pISSN 2394-6032 | eISSN 2394-6040

Original Research Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20184735

Infant feeding practices of a tribal community in a mandal of Khammam district, Telangana

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Received: 29 October 2018 Accepted: 15 November 2018

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ABSTRACT

Background: Breast milk is the best, safest and most nutritious food for infants. Though breast feeding is almost universal, there are yet some myths and false beliefs surrounding the practice due to various cultures and traditions in India. In the present study an attempt was made to understand various aspects of infant feeding practices among the Sugali tribes of Khammam district, Telangana state.

Methods: A cross sectional study was conducted among Sugali community in Khammam mandal of Khammam district in Telangana from March to June 2010. In which 314 families with pre-school children were interviewed using a pre-designed semi-structured questionnaire.

Results: Nearly 80% (251) of the mothers had said that they initiate breast feeding after one hour of delivery, while only 6% initiated breastfeeding within one hour delivery. About 54% of the mothers were giving colostrum to their newborns, while others (45.86%) were giving pre-lacteal feeding to the infants including jaggery water and honey. It was observed that most (71.65%) of the mothers were continuing to breastfeed their children more than 18 months. Only 11.78% of the mothers started weaning before 6 months of age. Socio-economic status, literacy rate and working status of the mothers were some of the influencing factors.

Conclusions: The study identified the practices of infant feeding, their determinants among the sugali tribes and recommendations to improve their practices. False beliefs and difficulties regarding breast feeding need to be addressed through heath education and family support.

Keywords: Sugali, Breastfeeding, Khammam

INTRODUCTION

Infant feeding practices differ from place to place and between different ethnic groups and communities. Breast feeding their infants is an integral part of the reproductive cycle in all mammalian species not just humans. Mother's milk is the ideal food for all infants which provides adequate nutritional requirements early during infancy and no wonder it is considered nature's gift to the baby. Breastfeeding which is an ancient social custom has immense benefits to both mother and the infant

because of its nutrients and immunoglobulin contents. It is the safest food for vulnerable newborns since it is free of contamination. Early initiation and exclusive breast feeding helps the infants to achieve optimal growth and development in the future. Breastfeeding also benefits the mother by helping to improve her health and acts as a natural contraception. Further, ensuring adequate and timely introduction of supplementary feeding along with continued breast feeding could benefit the nation in reducing an important nutritional disorder among child, 'stunting'. ²

Several factors affect breastfeeding including socioeconomic status, ethnicity, maternal education and employment, maternal age, attitude and confidence, residence and type of family, the influence of urbanization.

The attitudes and practices of breastfeeding vary in various sections of society due to different cultures, taboos, knowledge and attitudes of the mothers and their family members. From time immemorial, many tribes living in isolated pockets in the mountainous areas have been practicing a distinctive way of feeding their babies due to their ignorance and underlying cultural beliefs and practices.³

Lack of proper education and health facilities, faulty feeding habits, certain irrational belief systems and special tribal chores are likely to aggravate their health and nutritional status. Improper infants feeding practices could result in under nutrition, impaired cognitive development, poor school performance and reduced productivity influence.⁴

Child born in the tribal belt is one and half times more likely to die before the fifth birthday than children in other groups. Children below three years of age in scheduled tribes and scheduled castes are twice as likely to be malnourished than children in other groups. Malnutrition is a public health problem among tribals.⁵

The Sugalis are one of the few multilingual nomadic tribal communities, found throughout India. They are the largest notified scheduled tribe of Andhra Pradesh. They are also known as Lambadi, Lambani, Banjari and Brinjari in various parts of India.

Various ethnic groups exhibit dissimilar beliefs, attitudes, and practices in terms of nutrition and breastfeeding although they reside in the same area. Understanding of culture and beliefs are important for health-care providers which are needed to provide culturally sensitive care specific to the needs of such populations.

The present study was undertaken to explore the infant feeding practices among Sugali community of Khammam district, Telangana. In view of the fast changing customs and traditions due to industrialization and urbanization the study was done with the objective to explore various aspects of infant feeding practices including use of colostrum, time of initiation of breast milk, use of pre lacteal feeds, period of exclusive breast feeding, age at which weaning was started, so that specific intervention measures can be recommended as observed, for promoting and supporting early and exclusive breast feeding of newborns.

