

Determinants of Prelacteal Feeding Among Infants of RS Pura Block of Jammu and Kashmir, India

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ABSTRACT

Objective: To assess the role of various factors in determining prelacteal 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 the 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:** Giving prelacteal feed is almost universal with 88% of mothers feeding their children with prelacteal feeds. Income seemed to have significant effect on the preference of prelacteal feeds with low income groups showing lower preference for giving prelacteal feeds. **Conclusion:** The study showed, interalia, that a poor knowledge regarding infant feeding practice was prevalent among mothers.

Keywords: Determinants, infants, prelacteal feeding

Introduction

Prelacteal feeds are foods given to newborns before breastfeeding is established or before breast milk “comes in,” usually on the first day of life.^[1-4] Prelacteals include honey, jaggery (brown sugar from sugar cane) ghee (clarified butter), and ghutti (herbal paste). The choice of prelacteals may be specific to a caste or family.^[5] These prelacteals may be prepared with herbs such as cumin, cardamom, nutmeg, asafetida, caraway, cinnamon, and aniseed.^[6] Giving prelacteals to a newborn may be in the context of a ritual whereby the person administering the prelacteals holds an elevated status within the family or community.^[1,7]

Some believe prelacteals are a necessary substitute for colostrum.^[7-9] Other studies have also reported “insufficient milk supply” as a reason for providing prelacteals.^[2,10] The study was conducted with the aim to study the role of various factors in determining prelacteal feeding.

Materials and Methods

The study was conducted in R.S. Pura block 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. The community of R.S. Pura, 22 km from Jammu is the intensive field practice site for the department of community medicine of Government Medical College, Jammu. Its census and health status are continuously monitored by community health workers, for public health service and research purposes, through the Rural Health Services Program.

There are 176 villages and 1 town (11 wards) in the block with an estimated population of 1,79,636.^[2] The majority of population comprises Hindus. The dimension of breastfeeding considered in this study was the prelacteal feeding and factors influencing it. The study population comprised 375 mothers of children less than 1 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.

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.

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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

1. Stratum 1 small villages - villages with population of less than 500.
2. Stratum 2 moderately small villages - villages with population of 500-999.
3. Stratum 3 medium size villages - villages with population of 1000-1999.
4. Stratum 4 large size - villages with population equal to or greater than 2000.

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

Selection of mothers

From each village, 15 mothers having children less than 1 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 with a special mention of prelacteal feeding was collected.

Urban area

R.S. Pura town of block R.S. Pura was taken as the urban area for this study. Out of the 13 wards, 5 wards were selected randomly. The selected wards were identified with the help of an identification number. Fifteen mothers with children of less than 1 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.

Definitions used

Nuclear family was taken as one which consisted of married couple and their dependent children. Joint family was taken as one in which number of married couples and their children live together in the same household.

Scheduled caste (SC) stands for scheduled caste while scheduled tribe stands for scheduled tribe.

Results

Giving prelacteal feed is almost universal with 88% of mothers feeding their children with prelacteal feeds. There is not much

difference between rural (89%) and urban areas (84%) in this regard [Table 1]. It was seen that the preferred prelacteal feed for all social groups is honey. Preference for prelacteal feeds is uniformly distributed among family types [Table 2].

Caste seemed to have no bearing as far as giving prelacteal feed was concerned. The social groups behaved in similar ways in both rural and urban areas [Table 3]. Another important aspect to note was that there is not much difference between various literacy levels for parents and the type of prelacteal feed given [Table 4].

Income seemed to have a significant effect on the preference of prelacteal feeds in the sense that it is seen that low income groups show lower preference for giving prelacteal feeds.

