

Gaps in beliefs and practices of trained breastfeeding counsellors and lactating mothers facing Covid-19 pandemic in India

A quick online quantitative study



Report
October 2020

Introduction

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 contact, rooming-in and breastfeeding by Covid-19 suspected, probable or confirmed mothers. Presently, there is no evidence of transmission of COVID-19 virus from mother to infant in-utero or through breastmilk. (1) WHO and UNICEF suggest that mothers who are suspected, probable, or confirmed case of COVID-19 should follow standard infant feeding practices with the application of all precautions of prevention and control of infection. It includes keeping mothers and infants together (rooming-in), continuous and prolonged skin-to-skin contact immediately after birth, Initiation of breastfeeding within one hour of birth, and exclusive breastfeeding. (2,3) Mothers should mandatorily take Infection Prevention and Control (IPC) precautions, including using medical mask, hand washing and cleaning of frequently touched surfaces.

Mothers require accurate information and support for practicing optimal breastfeeding and care of the newborn infants. Role of professionals like breastfeeding counsellors in providing support to the pregnant and lactating mothers to practice standard infant feeding and observe IPC measures is crucial. This rapid assessment of knowledge, beliefs and practices of breastfeeding counsellors was undertaken to know about the nature of problems these professional encountered among the mothers amidst the COVID-19 and measures they took to help them in this difficult situation.

Materials and methods

Due to prevailing restrictions on movement and travel, data for the study were collected in the month of May 2020 using an online platform. A Google form was developed, pre-tested, finalised and sent to all the IYCF counselling specialist and national trainers whose database was available with BPNI. These professionals were trained and certified by Breastfeeding Promotion Network of India (BPNI) during last many years. They were requested to provide data for the period of March – April 2020. The study participants were informed about the details of the study objectives for filling the questionnaire and confidentiality at the beginning of the survey. The questionnaire of the study comprised of two parts, part one was to collect contact and demographic details of the participants, while part two was to document knowledge, beliefs and practices of the participants.

Results (See table – 1 and 2)

152 study participants from 63 cities/towns spanning over 22 states and Union Territories, 80% being females, submitted their response electronically. 43% participants are working in a hospital with maternity services, 27% are independent counsellors while 10% are having a dual functioning, both at the hospitals and as an independent counsellor. Some of them are working at nursing teaching institutes and few are working as research scholars. The respondents have an average experience of counselling for 101 months (range 3 – 468 months). 20 participants (13.1%) dealt with a total of 248 (range 1 - 27) Covid-19 suspected or confirmed mothers during the study period.

