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Study on knowledge, attitude and practice about breast feeding and complementary feeding among the mothers attending health camp

Vidya Mallesh*, Rekha S. Udgiri, Shailaja S. Patil

Department of Community Medicine, B. L. D. E. University Shri B. M. Patil Medical College, Hospital and Research Centre, Vijayapura, Karnataka, India

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*Correspondence:

Dr. Vidya Mallesh,

E-mail: vidyamallesh20@gmail.com

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ABSTRACT

Background: Malnutrition among under 5 children is a major public health concern in India, sub-optimal feeding and inadequate knowledge of mothers on optimal child feeding practice not only increases the risk of infections and malnutrition but also considered as an important determinant of under-5 children mortality. Objective: Assess knowledge, attitude and practice on breastfeeding, and complementary feeding among mothers with the children under-2 years of age attending the health camp.

Methods: This cross-sectional study was conducted on all the mothers with the children under 2 years of age attending the health camp at Shri B. M. Patil Medical College Hospital and Research Center, Vijayapura. A verbal consent was taken and pre structured questionnaire was used to assess knowledge, attitude and practice on breastfeeding and complementary feeding in the mother attending the health camp.

Results: In the present study, only 42.1% of the mothers had practiced early initiation breastfeeding and only 38.3% of mothers had practice exclusive breastfeeding for the first 6 months. 36% of the mothers had given prelactial feeds, 62.8% of mothers had fed their children with colostrum and timely initiation of complementary feeding was practiced only among 18.2% of mothers.

Conclusions: This study shows inadequate knowledge among mothers regarding infant and young child feeding methods and faulty child feeding practices were followed by mothers.

Keywords: Breastfeeding, Complementary feeding, Infant and young children feeding

INTRODUCTION

According to WHO, joint child malnutrition estimate report 2019, globally there are more than 150.8 million children, under five years of age suffer from stunting, 50.5 million of them are Wasted and 17 million are severely wasted. Approximately 80% of these undernourished children, mainly comes from 20 countries, with India contributing for almost 60 million underweight children. Currently, in India 43% of under 5 children are underweight, 48% are stunted due to chronic under nutrition and 20 percent of them are suffering from wasting due to acute undernutrition.

Stunting and wasting in children are life-threatening results of poor nutrition in early childhood, children suffering from stunting and wasting will have weakened immunity and will never attain their full possible growth physically as well as mentally. According to recommendation given by WHO and UNICEF to obtain optimal infants and young children growth, it is very crucial for every children to receive breast milk within 1 hour after birth, exclusively breastfed for the first 6 months and should be introduced to semisolid or solid food at beginning of 6 month along with continuation of breastfeeding until 2 years. After the 6 months, breast milk alone can no longer meet the nutritional requirement

of the children needed for their growth.4 Therefore the gradual transition from exclusive breastfeeding to semisolid and solid food plays a very important role in this vulnerable period of child's life because it is the time when malnutrition creeps into many infants, contributing significantly for the high prevalence of under-five, undernutrition, and infection in children.3 Timely introduction of complementary foods is an important process in every child's life, which will have an impact on future health and development of, growing child. Along with this the complementary foods that are given to the children should have adequate calories and nutrients, the complementary foods should also be given in appropriate quantity and consistency and in a hygienic manner.³ Inadequate knowledge regarding appropriate infant feeding practices is often the greatest determinant of malnutrition than the inadequacy of food.⁵ Therefore it is very important to know the mother's knowledge regarding these factors in planning interventions to improve infant feeding practices. Various studies have shown that the nutritional status of young children is often influenced by their dietary intake which in turn is determined by the knowledge, attitudes, and practices (KAP) of breastfeeding and complementary feeding by mothers.

Vijayapura is one of the North Karnataka districts where the prevalence of malnutrition is high, according to health camps conducted by the health and family welfare department in July-August 2012 reported that the number of children, under 5 years of age who were malnourished in Vijayapura were 4900.⁶ According to DLHS-4 (2013) survey data, Vijayapura stands second highest in Karnataka with 19.3% of wasted children (low weight for height) in the age group 0-5 years, next to Bidar with 20.7%.⁷ The objectives of the study are Assessment of KAP on breastfeeding among mothers with the children under-2 years of age attending health camp and Assessment of KAP on complementary feeding among mothers with the children under-2 years of age attending health camp.

