

Prevalent infant feeding practices of infants among the missing tribes of Jorhat district, Assam

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Study was conducted to record the prevalent infant feeding practices of the community. Total of 120 infants (1-12 months) were selected from 6 villages, an interview schedule was constructed to elicit information on prevalent infant feeding practices. Infant feeding practices showed that higher percentage of mothers (66.66%) practiced prelacteal feeding. 33.33 per cent infants were exclusively breast fed up to 6 months. Major percentage of the mothers (60.00%) fed colostrum to the new born, while 40 per cent mothers initiated breast feeding only after 2-3 days of birth of the baby. All the newborns were breast fed for 10-12 times per day almost upto first 2 weeks of birth. The frequency of breast feeding seemed to have taken a downward trend thereafter. Supplementary feeding at 6 months were introduced only by 33.33 per cent of mothers. Supplementary foods used were mainly cereal based mixed with milk and sugar or sometimes with dal water. Banana was commonly used fruit while potato and greens were found to be the common vegetables included in infants diet within 6-9 months (60%). Faulty feeding practices such as prelacteal feeding by majority of the mothers were rampant and needs to be corrected.

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INTRODUCTION

‘A new baby is the beginning of all things_ wonder, hope, love and fulfillment. Like a mestimable blessing of Almighty, it brings a dream of possibilities to every parent’—Eda. J. Le. Shan, New York.

The baby is like the dreams of all expectations and hopes, possibilities, wonder, joy and happiness of the family. But all these dreams could be possibly brought into reality only when he grows in a sound environment with the best care possible to adorn the tomorrow’s globe with all his potentialities. However, some traditional norms prescribing dietary practices, specifying rituals and practices for child birth and the immediate post-partum period and defining complex rituals and folk

knowledge applied to early infant care and child rearing have significant influence on maternal and child health (Kar, 1993). Infancy, a period of critical growth and development and an important period in human life, considered from birth to one year of age during which the foundation of future health is laid (Betty and Margret, 1982). Infant feeding practices is the current catch word in many developing countries, as adequate nutrition during infancy is the basis for child survival and good health in adulthood. Ideal infant feeding comprises exclusive breast feeding for the first six months, followed by sequential addition of semi-solid and solid food to complement breast milk at 6 months with continued breast feeding at least for 2 years (WHO, 2001 and 2002). Initiation of breastfeeding within one hour of birth is critical for newborn health and wellbeing. Colostrum or “the first milk” is beneficial to the child, rich in all nutrients essential for growth of infants and high concentration of anti-infective agents which is a must for the baby for long-term health and development. The breast milk alone, even in reasonable quantities cannot endow with all the nutrients required for maintaining an adequate velocity of growth after the age of six months. So weaning is very important to fulfill

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the raising needs of the infants. Although considerable amount of information are available regarding nutritional status of different age groups of tribal and non tribal population, the information regarding the infant feeding practices adopted for promoting health and nutritional status of the children among the tribes of Assam are still scanty. The present study is, therefore, an attempt in this direction with an aim to focus the light on the infant feeding practices of infants among the Missing (plain tribes) tribes of Teok Revenue Circle of Jorhat district, Assam with an objective to record prevalent infant feeding practices of the community.

METHODOLOGY

Kaliapani Development block of Teok Revenue Circle of Jorhat district was purposively selected for detail investigation in the year 2009. Investigatory visits were made to the selected block and ultimately six villages were selected which were purely dominated by the tribal population namely- Sriram, Bonoria, Hatihal, Kumolia Saponi, Sonari and Satal bagor. All total 120 infants (1-12 months) from the selected households were drawn with the help of local leaders- ASHA and Anganwadi workers. In order to meet the objective of the study, an interview schedule was constructed to elicit information on prevalent infant feeding practices including pattern of breast feeding and supplementary feeding practiced by the mothers in the community. The collected data were coded in coding sheets with a coding key for each question. The percentages for each response were then calculated on coding sheets. All analysed data were used in the form of tables and figures which were interpreted and discussed to give a complete shape to the present manuscript.