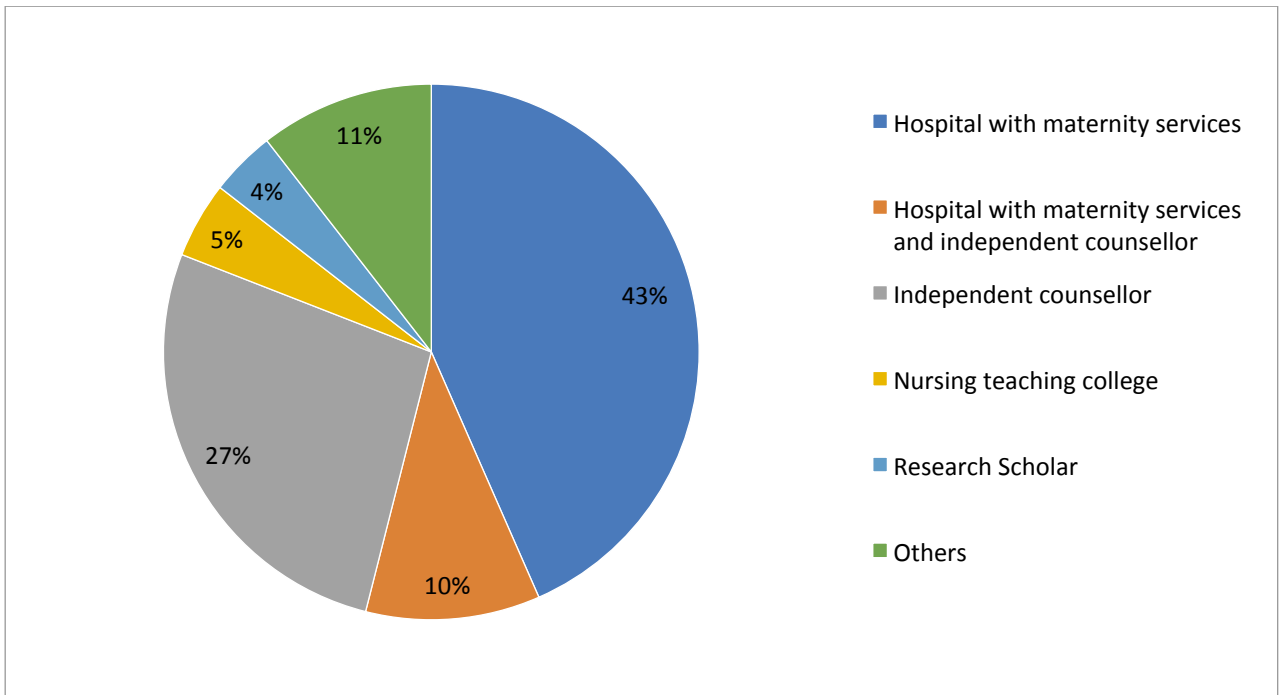


Fig 1: Where do you work presently

68% of respondent had correct knowledge about transmission of Covid-19 virus from a pregnant woman to her unborn child, while 90% of them knew that the Covid-19 virus does not pass in the breastmilk. About the safe mode of feeding by the Covid-19 positive mothers, 84% considered breastfeeding as safe. Expressed breastmilk and donor human milk was considered safe by 76% and 44% respondents respectively. Some respondents cited avoiding breastfeeding and using either infant formula (7%) or animal milk (3%) as a safe feeding option for Covid-19 positive mothers. Only 74% participants considered rooming-in as safe, while skin-to-skin contact (64%) was preferred by even lesser number of them. Almost all of the participants believed that wearing mask (99%) and hand washing (98%) are necessary precautions that the COVID-19 positive mother should take before touching and during breastfeeding the infant, 7% of them do not consider disinfecting and cleaning of frequently touched surfaces necessary.

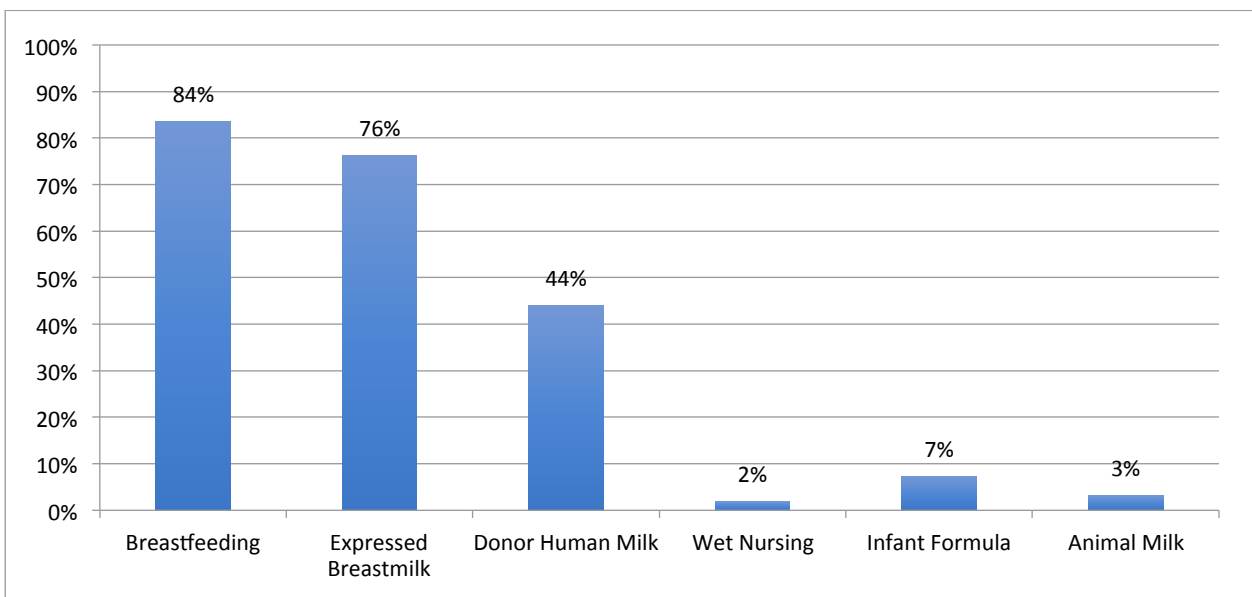


Fig 2: If a mother is confirmed/suspected to have COVID-19, which mode of feeding is safer for infants?