METHODS

This cross-sectional study was conducted for a period of one month (15th July to 15th August 2019) on the mothers attending the health camp at Shri B. M. Patil Medical College Hospital and Research Center, Vijayapura.

All the mothers with children under 2 years of age attending the health camp were included in the study and those mothers who were not willing to be a part of the study, and mothers with the children above 2 years of age were excluded from the study. Before interviewing a verbal consent was taken from all the eligible mothers. Pre structured questionnaire was used to, assess knowledge, attitude and practice on breastfeeding, and complementary feeding in the mother attending the health camp.

Statistical analysis

All the characteristics were summarized descriptively. Number and percentages were used in data summary. Data was analyzed using SPSS v.23 and MS office 2007.

The operational definitions used in the present study are:

Prelacteal feeds

Is defined as any food except mother's milk provided to a newborn before initiating breastfeeding.³

Colostrum

It is defined as the breast milk that women produce in the first few days after delivery. It is thick and yellowish or clear in color.³

Early initiation of breastfeeding

It is defined as the proportion of children born in the last 24 months who were put to the breast within one hour of birth.³

Exclusive breastfeeding

Exclusive "breastfeeding" is defined "as no other food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for 6 months of life, but allows the baby to receive Oral Dehydration Solution (ORS), drops and syrups (vitamins, minerals, and medicines)".³

Complementary feeding

Complementary feeding is "a process starting when breast milk alone is no longer sufficient to meet the nutritional requirements of infants, and therefore other foods and liquids are needed, along with breast milk". The age range for complementary feeding is generally 6-24 months. Properties of complementary feeding are timely initiation, it should be given in adequate quantity, consistency and frequency, variety of food groups should be used to cover the nutritional needs of growing child along with this breastfeeding should be continued till 2 years. The age of starting complementary feeding was considered as correct if it was started at the age of 6 months.³

RESULTS

Data from 121 mothers were collected and the following observations were made. 52.9% of the mothers were from rural area and 47.1% of them were from urban areas. ~50% of the mothers in present study were in the age group 20-25 years. The majority of mothers (46.3%) had received primary education, 23.1% had received secondary education, 19.8% of them were illiterate and 10.7% were graduates. It was observed that 38.8% of the

mothers in present study had 2 children, 24% had 1 child, 21.5% had 3 children and 15.7% of them had more than 4 children. The majority (63.6%) of the mothers were homemakers, 26.4% of them worked as daily wage workers, 8.3% of them worked in private sector and 1.7% of mothers were working in government settings (Table 1).

Table 1: Socio-demographic characters of the respondents.

Socio-demographic characters	No. of respondents (n=121)	%
Place		
Rural	64	52.9
Urban	57	47.1
Age (in years)		
18-20	16	13.2
20-25	62	51.2
25-30	31	25.6
30-35	8	6.6
>35	4	3.3
Education		
Primary education	56	46.3
Secondary education	28	23.1
Graduate	9	7.4
Postgraduate	4	3.3
Illiterate	24	19.8
Occupation		
Daily wage	32	26.4
Govt. sector	2	1.7
Homemaker	77	63.6
Private sector	10	8.3
Religion		
Christian	8	6.6
Hindu	92	76.0
Muslim	21	17.4

Around 36% of the mothers had given prelacteal feeds to their children and sugar water was found to be the most common type prelacteal feeds (22.3%). Majority of the mothers in this study had fed their child with colostrum (62.8%), 42.1% of the mothers had initiated breastfeeding within one hour after the birth, it was also observed that around 9% of the mothers had started breastfeeding after 7 hours of birth. Though more than half of the mothers in our study had positive knowledge regarding exclusive breastfeeding, only 38.3% of mothers had actually practice exclusive breastfeeding for the first 6 months. Most of the mothers (35.5%) preferred to continue breast feeding up to 2 years, while only 9.9% of mothers replied that they will breastfeed their infants till 1 year of age. 16.4% of mothers had practiced bottle-feeding and 40.5% of the mothers in present study were not breastfeeding their infants during sickness. More than half of the mothers (52.9%) knew that complementary feeding should be started at 6 months but only 18.2% of them had actually practiced (Table 2).

Table 2: Knowledge and practice on infant feeding followed by mothers.

