

Content available at: <https://www.ipinnovative.com/open-access-journals>

IP International Journal of Medical Paediatrics and Oncology

Journal homepage: <https://www.ijmpo.com/>

Original Research Article

Study of different feeding patterns among children of Maharashtra region

Shivendra Varshney¹, Nilesh T. Shah^{1,*}, Umang P. Patel²¹Dept. of Paediatrics, Shiv Multispecialty Hospital, Ahmedabad, Gujarat, India²Dept. of Forensic Medicine & Toxicology, Vedanta Institute of Medical Science, Palghar, Maharashtra, India

ARTICLE INFO

Article history:

Received 03-04-2022

Accepted 20-05-2022

Available online 30-06-2022

Keywords:

Breast feeding
Prelacteal feeding
Malnutrition
Morbidity
Mortality

ABSTRACT

Background: Proper feeding practices during first two years of life are essential for the growth and development of young children to prevent malnutrition associated morbidity and mortality.**Materials and Methods:** The children aged between 6 months to 18 months were selected for study. The detailed history was obtained from their mother. The different feeding patterns prelacteal feeding, time of inception of first feeding, causes of stoppage of breast feeding studied and classified with percentage.**Results:** In the study of inception of first feeding 35(46.6%) were < 6hrs, 21 (28%) were 7-12hrs, 10 (13.3%) were 12 to 24hrs, 7(9.33%) were between 25 -48hrs, 2(2.66%) were between 49 – 72 hours. In the study of pre lacteal feeding 16(21.3%) were given honey, 36(48%) sugar solution (water added sugar), 15(20%) plain water, 8(10.6%) milk. The reason for stoppage of breast feeding, 22(29.3%) due to insufficient breast milk, 16(21.3%) maternal sickness, 15(20%) infant sickness, 14(18.6%) maternal employment, 8(10.6%) subsequent pregnancy.**Conclusion:** The present study will be helpful to paediatrician to evaluate the feeding pattern to prevent malnutrition, morbidity and mortality in children.This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](#), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.For reprints contact: reprint@ipinnovative.com

1. Introduction

A child's first year's life is critical being characterised by a high rate of growth and intense maturation. Hence, nutrition has a fundamental role to play in assuring survival and adequate growth. The quality and quantity of foods eaten are extremely important for the development and have life repercussions.^{1,2} As per the guidelines of WHO, exclusive breast feeding for the first 6 months of life and continuation until 2 years of age, together with the introduction of complimentary foods are must.³

Breast Milk alone is capable of meeting all children's requirements upto age of 6 months but after this period it must be complemented with adequate foods in order to supply nutritional requirements and prevents infant's

mortality and morbidity, including malnutrition and over weight.⁴ Hence attempt was made to evaluate the different feeding patterns at different age groups.

2. Materials and Methods

75 children aged between 6 months to 18 months visiting to paediatric OPD of Vedanta Institute of Medical Science Palgarh, Maharashtra were studied.

2.1. Inclusive criteria

The children having normal body weight and normal CVS report were selected for study.

* Corresponding author.

E-mail address: umang272@gmail.com (N. T. Shah).

2.2. Exclusion criteria

Children having congenital anomalies, Low birth weight and non-cooperative mothers were excluded from the study.

2.3. Method

The detail history of each child was recorded from their mother. The different feeding patterns, prelacteal feeding, time of inception of first feeding causes of stoppage of breast feeding were studied with percentage. The duration of study was 2-10-2016 to 8-12-2018 (Two years).

2.4. Statistical analysis

Inception of first feeding in children, study of prelacteal feeding, causes of stoppage of breast feeding were classified with percentage. The analysis was done in SPSS software. The ratio of male and female was 2:1.

3. Results

Table 1: Study of inception of first feeding in children 35 (46.6%) children started first feeding less than six hour (< 6hrs), 21 (28%) between 7-12hrs, 10 between 13-24hrs, 7(9.33%) started between 25-48 hrs, 2 (2.66%) started between 49-72 hrs.

Table 2: Study of pre-lactation feeding in children – 16(21.3%) honey, 36(48%) sugar solution (water added sugar), 15(20%) plain water, 8(10.6%) milk.

Table 3: Causes (reason) for stoppage of breast feeding in children – 22(29.3%) due of insufficient breast milk, 16(21.3%) maternal sickness, 15(20%) Infant's sickness, 14(18.6%) maternal employment, 8(10.6%) subsequent pregnancy.

Table 1: Study of inception of fist feeding in children.

S.No.	Duration	No of Children	Percentage (%)
1	< 6 hrs	35	46.6
2	7 – 12 hrs	21	28
3	13 – 24 hrs	10	13.3
4	25 – 48 hrs	7	9.33
5	49 – 72 hrs	2	2.66
Total	75		

Table 2: Study of pre-lacteal feeding in children.

S.No.	Name of Feedings	No. of Children	Percentage (%)
1	Honey	16	21.3
2	Sugar Solution (water added sugar)	36	48
3	Plain Water	15	20
4	Milk	8	10.6
Total		75	

Table 3: Causes (reasons) of stoppage of Breast feeding in children.