59% of the respondents believed that all pregnant women be tested for COVID-19, 18% think that pregnant women with suspected or confirmed COVID-19 need to give birth by caesarean section, about 49% thought that it is necessary for a mother with confirmed/ suspected COVID-19 to wash her breast before she breastfeeds directly or before expressing milk. 89% opined that free distribution of formula milk should not be done to mothers in the community as a relief measure during the COVID-19, and 82% believe that a mother who is COVID-19 positive can touch and hold her newborn baby.

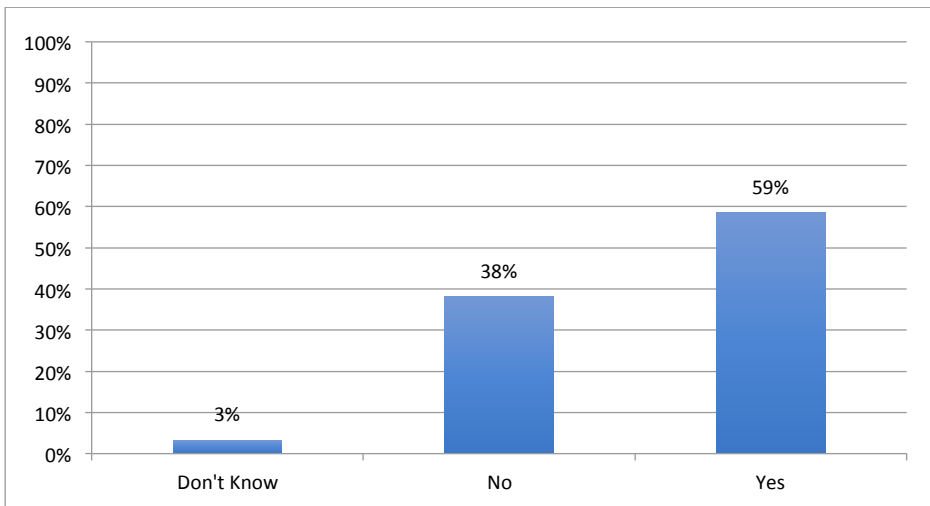


Fig 3: Do you recommend that all pregnant women be tested for COVID-19?

Infant feeding problems for which lactating mothers approached the respondents included perception of not enough milk (74%), anxiety about practicing breastfeeding in view of on going Covid-19 pandemic (63%) and breast problems like breast engorgement, cracked nipple, sore nipple and breast abscess etc. (55%).

Practices by the breastfeeding counsellors in Covid-19 positive mothers are given in table 2. Only 6 (30%) participants practiced rooming – in, 7 (35%) kept the mother and baby in the same room but baby was kept away from mother’s bed, 7 (35%) kept the baby in another room or in the neonatal unit. All the participants advised to the mothers to practice appropriate infection prevention and control measures like washing hands; wearing a facemask and disinfecting and cleaning frequently touched surfaces before touching the baby and during breastfeeding. They advised practicing either exclusive breastfeeding (88.8%) or expressed breastmilk (11.1%) to mothers with infants below 6 months, and exclusive breastfeeding or expressed breastmilk along with complementary foods to mothers with children 6 months – 2 years of age.