OBSERVATIONS AND ASSESSMENT

The present study was designed with an aim to provide an insight into the prevailing infant feeding practices of infants among the Missing Tribes of Teok Revenue Circle of Jorhat district, Assam with all total 120 infants (1-12 months) from the selected households. The information pertaining to the prevalent infant feeding practices among the mothers were

Table 1. Prevalent infant feeding practices of the community

Infant feeding practices	n = 120	Prevalence %
Prelacteal feeding	80	66.66
Colostrum feeding	72	60.00
Initiation of breast feeding within one hour	20	16.67
Exclusive breast feeding (upto 6 months)	40	33.33
Time of introduction of supplementary foods		
Below 6 months	31	25.83
At 6 months	40	33.33
At 7-8 months	49	40.83

recorded and are presented in Table 1.

The prelacteal feeding practices for infants among the mothers shows that 66.66 per cent of the mothers had practiced prelacteal feeding for their infants either in the form of plain water, honey or honey mixed with water. Majority of them (38.33%) used honey mixed with water while the rest had used either plain water (18.33%) or honey (10%) as first feed to their infants. These feeds were reported to be given as a cleansing agent for the tongue as well as to stimulate suckling impulse of the infant. The elders of the family usually introduced this first feed to the baby either with the finger or with cotton swab as a part of their social custom (Table 2). It is being observed that prelacteal feeding was, however, practiced by majority of the mothers and were given without any knowledge of having beneficial or harmful effect. This practice was found to be influenced by social and family customs. Earlier studies carried out in different parts of the country also reported the prevalence of such unhealthy prelacteal feeding practices either in the form of sugar, honey, gur, milk or water and were fed as first food not for any health benefit but due to socio-cultural influences (Devdas, 1998, Taneja and Gupta, 2001, Tiwari *et al.*, 2007).

Colostrum feeding:

It has been apparent from the study that 60 per cent of the mothers out of total 120 mothers, fed colostrum to their infants. On the other hand, 40 per cent mothers discarded the colostrum and considered it as impure, dirty and harmful for the health of the baby which may cause stomach problem. Therefore, discarding colostrum by the mothers at large was due to a number of misconceptions (Table 3).

This practice was still rampant in the society and thus depriving a large number of new born from getting the benefits of colostrum. Tiwari *et al.* (2007) in a study among Kol Tribal community of Madhya Pradesh found that colostrum was not given to the babies by almost 70 per cent mothers. The practice of rejecting colostrum by 40 per cent mothers in the present study is in conformity with the present findings.

Time of initiation of breast feeding:

The data presented in the Table 4 show that only 16.67 per cent of mothers initiated breast milk within 1 hour after birth, 31.67 per cent within 6 hours and 11.66 per cent after 6-8 hours of birth of the baby and nearly 40 per cent mothers initiated breast feeding after 2-3 days of delivery. The delayed initiation of breast feeding in India is as old as its culture and appears to be prevalent in all parts of the country particularly among the low socio-economic group. In the present study 40 per cent mothers did not initiate breast feeding till 2-3 days and thus deprived the infants from the potent immunological protection. Delayed initiation of breast milk and also discarding colostrum by these mothers by and large was due to some misconceptions

Table 2. Prelacteal feeding practices for the infants prevalent among the Missing Tribes of TRC, Jorhat, Assam (n=120)

Type of prelacteal food	Feeding method	Fed by	Reasons	No. of infants
Water	Finger	Elderly	It helps to stimulate sucking	22 (18.33)
Honey	Cotton swab	Elderly	Acts as a cleansing agent for tongue	12 (10.00)
Honey with water	Finger	Elderly	Acts as a cleansing agent for tongue	46 (38.33)
Total				80 (66.66)

Figures in parentheses indicates percentage

Table 3. Colostrum feeding practices of the mothers of infants (n=120)

