ORIGINAL ARTICLE

Knowledge, preferences, practices, and attitudes about breastfeeding among postnatal mothers in Uttarakhand, India: a cross-sectional study

Prasuna Jelly [1], Malar Kodi[2], Meenakshi Sharma[3], Suresh K Sharma[4], Rakesh Sharma[5]

[1]Assistant Professor, College of Nursing, All India Institute of Medical Sciences, Rishikesh; [2]Assistant Professor, College of Nursing, All India Institute of Medical Sciences, Rishikesh; [3]Nursing Tutor, College of Nursing, All India Institute of Medical Sciences, Rishikesh; [4]Professor, College of Nursing, All India Institute of Medical Sciences, Jodhpur; [5]Assistant Professor, College of Nursing, All India Institute of Medical Sciences, Rishikesh

Corresponding Author

Dr Rakesh Sharma, Assistant Professor, College of Nursing, All India Institute of Medical Sciences, Rishikesh, Uttarakhand. India
E Mail ID: rakesh553333@gmail.com

Citation

Jelly P, Kodi M, Sharma M, Sharma SK, Sharma R. Knowledge, preferences, practices, and attitudes about breastfeeding among postnatal mothers in Uttarakhand, India: a cross-sectional study. Indian J Comm Health. 2022;34(2):294-300. https://doi.org/10.47203/IJCH.2022.v34i02.027

Source of Funding: Nil **Conflict of Interest:** None declared

Article Cycle

Received: 30/09/2021; **Revision:** 13/05/2022; **Accepted:** 16/06/2022; **Published:** 30/06/2022

Abstract

Background: Breastmilk is the natural and safest first food for the newborn. It has nutritional, immunological, behavioural, and offers mother-infant bonding. **Objective**: The objective of the study was to explore the knowledge, practice, and attitudes of mothers towards breastfeeding. **Material & Methods**: A cross-sectional study was conducted among conveniently selected 950 postnatal mothers attending the immunization clinic and paediatric OPD with their children for vaccination and treatment of other minor illnesses from April 2018 to November 2019 in selected hospitals of Rishikesh, Uttarakhand. Mothers were face-to-face interviewed using structured knowledge, preference, practices, and attitude questionnaires about newborn breastfeeding. Tools were validated and tested for reliability. **Results**: The average knowledge scores (11.72±1.78) indicated that mothers have good knowledge about breastfeeding. Most mothers (81.45%) fed their babies with colostrum, and 82% were exclusively breastfeeding. It was also reported about top feeds like honey, coconut water, grape water, ghuttee, lactogen among about 20% of the participants. The average score of the Iowa Infant Feeding Attitude Scale (IIFAS) (58.11±6.44) lay in the range of neutral attitudes related to breastfeeding practices among the mothers. **Conclusion**: Breastfeeding practices were adequate among many mothers, but there were practices of throwing colostrum, topfeed baby and early initiation of weaning. Thus, it is necessary to create awareness among the mothers and their families about the correct practices of feeding the newborn baby; eventually, the attitude will change.

Keywords

Infant; Child; Mother; Breastfeeding; Weaning; Colostrum

Introduction

The natural and safest first food for a newborn is breastmilk(1) and it has a significant effect on reducing infant mortality and is also essential for the spacing of births. It has nutritional, immunological, behavioural and commercial advantages and offers necessary mother-infant bonding.(2) According to WHO, New research highlights that exclusive breastfeeding in rich and emerging countries has economic advantages and reduces healthcare costs. Higher IQ, greater school attainment, and higher salary later are other economic benefits associated with breastfeeding.(3) Exclusive Breastfeeding (EBF) has also been related as a natural birth control method for the first six months after delivery, reducing the incidence of later life breast and ovarian cancers in mothers. A decline in the rate of obesity and quicker return to pre-pregnancy weight also are the advantages of EBF.(4)