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D 1 4 10 11	No. of respondents (n=121)	%	
Prelacteal feeding	_	2.1.1	
Yes	44	36.4	
No	77	63.6	
Type of prelacteal	-		
Sugar water	27	22.3	
Honey	11	9.1	
Water	5	6.0	
Not given	77	63.6	
Colostrum given			
Yes	76	62.8	
No	43	35.5	
Initiation of breas	t feeding after birth		
With in 1 hour	51	42.1	
1-6 hour	53	43.8	
>7 hour	11	9.1	
NBF	6	5.0	
Knowledge on exclusive breast feeding			
1 month	9	7.4	
2-3 months	37	30.6	
4-5 months	11	9.1	
6 months	64	52.9	
Practice of exclusi	ve breast feeding		
Up to 1 month	11	9.1	
2-3 months	43	35.5	
4-5 months	14	11.6	
Up to 6 months	47	38.8	
NBF	6	5.0	
Duration of breastfeeding			
>2 years	24	19.8	
Up to 1.5 years	36	29.8	
Up to 1 year	12	9.9	
Up to 2 years	43	35.5	
Not breastfeeding	6	5.0	
Using bottle for feeding			
No	101	83.4	
Yes	20	16.5	
Breastfeeding during sickness			
Yes	66	54.5	
No	49	40.5	
Not breastfeeding		5.0	
	e of initiation of complementa		
feeding	•	J	
<6 months	6	5.0	
6 months	54	44.6	
7-12 months	48	39.7	
After 1 year	13	10.7	
Initiation of complementary feeding			
<6 months	12	9.9	
6 months	22	18.2	
7-12 months	65	53.7	
After 1 year	22	18.2	
11101 1 3001		10.2	

DISCUSSION

According to infant and young children feeding (IYCF) guidelines early initiation of breastfeeding within 1 hour of birth in infants, significantly improves neonatal survival rate, but in present study the initiation of breastfeeding within 1 hour was seen only among 42.1% of mothers the findings were comparable with the statistics reported (47.9%) by breastfeeding and IYCF report card 2019 for Vijayapura district.9 Exclusive breastfeeding for the first 6 months was seen in 38.8% of mothers, similar results (34.5%) were found in the study conducted by the Basu et al.¹⁰ But present findings were less compared (56.6%) to breastfeeding and IYCF report card 2019 for Karnataka.9 The probable reasons for low rates of EBF practice among this population may be the belief of mothers that the baby less than 6 months requires water and other fluids during summer.

In the present study 38.8% of children had received prelactial feeds, Similar findings were reported in studies conducted by Manasa et al, Srividya et al and Kumar et al. 11-13 A study done by Nethra et al in the same area reported a low (18%) prevalence of pre lacteal feeding practice among mothers.¹⁴ The probable discordance with above study may be possibly due to inclusion of rural and urban mothers in our study A study done by Saravanan et al.15 In the same region among rural mothers reported a higher (60.2%) prevalence of pre lacteal feeding practice among mothers. In the present study, sugar water and honey were commonly given as prelactial feeds. Similar findings were found in studies conducted by Srividya et al, Yadavannar et al and Goyle et al. 12,16,17 In present study 62.8% of mothers had given colostrum to their babies whereas 35.5% of mothers had discarded colostrum the findings were similar to the study conducted by Davara et al where 68.5% of mothers had given colostrum to their infants.¹⁸ 16.5% of mothers in present study were using the bottle to feed their children these findings were comparable (13.3%) to the study conducted by Varshney et al.¹⁹

At 6 months of age, energy and nutrient requirement of the child increases which cannot be fulfilled only by breast milk, thus introduction of complementary foods are mandatory to meet the energy requirement of a growing child and if complementary foods are not introduced at this period of life growth of the infants may be falter. ^{20,21} In the present study it was observed that, though 44.6% of mothers had positive knowledge regarding timely initiation of complementary foods only 18.2% of mothers had actually started complementary foods at 6 months of age, most of the mothers of the mothers in present study had delayed complementary feeding because of the wrong perception that the child cannot digest complementary foods. The other reasons for delayed complementary feeding were, ignorance regarding correct time to start complementary feeding, misconception, and false beliefs in the community. In the study conducted by Aggarwal et al in Delhi also showed that the delayed complementary feeding practices were due to poor knowledge of mothers, customs and false beliefs.⁵

CONCLUSION

The present study shows inadequate knowledge and faulty feeding practices among mothers. Based on these findings it can be concluded that only education can overcome misconceptions regarding infant feeding practices. Hence it is necessary to provide correct information to the target population (mothers and caregivers) on current guidelines of infant and young children feeding practices.