METHODS

The study is a community based, cross sectional, descriptive study done in Khammam mandal of

Khammam district in Telangana, since this is one of the districts with highest tribal population in the state. The sugali community was chosen as they are one of the largest tribal community in the state, living in the plain areas migrating to peri-urban areas.

Multi- stage sampling technique was adopted for the selection of samples. The criterion for selection of mothers was that the family should have a mother with at least one child below six years of age. The study included 314 families with preschool children from the selected mandal of Khammam district, which was closer to the district head-quarters.

The data were collected during March to June 2010. The mothers were interviewed with the help of pre-designed and pre-tested schedules in local language. The questions were framed to elicit information in line with the objectives of the study.

The data collected was entered in Microsoft Office Excel 2007 and data analysis was done by using SPSS software, version 17. Descriptive statistics were calculated, and χ 2-test was used to test the statistical association of data.

RESULTS

The study included 314 families with preschool children and the mean age of the participating mothers was 26.45 years ranging from 17 to 39 years.

It was observed that nearly 80% (251) of the mothers had said that they initiate breast feeding after one hour of delivery, while only 6% initiated breastfeeding within one hour of delivery. The rest (14%) of them said that they initiate breast feeding after a day or two after delivery, which is not good for the new-borns. Hence this practice has to be changed by health education during pregnancy during antenatal check-ups and support following delivery (Table 1).

Table 1: Time of initiation of breastfeeding.

S. No.	Time of initiation	Frequency	Percentage (%)
1	Within one hour of birth	19	6.1
2	One hour after birth	251	79.9
3	After one day	40	12.7
4	After two days	4	1.3
	Total	314	100.0

More than half i.e. 54.14% (170) of the mothers were giving colostrum to their newborns, while some others considered it not good for the infant. Contrary to this, a variety of pre-lacteal foods like jaggery water given by 24% (75) of mothers and honey given by 22% of them to the newborns, which was considered a custom (Table 2).

Table 2: Pre-lacteal feeds.

S. No.	Pre-lacteal feed	Frequency	Percentage (%)
1	Jaggery water	75	23.89
2	Honey	69	21.97
	Total	144	45.86

Nearly two thirds of the mothers fed their babies six times or more a day and rest 3-4 times a day.

Breast-feeding of children seemed universal amongst Sugalis, and was continued up to two years of age. Most of the families i.e. 225 (71.65%) preferred to continue breast beyond 18 months, while only 2 (0.64%) families replied that they breast feed their infants for less than six months (Table 3).

Table 3: Distributions of respondents according to duration of breastfeeding.

S. No.	Duration	Frequency	Percentage (%)
1	<6 months	2	0.64
2	6-12 months	7	2.23
3	13-18 months	80	25.48
4	>18 months	225	71.65
	Total	314	100

Table 4: Weaning practices.

S. No.	Initiation of weaning	Frequency	Percentage (%)
1	<6 months	37	11.78
2	6-9 months	207	66
3	9-12 months	58	18.5
4	>12 months	12	3.82

Although duration of breastfeeding was higher, up to 18 months or more amongst the Sugali families, about 88% of the mothers replied that they start weaning their infants after 6 months though they were not aware of exclusive breastfeeding. While 11.78% of them said they start solid foods within 6 months saying that their milk is not sufficient for their growing infants (Table 4).

Table 5: Distribution of families according to socioeconomic status (SES) based on monthly per capita income (B.G. Prasad's August 2010).⁷

SES	Income	Frequency	Percentage (%)
I	4063 and above	0	0
II	2031-4062	4	1.27
III	1219-2030	28	8.92
IV	610-1218	167	53.18
V	≤609	115	36.62
	Total	314	100

Most of the families (nearly 90%) belonged to lower or lower middle classes of SES, which appeared to significantly influence weaning practices (p<0.005) and practice of pre-lacteal feeding (p>0.05) and exclusive breastfeeding (p>0.05) to some extent, though not significant.

Literacy rate was 49.32% among the study population and only 16.69% of them had attended high school or above and apparently didn't show much influence on breastfeeding and weaning practices in the present study (p>0.05).

About 57.42% of the participant mothers were working which probably influenced their breastfeeding patterns (p<0.05).

