

Original Research

Assessment of Feeding Practices of Young Children Less Than 2 Years of Age

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ABSTRACT:

Background: Every infant and child has the right to good nutrition according to the convection of the rights of the children. WHO, UNICEF, and USAID recommends early initiation of breastfeeding within 1 hour of birth, exclusive breastfeeding for first 6 months of life, the introduction of nutritionally adequate and safe complementary foods after 6 months together with continued breastfeeding up to 2 years of age or beyond. **Aim of the study:** To assess feeding practices of young children less than 2 years of age. **Materials and methods:** A descriptive survey was conducted in the pediatric OPD of tertiary care hospital of India with an objective to assess feeding practices in infants and young children less than 2 years and to find out association of feeding practices with selected demographic variables. Mothers of 200 patients in age group of less than 2 years attending pediatric OPD were selected by total enumeration sampling method between 26/07/2019 to 2/08/2019 period. The tool consisted of two parts one for 0 - 6 months infants feeding practice assessment and other for 7 - 24 months child's feeding practice assessment. **Results:** Among breastfed babies, approximately half 49.4% received breast milk after 12 hours of birth and about 37.8% received breast milk within half an hour to 2 hours after birth. About 2/3 were breastfed every 2 hourly in a day and a very few 8.4% were fed on demand by mother. Nearly 89.4% mothers gave feed to their infants from both breasts. About 40% of mothers take average breast feeding time of less than 30 minutes to breast feed the child. About 88.4% of mothers have enough breast milk supply and out of those who were not having enough breast milk, about 6.3% of mothers use home remedies for enough breast milk supply. **Conclusion:** Good nutrition forms the basic foundation of health throughout the life of person. Almost all of the mothers gave breastfeeding to their children however they were not breast feed their child exclusively. It is also concluded that time of initiation of breast feeding after delivery was delayed in majority of them. But frequency of breastfeeding in a day was better. In complementary feeding it is observed that initiation of complementary feeding at the recommended time of 6 months was seen majority of children. Majority of the children like food group grains which include food items such as dalia, chapatti, rice, porridge and biscuits. However, there is need to inform the mothers about the timing, consistency, frequency and quality of complementary food item.

Key words: Breast feeding, feeding practice, 2 years old children.

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INTRODUCTION:

Every infant and child has the right to good nutrition according to the convection of the rights of the children.¹An appropriate diet is critical in the growth and development of children especially in the first two years of life. Timely, adequate, safe and appropriate complementary feeding if started after six months of exclusive breastfeeding and continued for 2 years of age, lowers the

risk of malnutrition, gastrointestinal diseases (diarrhea), pneumonia, otitis media and urinary tract infections in infant and also help mothers to return to pre-pregnant state.²Government of India, WHO, UNICEF, and USAID recommends early initiation of breastfeeding within 1 hour of birth, exclusive breastfeeding for first 6 months of life, the introduction of nutritionally adequate and safe complementary foods after 6 months together with

continued breastfeeding up to 2 years of age or beyond.^{1,3,4} The transition from the exclusive breastfeeding to the family foods covers the time from 6 to 24 months of age, and is a crucial period. It is the time when malnutrition starts in many children, leading to high prevalence of malnutrition in children under the age of 5 years.^{5,6} Hence, the present study was conducted to assess feeding practices of young children less than 2 years of age.

MATERIALS AND METHODS:

A descriptive survey was conducted in the pediatric OPD, of tertiary care hospital of India with an objective to assess feeding practices in infants and young children less than 2 years and to find out association of feeding practices with selected demographic variables. Written informed consent was obtained from the patient in his/her own language. Study was approved by the Ethics Review Committee of the institute. Mothers of 200 patients in age group of less than 2 years attending pediatric OPD were selected by total enumeration sampling method between 26/07/2019 to 2/08/2019 period. The tool consisted of two parts one for 0 - 6 months infants feeding practice assessment and other for 7 - 24 months child's feeding practice assessment. The data was analyzed using SPSS (version 20.0). Both descriptive & inferential statistics were applied.