Colostrum feeding practices	Reasons of feeding	No. of mothers
Yes n=72 (60.00)	It is good for the health of the baby	32 (44.44)
	It is nutritious	25 (34.72)
	As per elder's advice	15 (20.83)
	Total	72 (100.00)
No n = 48 (40.00)	It is a dirty milk	18 (37.50)
	It may affect the health of the new born	6 (12.50)
	It is not pure and may create stomach problem	20 (41.67)
	As per elder's advice	4 (8.33)
	Total	48 (100.00)

Figures in parentheses indicates percentage

Table 4. Percentage distribution of mothers according to time of initiation of breast feeding

Time of initiation of breast milk	% mothers (n = 120)
Within 1 hr after birth	16.67 (20)
Within 6 hrs after birth	31.67 (38)
After 6-8 hrs after birth	11.66 (14)
After 2 days	6.67 (8)
After 3 days	33.33 (40)
Total	100.00(120)

Figures in parentheses indicate number of mothers.

and strong influence of elders due to social custom or tradition of the locality. Early initiation of breast feeding is not only beneficial for the baby but also lowers the mothers risk for excess post partum bleeding and anaemia and helps to establish successful lactation (Khetarpaul *et al.*, 2001).

Frequency of breast feeding:

All the newborns were breast fed for 10-12 times per day almost upto first 2 weeks of birth. The frequency of breast feeding seemed to have taken a downward trend thereafter. By the end of second months 75 per cent of the mothers breast fed their infants for 9-11 times per day which revealed that some of these infants have given breast milk substitutes from the second months onwards. There was a gradual reduction in the frequency of feeding to 8-10 times per day (58.3%) by fourth month and 7-9 times per day (56.6%) by fifth months of

birth, which indicates that these infants were put to supplementary feeds along with breast feeding. After 6 months, there was a gradual reduction in frequency as the age advances. But it was a healthy sign that all the infants were breast fed till 12 months and above.

Devdas (1998) also found that almost all the newborns were breast fed 9-11 times upto 15 days of birth but the frequency of breast feeding seemed to decrease with increase in age of the infants. Kaur and Kumar (1990) observed that the mean frequency of breast feeding in India is six times per day with the frequency decreasing as the babies age advances.

Exclusive breast feeding:

According to World Health Organization (2002) exclusive breast feeding refers to 'the practice of feeding only breast milk excluding water, breast milk substitutes, other liquids and solid foods till 6 months of age'. It was observed from the study that only 33.33 per cent infants were found to be exclusively breast fed upto 6 months of age and was at par with the WHO's recommendation (Table 6). Although the rate was low (33.33%), it was indeed an encouraging and could be possibly due to the influence of post-natal advices received from the health professionals of the locality particularly Doctor, ANM and ASHA workers and also due to increasing awareness of these tribal mothers regarding the importance of breast feeding.

Medhi and Mahanta (2004) also observed prevalence of exclusive breast feeding upto 6 months among 69.35 per cent of tea garden workers of Assam. Earlier studies in the field reported low prevalence of exclusive breast feeding upto the age of four months of infants in different parts within and outside the country (Asma *et al.*, 1999; Devdas, 1998; Saadeh, 2003).

Time of introduction of supplementary feeding:

Only 33.33 per cent of infants had received supplementary feeding at recommended time *i.e.* at 6 months of age. It has been observed that a large number of infants (40.83%) had delayed introduction of supplementary foods, which might be because of the influence of a social ritual called "Apindopak" by the Missing community where the baby is first introduced with cereal food (Fig. 1). Tiwari *et al.* (2007) found delayed introduction of supplementary feeding among majority of children from Kol tribal community of Madhya Pradesh and

Table 5. Percentage distribution of mothers according to frequency of breast feeding