DISCUSSION

Breastfeeding is the customary way of offering new born babies with the nutrients, which are essential for proper growth and development. This study was undertaken to explore the infant feeding practices and their influencing factors among Sugali community of Khammam district, Telangana. In this study among the 314 mothers who had atleast one pre-school child, about 62.4% were from the age group of 22-27 years, and mean age was 26.45 years similar to the 63.6% who were from 20 to 25 years in a study done by Bobhate and Shrivastava and closer to the two-thirds belonging to 21-25 years as observed by Garje et al in their study.^{8,9}

Colostrum, the first breast milk is highly nutritious and possesses antibodies that protect the newborn from many diseases. Delay in initiation of breastfeeding deprives the child from valuable components of colostrum, and worst still prelacteal feeding may cause adverse health effect and also delay in stimulation normally provided by suckling which could lead to decreased lactation. ¹⁰

In our study only 6% initiated breastfeeding within one hour of delivery, contrary to this 25% of Indian population has been reported to start breast- feeding within an hour of birth in NFHS-3. 11 Early initiation of breast feeding was noted among 80% of the participant mothers, which was higher than the reported 70.1% in a study done in Nashik, Maharashtra and 76% reported by Vijayakumari and Ramana in their study. 4.9

Fifty four percent mothers in the study said that they gave colostrum to their infants, less than the 60% as reported by Neog et al, and more than the 40% observed by Dakshayani and Gangadhar and much more than and 26% reported by Nisha et al. 10,12,13

Karunamurthy et al and Neog et al have documented that prelacteal feeding had been given by about two third (66%) of mothers in Vizianagaram and Jorhat respectively, which is higher than 46% noted in this

study. 12,14 Jaggery water (24%) seemed to be popular choice of preacteal food followed by honey (22%).

Practically colostrums alone is sufficient to maintain the nutritional demand of the newborns during first few days of birth without any type of prelacteal feeds. ¹⁵ Many women reported that, these prelacteal feeds were given as cleaning agents. These prelacteal feeds actually interfere with the suckling stimulation and prolactin production and can also be the source of infection to the newborns.

About 71.65% of mother said that they continue breastfeed their children for more than 18 months of age, which is a good practice and though lower than the 76% mothers who continued breastfeeding upto one year and above as was seen in Andhra.⁴

It was observed that 88% of the mothers replied that they start weaning their infants after 6 months, while 11.78% of them said they start solid foods within 6 months which was higher than 48 percent initiating supplementary feeding during 6th to 9th month, but less than the 26.4% who started weaning in 4th to 6th month as found in a study done in Ananthapuramu district of Andhra Pradesh.⁴ The reasons for early weaning as mentioned by them were that their milk is not sufficient for their growing infants, child is old enough to take solid food etc. Gupta et al reported introduction of supplementary food at 6-9 months of age.²

The influencing factors for the breastfeeding practices among the study population seemed to be their socioeconomic status (p<0.005), education level (p>0.05) and work of the mothers (p<0.05) similar to those summarized in a review by Srikanth et al. 16

CONCLUSION

It was found that although women of Sugali community of Khammam were following good practices of breast feeding, yet there were instances harmful feeding practices like delay in initiation, giving pre-lacteal feeds instead of colostrum, early weaning are still prevailing among the tribes due to misconceptions. Certain delays in introducing supplementary feeding after one year can have deleterious consequences, as mother's milk is not sufficient to meet the nutritional requirements of the growing infant beyond six months.

While there have been situations of good infant feeding practices amongst the Sugali women, due because of increased education levels and awareness by various health programs, there are negative consequences of women going for work observed as early weaning and shorter duration of breastfeeding in some.

Proper counselling of the mothers on the infant feeding practices by healthcare workers and motivation, and support from family would help in a great way in reducing the serious menace like child under- nutrition, infant mortality amongst these communities. Special welfare programs by governments for the socially underprivileged communities who are unable to access the healthcare due to geographical, social or economic related distances are needed.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge the cooperation of the participant mothers and local leaders of the villages surveyed.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee at Mamata Medical College, Khammam

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Cite this article as: Alwala RR, Dudala SR, Bolla CR, Patki MB, Kumar BPR. Infant feeding practices of a tribal community in a mandal of Khammam district, Telangana. Int J Community Med Public Health 2018;5:5077-81.