Discussion and Conclusions

Participants of this study were trained breastfeeding counsellors, actively providing breastfeeding counselling services to the mothers in hospitals and community. However, one-third of the study participants did not have correct knowledge about the passage of Covid-19 virus through the placenta and 10% were not aware that Covid-19 virus does not pass through breastmilk. 16% participants believed that breastfeeding by Covid-19 positive mothers is not safe, while 24% were of the belief that expressed breastmilk is not safe. Only 44% participants believed donor human milk as a safe choice. 7% participants even believed that Covid-19 positive mothers should avoid breastfeeding and use infant formula. There

belief about Covid-19 testing of pregnant women, mode of delivery in Covid-19 positive women and washing breasts before breastfeeding or expressing breastmilk was also not optimum. Infant feeding problems for which mothers approached the participating professionals included perception of not enough milk and breast problems but a significant proportion of mothers came to them with anxiety about practicing breastfeeding in view of on going Covid-19 pandemic. Practice of rooming-in by 20 participants, who dealt with Covid-19 positive mothers, was far from satisfactory. However, all of them gave correct advice to the mothers for practice of infection prevention and control measures and appropriate breastfeeding, expressed breastmilk feeding and complementary feeding.

A study of 125 COVID-19 positive mothers from Turkey revealed that in spite of global and national guidelines stating that Covid-19 positive mothers should practice rooming-in and breastfeeding, majority of newborn babies were separated from their mothers and fed with infant formula or expressed breastmilk. (4) While another study of 120 neonates of COVID-19 positive mothers from three New York hospitals reported that most of the mothers practiced skin – to - skin contact and initiated breastfeeding in the delivery room, were roomed in with the neonates, and practiced breastfeeding, while observing necessary infection prevention measures. None of the infants tested positive for COVID-19. (5)

The present study has revealed important knowledge and practices gaps among the breastfeeding counsellors in India. There is a need of on-going updating and orientation of these trained professionals with the technical information about the safety and necessity of breastfeeding by the Covid-19 positive mothers. Also, the pregnant and lactating women should be helped with correct information about breastfeeding in Covid-19 situation in local language and using easy to understand print and electronic instruments to address the anxiety about practicing breastfeeding in view of Covid-19 pandemic.

Table 1: Study participants' profile and Knowledge, beliefs and practices about Infant feeding by Covid-19 suspected or positive mother

Profile of Study Participants (n=152)	
Geographical area of work	<ul style="list-style-type: none"> • Cities/towns – 63 • States/Union Territories -- 22
Gender	<ul style="list-style-type: none"> • Female – 80% • Male – 20%
Place of work	<ul style="list-style-type: none"> • Hospital with maternity services - 43%, • Independent counsellors - 27% • Hospitals and independent counsellor – 10% • Nursing teaching institutes – 5% • Research scholars – 4%
Average experience of breastfeeding counselling	<ul style="list-style-type: none"> • 101 months (range 3 – 468 months)
Number of participants who counselled mothers with suspected or confirmed Covid-19	<ul style="list-style-type: none"> • 20 (13.1%)
Knowledge, beliefs and practices of study participants about Infant feeding by Covid-19 suspected or positive mother	
Correct knowledge about transmission of Covid-19 virus through placenta	<ul style="list-style-type: none"> • 68%
Correct knowledge about transmission of Covid-19 virus through breastmilk	<ul style="list-style-type: none"> • 90%
Belief about safe infant feeding practice by mothers with suspected or confirmed Covid-19	<ul style="list-style-type: none"> • Breastfeeding – 84% • Expressed breastmilk -- 76% • Donor human milk -- 44% • Avoiding breastfeeding & using infant formula (7%) • Avoiding breastfeeding & using animal milk (3%)
Belief about Infection Prevention and Control measures by the COVID-19 positive mother	<ul style="list-style-type: none"> • Wearing mask -- 99% • Hand washing -- 98% • Disinfecting and cleaning of frequently touched surfaces -- 7%
Correct belief about need for testing pregnant women for Covid-19 infection	<ul style="list-style-type: none"> • 41%
Correct belief about mode of delivery	<ul style="list-style-type: none"> • 82%
Correct belief about the need for washing breast before each feed or milk expression	<ul style="list-style-type: none"> • 51%
Correct belief about distribution of infant formula during the pandemic as a relief measure	<ul style="list-style-type: none"> • 89%
Infant feeding problems for which lactating mothers approached the respondents included	<ul style="list-style-type: none"> • Perception of not enough milk -- 74% • Anxiety about practicing breastfeeding in view of on going Covid-19 pandemic -- 63% • Breast problems (breast engorgement, cracked nipple, sore nipple and breast abscess etc.) -- 55%

