

A Community Based Study on Various Aspects of Breast-Feeding Practices from Central India

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Received: 20-April-2023;

Accepted: 10-Jun-2023.

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Abstract

Background: For optimum growth and development of new-borns breastfeeding is of utmost importance. Identification of breastfeeding practise gaps need to be identified and filled. **Objectives:** This study was undertaken to explore the breastfeeding practices, influence of literacy and prevailing cultural factors on different aspects of breastfeeding. **Materials and Methods:** Complete line listing of 576 breastfeeding women in the study area was done. Then the study subjects were interviewed by making house to house visits. Data was gathered on the participant's demographics, breastfeeding knowledge, and practices. Privacy was maintained while conducting the interview. Anonymity and confidentiality were ensured to the study participants. **Results:** Data of 550 study participants was analyzed and presented here. 377 (68.5%) could not practice timely initiation of breast feeding. Most common reason (264, 70%) for the same was insufficient knowledge about it. Exclusive breast feeding was practiced by merely 44 (8%) subjects. Not good for health of new-born (108, 36.7%), not easily digested by the new-born (thick) (85, 28.9%) and myths prevalent in society (64, 21.8%) were three most common reasons for discarding colostrum by mothers. Lower socio-economic status, muslim religion and joint family were found to be associated with practice of exclusive breastfeeding. **Conclusion:** The issue of lower prevalence of early breastfeeding initiation and exclusive breastfeeding continues to persist in the study area. Still, colostrum is being discarded. Tailored and region-specific health promotion activities must be intensified in this regard by grass root level health care workers.

Keywords: Breastfeeding, Colostrum, Cultural factors, Practice.

INTRODUCTION

Breastfeeding is of utmost importance for optimum growth and development of new-borns. Only breast milk is given to the baby during Exclusive Breastfeeding (EBF), with the exception of Oral Rehydration Solution (ORS), syrup, or drops of vitamins, minerals, or medications.^[1] The World Health Organization (WHO) currently recommends exclusive breastfeeding for six months, as well as starting supplemental foods at six months of age while the mother continues to breastfeed her child concurrently up to 24 months of age.^[2] 10% of the disease load in children under the age of five years is caused by suboptimal and non-EBF in the first six months of life, which accounts for 1.4 million fatalities.^[3]

Only 37% of new-borns in low- and middle-income nations are exclusively breastfed until they are six months old.^[4] According to the National Family Health Survey-5 (NFHS-5), only 59.6% of new-borns in urban regions of India are exclusively breastfed until they are six months old.^[5] The mother's decision to exclusively breastfeed her child and to keep doing so until the child is two years old is influenced by a variety of interrelated circumstances. A wide range of cultural and societal influences, peer pressure and behaviour, and the accessibility of healthcare services are among these issues.^[6]

For the growth, development, health, and nutrition of new-borns and children everywhere, the beginning of nursing and the prompt introduction of sufficient, safe, and suitable supplemental feeds in addition to continuous breastfeeding are of utmost importance. Therefore, in order to improve children's nutritional status, it is necessary to promote and safeguard the best practises for new-born feeding. Hence this study was undertaken to

explore the breastfeeding practices, influence of literacy and prevailing cultural factors on different aspects of breastfeeding. This has a significant impact on the delivery of primary care because it allows for the identification of breastfeeding practise gaps, the strengthening of supportive factors, the reduction of cultural norms that are harmful to breastfeeding, and the incorporation of suitable interventions.

MATERIALS AND METHODS

This community-based study was planned and conducted by department of community medicine of a tertiary care teaching hospital located at Indore city of Madhya Pradesh in central India. This study was conducted for a period of one year i.e., April 2021 to March 2022 in an urban re-settlement slum colony.

