

Original Research Article

Knowledge, awareness and practices towards exclusive breastfeeding among lactating mothers in Kashmir, North India: a hospital based cross sectional study

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Received: 11 January 2023

Accepted: 18 February 2023

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ABSTRACT

Background: Addressing good breastfeeding practices in lactating mothers is important as it helps in bringing about a positive change in the behaviour, attitude, and practice with appropriate health education. Hence, this study was conducted to determine the knowledge, awareness and practices of lactating mothers regarding breastfeeding and identify the factors associated with it.

Methods: We conducted this hospital based cross sectional study among 349 lactating mothers at pediatric outpatient department of a tertiary care centre in Kashmir, North India between July to October 2022. Details regarding the socio-demographic characteristics and awareness/knowledge about the breastfeeding were collected using pretested semi-structured questionnaire. Data was collected through face-to-face interview.

Results: Majority of the participants 305 (87.4%) knew the meaning of exclusive breastfeeding and it is important for both mother and child. About (68.8%) had moderate knowledge about breastfeeding. Chi square test showed a significant association between level of knowledge and age, education and family type where p value was 0.000.

Conclusions: Our findings showed that the practice towards exclusive breast-feeding was low. Thus, it is important to provide prenatal education to mothers and fathers on breast-feeding. We also recommend strengthening the public health education campaigns to promote breast-feeding.

Keywords: Attitude, Awareness, Exclusive breastfeeding

INTRODUCTION

Breast feeding is one of the most effective ways of providing ideal food for the healthy growth and development of infants. It is safe and contains essential antibodies that give protection against many common childhood illnesses. Breast milk provides all the energy and nutrients required by infant for the first months of life, and continues to provide up to half or more of a child's nutritional needs during the second half of the first year, and up to one third during the second year of life. Breastfed children are less likely to be overweight or obese and less prone to diabetes later in life. Breastfeeding is shown to improve cognitive performance and has been associated with better educational

achievements later in life. Women who breast feed also have a reduced risk of breast and ovarian cancers. WHO and UNICEF recommend that mothers should initiate breastfeeding within the first hour of birth and exclusively breastfeed for the first 6 months of life-meaning no other foods or liquids are provided, including water.¹ Exclusive breast feeding for six months is important for both infant and maternal health. Infants who are not exclusively breastfeeding are more likely to develop gastro intestinal infections. The risk of mortality due to diarrhoea and other infections increases many fold in infants who are either partially breastfed or not breastfed at all.² So, Infant and young child feeding practices directly affect the nutritional status of children under two years of age and has a greater impact on child

survival. WHO actively promotes breastfeeding as the best source of nourishment for infants and young children, and is working to increase the rate of exclusive breastfeeding for the first 6 months up to at least 50% by 2025.³ WHO and UNICEF created global breastfeeding collective to rally political, legal, financial, and public support for breastfeeding and WHO's network for global monitoring and support for implementation of the international code of marketing of breast-milk substitutes, also known as NetCode, works to ensure that breast-milk substitutes are not marketed inappropriately. Additionally, WHO provides training courses for health workers to provide skilled support to breastfeeding mothers, help them overcome problems, and monitor the growth of children.⁴ However, nearly 2 out of 3 infants are not exclusively breastfed for the recommended 6 months- a rate that has not improved in 2 decades.⁵ Breastfeeding has declined worldwide in recent years, as a result of urbanization and maternal employment outside the home. Poor feeding practices and attitudes toward exclusive breastfeeding have remained to be among the major reasons for poor health outcomes among children, particularly in developing countries. In India, breastfeeding has appeared to be influenced by social, cultural, and economic factors although Government of India has undertaken National Rural Health Mission, which intends to implement integrated management of neonatal and childhood illnesses (IMNCI) through the existing healthcare delivery system to promote breast feeding. Studies in India have also shown a decline in breastfeeding trends, especially in urban areas, early initiation of breastfeeding has not been seen in over 60% of the nation's children and over 36% of children are not exclusively breastfed.⁶ Hence, these low figures in India for early initiation of breastfeeding are a matter of urgent concern. Although, the practice of breast feeding is influenced by various social, cultural and religious beliefs, maternal infant feeding knowledge, attitude has shown to be a stronger independent predictor of breastfeeding initiation. While, a number of studies have assessed knowledge, attitude and practice of breastfeeding in different parts of the country such studies are limited among the Kashmiri women. Thus, the present study was developed to examine the infant feeding practices, knowledge and attitude towards breast feeding among the Kashmiri lactating mothers.

