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Ministry of Health

Breastfeeding Management among COVID Cases

Subject	Issue source	ICD10AM	Replacement Protocol
Breastfeeding Management among COVID Cases	Assistant Deputy Minister for Medical Support, Therapeutic Affairs, MOH	--	An updated from the guidance of breastfeeding promotion during COVID Pandemic (2021)
Specialty of the Protocol	Approval Date	Activation Date	Review Date
General Directorate of Nutrition	5-10-2022		

Literature review

Corona viral infectious disease -19 (COVID-19) was proved to affect all age groups of people, including newborns (1). The pregnant women and breastfeeding mothers could encounter the virus as well, the severity of COVID among pregnant women found to be high (2). COVID morbidities among pediatric patients are low as compared to adults. The infectivity rates and the fatalities are lower among the children's populations, with incidence rates ranging from 1 to 2% and fatalities about 0.9–3%, mostly in early childhood. With consideration of the population pyramid in Saudi Population, COVID epidemiology in children seems to be similar to the international literature (3,4,5).

Up to date, the route of transmission COVID reformatted to be more concise by droplet and airborne (inhalation of virus, deposition of virus on exposed mucous membranes, and touching mucous membranes with soiled hands contaminated with virus, further research is ongoing to better understand the spread of the virus (8,9). The other mode of transmission like vertical, transplacental, breast milk seems to be negligible (10 ,11). Practicing breastfeeding cannot be performed with intimate close contact, so, preventive measures like mask in case COVID infant-mother dyad is mandatory. Skin to skin practice is recommended in Baby Friendly Hospital Initiative to be immediately after labor. Yet, the conclusive evidence for transmission of the virus by skin to skin contact is not clear yet. Indeed, the implementation of skin to skin contact was not routine in maternity units in few Saudi studies (12), however, it might be significant issue in Baby Friendly Accredited maternity facilities in the kingdom.

The adult and older children vaccination against COVID was a major prevention intervention in Saudi Arabia with strict compulsory policy to all unless medically contraindicated (13). The vaccination was considered safe while breastfeeding and its promotion through media was evident in Saudi Arabia. Emerging studies for passive acquisition of antibodies for the breastfeed infant against SARS-CoV-2 that are excreted in breast milk, from mother's infection or even after mother's COVID vaccination. Whether these can prevent the infant from acquiring the infection is not yet clear (14,15). Lactation insufficiency was reported as side effect post COVID vaccination for some breastfeeding mothers (16).

A contradictory recommendation in breastfeeding management with COVID positive status was present in the early stage of pandemic including Saudi Arabia. A strict policy with separation of newborns from their mothers has tremendous negative effect on breastfeeding initiation or exclusivity (17).

The current international recommendations (WHO, AAP, AAFP, Academy of Breastfeeding Medicine, and Canadian Pediatric Society) strongly support rooming of mother and the child continuation of direct breastfeeding while taking the universal respiratory hygiene precautions. This was due to the short and long terms benefits of breastfeeding compared to the morbidity and mortality from COVID. New emerging data showed that breastfeeding benefits extends to COVID prevention among young children (18).

Therefore, this protocol aim to update the local guidelines in management of COVID cases within the context of breastfeeding support.

Scope

The health care providers concerned with maternal and child health.

Target population

The positive COVID newborns, infants, young children under two years old, pregnant women at labor and lactating women whether the cases are inpatient or outpatient services or home setting.

Breastfeeding management among positive COVID case scenarios

- This protocol focuses only on breastfeeding management (rooming in, direct breastfeeding, skin to skin contact, prescription and vaccine related to COVID).
- The protocol of management of COVID case should follow the national COVID guidelines (19).

- Infection control measures for mother who breastfeeding is adequate hand cleaning, wearing mask during breastfeeding, a distance in between breastfeeding baby after its practice by one meter, and breast wash if coughed or sneezed on exposed breast.