Complete line listing of 576 breastfeeding women in the study area was done. Then the study subjects were interviewed. Homes that were noticed to be locked on the initial visit were checked again and excluded if still locked. The semi-structured, pre-formed performa was used to interview mothers. House-to-house visits were used to gather data on the participant's demographics, breastfeeding knowledge, and practices. Their written informed consent was obtained in the local language once the purpose of the study was explained to them. It took around 25-30 min to interview each subject. Privacy was maintained while conducting the interview. Anonymity and confidentiality were ensured to the study participants.

Study was conducted after obtaining necessary permission from Institutional Ethical Committee. The Microsoft Excel Sheet 2009 was used to enter all of the gathered data. After that, the data were transferred and examined using

SPSS version 21. Qualitative data were represented in the form of frequency and percentages. Chi Square test and Fisher Exact test were applied to find out association of exclusive breast feeding with selected socio-demographic factors. Statistical tests were applied considering *p* value <0.05 as statistically significant.

RESULTS

Of total 576 eligible subjects, ten houses were found locked despite two visits hence excluded. 12 mothers did not provide consent for this interview hence again excluded. data of 4 subjects, was found incomplete. Thus, finally data of 550 study participants was analyzed and presented here.

Most (*n*=384, 69.8%) of the lactating mothers were between 19 and 28 years of age. Four hundred and seventy-three (86%) mothers were illiterate. Of total, majority (*n*=348, %) of study subjects belonged to lower socio-economic status. Religion wise, more than 90% (*n*=502) were muslim. Most (*n*=395, %) of the lactating mothers were staying at joint family. Of total 550 mothers, 166 (%) did not get ANC registration done whereas 290 (%) mothers delivered at home rather than hospital.

Of 550 lactating mothers, only 173 (31.4%) timely initiated the breast feeding whereas remaining 377 (68.5%) could not practice timely initiation of breast feeding. In total, 256 (46.5%) study participants gave colostrum to their new born babies while 294 (53.4%) mothers discarded it. Exclusive breast feeding was practiced by merely 44 (8%) subjects. Regarding correct time of initiation of complementary feeding, most (*n*=392, 71.3%) of the study participants did not knew that correct time of initiation of complementary feeding is when the new born attains 6 months of age. Pre-lacteal feed was given to 417 (75.8%) of the babies.

Out of the total mothers, 377 (68.5%) could not practice timely initiation of breast feeding. Most common reason (264, 70%) for the same was insufficient knowledge about early initiation of breast feeding among mothers. Milk not letting down (67, 17.8%) and mother not comfortable (56, 14.9%) were other two important reasons. Not good for health of newborn (108, 36.7%), not easily digested by the newborn (thick) (85, 28.9%) and myths prevalent in society (64, 21.8%) were three most common reasons for discarding colostrum by mothers. Two common reasons for the discontinuation of exclusive breastfeeding were inability of mother to feed the baby (288, 56.9%) and sick infant (105, 20.8%) (Table 1).

Lower socio-economic status, muslim religion and joint family were found to be associated with practice of exclusive breastfeeding (*p* < 0.01). Illiteracy of head of the family, illiteracy of mother and home delivery were also found to be associated with practice of exclusive breastfeeding (*p* < 0.05). No association was observed with the ANC registration with practice of exclusive breastfeeding (*p* > 0.05) (Table 2).

DISCUSSION

A critical turning point in the development of the infant is the timing of breastfeeding beginning and adequate breastfeeding duration. If infants are placed to the breast within the first 60 min after delivery, when the sucking reflex is most active and they are awake and alert, their chances of exclusively nursing improve.^[7] Only 173 (31.4%) of the 550 lactating mothers in this study were able to practise timely initiation of breastfeeding, leaving 377 (68.5%) unable to do so. Another study from South India on the factors influencing Early Initiation of Breastfeeding (EIBF) in healthy term newborns found that the use of prelacteal feeds, Lower Segment Caesarean Section (LSCS) delivery, and mother sickness are the primary influences on EIBF.^[8] Similar outcomes were seen in an Andhra Pradesh study.^[9] According to study,

Table 1: Distribution of study subjects on different aspects of breastfeeding.