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Institutional Ethics Committee

REFERENCES

- Joint child malnutrition estimates- levels and trends (2019 edition). World Health Organization. 2019. Available from: https://www.who.int/nutgrowthdb/ estimates2018/en/. Accessed on 19 October 2019.
- 2. Nutrition. UNICEF. 2019. Available from: https://unicef.in/Story/1124/Nutrition. Accessed on 19 October 2019.
- 3. World Health Organization. Infant and young child feeding: model chapter for textbooks for medical students and allied health professionals. 2009.
- 4. USAID A, IFPRI U. Indicators for Assessing Infant and Young Child feeding Practices. WHO; 2008
- 5. Aggarwal A, Verma S, Faridi MM. Complementary feeding- reasons for inappropriateness in timing, quantity and consistency. Indian J Pediatr. 2008;75(1):49.
- 6. National Family Health Survey. 2016. Available from: http://rchiips.org/NFHS/factsheet_NFHS-4.shtml. Accessed on 10 October 2019.
- 7. District Level Household and Facility Survey. 2017. Available from: http://rchiips.org/DLHS-4.html. Accessed on 10 October 2019.
- 8. World Health Organization. Indicators for assessing infant and young child feeding practices: part 1: definitions: conclusions of a consensus meeting held 6-8 November 2007 in Washington DC, USA.
- 9. BF and IYCF report card. 2019. Available from: https://www.bpni.org/wp-content/uploads/2019/09/

- BF-and-IYCF-Report-Cards.pdf. Accessed on 22 October 2019.
- Basu P, Chakrabartty A, Dasgupta U, Bhattacharyya K, Ali KM, Sarkar AK. Factors influencing exclusive breastfeeding up to six months of age in a rural community of north 24 Parganas, India. Indian J Nutri. 2018;5(1):181.
- 11. Roy MP, Mohan U, Singh SK, Singh VK, Srivastava AK. Determinants of pre lacteal feeding in Rural Northern India. Int J Prev Med. 2014;5(5):658-63.
- Jayarama S, Ramaiah R. Pre lacteal feeding practice among mothers in a rural area of Karnataka: a cross sectional study. Int J Community Med Public Health. 2017;4(8):2919-23.
- 13. Obulareddy AK, Narareddy RR. Study on breast feeding practices among urban and rural women in Kakinada. Int J Res Health Sci. 2015;3(1):66-70.
- Nethra N, Udgiri R. A study on traditional beliefs and practices in newborn care among mothers in a tertiary health care centre in Vijayapura, North Karnataka. Int J Community Med Public Health. 2018 Mar;5:1035-40.
- 15. Sharvanan EU, Angadi MM, Udgiri R, Patil SD. A community based study on infant and young feeding practices in a rural area of Karnataka. J Evol Med Dent Sci. 2012;1(3):231-6.
- 16. Yadavannar MC, Patil SS. Socio cultural factors affecting breast feeding practices and decisions in rural women. Int J Plant Animal Environ Sci. 2011;1(2):46-50.

- Goyle A, Jain P, Vyas S, Saraf H, Shekhawat N. Colostrum and prelacteal feeding practices followed by families of pavement and roadside squatter settlements. Indian J Prev Soc Med. 2004;35(1):58-62.
- Davara K, Chavda P, Pandya Solanki D. Breastfeeding practices in children under 6 months of age: a community based study in urban field practice area of a medical college in central Gujarat, India. Int J Community Med Public Health. 2016;3:1010-3.
- 19. Varshney A, Kumar D, Patel M, Singh US. Determinants of breastfeeding practices in urban slums of a taluka headquarter of district Anand, Gujarat. Nat J Community Med. 2012;3(3):534-7.
- World Health Organization. Infant and Young Child Feeding Counselling: An Integrated Course. 2006. WHO Document Production Services: Geneva.
- 21. World Health Organization. Complementary feeding: report of the global consultation, and summary of guiding principles for complementary feeding of the breastfed child. 2003.

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