

Differentials in colostrum feeding among lactating women of block RS Pura of J and K: A lesson for nursing practice

Sunil Kumar Raina, Vijay Mengi¹, Gurdeep Singh¹

ABSTRACT

Introduction: Breast feeding is universally and traditionally practised in India. Experts advocate breast feeding as the best method of feeding young infants.

Objective: To assess the role of various factors in determining colostrum feeding in block R. S. Pura of district Jammu.

Materials and Methods: A stratified two-stage design with villages as the primary sampling unit and lactating mothers as secondary sampling unit. Villages were divided into different clusters on the basis of population and sampling units were selected by a simple random technique.

Results and Conclusion: Breastfeeding is almost universal in R. S. Pura. Differentials in discarding the first milk were not found to be important among various socioeconomic groups and the phenomenon appeared more general than specific.

Key words: Colostrum, infants, trends

INTRODUCTION

It is believed that breastfeeding is universally and traditionally practiced in India. National Family Health Survey (NFHS)^[1] reports that 96% of children in India are breast-fed. Medical and public health experts advocate breastfeeding as the best method of feeding young infants for a wide variety of reasons. Breastfeeding improves growth and development of children and also has some significant effects on mothers. Majority of infant deaths can be averted by promoting proper breastfeeding practices. WHO and UNICEF recognize well the beneficial effects of breastfeeding on maternal and child health. There is a

great inconsistency in findings regarding prevalence and correlates of breastfeeding behavior of mothers in different parts of the country.^[2-4] Knowledge, ignorance, undesirable sociocultural beliefs, and misconceptions prevailing in the community are reported to influence breastfeeding behavior of mothers.^[5,6] The aim of this study was to understand the differentials in colostrum feeding among lactating women in block RS Pura of J and K state.

MATERIALS AND METHODS

The study was conducted in block R. S. Pura of district Jammu. Jammu happens to be the winter capital of the Jammu and Kashmir state of India with an estimated population of 4.5 million and diverse topography. The block is located in the southwest of Jammu city adjacent to the Indo-Pak border with a total area of 273 sq km and average density of 658/sq km. There are 176 villages and one town (11 wards) in the block with an estimated population of 179 636.^[2] The majority of population comprises Hindus. The dimension of breastfeeding considered in this study was the time of initiation of breastfeeding and factors influencing it. The study population comprised 375 mothers of children less than one year (12 completed months) of age. The methodology comprised a stratified two-stage design which is in accordance with the IRMS (ICMR) Delhi methodology. The methodology used in rural and urban areas is as follows:

Departments of Community Medicine, Dr. R.P. Government Medical College, Tanda, Himachal Pradesh, ¹Government Medical College, Jammu (J and K), India

Address for correspondence: Dr. Sunil Kumar Raina, Department Of Community Medicine, Dr. R.P. Government Medical College, Tanda, Himachal Pradesh, India.
E-mail: ojasrainasunil@yahoo.co.in

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Rural area

In the design of the study, the stratification was according to the population size of the village. The village was the primary sampling unit and mothers the secondary sampling unit. One hundred and seventy-six villages of block R. S. Pura were stratified according to their population into four different strata as given below:

Stratification

- a) Stratum 1 Small Villages - Villages with population of less than 500.
- b) Stratum 2 Moderately - Villages with population of 500-999.

Small villages

- c) Stratum 3 Medium size - Villages with population of 1 000-1 999.

Villages

- d) Stratum 4 Large size - Villages with population equal to or greater than 2 000.

Five villages were selected from each stratum by simple random technique. Thus, the total number of villages taken was 20.

Selection of mothers

From each village, 15 mothers having children less than one year (12 completed months) of age at the time of study were picked up independent of each other. Thus, the overall sample consisted of 300 mothers in the rural area.

The village selected was mapped and a house-to-house survey was conducted. Information on breastfeeding practices was collected from all eligible mothers (mothers of children less than 12 completed months of age) and recorded on a structured questionnaire. Any eligible mother refusing to participate in study was excluded.