Variables		Frequency	Percentage
Reasons for delay in timely initiation of breast feeding* (n=377) 68.5%			
1	Insufficient knowledge about early initiation of breast feeding.	264	70.0
2	Milk did not let down.	67	17.8
3	Mother not comfortable .	56	14.9
4	Myths prevalent in society.	42	11.1
5	Infant not well.	25	6.6
6	Others	20	5.3
Reasons for discarding colostrum* (n=294)			
1	Not good for health of newborn.	108	36.7
2	Not easily digested by the newborn (thick).	85	28.9
3	Myths prevalent in society.	64	21.8
4	Elder's advice .	40	13.6
5	Socio-cultural reasons (fed after third days).	03	1.0
6	Others	12	4.1
Reasons for cessation of exclusive breast feeding* (n=506)			
1	Mother not able to feed the infant.	288	56.9
2	Infant not well.	105	20.8
3	Insufficient milk output.	72	14.2
4	Working mother.	22	4.3
5	Others	36	7.1

*Multiple responses permitted

Table 2: Association of exclusive breast feeding with selected socio-demographic factors.

Selected socio-demographic factor	Practice of exclusive breast feeding		Total	Test of significance
	Yes (n=44)	No (n=506)		
Illiteracy of head of the family	30 (6.8%)	410 (93.2%)	440 (100%)	χ ² = 4.1749, df=1, p= .041*
Illiteracy of mother	33 (6.9%)	440 (93.1%)	473 (100%)	χ ² = 4.8064, df=1, p= .028*
Lower socio-economic status	38 (10.9%)	310 (89.1%)	348 (100%)	χ ² = 10.9734, df=1, p= .001*
Muslim religion	24 (4.8%)	478 (95.2%)	502 (100%)	χ ² = 19.4653, df=1, p< .001*
Joint family	22 (5.5%)	373 (94.5%)	395 (100%)	χ ² = 11.2486, df=1, p< .001*
ANC registration	33 (8.6%)	351 (91.4%)	384 (100%)	χ ² = 0.6094, df=1, p= .435
Home delivery	16 (5.5%)	274 (94.5%)	290 (100%)	χ ² = 5.1378, df=1, p< .05*

36.30% of subjects had knowledge about correct initiation of breastfeeding. Lack of knowledge may result from inadequate coverage of breastfeeding advice given to the mother during antenatal consultations.

We observed that pre-lacteal feed was given to 417 (75.8%) of the new-borns in this study. Pre-lacteal feeding was seen to be given to 417 (75.7%) of the infants in this study. Another population-based study from the Punjabi city of Patiala found that 50.81% of the infants received prelacteal feeds.^[10] Numerous investigations have demonstrated that prelacteal feeding is a deeply

ingrained practise in India. These studies have presented a range of data from around the states.^[11,12] It is a widely held misconception that children take on the characteristics and appearance of the individual who provides prelacteal nutrition. Drinks including tea, boiled water, honey, sugar water, jaggery (a coarse brown sugar produced from palm sap), glucose with plain water, diluted animal milk, canned milk, ghee, and castor oil were among the prelacteal feeds that were given to newborns babies.^[13,14]

In this study, 256 (46.5%) mothers gave colostrum to their new born babies while 294 (53.5%) mothers discarded it. Another study from the coastal region of South India produced findings that are almost identical to these ones.^[15] In their study, Divyarani and Patil from Karnataka stated that 56% of infants received colostrum.^[16] This is in contrast to the studies from Raipur's slums and rural Uttarakhand.^[17,18] These studies have estimated that, based on their observations, 80% of infants received colostrum feeding. According to a study by Sinha LN *et al.* in the underserved Mewat area of Haryana state, mothers most frequently discard colostrum because they believe it is unsafe for the baby (19.77%), unhygienic (17.44%), or social norms (8.14%).^[19]

