Available on: https://ijmpr.in/

E-ISSN: 2958-3683 | P-ISSN: 2958-3675

ORGINAL ARTICLE **OPEN ACCESS**

Knowledge and Practice of Breastfeeding and Complementary Feeding Among Mothers of Under One Year Age Children

Dr. Sanjiv Kumar Roy¹, Dr. Achinta Kumar Mallick²

¹Associate Professor, Department of Paediatrics Varun Arjun Medical College and Rohilkhand Hospital (VAMC & RH), Banthra, Sahjahanpur, Uttar Pradesh India.

²Dept of Pediatrics, Military Hospital Wellington, Tamil Nadu, India

OPEN ACCESS

*Corresponding Author:

Dr. Achinta Kumar Mallick Dept of Pediatrics, Military Hospital Wellington, Tamil Nadu, India

Received: 07-07-2025 Accepted: 16-08-2025 Available Online: 25-08-2025



©Copyright: IJMPR Journal

ABSTRACT

Introduction: Breastmilk is the only natural source of food for newborn baby, providing all necessary nutrients and meeting the energy requirement of the newborn for the first few months of life. In India, as per the national family health survey-4, only about half of the infants under six months of age are exclusively breastfed which is really alarming. To add to this jeopardy, the early initiation of breastfeeds within 1 hour of birth in many Indian states is also alarmingly low.

Methods: A cross-sectional descriptive study was conducted among 100 mothers visiting our service hospital in Jammu & Kashmir, India over a period of six months using a questionnaire-based interview.

Results: The study found that most of our subject population had good breastfeeding knowledge. 67% mothers had knowledge of breastfeeding within an hour of birth. Majority knew that breastmilk protects baby from various infections and that colostrum is the first immunization for the baby. 86% mothers knew about complementary feeding at six months. Most of the mothers planned to breastfeed their baby for more than six months (97 %).

Conclusions: Majority mothers had good knowledge of breastfeeding and complementary feeding with good breastfeeding practices.

Keywords: Breastfeeding, Knowledge, Practice, Complementary feeding

INTRODUCTION

Breastmilk is the only natural source of food for newborn baby, providing all necessary nutrients and meeting the energy requirement of the newborn for the first few months of life. It also contributes in meeting up to half the energy and nutritional requirement of the infant in the initial first year of life, and also up to one third requirement for second year of life. Breastmilk is also an essential entity in promoting the sensory & cognitive development and protecting the infant against all infections and also preventing the onset of many adult onset chronic lifestyle diseases. Exclusive breastfeeding has also been proven in reducing infant mortality rate in lower middle income countries, like respiratory illnesses, diarrhea and pneumonia. It also helps in quicker recovery during illness. 1 The benefit of breastfeeding depends not only on its early initiation, exclusivity and its prolonged duration, but also at the age when the exclusively breastfed child is started on complementary feeding. In India, as per the national family health survey-4, only about half of the infants under six months of age are exclusively breastfed which is really alarming. To add to this, the early initiation of breastfeeds within 1 hour of birth in many Indian states is also alarmingly low.² The poor breastfeeding rate in India is not only attributed to maternal medical condition, but is also altered by the many myths and beliefs of the community, being influenced by their cultural, social and educational background. Successful breastfeeding is affected to a great extent on support and motivation by family and health care professionals and not only on mother's education. 3 Therefore an attempt was made in this study to assess knowledge & practices of breastfeeding among mothers of under one year age children.

OBJECTIVES

Objective of the study was to assess the knowledge and practice of breastfeeding and complementary feeding among mothers of under one year age children, in Northern India.

METHODS

This cross-sectional questionnaire based study was conducted over a period of six months from April 2024 to October 2024. All the mothers having children under one year, visiting our tertiary care hospital in Jammu & Kashmir, India were eligible for the study. Written informed consent was also taken from all the participants.

After obtaining the parental consent, a structured questionnaire based interview was conducted with the mothers, about her knowledge on exclusivity of breastfeeding, the problems faced and assistance received for their related issues. The interview also included questionnaires regarding their knowledge and practices of breastfeeding and the individual response obtained were analyzed thereafter. Scores for knowledge were compared with that of breastfeeding practices. Other variables like demographic factors were also observed. The questionnaire data was made in a standard proforma in MS Excel sheet and was later analyzed using the SPSS software (IBM Inc.). No monetary assistance was given to the mothers for their participation and the study was also not funded by any agency. The study was approved by the institutional ethical committee.