Exclusive breastfeeding can be described as a practice in which, for the first six months of life, a baby receives only breast milk, not even water, other liquids, tea, herbal preparations, or food except vitamins, mineral supplements or medicines.(5) WHO recommends that

babies exclusively breastfeed for the first six months beginning in the first hour of life, followed by breastfeeding for up to the age of two years or more with complimentary food.(4,5) The actual beneficial result of breastfeeding depends upon accurate breastfeeding practices. Initiation of breastfeeding after birth is significantly late in India, and in most cases, a rich colostrum is wasted before placing the child at the breast.(6,7) In 2011, the Government of India made it compulsory to keep the postnatal mother and baby in the hospital for at least 48 hours after normal vaginal delivery and seven days after caesarean section.(8)

More than 11 lakh babies within India die within the first month of life, and another 5 lakh babies die during 2 to 12 months of age.(9) Understanding the factors associated with exclusive breastfeeding will help boost the nutritional status of millions of infants, as India leads the world in the number of preterm births, malnutrition under the age of five and neonatal mortality.(10) The United Nations Children's Fund has reported that exclusive breastfeeding can reduce under-five mortality rates in developing countries by 13% in the first six months of life.(11) National Family and Health Survey-4 reported, only 56% of Indian mothers, on average, practised Exclusive Breastfeeding for the entire six months.(12,13)

Although many studies in various parts of the world have assessed the knowledge, attitude, and practice of breastfeeding, there are limited among Indian mothers. Before formulating an intervention programme and framework trends in breastfeeding practices, an in-depth view of mothers' knowledge, attitudes, and practices regarding breastfeeding are necessary. Researchers also witnessed that most mothers were not ready to feed their babies during the first three to four days of delivery. With these observations, the present study was planned to find the scientific evidences.

Aims & Objectives

To explore the knowledge, practices, and preferences of breastfeeding followed by mothers and disseminate information to enhance accurate breastfeeding practices.

Material & Methods

Study setting and population: This study was cross-sectional, explorative in nature, conducted in AIIMS Rishikesh, and government hospital Rishikesh, Uttarakhand state, located in the foothills of the Himalayas in northern India. The government hospital is an emergency hospital, including in-patient departments (facilities for medical, surgical, maternity, and pediatric), out-patient facilities, and serves the local public of Rishikesh and AIIMS Rishikesh is a tertiary care centre that serves the people of Uttarakhand, the western part of Uttar Pradesh, Himachal Pradesh and Haryana. A total of 950 mothers attending the immunization clinic and paediatric OPD with their children for vaccination and other minor illnesses were conveniently selected. The data were collected from April 2018 to November 2019.

Mothers who had infants between six months to one year of age, born between gestational weeks 37 and 42, and without congenital defects such as congenital heart disease, cleft lip or cleft palate, and Down syndrome were selected in the study. Mothers who were unwilling to participate, physically or mentally ill and with multiple gestations, were excluded from the study.

Nine hundred fifty mothers were the final sample included in the survey during the data collection period; few eligible participants refused to participate due to lack of interest, time and few mothers could not handle children during the interview.

Description of Data Collection Tool: Demographic data: The demographic form elicited information on participants' background: age, habitat, religion of mother, type of family, education of mother, occupation of mother, dietary habits, gravida, type of delivery, family monthly income, and current breastfeeding practices. A semi-structured checklist was used to explore breastfeeding preferences and practices for new-borns among mothers.

Knowledge, Practice & Preference and Attitude Scale: Section-A consisted of 15 questions related to mothers' knowledge about Breastfeeding with two possible answers, "True or False". The possible scores ranged from 0 to 15. Section-B was a semi-structured questionnaire that included questions related to practices and preferences of mothers about breastfeeding. This part also had options for the mothers to express and add further information related to the topic. The researcher constructed this part of the tool after an extensive review of published researches and utilizing experience.

Section-C was a standardized attitude questionnaire (The Iowa infant feeding attitude scale -IIFAS) for mothers towards breastfeeding, a validated and reliable tool(14). It is a five-point Likert scale (strongly disagree to agree strongly) with 17 items with a possible minimum score of 17 to 85. A higher score reflects a more positive attitude towards breastfeeding and a lesser score. Nearly half questions were negatively phrased (i.e., 1, 2, 4, 6, 8, 10, 11, 14, and 17). The total IIFAS score ranged from 17 to 85. A higher score reflects a more positive attitude towards breastfeeding. The total score was grouped into three groups: 1) Positive to Breastfeeding (70-85); 2) Neutral (49-69); and 3) favourable to formula feeding (17-48).