Objectives

To assess knowledge, awareness and practices of exclusive breastfeeding among lactating mothers. To compare findings with socio-demographic variables.

METHODS

Study design and setting

It was a hospital based cross-sectional study conducted at government pediatric tertiary care hospital (GB Pant) of District Srinagar, Kashmir, from July to October 2022.

Study participants

Mothers with infants aged 0-6 months who attended the pediatric out patient department with their children for vaccination and for the treatment of various illnesses.

Inclusion criteria

Lactating mothers with infants aged 0-6 months. Those who volunteered to participate.

Data collection

A total of 349 mothers were interviewed using the pretested semi structured questionnaire after obtaining the permission from hospital authorities, all mothers were given an explanation of purpose of the study. Written informed consent was obtained from the mothers who were willing to participate in the study and anonymity was maintained. Data was collected through face-to-face interview of lactating mothers who attended OPD of the pediatric tertiary care hospital with their children.

The data was collected using two questionnaires:

Lactating mothers' socio demographic profile

This questionnaire included general profile of the lactating mother wherein information pertaining to personal details of the subject such as age, occupation, educational status, and family type was ascertained.

Breastfeeding KAP questionnaire

This questionnaire included questions to assess the knowledge, attitude and practices pertaining to breastfeeding.

The first part of the questionnaire included items to assess the knowledge of lactating mothers towards EBF. Each item in the knowledge section of the questionnaire had 3 possible responses yes, no and don't know.

The second part of the questionnaire included questions to assess awareness and practices of the lactating mother towards breastfeeding and helped us in identifying the attitude of the lactating mother capturing the positive and negative attitudes towards breastfeeding.

The final part of the questionnaire included questions on factors hindering breastfeeding.

Statistical analysis

The data collected was entered into Microsoft excel and analysed using SPSS. The data was analysed using descriptive statistics as frequencies, percentages and tables. Also, Chi square test was used to determine association between socio-demographic variables and knowledge regarding breastfeeding.

RESULTS

Demographic characteristics of the participants

The sample of the present study comprised (N=349) of lactating mothers of whom 52.1% (n=182) belonged to 26-30 years age group. Nearly half of the participants (50.8%) had high school and above level of education. More than three fourth of the participants (78.5%) were unemployed. 68.2% of participants were living in a joint family. The demographic characteristics are further shown on the Table 1.

Table 1: Socio-demographic profile of respondents.

Age (years)	N	%
15-20	5	1.4
21-25	107	30.7
26-30	182	52.1
31 and above	55	15.8
Educational level		
No formal education	89	25.4
Primary and middle school	83	23.8
High school and above	177	50.8
Occupation		
Employed	75	21.5
Unemployed	274	78.5
Family type		
Nuclear	112	32.1
Joint	238	68.2

Knowledge on exclusive breastfeeding

Majority of the participants 305 (87.4%) knew the meaning of exclusive breastfeeding which is giving baby only breast milk without any food or drink with exception of prescribed medicines. Whereas, 312 (89.4%) of respondents knew that EBF provides essential nutrients to

baby. (91.7%) of the respondents knew that EBF is important as it helps to protect baby against disease and 260 (74.5%) did not have any knowledge that EBF can be used as family planning method (Table 2).

