

Prelacteal Infant Feeding Practices by Mothers of Block Hazaratbal...– A Retrospective Study

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Abstract

Original Research Article

Research question: What are the prevailing practices of prelacteal feeding among infants of block Hazaratbal? **Objectives:** To find out the prevailing pattern and influence of socio-demographic factors on prelacteal feeding of infants. **Study design:** Cross-sectional study. **Setting:** Block Hazaratbal, field practice area of Government Medical College Srinagar. **Sample size:** 210 mothers having children in the age group of ≤ 1 yrs of age. **Study variables:** Maternal age, maternal education, maternal occupation, type of family, place of delivery, type of delivery. **Method:** 30 cluster sampling technique. **Statistical analysis:** Percentages and Chi-square tests. **Results:** On analyzing type of first feed breast milk was given by 22.9% mothers. Sugar was most common prelacteal feed given by 26.2% mothers followed by honey which was given by 15.7% mothers. Other Prelacteal feeds like glucose, gur, soil and water was given by 5.7%, 8.1%, 8.1%, 5.2% mothers respectively. No statistical significance was seen between place of delivery, type of delivery and literacy level of the mothers however sex of the child was found to be significantly associated with type of first feed.

Keywords: Cluster sampling, prelacteal feed, multigravida.

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INTRODUCTION

Infections and malnutrition are the most common cause of morbidity and mortality in infants. Infants and young child's nutrition has been engaging the attention of scientists and planners since long for the very simple reason that growth is maximum during the first year of life. The period immediately following delivery is a time when women who are planning to breast feed introduce substances other than breast milk in the diet of the infants. Prelacteal feeds defined as any feeds given before the onset of lactogenesis which is the onset of copious lactation that occurs within four days of birth Neville M. *et al.* [1]. These feeds are not recommended because of their influence on onset of lactation and perinatal mortality and morbidity Duong D. *et al.* [2].

This study was conducted with an objective of finding the prevailing practice of prelacteal feeding of infants by mothers of Block Hazaratbal and influence of socio-demographic factors on such practice.

MATERIALS AND METHODS

Study was carried out in block Hazaratbal, field practice area of Government Medical College

Srinagar. Study population comprised of 210 mothers. Sampling was done using WHO "30 Cluster Sampling techniques [3]." A total of 30 villages/wards were selected using the above technique from which 7 eligible mothers were taken. Enquiry was made for a mother having a child in the age range of 0-11 completed months. To determine the earliest acceptable birth date exactly 12 months was subtracted from the date of interview. The process was continued till the desired number of mothers was obtained. Informed consent was taken and mothers were asked to fill a proper consent form. All the data thus collected was compiled and tabulated in the form of contingency tables and analysis was done using appropriate statistical technique which included Chi-square test to find the variables that came significant.

RESULTS AND DISCUSSION

Out of 210 mothers 37.6% were in the age group of 20-24 yrs and only 0.5% were 35 yrs and above. The mean age of mothers was 25.1 yrs. 65.7% mothers were illiterate and only 34.3% literate. 86.2% mothers were engaged in domestic work and 13.8% were doing paid work. 72.4% belonged to joint families and 27.6% mothers belonged to nuclear families.

Table-1: Distribution of surveyed mothers as per type of first feed given to them immediately after birth

Age of mother (year)	Type of first feed given								
	Breast Milk	Honey	Glucose	Gur	Khak(soil)	Sugar	Water	Borrowed Breast milk	Don't know
< 20	2 (4.16)	1 (3.03)	1 (8.3)	0 (0.0)	2 (11.7)	1 (1.81)	0 (0.0)	0 (0.0)	0 (0.0)
20 to 30	28 (58.3)	23 (69.9)	10 (83.3)	11 (64.7)	10 (58.8)	40 (72.7)	11 (100.0)	2 (100.0)	8 (53.3)
30 and above	18 (37.5)	9 (27.2)	1 (8.3)	6 (35.2)	5 (29.4)	14 (25.4)	0 (0.0)	0 (0.0)	7 (46.6)
Total	48 (22.9)	33 (15.7)	12 (5.7)	17 (8.1)	17 (8.1)	55 (26.2)	11 (5.2)	2 (1.0)	15 (7.1)

On analyzing type of first feed given to infants as per age of surveyed mothers it was observed that breast milk as first feed was given by 22.9% mothers. Among feeds other than breast milk i.e. (Prelacteal feed) sugar was most common given by 26.2%

mother's followed by honey which was given by 15.7% mothers. Other Prelacteal feeds like glucose, gur, soil and water was given by 5.7%, 8.1%, 8.1%, 5.2% mothers respectively. 7.1% mothers did not remember the type of first feed given by them to their infants.