Validity and reliability of the tools: The study tools used in the study were validated for content adequacy by taking opinions from subject experts in midwifery and the department of obstetrics, and there was more than 90% agreement from the experts. Reliability of the knowledge and practices & preferences tools were obtained by the test-retest method. The IIFAS (Iowa Infant Feeding Attitude Scale) is a standardized tool to assess the attitude toward different infant feeding practices among antenatal

and postnatal mothers in various countries, including India. The IIFAS is a reliable and valid assessment tool found to have high internal reliability (Cronbach's a = 0.86) and predictive of breastfeeding intention and initiation in postpartum women and breastfeeding duration among breastfeeding mothers.(15)

Data Collection procedure: The mothers attending OPD were approached and explained about the study to obtain their consent from the participant. Those who agreed to participate were explained the study process, and consent was explained thoroughly about the risks and benefits of study participation. In the OPD counselling area, face-to-face interviews were conducted in the Hindi language. The average time was approximately 15-20 minutes. The data collected in the present study was about the mother's knowledge, practices, preferences, and attitude towards breastfeeding.

After data collection, the researcher educated mothers about the importance of continuing breastfeeding and complementary feed up to two years of age with the help of an instructional module. The instructional module was developed based on essential breastfeeding practices such as initiating breastfeeding within the first hour of birth, exclusive breastfeeding for the first six months of life, demand feeding, different positions and techniques of breastfeeding, the correct technique of latching, rooming-in, avoidance of bottle, teats or pacifiers and weaning after six months.

Ethical consideration: Ethical approval was obtained from the Institutional Ethical Committee. Written consent was collected from the study participants.

Statistical Analysis: Data collected were entered into a Microsoft Excel sheet. The response of negatively worded items in the attitude scale was reversed while entering into the datasheet. We analyzed the data through SPSS (version 23.0), and the results are presented in narratives forms and tables.

Results

Out of 950 postpartum mothers, 46.6% (443) belonged to the 31–35-year age group; 609 (64.1%) were from the urban background, and the Hindu community was 792(83.4%). The mode of delivery for most mothers was normal vaginal delivery 621(65.4%). There were approximately equal primigravida 439(46.2%) and multigravida mothers 511(53.8%). (Table 1)

Most mothers understood that colostrum is the first breast milk (90%), and it is essential to maintain the baby's immunity (82.5%). Nonetheless, the average scores (11.72±1.78) indicates that mothers have good knowledge about breastfeeding. (Table 2) Most mothers (81.45%) gave colostrum feeding, and most mothers (79.84%) have initiated breastfeeding within an hour of delivery. Most mothers (82%) gave exclusive breastfeeding to babies, and most mothers (85.4%) were not providing pre-lacteal feed to babies. (Table 3)

However, 41.6% of mothers stated that breastfeeding affects the beauty of feeding mothers, and the majority of participants (83.1%) agreed that the benefits of breast milk last only as long as the baby is breastfed. 74.2% of participants agreed that breastfeeding increases mother-infant bonding, and 67.7% of mothers agreed with the statement and breast milk is ideal for babies. The average score of the IIFAS (58.11±6.55) lay in the range of neutral breastfeeding attitude. (Table 4)

Discussion

Breastfeeding is an essential practice in caring for newborn babies immediately after birth, which eventually has a vital role in reducing infant mortality and morbidity. In developing countries like India, where health care facilities are inadequate, developing and implementing effective breastfeeding practices would be easier to change the attitude of the mother and families. In the present study, even though 80% of mothers had minimal educational status and were housewives, most knew that colostrum is the first breast milk essential for newborn babies to maintain immunity. These findings were supported by a study conducted in rural Uttarakhand during 2013 by Kumar S et al., which showed that 88.8% of mothers had a reasonable opinion about colostrum.(16) Verma A et al., in their study regarding knowledge about breastfeeding in Northwest India in 2017, also shows that 87% sample know the importance of colostrum.(5)