In a meta-analysis on colostrum feeding practises in northern India, Chaturvedi M. and Awasthi S. found that the majority of studies discarded colostrum because it was not deemed healthy, some believed that the newborn baby would not properly digest it, and some households fed it to the sister-in-law after the third day as was customary.^[20] Multiple barriers to EBF were observed by Saxena Y *et al.*, including insufficient mother's milk, caesarean sections, and pressure from family elders to start top milk.^[21] Many nursing and weaning approaches are not beneficial to the child's growth and development, according to a recent systematic review (2022) on the investigation of breastfeeding habits in India. The report also notes that, despite widespread use of early breastfeeding, colostrum is still being wasted.^[22] According to this systematic review, a transcultural study is required to comprehend cultural practises that could obstruct the early start of the breastfeeding, EBF, and weaning processes, which will help create various intervention modules in accordance with local customs.

Regarding association of exclusive breast feeding with selected socio-demographic factors, we observed that lower socio-economic status, muslim religion and joint family were found to be associated with practice of exclusive breastfeeding. Illiteracy of head of the family, illiteracy of mother and home delivery were also found to be associated with practice of exclusive breastfeeding. One of the most potent predictors of the practise of exclusive breastfeeding, according to many research, is maternal education. These results also agreed with those of other studies by Srivastava and Awasthi^[23] in urban Lucknow and Obbulareddy and Narreddy^[24] in Andhra Pradesh, which found that neonates of parents who had never attended school were significantly less likely to be exclusively breastfed than those whose parents had. Another Punjabi study,^[10] which is consistent with our findings. Significant correlations between exclusive breastfeeding and the mother's education level, socio-economic status, nuclear family status, history of antenatal care registration, and hospital delivery have been found.

CONCLUSION

The issue of lower prevalence of early breastfeeding initiation and exclusive breastfeeding continues to persist in the study area. Still, colostrum is being discarded. The prelacteal feed beliefs that prevent postpartum mothers from starting breastfeeding early must be dispelled. The significance of early breastfeeding, early breast feeding, and early weaning practises as health promotion activities in this respect must be emphasised by community health workers and grass root health care workers particularly Accredited Social

Health Activists (ASHA) and Auxiliary Nurse Midwives (ANM).

ACKNOWLEDGEMENT

We are thankful to the administration and the faculty members of Community Medicine of the medical college, for the encouragement and constant support throughout the study.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

