



Knowledge, Attitude, and Practices of Indian Mothers Regarding Breastfeeding: An Online Cross-Sectional Study

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ABSTRACT

Background: Breastfeeding is essential in an infant's nutrition and growth. There are various misconceptions and cultural beliefs regarding breastfeeding which can lead to undesirable consequences. Breastfeeding is usually hampered in India due to introduction of top milk and lack of knowledge about benefits of exclusive breastfeeding. We conducted an online study of KAP toward breastfeeding with the help of Google survey form.

Objective: The objective of the study was to assess knowledge and attitude toward breastfeeding and infant feeding practices among Indian mothers.

Materials and Methods: A cross-sectional online study was carried out on Indian mothers who were having children <1 year of age by circulating the google survey form via social media using a semi-structured questionnaire. Data were entered into Microsoft excel and descriptive analysis was done.

Results: We accepted responses till we received 50 entries on our google survey form. Data was analysed using MS Excel and other appropriate softwares. Our results depict that there is a lack of knowledge, false attitude, and faulty practices regarding many attributes of breastfeeding among postnatal mothers in infant feeding. Our results depict that there is a lack of knowledge, false attitude, and faulty practices regarding many attributes of breastfeeding among postnatal mothers in infant feeding. Regarding knowledge of breastfeeding, there is less percentage of postnatal mothers having knowledge about early breastfeeding, breastfeeding on demand, not to give water before 6 months, that breast feeding prevents breast diseases and breastfeeding should be continued for 2 years. Regarding attitude of breastfeeding, there is very low percentage of postnatal mothers who thought breastfeeding affect beauty, breastfeeding should be stopped in sick babies and that formula feeding is more convenient than breastfeeding. All the postnatal mothers believe that breastfeeding in night. More than half of the mothers believe that breastfed babies are healthier than formula-fed babies. Regarding practice of breastfeeding, a satisfactory number of (>50%) postnatal mothers practiced good and safe breastfeeding. False practices like bottle feeding and giving pre lacteal feeds are followed in majority (>70%).had given colostrum and prelacteal feeding and feeding bottles still practiced.

Conclusion: There is poor knowledge, attitude, and faulty practices regarding some attributes of breastfeeding among postnatal mothers.

Keywords: Breast Feeding; Knowledge; Attitude; Practice; Postnatal Mothers

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1. Introduction

Breastfeeding is beneficial to the child because of its easy availability , optimal nutrients and protective factors against infections.[1] As recommended by WHO and American Academy of Pediatrics, exclusive breastfeeding for 6 months has many benefits to the growing infant such as calories, proteins, and bioactive factors such as IgA, lactoferrin, K-casein, cytokines, growth factors, which have anti-infective, antioxidant, and growth-promoting properties.[2] Human milk avoids hospitalizations and reducing infant mortality. Breast milk also improves intelligence quotient and brain size significantly compared to artificial feeds.[3,4] Globally, <40% of infants under the age of 6 months are exclusively breastfed.[5]

In India about 2.4 million children die each year, of which two-thirds are associated with faulty infant feeding practices. [6] 13% reduction in infant mortality rate has been estimated with the promotion of exclusive breastfeeding. [7] According to the WHO recommendations, three factors are needed to reduce infant mortality rates, namely initiation of breastfeeding within 1 h of birth, practicing exclusive breastfeeding for 6 months, and proper supplementation at 6 months. However, misconceptions among mothers have made it difficult to execute the same at the community level.[8] Issues such as career, easily available and aggressively promoted formula-based feeds, social pressures, and illness among the lactating mothers have further lowered breastfeeding rates.[9]

The knowledge attitude and practice of exclusive breastfeeding has been influenced by cultural, demographic, social, biophysical, and psychosocial factors.[8,10] In India, the rates of early initiation, exclusive breastfeeding are far from desirable and further KAP studies about breastfeeding are limited among Indian mothers.[11] Thus, we conducted a study to assess knowledge, attitude, and practices of postnatal mothers toward breastfeeding in Indian Community.

2. Materials and Methods

This was an online cross-sectional study carried out among Indian mothers. We accepted responses till we got 50 valid entries. The responses of mothers who were having children <1 year of age were included in the study. Those who refuse to give informed consent and all lactating mothers having children >1 year of age were excluded from the study. A total of 50 mothers were included in the study. Ethical approval was obtained before the commencement of the study.