Discussion

The practice of giving prelacteal feed to baby is a traditionally accepted culture in India. In the report of nationwide study by Breast Feeding Promotion Network of India (BPNI), the prevalence of prelacteal feed was found to be 49%^[11] which is much lower than our study at 88%. A study conducted in Wardha in rural population 45% babies were given prelacteal feed,^[12] while in urban slums of Chandigarh 40% babies were given prelacteal feeds.^[13] In a study from Cuttack conducted in 1997, 100% babies received prelacteal feeds.^[14] Regional differences may account for this change with Cuttack mothers showing findings closer to our study. Honey was most common prelacteal feed in our study which is similar to the BPNI study.^[11]

Table 1: Coverage of prelacteal feeds among lactating mothers

Pre lacteal feed	Overall N=375	Rural N=300	Urban N=75
Received	331 (88)	268 (89)	63 (84)
Not received	44 (12)	32 (11)	12 (16)

Figures in parenthesis are percentages

Table 2: Pre lactation among lactating mothers according to type of family

Pre lactation	Joint	Nuclear
Rural no.	166	134
Urban no.	47	28
Not given		
Rural	17 (10)	11 (8)
Urban	6 (13)	4 (14)
Honey		
Rural	102 (61)	84 (64)
Urban	26 (55)	13 (46)
Ghutti		
Rural	43 (26)	23 (17)
Urban	11 (23)	8 (29)
Others		
Rural	13 (8)	7 (5)
Urban	5 (3)	2 (2)

Figures in parenthesis are percentages

Table 3: Prelactation among lactating mothers according to caste

Prelactation	SC/ST*	Non SC/ST
Rural no.	175	90
Urban no.	54	19
Not given		
Rural	18 (10)	10 (11)
Urban	6 (11)	4 (21)
Honey		
Rural	102 (58)	57 (63)
Urban	30 (56)	9 (47)
Ghutti		
Rural	42 (24)	18 (20)
Urban	12 (22)	4 (21)
Others		
Rural	13 (7)	5 (6)
Urban	6 (14)	3 (16)

Figures in parenthesis are percentages. *SC/ST: Scheduled caste/Scheduled tribe

Table 4: Prelactation among lactating mothers according to literacy

Literacy	Mother			Father		
	Ill*	J/lit**	F/edu***	Ill	J/lit	F/edu
Rural no.	56	33	211	46	41	213
Urban no.	23	6	46	12	5	58
Not given						
Rural	3 (5)	3 (9)	22 (10)	4 (9)	2 (5)	22 (10)
Urban	3 (13)	1 (17)	6 (3)	4 (33)	-	6 (10)
Honey						
Rural	36 (64)	21 (63)	129 (61)	30 (65)	29 (71)	134 (63)
Urban	12 (52)	4 (67)	23 (50)	5 (42)	3 (60)	30 (42)
Ghutti						
Rural	12 (32)	7 (21)	47 (22)	10 (22)	8 (20)	40 (22)
Urban	5 (22)	1 (16)	13 (28)	2 (17)	2 (40)	14 (24)
Others						
Rural	5 (9)	2 (6)	13 (6)	2 (4)	2 (5)	17 (7)
Urban	3 (13)	-	4 (9)	1 (8)	-	8 (14)

Figures in parenthesis are percentages. *Illiterate, **Just literate, ***Formal education

Other studies also found gur, water, and cow's milk as common prelacteal feeds.^[12]

Differentials used in prelacteal feeding were important only as far as income was concerned, with higher income groups showing a higher preference for prelacteal feeds. Maternal education was found to have no influence on acceptance of breast-feeding, according to a study by from south India.

Improvement in nutrition during pregnancy and during lactation should be one of the aims of the services offered at the primary care 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 primary care physicians is of immense use in this direction.

Primary care physicians play a multi-faceted role in health care in general and maternal and child health services in particular.

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. In spite of variance in these factors, their goal of maintenance, promotion, and restoration of the health and well-being of patients remains clearly defined. Several broad areas, in which a primary care physician is expected to make contribution in the field of breast feeding, include communication and transmission of information, motivation, supervision and education, and research and evaluation.

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