Urban area

R. S. Pura town of block R. S. Pura was taken as the urban area for this study. Of the 13 wards, five wards were selected randomly. The selected wards were identified with the help of an identification number. Fifteen mothers with children of less than one year (12 completed months) of age were picked from each ward, independent of each other. Thus, the total number of mothers picked up from the urban area was 75.

The number of mothers was fixed at 75 keeping in view the rural-urban ratio of 80-20 in J and K state. The selection procedure adopted for mothers from the wards was similar to the one adopted for the villages in the rural area. The desired information on each selected mother was collected

with the help of the same questionnaire as utilized for the rural areas and in the same manner.

RESULTS

The majority of the 375 women studied were Hindu (87%), the rest (13%) being Sikhs and Muslims. Among majority Hindu females, 62% females belonged to scheduled caste or scheduled tribe group.

Throwing of colostrum is a fairly common practice. 76% of lactating women in our study threw off their first feed. There was very little urban rural variation in this regard (74% and 77%, respectively). The percentage of male children receiving colostrum is higher than female children. The trend stays the same in both rural and urban areas. [Table 1]

Not feeding colostrum is uniformly being practiced by all social groups with almost no differences among different caste groups in both urban and rural area. [Table 2] When a comparison for colostrum feeding was made among parents with different levels of literacy, it was that colostrum was given by literate mothers more than the illiterate ones. It was found that the findings were similar in urban and rural areas. [Table 3]

Income did not seem to be a factor in colostrum feeding behavior. The findings were inconsistent in both rural and urban areas. The commonest reason cited for not giving colostrum (71% women) was the belief that colostrum was not good for the baby. [Table 4]

DISCUSSION

A study conducted by DANIDA^[7] in seven districts of Madhya Pradesh reported only 51.5% as stating that

Table 1: Colostrum-feeding practices sex distribution of infants

Sex	Male	Female
Rural	169	131
Urban	41	34
Colostrum given		
Rural	44 (26)	25 (19)
Urban	12 (29)	8 (23)

Figures in parenthesis are percentages

Table 2: Colostrum-feeding practices and caste distribution of lactating mothers

	SC/ST	Non-SC/ST
Rural	163	89
Urban	54	19
Colostrum given		
Rural	40 (24.5)	29 (32.5)
Urban	15 (28)	8 (26)

SC / ST: Scheduled caste or scheduled tribe; Figures in parenthesis are percentages

Table 3: Colostrum-feeding practices and literacy of the parents

Literacy	Mother			Father		
	Ill	J/Lit	F/ed	Ill	J/Lit	F/ed
Rural	56	33	197	46	41	199
Urban	22	5	44	11	4	56
Colostrum given						
Rural	9 (16)	9 (27)	51 (26)	8 (17)	11 (27)	50 (25)
Urban	4 (18)	1 (20)	15 (34)	2 (18)	1 (25)	17 (30)

Figures in parenthesis are percentages

Table 4: Colostrum-feeding practices and income

	2500-5000	5001-7500	7501-10,000	>10,000
Rural	56	33	38	159
Urban	15	19	11	26
Colostrum given				
Rural	14 (25)	9 (27)	12 (31.5)	34 (21)
Urban	4 (27)	6 (31.5)	3 (27)	7 (27)

Figures in parenthesis are percentages

colostrum was important and the reasons for not feeding the baby with colostrum were: dirty (25.9%), harmful (23.0%), baby will become ill (13%), causes pain in the abdomen (3.4%), too thick (2.0%), and stagnant (1.4%). Almost a third of the respondents did not give any reason for discarding it. The findings are in line with the trend we observed in RS Pura with a large number (76%) of lactating mothers in RS Pura throwing off their first feed. The main reason given for resorting to this practice in RS Pura is that colostrum is harmful. It is here that the role of midwife/nurse comes in. She needs to allay these fears and encourage colostrum feeding and she happens to be the first to come in contact with lactating mothers.