A pre-tested semi-structured questionnaire with a total of 35 questions, which was prepared for assessing knowledge, attitude, and practice of mothers on breastfeeding. Most of the questions were prepared on the questionnaire used in the World Health Organization KAP survey [12,13] and in a study by Thomas *et al.*[14] The first set of questions asked about demographics such as age, employment, education, type of delivery, and number of deliveries followed by a set of questions about the knowledge, attitude, and practices of breastfeeding.

Statistical Analysis

Data entered into Microsoft Excel and analyzed using descriptive statistics like percentages.

3. Results & Discussion

Table 1 depicts that majority (70%) of postnatal mothers belongs to 21–30 years age group. 38% were from rural and 62% were from urban background. Majority of them (60%) were Hindu, 22% Muslim and 18% belonged to other religion (Sikh, Christian etc). The cohort of our study was mostly well educated. 54% of the mother delivered through normal vaginal delivery while 46% underwent caesarean section as a mode of delivery. Out of the total study population 64% were primigravida mothers while 36% were multigravida.

Table 1: Demographics details

DEMOGRAPHICS	N	%
Age in Years		
<20	2	4%
21-25	18	36%
26-30	17	34%
30-35	9	18%
>35	4	8%
Background		
Rural	19	38%

Urban	31	62%
Religion		
Hindu	30	60%
Muslim	11	22%
Others	9	18%
Education		
Illiterate	2	4%
School education	7	14%
Graduate	31	62%
Post graduate	10	20%
Type of Delivery		
Normal	27	54%
Cesarean	23	46%
Gravida		
Primi	32	64%
Multi	18	36%

Table 2: Mothers' knowledge regarding breastfeeding

Characteristic	N (out of 50)	%
Pre-lacteal feeds are not good	37	74%
Colostrum is essential for babies health	41	82%
Start breastfeeding within 1 h after delivery	31	62%
Give only breast milk for first 6 months	41	82%
Burping should be done after each feed	33	66%
Breast feed should be given minimum 8 times a day for initial few months and then "on demand"	27	54%
Child needs vitamin syrup during first 6 months	11	22%
Child <6 months require water during summer season	26	52%
Breast feeding helps in mother and child bonding	44	88%
Breast feeding can prevent diseases affecting breast	21	42%
Breast feeding should be continued up to 2 years	19	38%

Table 2 depicts about knowledge of postnatal mothers about breastfeeding. Nearly 74% postnatal mothers reported that pre-lacteal feeds are not good for their babies and Majority (82%) said that colostrums is essential for babies' health. Low percentage (62%) of postnatal mothers started breastfeeding within 1 h of birth. Very high percentage (82%) knew that only breast milk is to be given for 1st 6 months. 66% (45.4%) mothers knew that burping after each feed is essential. 54% had knowledge that breastfeeding is to be given minimum 8 times a day and then "on demand" and only 22% mother knew vitamin to be needed in 1st 6 months. Almost 52% mothers had false knowledge of giving water in summer season in <6-month babies. Majority (88%) had knowledge about breastfeeding creating good mother-child bonding. Only 42% of mothers were aware of that breastfeeding prevents diseases

affecting breast and (38%) of mothers knew that breastfeeding is to be continued for 2 years. Overall we found that there is moderate to good knowledge about principles of breastfeeding in postnatal mothers included in our study.

Table 3: Attitude of Mothers towards breastfeeding

Characteristic	N (out of 50)	%
I should breastfeed my child in the night	50	100%
Breastfed babies are healthier than formula-fed babies	33	66%
During breastfeeding the mother should sit comfortably	18	36%
I should not feed if my child is sick	12	24%
Breastfeeding affects beauty	7	14%
It is better to stop breastfeeding when weaning is started	29	58%
Formula feeding is more convenient than breastfeeding	16	32%

Table 3 shows regarding attitude of mothers' towards breastfeeding, 100% of the mothers thinks that breastfeeding their child in night is essential. 66% mothers had positive attitude that breastfeeding is healthier than formula-feeding. Only 36% of them thinks that mother should be in a comfortable sitting position while breastfeeding in supine feeding should be avoided. 24% mothers had false attitude of not breastfeeding their children during illness. Only 14% thinks that breastfeeding affects beauty. 58% thinks to stop breastfeeding during weaning which is a false belief and attitude. 32% feels that formula-feeding is more convenient than breastfeeding which is again a wrong belief. Overall there are many false believes and attitudes towards breastfeeding persisting in Indian mothers.