Women with COVID-19 can breastfeed if they wish to do so. They should:



Practice respiratory hygiene and wear a mask



Wash hands before and after touching the baby



Routinely clean and disinfect surfaces

HOW TO SAFELY BREASTFEED IF YOU HAVE COVID-19

We don't know for sure if mothers with COVID-19 can spread the virus to babies in breast milk, but based on what we do know, this is unlikely.



If You Have COVID-19 and Choose to Breastfeed

- Wash your hands with soap and water for at least 20 seconds before breastfeeding.
- **Wear a mask** while breastfeeding AND whenever you are less than 6 feet away from your baby.
 - » Do not put a face shield or mask on your baby. A face shield or mask could increase the risk of [sudden infant death syndrome \(SIDS\)](#) or accidental suffocation and strangulation.



If You Have COVID-19 and Choose to Pump or Express Breast Milk by Hand

- Use your own breast pump (do not share a breast pump).
- Wear a mask while pumping.
- Wash your hands with soap and water for at least 20 seconds before touching any pump or bottle parts.
- **Clean your pump** after you use it, every time.
- If possible, have someone who lives with you and is up to date with their COVID-19 vaccines feed the pumped breast milk to the baby. Make sure they do not have COVID-19 and are not [at increased risk](#).
- Any caregiver living with you might have been exposed, and should wear a mask when they are within 6 feet of the baby for the entire time you are in [isolation](#)** for COVID-19, and during their [quarantine](#)**.

* Isolation refers to keeping someone who is infected with the virus away from others, even in their home.
**Quarantine refers to keeping someone who might have been exposed to COVID-19 away from others.



Breastfeeding if You Are Separated from Your Newborn

If you have COVID-19, you may choose to temporarily separate from your newborn to reduce the risk of spreading COVID-19 to your baby. However, you may find it hard to start or continue breastfeeding. There are steps you can take that can help build your milk supply:

- Pump or feed every 2-3 hours (at least 8-10 times in 24 hours, including at night), especially in the first few days. This signals the breasts to produce milk and prevents blocked milk ducts and breast infections.
- If you are unable to establish milk production or have to temporarily stop breastfeeding for any reason, consider getting help from a [lactation support provider](#).
- **COVID-19 vaccination is recommended for people who are breastfeeding.** COVID-19 vaccines are effective at protecting you from getting sick even after you have had COVID-19. In addition, everyone who is eligible should get a booster shot.



cdc.gov/coronavirus



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الاحترازمات الوقائية

للأم المرضع المصابة بفيروس كورونا

إذا عطست أو سعلت الأم على صدرها فلا بد من غسل الثديين بالماء والصابون قبل الرضعة



غسل اليدين جيداً قبل حمل أو لمس الرضيع بالماء والصابون



تجنب السعال أو العطس على الرضيع أثناء الرضاعة



لبس الكمامة الطبية أثناء الإرضاع



في حال كانت أعراض السعال الشديدة تمنعها من الرضاعة الطبيعية، يتم استخدام مضخة الرضاعة لتغذية الطفل بشكل آمن



تعقيم وتنظيف أدوات الرضاعة



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Scenario (1): Previous history of COVID positive during pregnancy

- Past history of COVID should not be a barrier to breastfeeding.
- New mother should be fully supported to breastfeed her newborn.

Scenario (2): current COVID positive mothers

2.1. COVID positive pregnant women in labor:

- Initiation of breastfeeding with the first hour for both vaginal delivery or cesarean section.
- Skin to skin contact immediately after delivery can be practiced with caution such as reducing the duration. (There is no evidence of infection secondary to abdominal and chest skin to skin contact),
- Isolation room with rooming in the newborn with the mother.
- Mother education on breastfeeding and the respiratory and hand hygiene.