An international collaborative study^[8] reported that among the rich, a large number of women in India (59%) gave “no milk” or “insufficient” as the reason for not breastfeeding their babies. It has also been shown that the higher the educational status of the Indian mother, the lower is the incidence of successful lactation.^[9-11] However, no such findings were observed in our study, probably underlying the need to understand breastfeeding practices on specific bases suited to local conditions with a view of fixing roles and responsibilities for nursing/midwifery staff.

Breastfeeding was found to be practiced by almost all women in a study conducted in a rural area of Jammu district of J and K.^[12] The area of concern in this study, as in ours, was involvement of lactating women in poor feeding practices.

Differentials in discarding the first milk were not found to be important among various socioeconomic groups and the phenomenon appeared more general than specific. Therefore, creating awareness remains the key if improvements in this regard are expected.

All women continued breastfeeding during the period of study and also, planned to do so till the child was three to four years of age, emphasizing the need to protect, promote, and support the already existing practice of breastfeeding, especially through the health services. Improvement in nutrition during pregnancy and during lactation should be one of the aims of the services offered at the village level.

The cornerstone of any public health nutrition program for the prevention of childhood malnutrition must be the need to promote an optimal lactation pattern in the community. The role of nurse/midwife can be of immense utility in this direction.

A nurse or midwife plays a many-faceted role in maternal and child health services. Many factors influence the role definition of these personnel, including professional preparation, work-situation, level of responsibility, regulatory policies, sociocultural factors, and personal attitudes and beliefs toward health. Despite variance in these factors, the nurse's or midwife's goal of maintenance, promotion, and restoration of the health and well-being of patients remains clearly defined. Several broad areas, in which she is expected to make her contribution in the field of breast feeding, include communication and transmission of information, motivation, supervision and education, and research and evaluation.

REFERENCES

1. Available from: <http://www.nfhsindia.org/india1.html> [Last accessed on 2011 May 19].
2. Bhardwaj N, Hasan SB, Yunus M, Zaheer M. High risk pregnancy and its relation with maternal care receptivity (MCR) - A rural study from India. *J R Soc Health* 1991;111:43-6.
3. Singh S, Bhasin SK, Ingle GK, Raut DK. Pattern of breast-feeding practices in a rural community from Haryana. *J Trop Pediatr*

- 1990;36:334-5.
4. Srivastava SP, Sharma VK, Kumar V. Breast feeding pattern in neonates. *Indian Pediatr* 1994;31:1079-82.
5. Jeelson UC, Richard J. Factors influencing breast feeding behavior. *Indian Pediatr* 1989;26:997-1002.
6. Kumar S, Nath LM, Reddaiah VP. Factors influencing prevalence of breast feeding in a resettlement colony of New Delhi. *Indian J Pediatr* 1989;56:385-91.
7. National Institute of Health and Family Welfare: Demographic situation and utilization of health and family welfare in Madhya Pradesh: A baseline survey report on levels of fertility, mortality family welfare services in project districts: Report of the Department of Statistics and Demography, NIHFV, New Delhi, 1983.
8. World Health Organization: Contemporary Patterns of Breast-feeding: Report on the WHO Collaborative Study on Breast-feeding, WHO, Geneva, 1981.
9. Ghosh S, Gindwani S, Mital SK, Verma RK. Socio-cultural factors affecting practices in an urban community. *Indian Pediatr* 1976;13:827-32.
10. Walia BN, Gambhir SK, Bhatia U. Breast-feeding and weaning practices in an urban population. *Indian Pediatr* 1974;11:133-7.
11. Chowdhary M, Dutta N, Sarkar A, Dey B. Breast-feeding by urban mothers. *J Indian Med Assoc* 1978;70:221-4.
12. Gandotra VK, Sethi N, Rishma G. A Study of Breast-feeding Practices and Problems Related to Breast-feeding in Rural Women. *Health and Population -Perspectives and Issues* 1990;13:12-20.

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