Table-2: Type of first feed given to infants as per their mother's literacy.

Mother's Literacy	Type of first feed		
	Breast milk	Prelacteal feed	Total
Illiterate	32(26.7)	88(73.3)	120
Literate	16(17.8)	74(82.2)	90
Total	48(22.8)	162(77.1)	210

p=0.130 (NS)

Table 1 depicts type of first feed given to infants as per mother's literacy. It was seen that 26.7% illiterate mothers had given breast milk as the first feed as compared to 17.8% literate mothers. On applying

Chi-square test no statistical significance was seen between literacy status of mothers and type of first feed given to infants.

Table-3: Sex wise distribution of infants on the basis of type of first feed

Gender	Type of first feed		
	Breast milk	Prelacteal feed	Total
Male	39(32.8)	80(67.2)	119
Female	9(9.9)	82(90.1)	91
Total	48 (22.8)	162 (77.1)	210

p=0.000 (Sig)

Table 3 gives type of first feed given as per the sex of the infants. 32.8% male infants were given breast milk as their first feed as compared to only 9.9% female

infants. Sex of the infants was found to be significantly associated with the type of first feed given to infant.

Table-4: Type of first feed given to infants as per their place of delivery

Place of delivery	Type of first feed		
	Breast milk	Prelacteal feed	Total
Hospital	16(17.2)	77(82.8)	93
Home	32(27.6)	84(72.4)	116
Total	48 (22.8)	161(76.6)	210

p=0.093 (NS)

Table 4 gives distribution of first feed given to infants as per place of delivery. Out of 210 infants 82.8% infants who had delivered in hospital were given pre-lacteal feed and 17.2% were given breast milk as

first feed. 72.4% infants delivered at home were given pre-lacteal feed and 27.6% were given breast milk. However place of delivery was not found to be significantly associated with the type of first feed.

Table-5: Distribution of type of first feed given to infants as per type of delivery

Type of delivery	Type of first feed		
	Breast milk	Prelacteal feed	Total
Caesarean	16(17.2)	77(82.8)	93
Vaginal	32(27.4)	85(72.6)	117
Total	48 (22.8)	162(77.1)	210

p=0.083 (NS)

On analyzing type of first feed given to infants as per type of delivery 82.8% infants who had delivered by caesarean section were given prelacteal feed as compared 72.6% infants who had delivered vaginally. Only 17.2% infants delivered by caesarean section were given breast milk as first feed as compared to 27.4% infants delivered vaginally. However on applying Chi-square test type of delivery was not found to be significantly associated with type of first feed given to infants.

DISCUSSION

The practice of giving infant some special type of feed—i.e. liquids or foods other than breast milk given prior to the establishment of regular breast feeding (Prelacteal feed) deprives the child of the valuable nutrients of colostrums and exposes the newborn to the risk of infection. In the present study prelacteal feed was given by 77.9% mothers and only 22.9% mothers had started directly with breast milk. Similar results obtained by Chabra *et al.* [4] showed that Prelacteal feed was given to 76.9% infants. However study by Kulkarni R.N *et al.* [5] on breast feeding practices in urban community of Navi Mumbai reported that only 36.1% mothers gave Prelacteal feeds to their infants. In our study, sugar (26.2%) was on top of the list of prelacteal foods followed by honey (15.7%), jaggery (8.1%) and glucose (5.7%). 7.1% mothers could not recall the type of feed given to them immediately after birth, however study by Chabra *et al.* [4] reported jaggery as the most common prelacteal food. Study by Dakshyani B *et al.* [6] on tribal population of Mysore district also reported sugar water on top of the list of prelacteal foods followed by milk mixed with jaggery which is in concordance with our study findings.

Association of the type of first feed was seen with maternal literacy, parity and gender of the child. Parity of mother was significantly associated as 86.3% primigravida mothers had given prelacteal feed to their infants as compared to 72.3% multigravida mothers. Studies by Narayan *et al.* [7] revealed that primigravida status adversely affect the start of breast feeding. Gender of the child was also found to be significantly associated with type of feeds as 67.2% male infants had received prelacteal feed as compared to 90.1% female infants. These findings are consistent with previous studies conducted in rural area of West Bengal by I Pal *et al.* [8] who found a higher proportion of females (21.6%) being fed prelacteal feed when compared to

males (14.7%). However in our study maternal literacy was found to be insignificantly associated with type of first feed.

Our study also showed that hospital delivery (82.8%) and infants delivered by caesarean section had more dependence on prelacteal feeds. This is in agreement with previous study by Rafael PE *et al.* [9], in which hospital deliveries and delivery by cesarean section were found to be significantly associated with exposed to milk based prelacteal food.

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