In this study, 82.5% of mothers agree that colostrum is vital for the baby to maintain immunity. Similar findings were reported by a study conducted in Owaisi Hospital and Research Centre Hyderabad between 2013 and 2015, showing that 72.8% of mothers knew that children remained healthy after breastfeeding.(17) In our study, 67.1% of mothers knew that breastfeeding should be continued up to two years, which was less compared to the study conducted by Bashir A et al (18) Near 90% of mothers know that exclusive breastfeeding for the first six months is essential for the baby for growth and development. A study by Kumar S et al. has shown that only 38% of mothers knew that exclusive breastfeeding should be practised for the first six months.(16)

Most of the mothers knew the benefits of breastfeeding that it helps in mother and child bonding and can prevent diseases affecting the breast. These findings were supported by a cross-sectional survey conducted by Vijayalakshmi et al.(19) In this study, 96% of mothers knew that breastfeeding could prevent diseases affecting breast contrast to these findings. Only 5% of mothers said yes to the statement that breastfeeding protects the mother from cancer in a study conducted on 137 mothers having a child less than two years of age in 2016 (20). Mothers had less knowledge regarding a few aspects of breastfeeding in this study; 41.9% of mothers agreed that mothers should not feed the child when she has

diarrhoea, and near half of the mothers agree with the statement that it stops breastfeeding when you start weaning. Study findings were supported by a study conducted in Abu Dhabi on 344 women between November 2014 and 2015; only 33% of mothers agreed that children should receive breast milk until ≥24 months.(21) The mothers' knowledge was good considering the maximum of mothers were housewives, and more than half of the mothers were illiterate and primary educated.

In the present study, a maximum of mother-initiated breastfeeding was within an hour (79%), and 81% of mothers also fed colostrum to a newborn baby. This study results comparable to the study conducted on the early initiation of breastfeeding in Ethiopia, which shows that 78.6% of mothers started early breastfeeding of their babies.(22) 85% of mothers in the present study did not give pre-lacteal feed to babies. These study findings were supported by a study conducted in Eutopia on pre-lacteal feeding practices showing that 79% of mothers did not give pre-lacteal food to babies.(23) In our study, 61% of mothers followed demand feeding; in contrast to this study, a 100% demand feeding schedule was seen in a study conducted by Kumari SM V et al.(24) In the present study, 79% of mothers breastfeed their babies from both sides of the breast. These findings were supported by the study conducted in BPKIHS, Dharan, on 200 mothers, showing that 85% of mothers fed from both sides of the breast.(25)

In this study, 80% of mothers were giving night feed to their babies, which was comparable to the study's findings conducted on postnatal mothers in Jammu and also shows that 89% of mothers give night feed to their babies.(26) In the current study, 82% of mothers exclusively breastfed their babies, comparable to their knowledge regarding exclusive breastfeeding. These results were comparatively higher than the study conducted in the Garhwal Himalayan region of Uttarakhand, showing that only 52.8% of babies were exclusively breastfed.(27) In our study, 55% of mothers started weaning at age more than six months. These study findings were comparable with the study conducted in Assam, which shows that 56% of babies started semi-solid food at 9-10 months.(20) These findings show that health care professionals make the population aware of the importance of exclusive breastfeeding and initiating breastfeeding early.

The attitude was assessed by an internationally standardized scale, the Iowa Infant Feeding Attitude Scale (IIFAS). Nearly three-fourths of the postnatal mothers have a positive attitude that breastfed babies are healthier than formula-fed babies, and breastfeeding improves mother-infant bonding. Many mothers had a positive attitude that breast milk is the ideal food for babies. The study findings were also supported by a study conducted in the tertiary medical centre OPD department, which showed that mothers have a positive attitude regarding breastfeeding.(28) In this study, 25% of mothers agree with the statement that the formula is as healthy for an infant as breast milk, 34% of mothers agree that Formula feeding is the better choice if the mother plans to go back to work, and 35% of mothers agree that formula feeding is more convenient than breastfeeding. This shows that some mothers have a positive attitude towards formula feeding. These findings can be comparable with the study conducted in New Delhi among mothers of an upper-middle-class family, which shows that two-thirds of participants have a positive attitude towards few statements of formula feeding.(29)