Frequency of feeds/day	No. of mothers (%)													n = 120
	Age in months													
	New born	1	2	3	4	5	6	7	8	9	10	11	12	
10-12	100													
9-11		90	75											
8-10		10	25	71.6	58.3									
7-9				28.3	41.6	56.6								
6-8						43.3	54.1							
5-7							45.8	46.6						
4-6								53.3	40	33.3				
3-5									60	66.6	25	21.6	15	
2-4											75	78.3	85	

Table 6. Percentage distribution of infants according to breast feeding status among Missing Tribes of TRC, Jorhat, Assam (n = 120)

Breast feeding status	% of infants
Exclusive breast feeding upto 6 months	33.33 (40)
Exclusive breast feeding beyond 6 months(7-8 months)	40.83 (49)
Partial breast feeding below 6 months	25.83 (31)

Figures in parentheses indicate number of infants

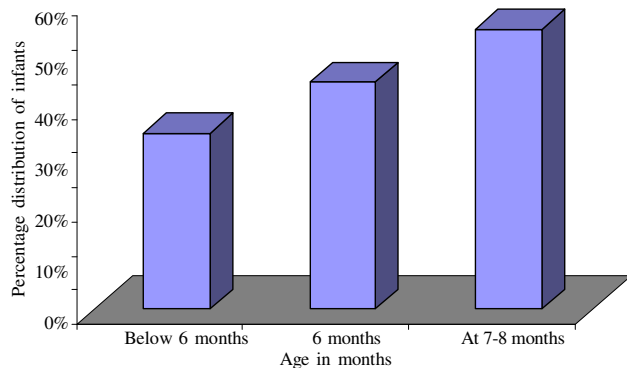


Fig. 1. Percentage distribution of infants according to time of introduction of supplementary feeding

are similar with the results of the present investigation.

Supplementary foods used were mainly cereal based mixed with milk and sugar or sometimes with dal or dal water. Banana was commonly used fruit while potato and greens were found to be the common vegetables included in infants diet within 6-9 months (60%). Feeding of bamboo shoot with milk was really a striking feature of supplementary feeding practiced by 38.33 per cent mothers belonging to this community. Majority of the infant’s diet was modified out of the family kitchen from locally available foods (Table 7).

Table 7. Type of supplementary foods given to the infants by the mothers among missing tribes of TRC, Jorhat, Assam

Type of supplementary foods	Age of feeding	No. of mothers
Cow’s milk	2 months	27 (22.50)
Dal water	3 Months	28 (23.33)
Mashed cooked rice with milk or dal	4 months	28 (23.33)
Cerelac	4 Months	19 (15.83)
Mashed banana with cow’s milk	5 Months	39 (32.50)
Luthuri (rice flour–milk–sugar)	6 Months	51 (42.50)
Khichiri (Rice–dal–potato)	6 Months	59 (49.16)
Boiled and mashed vegetables with softly cooked rice	7 Months	72 (60.00)
Rice with mashed greens and potato	8 Months	75 (62.5)
Mashed banana and sago mixed with cow’s milk	9 Months	72 (60.00)
Bamboo shoot-boiled, mashed and blended with milk	10 Months	46 (38.33)

Figures in parentheses indicate percentage

Conclusion:

The infant feeding practices studied among the mothers of Missing Tribes of TRC were not optimum as per global recommendation. Faulty feeding practices such as prelacteal feeding followed by majority of the mothers was rampant and needs to be corrected. Though the custom of discarding colostrum was prevalent, incidence of complete omission of colostrum by all the mothers was not observed. Premature introduction of supplementary feeding was one of the important point of concern among the tribal mothers of the present study. However, prevalence of colostrum feeding (60%), exclusive breast feeding (33.33%), timely introduction of supplementary feeding (33.33%) were some healthy signs observed among the community. In view of the findings of the present study there is urgent need to educate mothers regarding benefits of

proper infant feeding practices. All parents, communities, societies must be sensitized to understand the importance of this pivotal period of life from self and national point of view to lay the foundation for a healthy nation.

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