Table 4: Breastfeeding practices

Characteristic	N (out of 50)	%
Pre-lacteal feeds given	39	78
Colostrum given	31	62
Breastfeeding started within 1 hour of delivery	28	56
Used/Using feeding bottles	37	74
Weaning started after 6 months	37	74

In our study we found that majority of mothers (78%) had given pre lacteal feeds to their baby. 62% gave colostrums to their newborns. Only 56% were able to breastfeed their child within 1 hour of birth. A large number (74%) of mothers uses feeding bottles at any point of time after birth of the child. 74% of them started giving weaning food after six completed months.

4.1 Differences based on religion

Characteristic	Hindu (n=30)	Muslim (n=11)	Others (n=9)	P value
Pre-lacteal feeds given	24	9	6	>0.05
Colostrum given	21	3	7	<0.05
Breastfeeding started within 1 hour of delivery	19	3	6	>0.05
Used/Using feeding bottles	27	5	5	<0.05
Weaning started after 6 months	26	3	8	<0.05

When breastfeeding practices were compared among different religions, it was seen that significant difference ($p < 0.05$) exists in giving colostrums to the newborn babies (lowest among Muslims), using feeding bottles (highest among Hindus) and starting weaning after 6 completed months (lowest among Muslims). There was no significant difference ($p > 0.05$) in giving pre lacteal feeds and starting breastfeeding within 1 hour of delivery.

4.2 Differences based on mode of delivery

Characteristic	Normal Delivery (n=27)	Cesarean (n=23)	P value
Pre-lacteal feeds given	21	18	>0.05
Colostrum given	24	7	<0.05
Breastfeeding started within 1 hour of delivery	24	4	<0.05
Used/Using feeding bottles	17	20	>0.05
Weaning started after 6 months	21	16	>0.05

When breastfeeding practices were compared among different modes of delivery (Normal V/S Cesarean), it was seen that significant difference ($p < 0.05$) exists in giving colostrums (lower in caesarean) and starting breastfeeding within 1 hour of delivery (lower in caesarean).

4.3 Difference among Rural and Urban population

Characteristic	Rural (n=19)	Urban (n=31)	P value
Pre-lacteal feeds given	18	21	<0.05
Colostrum given	11	20	>0.05
Breastfeeding started within 1 hour of delivery	13	15	>0.05
Used/Using feeding bottles	11	26	<0.05
Weaning started after 6 months	12	25	<0.05

When breastfeeding practices were compared among residential area of mothers (Rural v/s Urban), it was seen that significant difference ($p < 0.05$) exists in giving pre lacteal feeds (higher in rural), using feeding bottles (higher in urban) and starting weaning food after six months (lower in rural).

4. Conclusion

Our results depict that there is a lack of knowledge, false attitude, and faulty practices regarding many attributes of breastfeeding among postnatal mothers in infant feeding. Regarding knowledge of breastfeeding, there is less percentage of postnatal mothers having knowledge about early breastfeeding, breastfeeding on demand, not to give water before 6 months, that breast feeding prevents breast diseases and breastfeeding should be continued for 2 years. Regarding attitude of breastfeeding, there is very low percentage of postnatal mothers who thought breastfeeding affect beauty, breastfeeding should be stopped in sick babies and that formula feeding is more convenient than breastfeeding. All the postnatal mothers believe that breastfeeding in night. More than half of the mothers believe that breastfed babies are healthier than formula-fed babies. Regarding practice of breastfeeding, a satisfactory number of (>50%) postnatal mothers practiced good and safe breastfeeding. False practices like bottle feeding and giving pre lacteal feeds are followed in majority (>70%).had given colostrum and prelacteal feeding and feeding bottles still practiced.

Strengths and Limitations

Being cross-sectional study and lower sample size are certain limitations. The findings of the current study may be helpful to clinicians, nurses and counsellors to create interventions to promote breastfeeding.

Recommendations

There should be counseling centers for breastfeeding mothers to create awareness, change attitude, and adopt good practices regarding breastfeeding. There should also be training of health-care workers (ASHA and ANMS) and nurses to create awareness about breastfeeding in mothers. There should be demonstrations regarding breastfeeding practices. We also recommend to strengthen public health education campaigns to promote breastfeeding which will increase positive attitude and practices related to breastfeeding in mothers.

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