RESULTS:

Socio demographic data of study subjects :-

The results of socio demographic data of study subjects revealed that the age range was 4 days to 24 months and the mean \pm SD was 5.31 ± 2.48 months. About 28% were in age group of 6 - 12 months and only 4% were in 18 - 24 months. Out of total, 64% were males. While taking birth weight into consideration, more than half (52%) had more than 2.5 kg birth weight and 3.5% mothers were not aware of their child's birth weight. In immunization status, majority 83.5% had completed immunization till the time of data collection.

Socio-demographic profile of mothers :-

In socio-demographic profile of mothers showed that majority 64.5% were in age group of 20 - 30 years and only 3.5% were having age < 20 years. The mean \pm SD of age of mothers was 27.85 ± 0.525 years and in range of 19 - 35 years. About 60.5% gave birth to the child under the study by normal vaginal delivery and about 53.5% were having primi gravid status of parity. As per educational status, maximum mothers 42% were having education up to secondary level and 7% were illiterate. On viewing occupation of mothers, about 87% were not working and only equal number 1.5% were doing skilled and professional work respectively.

Breast feeding practices among infants of 0 - 6 months

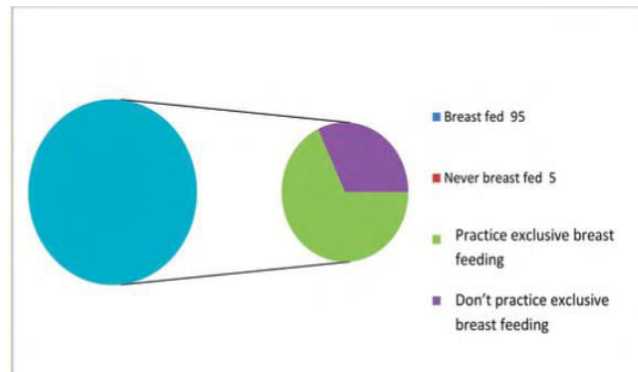
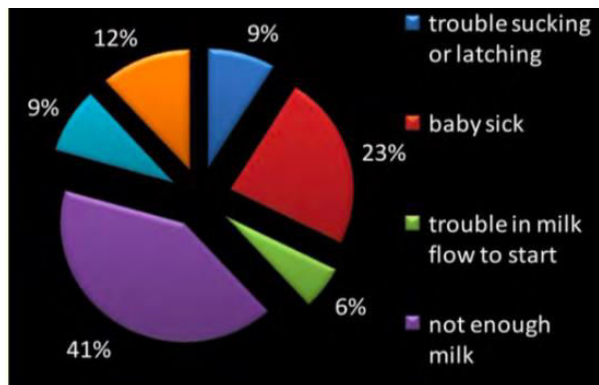
The results related to breast feeding practices showed that about 95% of infants were breastfed and about 5% were not breastfed at all. Out of breastfed ones, 68% were exclusively breastfed and rest 32% were not exclusively breastfed for 6 months.

Among breastfed babies, approximately half 49.4% received breast milk after 12 hours of birth and about 37.8% received breast milk within half an hour to 2 hours after birth. About 2/3 were breastfed every 2 hourly in a day and a very few 8.4% were fed on demand by mother.

Nearly 89.4% mothers gave feed to their infants from both breasts. About 40% of mothers take average breast feeding time of less than 30 minutes to breast feed the child. About 88.4% of mothers have enough breast milk supply and out of those who were not having enough breast milk, about 6.3% of mothers use home remedies for enough breast milk supply.