In the present study, 35% of mothers agreed that breast milk is lacking in iron. These findings were similar to a study conducted by Vijayalakshmi P et al.(19,29) In the current study, 42% of mothers agreed that women should not breastfeed in public places such as restaurants; the findings were supported by a study conducted on 276 mothers in Saudi Arabia in which 48% of mothers agree that women should not breastfeed in public places.(30) In the current study, 38% of mothers agreed that fathers felt left out if a mother breastfeeds, comparable to the study conducted in Egypt on 250 mothers, which shows that 49% of mothers agree with the same statement.(31) Nearly half of mothers agree with both statements that formula-fed babies were more likely to be overfed than breastfed babies, and breastfed babies were more likely to be overfed than formula-fed babies. The study findings were slightly comparable with the research study conducted by Vijayalakshmi et al.(19) In this study, 54% of mothers agreed that mothers who occasionally drink alcohol should not breastfeed their babies. These findings were supported by a study conducted on 427 mothers in Australia by using the IIFA scale.(32) According to our findings, maximum mothers have a neutral attitude towards breastfeeding.

This study shows that postnatal mother's practices and preferences towards breastfeeding were changing with time, which is helping in improving immunity and maintaining the good health of a newborn. Many mothers were aware of the importance of breastfeeding, but they should also know about every single aspect of breastfeeding in detail.

Conclusion

This study concludes that most postnatal mothers attending immunization clinics and paediatric outpatient departments, even though most were primarily educated and homemakers, had good knowledge, optimum practices, and a neutral attitude towards breastfeeding.

Recommendation

Primary health care practitioner, nurses and other health care professionals should council and educate to mothers during antenatal and postnatal phase, as well as family members to support mother to breast feed the child.

Limitation of the study

Present study findings are based on the self-reported by the study participants based on their recall ability, which may give rise to recall bias.

Authors Contribution

PJ, MK, SKS: study design; Data collection: MS, PJ,MK; compilation and data analysis: RS, SKS; drafting of manuscript: PJ, MK, MS, SKS, RS; All authors contributed equally in final manuscript with intellectual content

