistance (e.g., direct provision or price discounts) might be needed for low-income families to secure access to nutritious foods, particularly those families who have lactating women and young children.

10.7. Multi-sectoral collaboration is needed to achieve infant feeding preparedness for an emergency situation.

11. The code of breast milk substitutes

11.1. Full adherences to breast-milk substitutes marketing Saudi executives’ regulations (updated) is mandated.

11.2. In cases of milk formula prescription, where it was due to COVID-19 and breastfeeding stopped within the first six months of child’s age, support should be provided for those families till their infants are weaned.

Funding:
None

Conflict of interest:
None
References:


Safely Fed Canada Compilation of COVID-19 resources and statements related to breastfeeding: Includes also COVID19 Infant Feeding Resources for Parents and Caregivers and Statement on skin-to-skin

Save the Children IYCF Tools in the Context of COVID-19 These resources provide an overview of the latest global evidence-based recommendations related to IYCF and COVID-19.

UNICEF COVID-19: What Parents Should Know. (Accessed 26 March 2020) General information for parents, including precautions families can take to avoid infection and guidance for symptomatic women who are breastfeeding, including recommended precautions to prevent transmission to an infant.


WHO Breastfeeding advice during the COV D-19 outbreak. Flyer
WHO Clinical management of severe acute respiratory infection when COVID-19 infection is suspected (13 March 2020). Guidance for clinicians caring for hospitalized adult and pediatric patients. Section 13 contains comprehensive breastfeeding and some artificial feeding guidance.

WHO Five keys to safer food. Poster – applicable to preparation of complementary foods. Available in French and Arabic.


WHO IYCF and COVID19 infographics

WHO Q&A on COVID-19, pregnancy, childbirth and breastfeeding