S.No.	Causes	No. of Children	Percentage (%)
1	Insufficient breast milk	22	29.3
2	Maternal sickness	16	21.3
3	Infant sickness	15	20
4	Maternal Employment	14	18.6
5	Subsequent Pregnancy	08	10.6
Total		75	

4. Discussion

Present study of different feeding patterns among the children of Maharashtra. In the study of inception of first feeding in children – 35(46.6%) started < 6 hrs, 21(28%) between 7-12 hours, 10 between 13-24hrs, 7(9.33%) between 25-48 hours, 2(2.66%) started between 49-72 hours (Table 1). In the study of pre lactation feeding in children – 16(21.3%) were given honey, 36(48%) sugar solution, 15(20%) plain water, 8(10.6%) milk (Table 2). The causes of stoppage of breast feeding in children – 22(29.3%) due to insufficient breast milk, 16(21.3%) due to maternal illness, 15(20%) infant illness, 14(18.6%) maternal employment, 8 (10.6%) subsequent pregnancy (Table 3). These findings are more or less in agreement with previous studies.⁵⁻⁷

It is established fact that, Breast milk alone is capable of meeting all children's requirements up to six months provided mother is healthy, but after this period it must be complemented with adequate foods in order to supply nutritional requirement and prevent infants mortality, morbidity and malnutrition. Any food other than breast milk is defined as complimentary food.⁸

Infants feeding practices are influenced by the family environment by information provided by health professional and also by the media through advertising by food manufacture.^{9,10} WHO has proposed timely complementary feeding (TCF) indicator, for the children aged between 6 to 9 months who are still breast feeding and also eating solid and semi solid foods.¹¹ Excessive milky diets have been reported as cause of anaemia during first years of life, liquid cow's milk is a poor source of iron and can also inhibit absorption of iron present in some other foods given concomitantly.¹² It was also reported that, elevated iron deficiency anaemia among the children under five years old, attributed the fact low breast milk intake and insufficient supply of nutrition in the diet¹² because majority of the children in the present study belonged to middle socio-economic status.

5. Conclusion

The present study of feeding pattern in children of Maharashtra is useful to paediatrician and nutrition expert because majority of the children are given complementary feeding in an unsuitable manner which can have negative repercussion for their health.

6. Conflict of Interest

The authors declare no relevant conflicts of interest.

7. Source of Funding

None.

References

1. Pipes L. Nutrition in infancy. In: Krause's food, nutrition and diet therapy, 9th Edn. Philadelphia WB, Saunders; 1999. p. 213-30.
2. World Health organisation - Complementary feeding of young children in developing countries; a review of current WHO/NUT/98; 1998. Available from: <https://apps.who.int/iris/handle/10665/65932>.
3. World Health organisation. The optional duration of exclusive breast feeding; a systemic review WHO/01-08 WHO/FCH/CAH/01.23 Geneva WHO 2001.
4. Regina DS. Saldiva-Feeding hobbits of children aged 6 to 12 months and associated maternal factors. *J Pediatr*. 2007;83(1):53-8. doi:10.2223/JPED.1586.
5. Brown R, Ogden J. Children's eating attitudes and behaviour: a study of the modelling and control theories of parental influence. *Health Educ Res*. 2004;19(3):261-71. doi:10.1093/her/cyg040.
6. Campoy C, Escolano-Margarit MV, Anjos T, Szajewska H, Uauy R. Omega-3 fatty acids and neurodevelopment Br. *J Nutr*.

- 2012;107(2):85-106. doi:10.1017/S0007114512001493.
7. Chakraborty B. JudaidoRumana - Infant and young child feeding pattern in children attending the outpatient department of urban Hospital. *Bangladesh J Child Health*. 2016;4(2):92-7.
8. Chaudhary RN, Shah T, Raja S. Knowledge and practice of mothers regarding breast feeding: A hospital based study. *Health Renaissance*. 2011;9(3):194-200.
9. James G. Steketee RW - Bellagio child survival study group. *Lancet*. 2003;362(9377):65-71. doi:10.1016/S0140-6736(03)13811-1.
10. Jelly P, Choudhary S, Sharma R, Mahala P, Aggarwal P. Role of mass media on mankind: Time to rethink. *Pondicherry J Nurs*. 2021;14(2):37-41. doi:10.5005/jp-journals-10084-12167.
11. Victoria CG, Deoni SM. Worldwide timing of growth faltering: revisiting implications for interventions. *Pediatrics*. 2010;125(3):473-80. doi:10.1542/peds.2009-1519.
12. Singh P, Bhalwar R. Breast feeding practices among families of armed forces personnel in a large cantonment. *Med J Armed Forces India*. 2007;63(2):134-6.

Author biography

Shivendra Varshney, Consultant Paediatrician

Nilesh T. Shah, Consultant Paediatrician

Umang P. Patel, Associate Professor

Cite this article: Varshney S, Shah NT, Patel UP. Study of different feeding patterns among children of Maharashtra region. *IP Int J Med Paediatr Oncol* 2022;8(2):73-75.