Among infant who were not exclusively breastfed (32%), the main reason was lack of enough milk supply reported in 41% cases. In about 9% cases, infant had trouble in sucking and latching and in about 6% cases, mothers were having trouble in milk flow to start. Feeding practices of children 7 - 24 months of age. The results of complementary feeding practices (N = 100) revealed that 77% of the mothers were breast feeding the child along with complementary feeding where as 22% of the mothers have completely stopped breast feeding. In about 2/3 cases, the complementary feeding was started at completion of 6 months age, in 21% cases it was started after 7 months to 9 months of age and only in about 3% cases it was initiated at 10 - 12 months of age. The mothers of infants used locally prepared food as first food to initiate complementary feeding. In about 21% cases dal ka pani (water of boiled pulses), in 19% cerelac, in 18% dalia (porridge) and in 12% khichdi (rice gruel) was used as first food. About the reason for choosing preferred complementary food after the age of 6 months and the consistency of complementary feed majority 97% of the mothers preferred giving watery porridge over the thick porridge. Out of them 43% of the mothers preferred it, as it contain more of liquid than the thick porridge. On asking about the food types that can be added to rice porridge in order to make it more nutritious, most 37% of the mothers they would add green leafy vegetables and about 22% of the mother said they would add pulses and nuts to make it nutritious.

About the problems caused due to intake of complementary food and the ways through which they were treated, it was found that only 19% of the children faced problems which include spitting up, vomiting and stomach cramps. About the food groups liked by the child, about 27% of the children liked grains and 14% liked dairy products.



DISCUSSION:

All the national and international guidelines on Infant and Young Child Feeding recommends early initiation of breastfeeding within one hour of birth, exclusive breastfeeding for first 6 months of life, the introduction of nutritionally adequate and safe complementary foods after 6 months of age together with continued breastfeeding up to 2 years of age or beyond. In the present study, 37.8% of children were put on breast feeding within half hour- two hours of birth. National Family Health Survey -3*data at national level showed it as 24.5%.⁷

In breastfeeding practices, in our study 63.1% of mothers feed the infants every two hourly and only 8.4% feed their children on demand. Most of the mothers (95.7%) don't have any kind of problem while breastfeeding their children. Majority of mothers (89.4%) breastfeed their children from both the breasts every time. Related to the complementary feeding in present study having sample of 100 children lying in the age of 6 - 24 months, 77% were still breastfeeding, 22% were stopped breastfeeding and 1% were never breastfed and almost similar results found in a study conducted in Madhya Pradesh showing that 88% were still breastfeeding and 12% stopped breastfeeding.⁸

In present study only 9% of children weaned prematurely. But the eastern Ethiopian study showed premature weaning in 19% of the children.⁸ In present study majority of mothers (81%) had given homemade food as complementary feeding. About 21% of mothers used Dal ka pani and 19% used cerelac as a weaning food which is very lower than a study conducted by Lodha., et al. in Madhya Pradesh where 50% of mothers used Dal ka pani and 42% used commercial food as a weaning food.⁸

Rathaur VK et al conducted study in HNB Base Hospital and Teaching Institute with the aim to assess the infant feeding practices and the prevalence of malnutrition in the study population reporting at the hospital in Garhwal region of Uttarakhand. 275 infants were included in the study. After taking informed consent, case study forms were filled by interviewing the infants' mothers. Weight, length and head circumference of each infant was also measured. The information thus obtained was compiled, tabulated and

analysed statistically. The study findings revealed that 46.4% infants in the age group 0-5 months were breastfed within 1 hour of birth. 52.8% infants aged 0-5 months were exclusively breastfed. 33.6% infants in age group 0-5 months received prelacteal feeds. 53.12% infants in age group 6-8 months received solid, semi-solid or soft food, in addition to breast milk. 53.33% infants were partially or fully bottle fed. Age appropriate feeding was found in 56% infants. The percentage of wasting, stunting and underweight in 0-5 months was 33.6%,30.4% and 36.8% respectively . The percentage of wasting, stunting and underweight in 6-11 months was 28%, 26.5% and 30.7% respectively. There appeared to be an association between longer duration of exclusive breastfeeding and lower prevalence of stunting and underweight at 6 months of age. They concluded that undesirable infant feeding practices are still prevalent in the community. Lower prevalence of stunting and underweight was observed in infants with longer duration of exclusive breastfeeding. A comprehensive plan to address the problems in infant feeding should be formulated. Antenatal counselling of mothers should be done. Revitalization of the Baby Friendly Hospital Initiative (BHFI) in health facilities is recommended.⁹