2.2. COVID positive breastfeeding mother and COVID negative neonate, infant or child

- Isolation of baby – mother dyad (Rooming in), reinforce the following message:

If you are in isolation for COVID-19 and are sharing a room with your newborn, take the following steps to reduce the chance of spreading the virus to your newborn:

- Wash your hands with soap and water for at least 20 seconds before holding or caring for your newborn. If soap and water are not available, use a hand sanitizer with at least 60% alcohol.
- Wear a well-fitting mask whenever you are within 6 feet of your newborn.
- Keep your newborn more than 6 feet away from you as much as possible.
- Talk to your healthcare provider about how you can protect your newborn, such as using a physical barrier (for example, placing the newborn in an incubator) while in the hospital.

- Support direct breastfeeding
- Mother education on breastfeeding and the respiratory and hand hygiene.

Scenario (3): COVID positive newborn, neonate, or young child

3.1. COVID positive breastfed child and COVID negative mother

- Isolation of baby- mother dyad (Rooming in).
- Support direct breastfeeding.
- Mother education on breastfeeding and the respiratory and hand hygiene.

- Checking history of mother COVID vaccination status and promote vaccination if not yet when available.

3.2. COVID positive milk formula fed child.

- Bottle feeding should be discouraged; the use of cup feeding is the optimal method for milk formula supplements.

Scenario (4): COVID positive breastfeeding mother and COVID positive newborn, neonate, or young child (simultaneous)

- Isolation of baby – mother dyad (Rooming in)
- Support direct breastfeeding.
- Mother education on breastfeeding and the respiratory and hand hygiene.

Scenario (5): Drug therapy with COVID positive breastfeeding mothers.

- Most medications used to treat COVID 19 are not contraindicated with lactation, few of them need monitoring of side effect on the infant or milk production. (Check updated MOH protocol of supportive and medications for COVID for V3.5), 18.

Scenario (5): COVID vaccine and breastfeeding.

5.1. COVID vaccine is considered safe for lactating women.

5.2. Post-vaccination breastfeeding mother with low milk supply or other observation should be reported to Saudi Food and Drug Administration through the link at their website, using the form

https://old.sfda.gov.sa/ar/drug/about/sector_departments/national_pharmacovigilance_center/Documents/AdverseDrugReactionADRReportingForm.pdf (19).

5.3 Cases of low milk supply should be referred and followed up by expert in lactation management.

Indications for isolation with separation of breastfeeding mother- infant dyad in COVID positive status

There are medical or social situations that demands separation of mother and infants, these are examples collected from literature but no limited to:

- Newborn, neonate or infant or young child with positive COVID who needs intensive resuscitations.
- Sick mother as per health practitioner clinical evaluation who cannot care of her child or need intensive medical care.
- Active immunocompromised status of the mother or the infant.

- Bottle formula feeding (not on breastfeeding immediately before his infection), provided there is a safe caregiver for the infant.
- Parent refusal of “isolation with Rooming in with isolation” after counseling with informed consent.

Recommendation if separated:

- Every effort to support human milk expression, or a wet nurse to be the second alternative.
- All separated cases need to be close follow up (from distance and or face to face) by expert in lactation, with considering re-lactation if needed.
- Breast milk substitutes usually infant milk formula will be the last alternative.

Human milk expression

- All pregnant and postpartum women who are suspected should be educated about milk expression (manual, breast pump, milk storage, expressed milk feeding).
- 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.
- Ensure human milk storage, delivery or feeding appropriately.
- Keep the breast pump kit clean; see breast pump fact sheet below.
- When Decision for breast milk expression, reinforce the following message:

If you have COVID-19 and choose to express breast milk:

- Use your own breast pump (one not shared with anyone else), if possible.
- Wear a mask as you express breast milk.
- Wash your hands with soap and water for at least 20 seconds before touching any pump or bottle parts, and before expressing breast milk.
- Follow recommendations for proper pump cleaning after each use. Clean all parts of the pump that come into contact with breast milk.
- Consider having a healthy caregiver feed the expressed breast milk to the baby.
- The caregiver should be up to date on their COVID-19 vaccines and not be at increased risk for severe illness from COVID-19.