References

1. Shaili V, Parul S, D KS, Jayanti S, Anurag S, Vipul N, et al. A community based study on breastfeeding practices in a rural area of Uttarakhand. Natl J Community Med. 2012;3(2):283–7.
2. Khan ME. Breast-feeding and weaning practices in India. Asia-Pacific Popul J. 1990;5(1):71–88.
3. WHO. Breastfeeding can save lives and boost the economy – but mothers need more support [Internet]. WHO. World Health Organization; 2017. Available from: http://www.who.int/life-course/news/commentaries/breastfeeding-can-save-lives/en/
4. Rollins NC, Bhandari N, Hajeebhoy N, Horton S, Lutter CK, Martines JC, Piwoz EG, Richter LM, Victora CG GT. Why invest, and what it will take to improve breastfeeding practices? Lancet. 2016;387(10017):491–504.
5. Verma A, Kumari R, Hussain S, Langer B, Gupta R, Singh P. Knowledge and practices regarding breastfeeding: A community-based cross-sectional study in a rural area of Northwest India. Int J Med Sci Public Heal. 2017;6(5):1.
6. Kumar S, Jha SK, Singh A, Rawat CM, Awasthi S, Bano M SA. Knowledge, Attitude and Practices (KAP) Regarding Breastfeeding: A Community based Cross Sectional Study from Rural Uttrakhand. Hindu. 2015;6(2):17-22.
7. Mise PJ, Mise AJ, Mise SJ, Siddappa M. Study of breastfeeding practices and problems among postnatal mothers: a hospital based study. Int J Reprod Contraception, Obstet Gynecol. 2017;6(8):3343.
8. Janani-Shishu Suraksha Karyakram :: National Health Mission [Internet]. NHM. 2021. Available from: http://www.nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1179&lid=363
9. Junaid M, Patil S. Breastfeeding practices among lactating mothers of a rural area of central India: a cross-sectional study. Int J Community Med Public Heal. 2018 Nov;5(12):5242.
10. Newborn and child health; Let's end preventable neonatal deaths and ensure Every Child ALIVE. [Internet]. Unicef, India. Available from: https://www.unicef.org/india/what-we-do/newborn-and-child-health
11. Nishimura H, Krupp K, Gowda S, Srinivas V, Arun A, Madhivanan P. Determinants of exclusive breastfeeding in rural South India. Int Breastfeed J. 2018;13(1):1–7.
12. Reddy SN, Sindhu KN, Ramanujam K, Bose A, Kang G, Mohan VR. Exclusive breastfeeding practices in an urban settlement of Vellore, southern India: Findings from the MAL-ED birth cohort. Int Breastfeed J. 2019 Jun 27;14(1):1–6.
13. Jelly P, Sharma SK, Saxena V, Arora G, Sharma R. Exploration of Breastfeeding Practices in India: A Systematic Review. J Holist Nurs Midwifery. 2022;32(1):58–68.
14. Mora A de la, Russell DW, Dungy CI, Losch M, Dusdieker L. The Iowa infant feeding attitude scale: analysis of reliability and validity 1. J Appl Soc Psychol. 1999;29(11):2362–80.
15. Iliadou M, Lykeridou K, Prezerakos P, Tzavara C, Tziaferi S. Reliability and Validity of the Greek Version of the Iowa Infant Feeding Attitude Scale Among Pregnant Women. Mater Socio Medica. 2019;31(3):160.
16. Kumar S, Jha SK, Singh A, Rawat CMS, Awasthi S, Bano M, et al. Knowledge , Attitude and Practices (KAP) Regarding Breastfeeding : A Community based Cross Sectional Study from Rural Uttrakhand. Heal J. 2015;6(2):2–7.
17. Naseem A, Mazher N. A study to evaluate the knowledge, attitude and practices of exclusive breast feeding among primi mothers of healthy term neonates in a tertiary care hospital and predictors of failure of establishment of exclusive breast feeding in first six months. Int J Contemp Pediatr. 2016;3(3):810–4.
18. Bashir A, Mansoor S, Yousuf Naikoo M. Knowledge, attitude, and practices of postnatal mothers regarding breastfeeding: A cross-sectional study. Int J Med Sci Public Heal. 2018;7(11):725.
19. Vijayalakshmi P, Susheela,D. M. Knowledge , Attitudes and Breast Feeding Practices of Postnatal Mothers : A Cross Sectional Survey. Int J Health Sci (Qassim). 2015;9(4):363–72.
20. Hema K T, Akhtar F, Aggarwal S, Rawat C. Knowledge and Practices regarding Breastfeeding and Complementary Feeding among migrant mothers of Haldwani block, District Nainital, Uttarakhand. India J Appl Res. 2017;7(9):17–9.
21. Al Ketbi MI, Al Noman S, Al Ali A, Darwish E, Al Fahim M, Rajah J. Knowledge, attitudes, and practices of breastfeeding among women visiting primary healthcare clinics on the island of Abu Dhabi, United Arab Emirates. Int Breastfeed J. 2018;13(1):1–14.
22. Abie BM, Goshu YA. Early initiation of breastfeeding and colostrum feeding among mothers of children aged less than 24 months in Debre Tabor, northwest Ethiopia: A cross-sectional study. BMC Res Notes. 2019 Jan;12(1):65.
23. Amele EA, Demissie BW, Desta KW, Woldemariam EB. Prelacteal feeding practice and its associated factors among mothers of children age less than 24 months old in Southern Ethiopia. Ital J Pediatr. 2019 Jan;45(1):1–8.
24. Kumari SM V, Sudha Rani G, Rao BB. A Study on Infant Feeding Practices in Rural Areas of Warangal District, State of Telangana, India. Int J Contemp Med Res ISSN. 2015;4(4):789.
25. Chaudhary R, Shah T, Raja S. Knowledge and practice of mothers regarding breast feeding: a hospital based study. Heal Renaiss. 1970;9(3):194–200.
26. Bala K, Sahni B, Bavoria S, Narangyal A. Knowledge, attitude, and breast-feeding practices of postnatal mothers in Jammu: A community hospital based cross sectional study. J Fam Med Prim Care. 2020;9(7):3433.
27. Rathaur V, Pathania M, Pannu C, Jain A, Dhar M, Pathania N, et al. Prevalent infant feeding practices among the mothers presenting at a tertiary care hospital in Garhwal Himalayan region, Uttarakhand, India. J Fam Med Prim Care. 2018;7(1):45.
28. Bindu A, Noushadali A. K, Kutty P. M. Knowledge, attitude, and practice of breast feeding mothers in a tertiary care centre: a descriptive study. Int J Pediatr Res. 2017;4(12):706-712.doi:10.17511/ijpr.2017.12.03.
29. Gangwal M, Nair BT, Singh VK. Knowledge, attitude and practices regarding breastfeeding and infant milk substitutes among mothers of upper middle-class society in a baby friendly hospital initiative accredited hospital of New Delhi, India. Int J Contemp Pediatr Gangwal M al Int J Contemp Pediatr. 2020;7(1):173–9.
30. Attia Mohammed B, Abdullah Soliman S. Mothers' Attitudes toward Breastfeeding and Their Association with Infants' Characteristics. J Nurs Heal Sci. 2018;7(3):60–9.
31. Shoman AE, Emam HM, Environment C. Evaluation of Lactation Management Education Program among Nursing Mothers Attending a Primary Health Care Unit in Suez Governorate, Egypt. Egypt J Community Med. 2018;36(3):49–60.
32. Cox KN, Giglia RC, Binns CW. The influence of infant feeding attitudes on breastfeeding duration: Evidence from a cohort study in rural Western Australia. Int Breastfeed J. 2015;10(1):1–9.

