

Original Research Article

Insight on infant feeding among mothers of rural community: a cross sectional study

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ABSTRACT

Background: India, a low-middle income and a developing country is combating with a triple burden of malnutrition with a very cost-effective measure, infant and young child feeding practices. But there are a lot of challenges in its implementation which need to be catered.

Methods: A cross sectional study was aim to assess the knowledge and knowledge on practices of infant feeding among mothers of rural community. The mothers were included in the study were having children age between 0-1 year, who visits to primary health centers for availing health need services. Total 400 mothers were selected for the study by using purposive sampling method based on inclusive criteria.

Results: The results shows that though it was encouraging to note that mothers were largely in favour of breast feeding, but majority 96.50% of mothers knowledge on infant feeding was inadequate, only 3.50% of mothers were found moderate level of knowledge on infant feeding, none of the mothers were found adequate level of knowledge on infant feeding.

Conclusions: Regarding knowledge of infant feeding practices majority (94.25%) were identified in-adequate in their knowledge on practices of infant feeding, only (5.75%) having moderate level of knowledge on practices of infant feeding and none of the mothers found adequate knowledge of practices on infant feeding.

Keywords: Breast feeding, Infant feeding, Mothers, Weaning

INTRODUCTION

Today's children are the future citizens of the nation. Every child has the right to have breast feeding. In infancy, no gift is more precious than breast feeding. Breast feeding is a mothers privilege. From the ancient civilization mothers milk is regarded as complete food for the new born. Nothing can substitute the breast milk. Breast milk contains enzymes and antibodies which protect the infants vulnerable body system. The immunizing factors found in the breast milk give the infant the power to fight deadly diseases like diarrhea, respiratory problems, asthma and allergies.

Breast feeding is the effective way to ensure child health and survival. If every child born was breastfed within an one hour of birth, exclusively breastfed for first six months of life and breast feeding continued up to the age of two years, the lives of about 2,20,000 children would be saved every year. Globally less than 40% of infants fewer than six months of age are given only breast milk for the first six months. Breast feeding counseling and support are very essential for mothers and families to initiate and maintain optimal feeding practices. World Health Organization actively promotes breast feeding as the best source of nourishment for infants and young children.¹

While a remarkable resurgence of breast-feeding has been observed in the industrialized countries since the 1970s, a downward trend in breast-feeding during the last 20 years in developing countries has caused increased concern among the promoters of child health and development. Bottle feeding in these countries has become a symbol of modernity.²

Despite higher rates of early initiation of breastfeeding and exclusive breastfeeding, awareness of the benefits of exclusive breastfeeding was low. This indicates the need to promote awareness of the correct method of infant feeding and care of the newborn. Creating an awareness of the advantages of exclusive breastfeeding will further strengthen and support this common practice in rural communities and avoid an early introduction to complementary foods for socio-cultural reasons.³

Early initiation of breastfeeding (within an hour of birth) and other feeding practices were associated with community, type of family and education of mother. Efforts are needed to promote early initiation of breastfeeding, exclusive breastfeeding for 6 months and age-appropriate complementary feeding among infants.⁴

The beneficial effects of breastfeeding depend on the initiation of breastfeeding, its duration, and the age at which the breastfed child is weaned.⁵

All infants should be fed exclusively on breast milk from birth to six months of age, and thereafter, while receiving appropriate and adequate complementary foods, breastfeeding should continue for up to two years of age or beyond.^{6,7}

Breastfeeding practices vary among different regions and communities. The third National Family Health Survey (NFHS-3) of India reported that overall 21.5% of children aged under three years were breastfed within one hour of birth, 48.3% of the children aged zero to five months were exclusively breastfed, and 53.8% of the children aged six to nine months received solid or semi-solid food and breast milk.⁸

The practice of breastfeeding among Indian mothers is almost universal, but initiation of breastfeeding is quite late and the colostrum is usually discarded. Breastfeeding practices in rural communities are shaped by their beliefs, which are influenced by social, cultural, and economic factors.⁹

Continuous vigilance over infant feeding practices in the community is necessary for timely interventions, to ensure optimal growth and development. This information will be useful to policy makers for the formulation of interventional programs in the future. Therefore, the present study was carried out to assess the knowledge on infant feeding practice among mothers of rural community and its relation to certain care practices of maternity and the newborn.