RESULTS

A total of 100 mothers were included in the study. 22 mothers (22%) were in the age group below 25 years, 47(47%) between the age group of 26-30 years and the remaining 31 (31%) were aged more than 30 years. 67 (67%) babies were aged less than six months. The remaining 33 (33%) were aged 6-12 months respectively. All the participants were of nearly similar socio-economic status as ours is a service hospital having financial, accommodation and social security. The educational status of the participants were as under: Undergraduates 23(23%) graduates 46 (46%) and post-graduates 31 (31%)]. All mothers had booked institutional delivery. Demographic data is depicted as in Table 1. Further association between mother's breastfeeding knowledge and practices is depicted in Table 2.

Table 1: Demographic characteristics of responders (Total respondents = 100)

Baseline characteristics ^a	N (%)
Mother's age < 25 yrs	22 (22%)
Mother's age > 25 yrs < 30 yrs	47 (47%)
Mother's age > 30 yrs	31 (31%)
Mother's education level undergraduate	23(23%)
Mother's education level graduate	46(46%)
Mother's education level postgraduate	31(31%)
Parity 1 child	43 (43%)
Parity > 1 child	57(57%)
Term pregnancy	93(93%)
Preterm pregnancy	7 (7%)
Cesarean delivery	37 (37%)
Normal vaginal delivery	63 (63%)
Child's age < 6 months	67(67%)
Child's age 6 - 12 months	33(33%)

Table 2: Responders response to questionnaire on knowledge and practice of Breast feeding (Total respondents = 100)

Questions	Agree% (n)	Don't agree % (n)
Knowledge		
Baby should be put to breastfeed within one hour of birth	67% (67)	33% (33)
Does a baby need water or other feeds for first six months	56%(56)	44% (44)
Breast fed babies have lesser episodes of diseases	65%(65)	35% (35)
Can a mother produce sufficient breastmilk by continuing breast feeding her	62%(62)	38% (38)
baby?		
Breast milk contents can protect against many diseases to the baby	65%(65)	35% (35)
Colostrum is beneficial and provides first immunization to baby	65%(65)	35% (35)
Colostrum should not be thrown. It should be given to the baby	59%(59)	41%(41)
Mother should exclusively breastfeed her baby till six months	89%(89)	11% (11)
Mother should continue breastfeeding her baby till 2 years	73%(73)	37%(37)
Complementary feeding should be started six month onwards	86%(86)	14%(14)
Practices		
When did you start breast feed to your baby?		
Within one hour of birth	65%(65)	35% (35)
More than one hour after birth	44% (44)	56%(56)
Did you know breastfeeding prior to delivery	76%(76)	24%(24)
What was the source of information		

Family relatives / Elders/ Friends	73%(73)	
Media	20%(20)	
Others	7%(7)	
Baby should be breastfed only when hungry and crying	23%(23)	77%(77)
How long do you plan to breastfeed your baby		
Less than six months	3%(3)	97%(97)
More than six months	97%(97)	3%(3)

DISCUSSION

This study was done to analyze mother's knowledge and practices to breastfeeding. Majority of mothers (67%) had the knowledge of initiating breastfeed within one hour of birth out of which, only 56 mothers (56%) reported initiating breastfeeding within one hours of birth. As per National Family Health Survey 5, only 44.7% rural and 40.7% urban children under three were put to breast within an hour of birth.⁴ As Similarly, as per United nations children's fund (UNICEF) only 45% of world's newborn and 42% of South-Asian newborns were given breastmilk within an hour of birth. 5 56 (56%) mothers had correct knowledge that newborns upto six months of age do not need anything other than breast milk. 62 mothers (62%) knew that with frequent breast feeding, mothers can produce sufficient breast milk for their newborn. Choudhary et al in their study reported that knowledge and advantages of exclusive breastfeeding duration in mothers was 59.1% and 50.2%. Similarly, Ketbi et al in their study reported that 81.2% mothers had this knowledge. Ulak et al reported that 79% babies were already given supplements (semi/solid or animal milk) before six months of age and the main reason was assumed insufficient breast milk production.8 In our study, regarding the knowledge of mother about colostrum being the first immunization for the baby, 65 (65 %) had the same knowledge. 65 % of mothers (65) knew that Breast fed babies have lesser episodes of diseases. 65 (65 %) reported that breast milk has antibodies that protect against many diseases. Joshi et al found in their study that 74% of women had heard about colostrum. 9 Similar results were reported by Ahmed et al that 76.7% mothers had favourable knowledge about the colostrum and 79.2% knew about its necessity to newborn. 10 Rahalkar et alsaid that 90% mothers had given colostrum to their newborn baby.¹¹ Kakati et al reported that 21% of urban & 29.5% rural mothers had discarded colostrum.¹² 65 (65 %) mothers in our study group had started breastfeeding within one hour of birth. Rahalkar et al reported 50.6% newborns were breastfed within an hour of birth. 12 Majority of mothers (73 %) knew that breastfeeding should be continued for 2 years and 97 (97%) intended to continue the same with their baby. Our findings are somewhat consistent with study by Chaudhary et al who reported that 75% mothers were already aware of continuing breastfeeding till two years of age. 13. In contrast Ketbi et al reported that only 33.9% mothers knew that baby should be continued breastmilk for at least two years. In our study 86 (86%) mothers had knowledge about complementary feeding. As per Jain et al, more than 83.75% of mothers had knowledge of complementary feeding. 14 Similarly, as per Berisha et al, 88.4% of mothers had knowledge of complementary feeding.¹⁵ 86 (86%) mothers agreed that suitable age for starting complementary feed is after 6 months, which was similar to findings of Ketbi et al whose numbers were 86.1%. Meshram et al reported 58% of infants (6-11 months) having received complementary feeding at 6-9 months of age. 16 Rahalkar et al found 84% babies complementary fed after 6 months. 11 Berisha et al said that 61.9% mother had knowledge about complementary feeds to be given after 6 months.¹⁵