Tables

TABLE 1 SOCIO-DEMOGRAPHIC PROFILE OF PARTICIPANTS (N=950)

S. No.	Demographic Variables	f	%
1.	**Age in Years:**		
	a. *19 – 25 Years*	64	6.7
	b. *26 – 30 Years*	328	34.5
	c. *31 – 35 Years*	443	46.6
	d. *Above 35 Years*	115	12.1
2.	***Habitat:***		
	a. *Urban*	609	64.1
	b. *Rural*	341	35.9
3.	***Religion of Mother:***		
	a. *Hindu*	792	83.4
	b. *Sikh*	4	0.4
	c. *Christian*	45	4.7
	d. *Muslim*	109	11.5
4.	***Type of Family:***		
	a. *Nuclear Family*	564	59.4
	b. *Joint Family*	386	40.6
5.	***Education of the mother:***		
	a. *Illiterate*	267	28.1
	b. *Primary*	468	49.3
	c. *Secondary*	94	9.9
	d. *Higher Secondary*	87	9.2
	e. *Graduation*	34	3.6
6.	***Occupation of mother:***		
	a. *Housewife*	735	77.4
	b. *Private Sector*	148	15.6
	c. *Government Sector*	52	5.5
	d. *Health professional*	15	1.6
7.	***Dietary Habits:***		
	a. *Vegetarian*	671	70.6
	b. *Non – vegetarian*	279	29.4
8.	**Gravida:**		
	a. Primi	439	46.2
	b. Multi	511	53.8
9.	**Type of Delivery:**		
	a. Normal	621	65.4
	b. Caesarean	329	34.6
10.	**Family monthly income:**		
	a. Rs < 10,000	303	31.9
	b. Rs 10,000 - 20,000	246	25.9
	c. Rs 20,001 – 30, 000	197	20.7
	d. Rs. 30,001 – 40,000	105	11.1
	e. Rs > 40,000	99	10.4
11.	**Current breastfeeding practices:**		
	a. Yes	675	71.1
	b. No	275	28.9

TABLE 2 KNOWLEDGE OF MOTHERS ON EXCLUSIVE BREAST FEEDING (N=950)

S. No.	Statement	True		False		Mean
		f	%	f	%	
1.	Colostrum is first breast milk	855	90.0	95	10.0	0.90
2.	Colostrum is important for the baby to maintain immunity	784	82.5	166	17.5	0.83
3.	Burping should be done after each feed	881	92.7	69	7.3	0.93
4.	Breastfeeding should be continued up to 2 years	637	67.1	313	32.9	0.67
5.	Exclusive breast milk can be given during the first six months	848	89.3	102	10.7	0.89
6.	Lactating mother should take healthy food to improve secretion of milk	927	97.6	23	2.4	0.98
7.	During breastfeeding, the mother should sit comfortably	950	100	-	-	1.00