Table 2: Practices by the breastfeeding counsellors in Covid-19 positive mothers (n=20)

Where did the infant stay after the delivery and during the stay in hospital (n=20)	Same bed with mother - 6 (30%)
	Same Room with mother but kept away from her bed- 7 (35%)
	Kept in a separate room/neonatal unit - 7 (35%)
What did you advise to the COVID-19 positive mother about precautions to be taken before touching and during breastfeeding the infant? (n=20)	Wash hands; Wear a Face mask; Disinfect and clean frequently touched surfaces – 20 (100%)
What feeding method did you advise COVID-19 positive mothers whose infant was between <6 months of age? (n=18)	Exclusive Breastfeeding- 16 (88.8%)
	Expressed Breastmilk- 2 (11.1%)
What feeding method did you advise COVID-19 positive mothers whose infant was between 6-12 months of age? (n=12)	Breastfeeding + Complementary Feeding- 11 (91.6%)
	Expressed Breastmilk + Complementary Feeding- 1 (8.33%)
What feeding method did you advise COVID-19 positive mothers whose infant was more than 12 months? (n=11)	Breastfeeding + Complementary Feeding- 9 (81.8%)
	Expressed Breastmilk + Complementary Feeding- 2 (18%)

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Authors:

Dr. JP Dadhich, *National Coordinator and Technical Director, BPNI*

Dr. Arun Gupta, *Central Coordinator, BPNI*

Ms.Yashika Joshi, *District Programme Officer, BPNI*

Acknowledgement

We are thankful to Dr. Gayatri Singh, Unicef India for her valuable inputs in the draft report; Ms. Abhilasha Rawat and Ms. Nupur Bidla for reviewing the report; Ms. Zarrin Ashraf for assistance in the pre-testing of the study tools, Ms. Veena Rawat for assistance in collecting the data and Mr. Pranav Dadhich and Ms. Megha Suresh for help in analysing the data. Our special thanks to all the respondents of the study.

Designing and layout

Mr. Amit Dahiya



Breastfeeding Promotion Network of India (BPNI)

BP-33, Pitampura, Delhi-110034. India

Tel: +91-11-27312705, 42683059

Email: bpni@bpni.org, bpni.india@gmail.com

Website: www.bpni.org

This report has been produced with the support from UNICEF India project “BPNI-UNICEF partnership for sustained advocacy and accelerating implementation of MAA programmes in 4 states”.

The Breastfeeding Promotion Network of India (BPNI) is a 28 years old registered, independent, non-profit, national organisation that works towards protecting, promoting and supporting breastfeeding and appropriate complementary feeding of infants and young children. BPNI works through policy analysis, advocacy, social mobilization, information sharing, education, research, training and monitoring the company compliance with the IMS Act. BPNI is the Regional Coordinating Office for International Baby Food Action Network (IBFAN), South Asia. BPNI also serves as the global secretariat for World Breastfeeding Trends Initiative (WBTi) programme, that analyses policy & programmes and galvanises action at country level.

BPNI does not accept funds or any support from the companies manufacturing baby foods, feeding bottles or infant feeding related equipment. BPNI does not associate with organizations having conflicts of interest.



Annex – 1

Questionnaire on Study on Infant feeding practices during COVID-19 Pandemic- Part -1

Basic Information
1. Name of the participant:
2. Gender:
3. Email Address:
4. Contact Number:
5. Where do you work presently? <ul style="list-style-type: none">• In a hospital with maternity services• Independently providing counselling to pregnant and lactating women• Other
6. Place of work (City):
7. State:
8. Experience in counselling pregnant and lactating mothers (Months/Years):

1. Number of mothers consulted you during the study period (March 2020-May 2020)

- Ante-natal Counselling for mother
- Post-natal Counselling for mother
- Counselling to mothers with suspected/positive COVID-19 disease
- Others, please specify