CONCLUSION

In our study, we found that breastfeeding knowledge and practices in our subject population was good. Most of the mothers 65 (65 %) had breastfed their baby within first hour of birth. Most of them had good knowledge of benefits of breastmilk and also the knowledge that colostrum is important and that infants should not to be given anything for the first six months except breast-milk. Our study found good breastfeeding knowledge among mothers. Antenatal counselling on breastfeeding was pivotal in better breast feeding knowledge and practices. The limitation to our study is the smaller sample size. A large sample size with wide population based study is required for validation.

Funding: None

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

- 1. WHO / Maternal, newborn, child and adolescent health/breastfeeding. Available at: (www.who.int/maternal_child_adolescent/topics/child/nutrition/breastfeeding/en. Accessed on 18 April 2025.
- 2. National Family Health Survey (NFHS-4), 2015-16. Available at: http://rchiips.org/nfhs/factsheet_nfhs-4.shtml. Accessed on 01 December 2020.
- 3. Shashank KJ, Chethan TK. A study on breastfeeding practices among mothers in rural area of Mangalore: a cross-sectional study. Nation J Commun Medic. 2016;7(2):134-7.
- 4. International Institute for Population Sciences (IIPS) and ICF. 2021. National Family Health Survey (NFHS-5), 2019-21: India: Volume I. Mumbai: IIPS. Available at http://www.rchiips.org/nfhs or http://www.iipsindia.ac.in Accessed on 18 April 2025.
- 5. UNICEF. From the First Hour of Life: Making the case for improved infant and young child feeding

- everywhere. New York, USA: UNICEF; 2016.
- 6. Choudhary AK, Bankwar V, Choudhary A. Knowledge regarding breastfeeding and factors associated with its practice among postnatal mothers in central India. Int J Medic Sci Pub Heal. 2015;4(7):973-76
- 7. 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):26.
- 8. Ulak M, Chandyo RK, Mellander L, Shrestha PS, Strand TA. Infant feeding practices in Bhaktapur, Nepal: a cross-sectional, health facility-based survey. Int Breastfeed J. 2012;7(1):1.
- 9. Joshi S, Barakoti B, Lamsal S. Colostrum Feeding: Knowledge, Attitude and Practice in Pregnant Women in a Teaching Hospital in Nepal. Webmed Central Medical Educat. 2012;3(8).
- 10. Ahmed HM. Knowledge and Attitudes of Pregnant Women Regarding Breastfeeding. Polytechn J. 2019;9(2):55-62.
- 11. Rahalkar AA, Phalke DB, Phalke VD. A study of breastfeeding and complementary feeding practices with emphasis on misconceptions amongst the women with under two-year children in rural area. Int J Medic Res Heal Sci. 2014;3(4):851-5.
- 12. Kakati R, Rahman SJ, Borah M, Borah H. Colostrum feeding practices and its determinants among urban and rural mothers in Kamrup, Assam, India. Int J Res Med Sci. 2016;4(10):4567-72.
- 13. Chaudhary RN, Shah T, Raja S. Knowledge and practice of mothers regarding breast feeding: a hospital-based study. Heal Renaiss. 2011;9:194-200.
- 14. Jain S, Thapar RK, Gupta RK. Complete coverage and covering completely: Breast feeding and complementary feeding: Knowledge, attitude, and practices of mothers. Med J Armed Forces Ind. 2018;74(1):28-32.
- 15. Berisha M, Ramadani N, Hoxha R, Gashi S, Zhjeqi V, Zajmi D, et al. Knowledge, attitudes and practices of mothers in kosova about complementary feeding for infant and children 6-24 months. Medic Arch. 2017;71(1):37.
- 16. Meshram II, Laxmaiah A, Venkaiah K, Brahmam GN. Impact of feeding and breastfeeding practices on the nutritional status of infants in a district of Andhra Pradesh, India. Nation Medic J Ind. 2012;25(4):201.