METHODS

The present study was adapted descriptive analysis with objective of assess the knowledge of infant feeding practices among mothers of rural community selected from primary health centers of Chitradurga district, Karnataka. Total 400 mothers were selected for the study by using purposive sampling technique based on inclusive criteria like mothers who were having children age between 0 and 1 year, available during the data collection and who gave consent for the study.

Based on the objectives of the study, a structured interview schedule was prepared in order to assess the knowledge and knowledge on practice of infant feeding among mothers. A structured interview schedule was developed to conduct interview with mothers to collect data and to determine the knowledge and knowledge on practice of infant feeding among mothers after consultation with subject experts. The tool used for collecting data was in three parts, part I: consists of socio demographic data of mothers, which includes age, religion, educational status, occupation, income, number of living children and place of delivery. Part II: consists of items about knowledge of mothers on infant feeding. There are 24 questions related to knowledge of mothers on infant feeding. These questions in the interview schedule were related to pre-lacteal feed, initiation of breast feeding, colostrum, frequency of breast feeding, burping, exclusive breast feeding, ideal duration of breast feeding, artificial feeding, weaning and beneficiary effect of breast feeding on mothers and baby. Part III: structured interview schedule to collect the data related to knowledge on practice of infant feeding among mothers. These questions in the schedule were related to colostrum, initiation of breast feeding, burping, exclusive breast feeding, weaning and cleaning of breast. There were 10 questions related to knowledge on practice of mothers on infant feeding practice. Content validity of the instrument was established by experts. The reliability and validity of the tool was established by using split half technique and Spearman's brown prophecy formula. The reliability coefficient of correlation of the tool was found reliable and feasible. The data was collected by interviewing the mothers at one to one basis. Data entry and statistical analysis were performed using the Microsoft Excel and SPSS windows version 14.0 software.

RESULTS

Socio-demographic information

As illustrated in the Table 1, total 400 participants were included in the study, the majority 46.75% mothers were aged between 25-30 years, 22.75% were belong to 21-24 years, 8.75% were 15-20 years and 6.25% were aged above 30 years. Majority were 64.75% belong to Hindu religion, 21% were Muslim, and 14.25% were belonging to Christianity. 62.25% mothers residing in nuclear

family and 37.75% were in joint family. 35.75% of mothers were educated up to secondary level, 26.50% were studied primary level, 13% were educated PUC/diploma level, only 5.75% were studied up-to graduate and above, remaining 19% were not underwent any formal education. 38% mothers were house makers, 36.75% were working as a cooly or laboures, 11.50% were dong government job, 9.25% were working in private sector, and 4.50% were self employed. 33.25% were having income range from Rs. 5000 to 7000 per month, 25% were having Rs.7001 to 9000 per month, 23% were having Rs. <5000 per month and 18.75% were having above Rs. 9000 per month income. 44.25% were had two children, 28.25% were had three and more children, 27.50% were had one child. Majority 69.50 % mothers were underwent their delivery in the hospital, 30.50% were had delivery at home.

Table 1: Socio-demographic characteristics of mothers.

Socio-demographic characteristics		Total	Percentage
Age	15-20 years	35	8.75
	21-25 years	91	22.75
	26-30 years	187	46.75
	31-35 years	62	15.50
	36 and above	25	6.25
Religion	Hindu	259	64.75
	Muslim	84	21.00
	Christian	57	14.25
Type of family	Nuclear	249	62.25
	Joint	151	37.75
Educational status	No formal education	76	19.00
	Primary level	106	26.50
	Secondary level	143	35.75
	PUC and diploma	52	13.00
	Graduate and above	23	5.75
Occupation	House wives	152	38.00
	Laboures /cooly	147	36.75
	Govt. service	46	11.50
	Private service	37	9.25
	Self employee	18	4.50
Income per month	<5000	92	23.00
	5001-7000	133	33.25
	7001-9000	100	25.00
	>9000	75	18.75
No. of children	One	110	27.50
	Two	177	44.25
	Three and more	113	28.25
Place of delivery	Home	122	30.50
	Hospital	278	69.50