2. Can COVID-19 virus be transmitted from a pregnant woman to her unborn child?

- Yes
- No
- Don't Know

3. Can COVID-19 pass to a baby through breastmilk?

- Yes
- No
- Don't Know

4. **Do you recommend that all pregnant women be tested for COVID-19?**
- Yes
 - No
 - Don't Know
5. **Can a mother who is COVID-19 positive, touch and hold her newborn baby?**
- Yes
 - No
 - Don't Know
6. **Do pregnant women with suspected or confirmed COVID-19 need to give birth by caesarean section?**
- Yes
 - No
 - Don't Know
7. **If a mother is confirmed/suspected to have COVID-19, which mode of feeding is safer for infants? (Tick all correct answers)**
- Breastfeeding
 - Expressed Breastmilk
 - Donor Human Milk
 - Infant Formula
 - Animal Milk
 - Other
8. **What would you advise a pregnant women and lactating mother about infant feeding in the scenario of COVID-19? (Tick all correct answers)**
- Skin to Skin contact
 - Initiation of breastfeeding within one hour of birth
 - Rooming in (no separation)
 - Practicing exclusive breastfeeding
 - Avoid breastfeeding and practice formula feeding
 - Other
9. **What precautions the COVID-19 positive mother should take before touching and during breastfeeding the infant? (Tick all correct answers)**
- Wash hands
 - Wear a facemask
 - Disinfect and clean frequently touched surfaces
 - Other
10. **Is it necessary for a mother with confirmed/ suspected COVID-19 to wash her breast before she breastfeeds directly or before expressing milk?**
- Yes
 - No
 - Don't Know

11. Should free distribution of formula milk be done to mothers in the community as a relief measure during the COVID-19?

- Yes
- No
- Don't Know

12. With what infant feeding problems lactating mothers approached you for counselling during the study period?

- Anxiety about practicing breastfeeding in view of ongoing Covid-19 pandemic
- Perception of not enough milk
- Breast engorgement
- Sore nipple
- Cracked nipple
- Breast abscess
- Other

13. Did you recommend using infant formula to mothers during the study period (If the answer is Yes then go to question 14)

- Yes
- No

14. Please specify the indication in which you recommended use of infant formula.

- Caesarean Section delivery
- Mother complaining of insufficient milk supply
- Conditions mentioned in the WHO guidelines for using breastmilk substitutes
- Mothers was suffering with COVID-19
- Mother was sick and unable to breastfeed
- Baby was sick and admitted to NICU
- Mother expired
- Other

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Annex – 2

Questionnaire on Study on Infant feeding practices during COVID-19 Pandemic- Part -2

Background Information
1. Name:
2. Email Id:
3. Contact Number:
4. State:

1. **Number of COVID–19 positive/suspected mothers counselled by you?**

2. **What mode of counselling did you used?**
 - Face to Face
 - Telephone
 - Video calling
 - Other

3. **Age of the infant of COVID-19 positive mother at the time of counselling (*Please insert zero, in case if there is no infant in a particular age group*)**
 - At Birth – Number
 - 1-28 Days- Number
 - 1 month- 6 month- Number
 - 6 months- 12 months- Number
 - > 12 months- Number

4. **Did you attend the delivery of a COVID-19 positive mother?**
 - a. Yes
 - b. No

5. **If yes, what procedures were practiced immediately after the birth?**
 - Infant was kept on mother's chest after birth for at least an hour without interruption
 - Breastfeeding was initiated within one hour of the birth

Other

6. **Where did the infant stay after the delivery and during the stay in hospital?**

- Infant was on the same bed with the mother
- Infant stayed in the same room, but away from the bed of the mother
- Infant was kept in a separate room or neonatal unit
- Other

7. **How the infant was fed during the stay in the hospital?**

- Breastfeeding
- Expressed Breastmilk
- Infant Formula
- Donor Milk
- Other

8. **What did you advise to the COVID-19 positive mother about precautions to be taken before touching and during breastfeeding the infant? (Tick correct answers)**

- Wash hands
- Wear a Face mask
- Disinfect and clean frequently touched surfaces
- Other

9. **What feeding method did you advise COVID-19 positive mothers whose infant was between 1-6 months of age?**

10. **What feeding method did you advise COVID-19 positive mothers whose infant was between 6-12 months of age?**

11. **What feeding method did you advise COVID-19 positive mothers whose infant was more than 12 months?**

12. **Any other information or experience you would like to share with us?**

X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-