Table 2: Knowledge of respondents about exclusive breastfeeding.

	N	%
Meaning of exclusive breast feeding is giving baby only breast milk without any food or drink with exception of prescribed medicines		
Yes	305	87.4
No	32	9.2
I don't know	12	3.4
EBF provides essential nutrients to baby		
Yes	312	89.4
No	11	3.2
I don't know	26	7.4
EBF can be used as family planning method:		
Yes	79	22.6
No	10	2.9
I don't know	260	74.5
EBF helps to protect baby from disease		
Yes	320	91.7
No	10	2.9
I don't know	19	5.4

Levels of knowledge about exclusive breastfeeding

The overall knowledge of respondents was graded as poor, medium and high knowledge. Therefore, the study revealed that, majority of respondents 240 (68.8%) had moderate knowledge whereas 65 (18.6%) had low level of knowledge and 44 (12.6%) had high level of knowledge regarding EBF.

Table 3: Level of knowledge of respondents.

	N	%
Meaning of breast feeding is giving baby only breast milk without any food or drink with exception of prescribed medicines		
Low level of knowledge	65	18.6
Moderate level of knowledge	240	68.8
High level of knowledge	44	12.6

Table 4: Awareness regarding benefits and practice of exclusive breastfeeding among respondents.

	N	%
Awareness about whom the benefits of breastfeeding are intended		
Benefit to mother and child	249	71.3
Benefit only to child	59	16.9
Benefit only to mother	58	8.0
Don't know	13	3.7

Continued.

	N	%
Awareness about the benefits		
Natural contraception	15	4.3
Involution of uterus	39	11.2
Increased lactation	15	4.3
Mother and child bonding	112	32.1
Growth and development	132	37.8
Immunity	36	10.3
Exclusive breastfeeding practices		
Breast feeding initiation within one hour	99	28.4
Breastfeeding initiation after one hour	101	28.9
Breastfeeding initiation after six hours	26	7.4
Breastfeeding initiation after 24 hours	123	35.2
Supplementary food initiation		
Within one month	22	6.3
Within two months	144	41.2
After six months	183	52.4

Table 5: Factors hindering EBF among mothers.

Factors	Number	Percentage
Nature of job	19	5.4
Marital problems	15	4.3
Insufficient milk production	191	54.7
Sore nipples	60	17.2
Stressful	27	7.7
Nipple confusion	37	10.6

Table 6: Association between knowledge about breastfeeding and socio-demographic characteristics.

	High knowledge	Moderate knowledge	Poor knowledge	P value
Age group				
15-20	0	5	0	0.000
21-25	2	74	31	
26-30	32	119	31	
31 and above	10	42	3	
Educational level				
No formal education	0	60	29	0.000
Primary and middle school	6	58	19	
High school and above	38	122	17	
Occupation				
Employed	10	43	22	0.21
Unemployed	34	197	43	
Family type				
Nuclear	0	85	26	0.000
Joint	44	155	39	

Table 4 shows that majority of the mothers were aware about the fact that breastfeeding is beneficial to both mother and baby (71.3%), beneficial as it helps in growth and development (37.8%), child and mother bonding (32.1%) involution of uterus (11.2%), immunity (10.3%), increased lactation and natural contraception (4.3%) respectively. Regarding the exclusive breastfeeding practices of the mothers, most of the respondents 123

(35.2%) initiated breastfeeding after 24 hours. About 183 (52.4%) of participants started feeding their babies after six months of age.

Table 5 shows that half of the mothers, (54.7%) reported that the main barrier to EBF was insufficient milk production. Other factors hindering EBF among mothers were sore nipples (17.2%), nipple confusion (10.6%),

stress (7.7%), nature of job (5.4%) and marital problems (4.3%) respectively.

Table 6 reveals that there was significant association between level of knowledge and age, knowledge and education, knowledge and family type where p value was 0.000.