Knowledge level on infant feeding

Majority 96.50% of mothers knowledge on infant feeding was inadequate, only 3.50% of mothers were found moderate level of knowledge on infant feeding, none of the mothers were found adequate level of knowledge on infant feeding (Table 2). Specific knowledge on infant feeding related to pre-lacteal feed mean knowledge score was 41 (SD-27), regarding colostrum mean was 42.27 (SD-15), about essentials of breast feeding mean was 40.1 (SD-17.1), awareness on exclusive feeding mean was 41.1 (SD-22.3), and on weaning mean was 43.3 (SD-25.2) (Table 3).

Table 2: Level of knowledge on infant feeding.

Level of knowledge on infant feeding	Frequency	Percentage
Inadequate	377	94.25
Moderate	23	5.75
Adequate	0	0

Table 3: Knowledge on aspects wise on infant feeding.

Knowledge aspects on infant feeding	Mean	SD
Pre-lactal feeding	41.00	27.00
Coloustrum	42.7	15.0
Essentials of breast feeding	40.1	17.9
Exclusive breast feeding	41.1	22.2
Weaning	43.3	25.2

Knowledge on infant feeding practices

The results shows that regarding mean knowledge on practices of infant feeding identified that, on initiation of breast feeding was mean 46.7 (SD-26.9), essentials of breast feeding was mean 39 (SD-26.1) and knowledge on practices of weaning was mean 46.3 (SD-20.8) (Table 4).

Table 4: knowledge on aspect wise practices on infant feeding.

Knowledge aspects on infant feeding	Mean	SD
Initiation of breast feeding	46.7	26.09
Essentials of breast feeding	39.0	26.1
Weaning	46.3	20.8

Table 5: Level of knowledge on practices of infant feeding.

Level of knowledge on practices of infant feeding	Frequency	Percentage
Inadequate	319	79.75
Moderate	72	18.00
Adequate	9	2.25

Though it was encouraging to note that mothers were largely in favour of breast feeding, but in overall level of knowledge on infant feeding practices found majority (76%) were identified in-adequate in their knowledge on infant feeding practices, (24%) having moderate level of knowledge on practices of infant feeding and none of the mothers found adequate knowledge on infant feeding practices (Table 5).

DISCUSSION

India, a low-middle income and a developing country is combating with a triple burden of malnutrition with a very cost-effective measure, infant and young child feeding practices. But there are a lot of challenges in its implementation which need to be catered. The objective of the present cross sectional study was to assess the knowledge and knowledge on practices infant feeding among mothers of children aged 0 to 1 year in a rural area of Karnataka. The results were evidenced that majority of mothers were found inadequate knowledge and knowledge of practices on infant feeding (96.50% and 76%). The study results support with earlier study concluding report says that in spite of many programmes targeted for promoting safe intra natal and infant feeding practices this study finds a relatively high proportion of faulty practices prevalent in rural areas.¹⁰

The study findings related to knowledge on infant feeding aspects wise, pre lacteal feed mean was 37.6, colostrum mean =40.9, Essentials of breast feeding mean =34.8, exclusive breast feeding mean =39.1 and weaning mean =43.1. The present study results were supported with earlier studies.¹¹⁻¹³

The findings regarding knowledge of practices on infant feeding reveals that initiation of breast feeding mean 46.7, essentials of breast feeding mean =39 and weaning was mean =46.3. Present study results were supported with previous studies.^{4,14,15}

These findings suggest that there is an increased need for teaching program regarding infant feeding in rural community settings.

CONCLUSION

This study results related to level knowledge and knowledge of practice on infant feeding practices showed majority were in-adequate such as early initiation of breastfeeding, exclusive breastfeeding; feeding of colostrum, avoiding pre-lacteals and time of weaning among rural mothers.

Hence, there is a need for strengthening the promotion on knowledge and knowledge of infant practice by health workers during their interaction with the beneficiaries, giving emphasis for complementary feeding practice especially for mothers in rural community.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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