REFERENCES

1. Grundy Reddy NS, 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;14(1):1-6.
2. World Health Organization, Department of Maternal N Child and Adolescent Health. WHO recommendations on postnatal care of the mother and new-born. 2013. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK190086/>.
3. Bhandari DJ, Pandya YP, Sharma DB. Barriers to exclusive breastfeeding in rural community of central Gujarat, India. *J Fam Med Prim Care.* 2019;8(1):54-61. doi: 10.4103/jfmpc.jfmpc_329_18, PMID 30911481.
4. North K, Gao M, Allen G, Lee AC. Breastfeeding in a global context: epidemiology, impact, and future directions. *Clin Ther.* 2022;44(2):228-44. doi: 10.1016/j.clinthera.2021.11.017, PMID 34973827.
5. NFHS-5. Ministry of Health and Family Welfare, Government of India. p. 5; 2019-21. India fact sheet, national Family Health Survey-5 [internet]. Available from: https://main.mohfw.gov.in/sites/default/files/NFHS-5_Phase-II_0.pdf.
6. Helle C, Hillesund ER, Øverby NC. Associations between infant and maternal characteristics measured at child age 5 months and maternal feeding styles and practices up to child age two years. *PLOS ONE.* 2022;17(1):e0261222. doi: 10.1371/journal.pone.0261222, PMID 34995296.
7. Pommeret-de Villepin B, Barasinski C, Rigourd V. Initiating and supporting breastfeeding: guidelines for interventions during the perinatal period from the French national college of midwives. *J Midwifery Womens Health.* 2022;67(1):S56-73. doi: 10.1111/jmwh.13420, PMID 36480673.
8. Khan A, Sharma D, George JN, Vanagondi K, Devaguru A, Wali PP, *et al.* Factors influencing early initiation of breastfeeding in healthy term newborns: A cross-sectional study at a tertiary Care Center in South India. *Neonatal Netw.* 2022;41(3):129-36. doi: 10.1891/11-T-738, PMID 35644358.
9. Kommula AL, Kommula VM. Knowledge, attitude and practices of breastfeeding among mothers in a slum area of Amalapuram, East Godavari District, Andhra Pradesh. *N Atl J Dent Res.* 2014;2:15-7.
10. Randhawa A, Chaudhary N, Gill BS, Singh A, Garg V, Balgir RS. A population-based cross-sectional study to determine the practices of breastfeeding among the lactating mothers of Patiala city. *J Fam Med Prim Care.* 2019;8(10):3207-13. doi: 10.4103/jfmpc.jfmpc_549_19, PMID 31742143.
11. Dakshayani B, Gangadhar MR. Breast feeding practices among the Hakkipikkis: A tribal population of Mysore District, Karnataka. *Med.* 2008;2(2):127-9. doi: 10.1080/09735070.2008.11886323.
12. Pathi S. Breast feeding practices in a rural ICDS block of Khallikote, South Orissa. *Indian J Community Med.* 2005;30:10-2.
13. Madhu K, Chowdary S, Masthi R. Breast feeding practices and newborn care in rural areas: A descriptive cross-sectional study. *Indian J Community Med.* 2009;34(3):243-6. doi: 10.4103/0970-0218.55292, PMID 20049304.
14. Gadhavi K, Deo R. Delayed onset of breastfeeding: what is stopping us? *Int J Contemp Pediatr.* 2020;7(10):2021-5. doi: 10.18203/2349-3291.ijcp20204046.
15. Swetha R, Ravikumar J, Rao RN. Study of Breast feeding practices in coastal region of South India: A cross sectional study. *Int J Contemp Pediatr.* 2014;1:74-8.
16. Divyarani DC, Patil GR. Knowledge, attitude and practices of breastfeeding among post natal mothers. *Int J Contemp Pediatr.* 2015;2:445-9.
17. Shaili V, Parul S, Kandpal SD, Jayanti S, Anurag S, Vipul N. A community based study on breastfeeding practices in a rural area of Uttarakhand. *Natl J Community Med.* 2012;3:283-7.
18. Thakur N, Kumar A. Breast feeding practices among the Ganda women of Raipur Slums. *IJMCH.* 2010;12:2-7.

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19. Sinha LN, Kaur P, Gupta R, Dalpath S, Goyal V, Murhekar M. Newborn care practices and home-based postnatal newborn care programme-Mewat, Haryana, India, 2013. *Western Pac Surveill Response J.* 2014;5(3):22-9. doi: 10.5365/WPSAR.2014.5.1.006, PMID 25649098.
20. Chaturvedi M, Awasthi S. A meta-analysis: colostrum feeding practices in Uttar Pradesh, India. *Indian J Community Health.* 2016;28(1):14-8.
21. Saxena V, Kumari R. Infant and young child feeding – knowledge and practices of ASHA workers of Doiwala Block, Dehradun District. *Indian J Community Health.* 2014;26(1):68-75.
22. Jelly P, Sharma K S, Saxena V, Arora G, Sharma R. Exploration of Breastfeeding Practices in India: A Systematic Review. *Journal of Holistic Nursing and Midwifery.* 2022;32(1):58-68.
23. Srivastava NM, Awasthi S. Breast feeding practices for newborns among urban poor in Lucknow, northern India: A prospective follow-up study. *Clin Epidemiol Glob Health.* 2014;2(2):66-74. doi: 10.1016/j.cegh.2013.03.003.
24. Obulareddy AK, Narreddy RR. Study on breastfeeding practices among urban and rural women in Kakinada. *Int J Res Health Sci.* 2015;3:66-70.