DISCUSSION

The study revealed that majority of the respondents 182 (51.2%) were between the ages of 26-30 years. A study was conducted by Ella et al in Nigeria, where they found that 51.6% of respondents were in age group of 21-30 years which is in comparison to our study.⁷ In addition, majority 274 (78.5%) of the mothers were unemployed and living in a joint family. Majority of them had a moderate level of knowledge about exclusive breastfeeding.

Majority of the respondents 305 (87.4%) knew the meaning of exclusive breastfeeding which is giving baby only breast milk without any food or drink with exception of prescribed medicines. This finding was slightly higher than study results done in Zanzibar at Mnazi Mmoja hospital where (82.2%) respondents knew the correct definition of exclusive breastfeeding.⁸

Majority of the mothers were aware about the fact that breastfeeding is beneficial to both mother and baby, promotes growth and development of the child and promotes mother and child bonding. This was in favour with the previous studies conducted in different parts of India such as Kerala, Punjab, Haryana, Uttarakhand, and Jammu as all these studies reported that mothers had satisfactory level of knowledge with respect to these domains.⁹⁻¹³

It was found that (35.2%) respondents initiated breastfeeding 24 hours after birth. This finding is different from the study conducted in Ethiopia where majority of mothers initiated breast feeding within one hour of birth.¹⁴ According to infant and young child feeding (IYCF, 2006) guidelines, Government of India recommends that initiation of breastfeeding should begin immediately after birth, preferably within one hour.¹⁵ This practice of initial breastfeeding after 24 hours has influence toward exclusive breastfeeding. The majority of the mothers started supplementary feed after 6 months of age and the reasons given by them were breast milk alone is insufficient for a growing baby and insufficient production of milk. Published reports indicate that insufficient milk production was the most common reason given by women for weaning. This finding was similar to those found in other studies.^{16,17}

Findings uncovered that mother's lack of milk secretion and sore nipples were main reasons that hinder exclusive breastfeeding. The reason could be that mothers neglect their own nutrition while breastfeeding their infant which

could be reason for the inadequate flow of breast milk. Inadequate flow could cause a baby to suck for longer time, which may result in sore and painful nipples.

For EBF to be effective and sustained for up to six months, mothers need both physical and emotional support from others such as their husbands, in-laws, friends and counsellors. It was found that age, education and family type showed a statistically significant association with knowledge of breastfeeding which was not in line with the study conducted by Rajan et al in Tamil Nadu.¹⁸ This study revealed that there was no significant association between occupation status of the lactating mothers and exclusive breastfeeding knowledge ($p=0.21$). This is different from the study done in, Amhara regional state, Ethiopia where unemployed mothers had better knowledge about EBF than employed mothers.¹⁹

CONCLUSION

We found that majority of the lactating mothers had moderate level of knowledge about breastfeeding.

But the practice to initiate breastfeeding within recommended time of one hour was low. Health education sessions are required to promote the awareness about breastfeeding during antenatal and postnatal check-ups. It is also important to provide prenatal education to mothers and fathers on breastfeeding.

Funding: No funding sources

Conflict of interest: None declared

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

REFERENCES

1. WHO. Available at: http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/2021. Accessed on 1 December 2022.
2. WHO. Early Initiation of Breastfeeding: WHO, Geneva; 2021. Available at: <https://www.who.int/data/gho/indicator-metadata-registry/imr-details/337>. Accessed on 1 December 2022.
3. WHO. Indicators for assessing infant and young child feeding practices. WHO, Geneva; 2021. Available at: [https://apps.who.int/iris/rest/bitstreams/1341846/retrieve#:~:text=WHO%20guiding%20principles%20for%20complementary,and%20young%20children%20\(IYC\)%20under](https://apps.who.int/iris/rest/bitstreams/1341846/retrieve#:~:text=WHO%20guiding%20principles%20for%20complementary,and%20young%20children%20(IYC)%20under). Accessed on 1 December 2022.
4. CARE. Infant and Young Child Feeding Practices: Collecting and Using Data: A Step-by-Step Guide: Cooperative for Assistance and Relief Everywhere, Inc. (CARE); 2021.
5. NRHM. National Rural Health Mission (2019-2021) Mission document. New Delhi: MOHFW, Government of India, New Delhi; 2021.