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Available online: www.cdc.gov/healthwater/hygiene/healthychildcare/infantfeeding/breastpump.html

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 one way to provide breast milk to your baby. Keeping the 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 can keep your breast pump clean and help protect your baby from germs. If your baby was born prematurely or has other health concerns, your baby's health care provider may have more recommendations for pumping breast milk safely. The steps outlined below are based on the available scientific literature and expert opinion on breast pump hygiene. However, more research is needed to answer some questions about how to best clean breast pump equipment.



BEFORE EVERY USE



Wash your hands well with soap and water for 20 seconds.

Inspect and assemble clean pump kit. If your tubing is moldy, discard and replace immediately.

Clean pump dials, power switch, and countertop with disinfectant wipes, especially if using a shared pump.

AFTER EVERY USE



Store milk safely. Cap milk collection bottle or seal milk collection bag, label with date and time, and immediately place in a refrigerator, freezer, or cooler bag with ice packs.

Clean pumping area, especially if using a shared pump. Clean the dials, power switch, and countertop with disinfectant wipes.

Take apart breast pump tubing and separate all parts that come in contact with breast/breast milk.



Rinse breast pump parts that come into contact with breast/breast milk by holding under running water to remove remaining milk. Do not place parts in sink to rinse.

Clean pump parts that come into contact with breast/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 cleaning steps given on the next page.



Clean Pump Kit

CLEAN BY HAND



Place pump parts in a clean wash basin used only for infant feeding items. Do not place pump parts directly in the sink!

Add soap and hot water to basin.

Scrub items according to pump kit 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 or pat items 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.



OR CLEAN IN DISHWASHER



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 or pat items dry!

After Cleaning

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 sanitize 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/healthwater/hygiene/healthychildcare/infantfeeding.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.



Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases

Learn more about safe and healthy diapering and infant feeding habits at www.cdc.gov/healthwater/hygiene/healthychildcare.

Feeding expressed breast milk:

Each institute should have a protocol for handling the mother's expressed milk. The protocol should follow the following standards:

- 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 to make sure 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 labeled and dated.
- E. The administration will be decided by the neonatologist, pediatrician, or lactation consultant depending on the case scenario (nasogastric tube, small cup, syringe, or spoon).
- F. Feeding of expressed milk by bottle should be used with caution for selected infants.

Wet nursing

- The cultural acceptability of wet nursing for the area shall be investigated and a wet nurse choice for the youngest infants should be prioritized if needed.
- . The family of a COVID positive mother with should be counseled on different options, including finding a suitable healthy wet nurse.
- . Health care facilities especially NICU should develop a protocol of donor human milk in arrangement with social, religious, nursing, and infectious control departments.
- Registry of milk kinship can be applied through the national application of Ministry of Justice (najiz), if prerequisites exist.

Infant Milk Formula

- A policy of use breast milk substitutes should be available in the services, see MOH policy for infant milk formula.

- Ensure AFASS Criteria (21) if infant milk formula used, see table below:

Acceptable	The mother perceives no problem in replacement feeding.
Feasible	The mother (or family) has adequate time, knowledge, skills, resources and support to correctly mix formula or milk and feed the infant up to 12 times in 24 hours.
Affordable	The mother and family, with community or health system support, if necessary, can pay the cost of replacement feeding without harming the health or nutrition status of the family.
Sustainable	Availability of a continuous supply of all ingredients needed for safe replacement feeding for up to one year of age or longer.
Safe	Replacement foods are correctly and hygienically prepared and stored, and fed preferably by cup. WHO guiding principles recommend avoiding the use of feeding bottles because they are difficult to keep clean and represent a particularly important route for the transmission of pathogens. Bottle feeding may interfere with optimal suckling behaviour. WHO recommends the use of cup feeding and avoidance of feeding bottles (21).

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