S. No.	Statement	True		False		Mean
		f	%	f	%	
8.	During breastfeeding, the mother should maintain eye to eye contact & talk with the baby	806	84.8	144	15.2	0.85
9.	Wash each breast with warm water before breastfeeding	726	76.4	224	23.6	0.76
10.	Awakening the baby while breastfeeding	588	61.9	362	38.1	0.62
11.	Breastfeeding helps in mother and child bonding	906	95.4	44	4.6	0.95
12.	Breastfeeding can prevent diseases affecting breast	913	96.1	37	3.9	0.96
13.	Breastfeed affect the beauty of feeding mothers	395	41.6	555	58.4	0.42
14.	The mother should not feed the child when she has diarrhoea	398	41.9	552	58.1	0.42
15.	Stop breastfeeding when you start weaning	518	54.5	432	45.5	0.55
	Mean of Knowledge Score ±SD					**11.72±1.78**

TABLE 3 BREAST FEEDING PRACTICES OF MOTHERS (N=950)

Statement		f	%
Breastfeeding initiation within an hour	a. Yes	758	79.84
	b. No	192	20.16
Pre-lactational feeds:	a. Yes	138	14.52
	b. No	812	85.48
Colostrum feeding:	a. Yes	774	81.45
	b. No	176	18.55
Frequency breastfeeding:	a. Demand feed	582	61.29
	b. Scheduled feed	368	38.71
Feeding pattern at a time:	a. From one side of the breast	199	20.97
	b. From both the sides of the breast	751	79.03
Night feeds:	a. Yes	766	80.65
	b. No	184	19.35
Exclusive breastfeeding	a. Yes	781	82.26
	b. No	169	17.74
At what age you will start weaning the baby	a. 4months	77	8.06
	b. 6months	345	36.29
	c. >6months	529	55.65
First feed to the baby	a. Breastfeeding	812	85.48
	b. Top feeding *(Honey, Coconut water, Grape Water, Ghuttee, Lactogen)*	138	14.52

TABLE 4 MOTHERS' ATTITUDES TOWARDS BREASTFEEDING (N=950)

Statements	Agree f (%)	Neutral f (%)	Disagree f (%)	Mean ±SD
The benefits of breast milk last only as long as the baby is breastfed*	789 (83.1)	84(8.9)	77(8.1)	1.50±1.19
Formula feeding is more convenient than breastfeeding	337(35.5)	268(28.2)	345(36.3)	2.98±1.70
Breastfeeding increases mother-infant bonding	705(74.2)	207(21.8)	38(4.0)	4.40±1.08
Breast milk is lacking in iron*	291(30.6)	483(50.8)	176(18.5)	2.76±1.39
Formula-fed babies are more likely to be overfed than breastfed babies	437(46.0)	299(31.5)	215(22.6)	3.47±1.59
Formula feeding is the better choice if the mother plans to go back to work*	329(34.7)	329(34.7)	291(30.6)	2.92±1.62
Mothers who formula feed miss one of the great joys of motherhood	498(52.4)	375(39.5)	77(8.1)	3.89±1.28
Women should not breastfeed in public places such as restaurants	406(42.7)	276(29.0)	268(28.2)	3.29±1.67
Breastfed babies are healthier than formula-fed babies	674(71.0)	169(17.7)	107(11.3)	4.19±1.37
Breastfed babies are more likely to be overfed than formula-fed babies	490(51.6)	283(29.8)	176(18.5)	3.66±1.55
Fathers feel left out if a mother breastfeeds*	368(38.7)	391(41.1)	192(20.2)	2.63±1.50
Breast milk is the ideal food for babies	644(67.7)	199(21.0)	107(11.3)	4.13±1.38
Breast milk is more easily digested than formula	705(74.2)	146(15.3)	100(10.5)	4.27±1.33
The formula is as healthy for an infant as breast milk*	238(25.0)	337(35.5)	375(39.5)	3.29±1.59
Breastfeeding is more convenient than formula	659(69.4)	192(20.2)	100(10.5)	4.18±1.35
Breast milk is cheaper than formula	713(75.0)	199(21.0)	38(4.0)	4.42±1.08
A mother who occasionally drinks alcohol should not breastfeed her baby*	521(54.8)	322(33.9)	107(11.3)	2.13±1.38
58.11±6.44				