6. NFHS. National Family Health Survey-5 2019-2020. Available at: https://main.mohfw.gov.in/sites/default/files/NFHS-5_Phase-II_0.pdf. Accessed on 1 December 2022.
7. Ella RE. Factors affecting exclusive breastfeeding practice in rural communities of Cross River State, Nigeria. *Int J Hum Soc Sci Educ*. 2016;3(4):101-10.
8. Ali NS. Prevalence of exclusive breastfeeding among infants under 6 months old attending Mnazi Mmoja Hospital Zanzibar. University of Nairobi. 2016;28-34.
9. Girish HO, Acharya A, Kumar A, Venugopalan PP, Prabhakaran S, Koppad R. Knowledge and practices of breastfeeding among ante natal mothers at a Teaching Hospital at Kannur, Kerala: a cross sectional study. *J Evol Med Dent Sci*. 2013;2:8996-9002.
10. Garg R, Deepti S, Padda A, Singh T. Breastfeeding knowledge and practices among rural women of Punjab, India: a community-based study. *Breastfeed Med*. 2010;5:303-7.
11. Kishore MS, Kumar P, Aggarwal AK. Breastfeeding knowledge and practices amongst mothers in a rural population of North India: a community-based study. *J Trop Pediatr*. 2009;55:183-8.
12. Kumar S, Jha SK, Singh A, Rawat CM, Awasthi S, Bano M, et al. Knowledge, attitude and practices (KAP) regarding breastfeeding: a community based cross sectional study from rural Uttarakhand. *Healthline J*. 2015;208:83-2.
13. Bala K, Sahni B, Bavoria S, Narangyal A. Knowledge, attitude, and breastfeeding practices of postnatal mothers in Jammu: a community hospital based cross sectional study. *J Fam Med Prim Care*. 2020;9:3433-7.
14. Chen CH, Chi CS. Maternal intention and actual behavior in infant feeding at one month postpartum. *Acta Paediatr Taiwan*. 2003;44:140-4.
15. IYCF. National guideline on Infant and Young Child Feeding. 2nd edition. Ministry of Human Resource Development: Government of India; 2006.
16. Otsuka K, Dennis CL, Tatsuoka H, Jimba M. The relationship between breastfeeding self-efficacy and perceived insufficient milk among Japanese mothers. *J Obstet Gynecol Neonat Nurs*. 2008;37:546-55.
17. Ekubay M, Berhe A, Yisma E. Initiation of breastfeeding within one hour of birth among mothers with infants younger than or equal to 6 months of age attending public health institutions in Addis Ababa, Ethiopia. *Int breastfeed J*. 2018;13(1):1-7.
18. Rushender R, Krishnamoorthy Y, Hussain Siraja AA. Factors associated with the knowledge about breastfeeding among antenatal and postnatal women in selected rural villages of Chengalpattu, Tamil Nadu: a community-based cross-sectional study. *J Edu Health Promot*. 2022;11:72.
19. Zenebu BB, Belayneh KG, Alayou G, Ahimed A, Bereket C, Abreham A, et al. Knowledge and practice of mothers towards exclusive breastfeeding and its associated factors in Ambo Woreda West Shoa Zone Oromia Region, Ethiopia. *Epidemiol Open Access*. 2015;5(1).

Cite this article as: Nabi S, Zahoor N, Muzamil F. Knowledge, awareness and practices towards exclusive breastfeeding among lactating mothers in Kashmir, North India- a hospital based cross sectional study. *Int J Community Med Public Health* 2023;10:1191-6.