Ahmad I et al determined the prevalence of complementary feeding practices among children aged 6–23 months and its association with various sociodemographic factors. The study was a community-based, cross-sectional study conducted at field practice area of Urban Health Training Centre and Rural Health Training Centre, Department of Community Medicine, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh. Mothers of children aged 6–23 months of age interviewed using the infant and young child feeding questionnaire for complimentary feeding indicators, namely, minimum dietary diversity (MDD), minimum meal frequency (MMF), and minimum acceptable diet (MAD). The sample size drawn was 326 using systematic random sampling with probability proportionate to size. MDD was adequate in 42.6% children, MMF in 50.9% children, and MAD in 35.6% children. MDD was significantly associated with area of

residence, birth order of child, and Standard of living index (SLI); MMF was significantly associated with area of residence, sex of child, and literacy status of mother; MAD was significantly associated with area of residence, sex of child, birth order of child, and SLI. The study revealed that approximately 50% of mothers practiced inadequate complementary feeding. The feeding practices were found to be significantly associated with various sociodemographic factors highlighting the importance of addressing these factors if we aim an improvement in feeding practices.¹⁰

CONCLUSION:

Good nutrition forms the basic foundation of health throughout the life of person. Almost all of the mothers gave breastfeeding to their children however they were not breast feed their child exclusively. It is also concluded that time of initiation of breast feeding after delivery was delayed in majority of them. But frequency of breastfeeding in a day was better. In complementary feeding it is observed that initiation of complementary feeding at the recommended time of 6 months was seen majority of children. Majority of the children like food group grains which include food items such as dalia, chapatti, rice, porridge and biscuits. However, there is need to inform the mothers about the timing, consistency, frequency and quality of complementary food item.

REFERENCES:

1. The Maternal and Child Nutrition Study Group. "Maternal and Child undernutrition and overweight in low-income and middle-income countries". *Lancet* 382.9890 (2013): 427-451.
2. Kalanda BF., et al. "Breast and complementary feeding practices in relation to morbidity and growth in Malawian infants". *European Journal of Clinical Nutrition* 60.3 (2006): 401-407.
3. Marquis GS, Juteau S, Creed-Kanashiro HM, Roche ML. Infant and young child complementary feeding among indigenous peoples. In: Kuhnlein HV, Erasmus B, Spigeliski D, Burlingame B, editors. *Indigenous Peoples' Food Systems and Well-being: Interventions And Policies For Healthy Communities*. New York: FAO; 2009. pp. 39-50.
4. Pan American Health Organization, World Health Organization. *Guiding Principles for Complementary Feeding of the Breastfed Child*. Washington, DC, USA, Geneva, Switzerland: Pan American Health Organization, World Health Organization. 2003
5. Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, et al. Maternal and child undernutrition: Global and regional exposures and health consequences. *Lancet*. 2008;371:243-60.
6. Jones G, Steketee RW, Black RE, Bhutta ZA, Morris SS Bellagio Child Survival Study Group. How many child deaths can we prevent this year? *Lancet*. 2003;362:65-71.
7. International Institute for Population Sciences National Family Health Survey(NFHS3), 2005-06: India. V.I. Mumbai: International Institute for Population Sciences (2007) :540
8. Patel A., et al. "Infant and Young Child Feeding Indicators and Determinants of Poor Feeding Practices in India: Secondary data analysis of National Family Health Survey 2005-06". *Food and Nutrition Bulletin* 31.2 (2010): 314-333.
9. Rathaur VK, Pathania M, Pannu C, et al. Prevalent infant feeding practices among the mothers presenting at a tertiary care hospital in Garhwal Himalayan region, Uttarakhand, India. *J Family Med Prim Care*. 2018;7(1):45-52. doi:10.4103/jfmpc.jfmpc_413_16
10. Ahmad I, Khalique N, Khalil S, Urfi, Maroof M. Complementary feeding practices among children aged 6-23 months in Aligarh, Uttar Pradesh. *J Family Med Prim Care*. 2017;6(2):386-391.