

## Original Research Article

# Complementary feeding: knowledge and perception of mothers attending paediatric outpatient department in a tertiary care hospital

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### ABSTRACT

**Background:** Complementary feeding refers to food which supplements breast milk and ensures that the child continues to have enough energy protein and other nutrients to grow normally. Complementary feeding is started at 6 months of age, while continuing breast feeding. After 6 months of age breast milk alone is not enough to make an infant grow well.

**Methods:** Cross sectional study conducted among 70 mothers coming to paediatric outpatient department. Data was collected regarding their knowledge and practices of complementary feeding. Mean, frequency table and chi-square test were used.

**Results:** 77.1% women have sufficient knowledge about complementary feeding. 77.1% of mothers give complementary food after 6 months remaining i.e. 22.9% are unaware of age of starting it. All mothers are aware of the complementary food which is to be given to babies. 82.8% mothers properly know how to start with complementary feeds. 98.5% of mothers continue to breast feed their baby's above 6 month.

**Conclusions:** The study concluded that inadequate complementary feeding knowledge and practices were present among some study subjects.

**Keywords:** Complementary feeding, Knowledge, Perception

### INTRODUCTION

Numerous benefits of breastfeeding are known since ages. World Health Organization and UNICEF recommend exclusive breastfeeding for first six months and continued breastfeeding for two years and above along with complementary feed started after six months.<sup>1</sup> After 6 months of age complementary feeding is as equally important as exclusive breastfeeding. As the age of child increases nutritional requirement also increases which cannot be fulfilled by breastfeeding only. In child health, positive attitude of parents towards infant feeding is essential. This helps to lessen the burden of

malnutrition which is a major problem among children of less than 5 years age group in the developing countries like India.<sup>2</sup>

According to NFHS-4 survey (2015-2016) Infant mortality rate is 41% and under 5 mortality rate is 50% which is very high and can be reduced by effective spreading of knowledge on breastfeeding and complementary feeding.<sup>3</sup>

Most of the studies have found the lack of knowledge regarding time of initiation and food given for complementary feeding. According to a study conducted

in a rural area, correct knowledge of complementary feeding was found in 82.6% women only and absent in 17.4% women.<sup>4</sup>

In this study we assessed knowledge of mothers on complementary feeding coming to paediatric OPD in a tertiary care hospital in a metropolitan city in India.

The objective of the study was to assess knowledge of mothers regarding complementary feeding and to assess their perception with reference to time of initiation and components of complementary foods.

## METHODS

Convenient sampling was done and cross sectional study was conducted among 70 women coming to Paediatric OPD at a tertiary healthcare center in a metropolitan city between the period from January 2018 to March 2018. All mothers having child less than one year of age were included in the study and interviewed. A prevalidated semi-structure questionnaire was prepared in accordance with the study objectives. After obtaining informed consent and establishing rapport, the interviews were conducted in the most common spoken local language in that area.

Ethical clearance was obtained from the Institutional Review Board of the College after submitting the protocol and subsequently answering all their queries.

Permission was obtained from the Head of Department of Paediatrics for conducting the study after giving detailed explanation of all the procedures.

The results were analyzed using SPSS software version 23. Tests applied were percentages, mean, average, Chi-square test.

## RESULTS

Mean age of study subjects was 26.3 years. Majority of the women that is 51 (72.8%) were in the age group of 24-34 years (Table 1). 34 (48.5%) women were educated till 12<sup>th</sup> std, and maximum of them that is 48 (68.5%) belongs to middle and lower middle class. More than 50% women were housewives (Table 2).

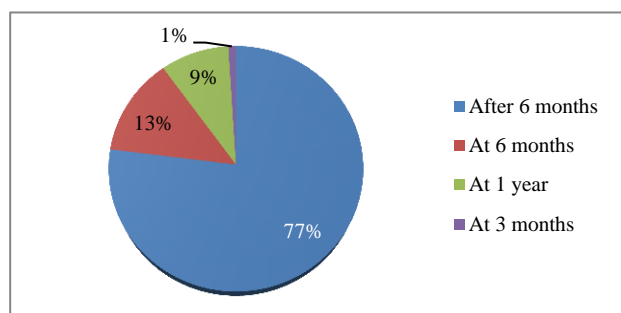
54 (77.1%) of mothers give complementary food after 6 months; remaining i.e. 16 (22.9%) were unaware of age of starting it. All mothers were aware of the complementary food which is to be given to babies. 58 (82.8%) mothers properly know how to start with complementary feeds. 69 (98.5%) of mothers continue to breast feed their baby's above 6 month. 69 (98.5%) of mothers properly wash their & baby's hands while feeding the baby. 60 (85.7%) of mothers give water by wati and spoon and 10 (12.9%) give it by bottle 50 (71.4%) of mothers observe only weight of baby for normal growth whereas 20 (28.5%) observe properly weight and height. 49 (70%) of mothers continue breastfeeding and complementary food when baby has diarrhea/ vomiting. All mothers take proper hygienic precautions while feeding. 50 (71.4%) mothers feed their baby with 2 or more items per day. 16 (22.8%) of mothers use commercial baby food products out of which 4 (5.7%) can't afford. 100% of mothers use branded salt in baby's food. 63(90%) of mothers use ghee in making baby's food. 7 (11.4%) of mothers forces baby to eat if they are sick/ doesn't want to eat. 17 (24.2%) gives tea to babies, which is not a good practice of feeding. 4 (5.7%) mothers keep giving new item to baby irrespective of baby's response whereas 26 (37.1%) try to give in next week and 6 (10%) never give it to baby at all. All mothers wash the fruits before giving to babies (Table 3).

**Table 1: Age wise distribution of study subjects (n=70).**

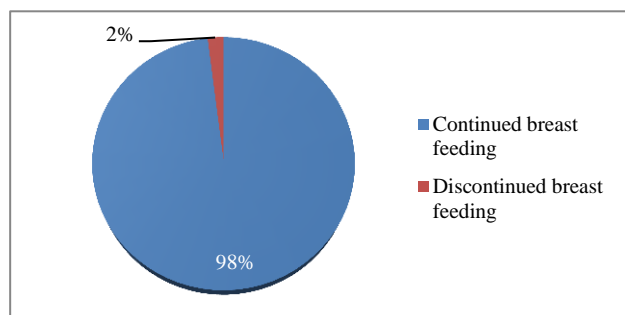
Age (in years)	Frequency
19-23	10
24-29	23
30-34	28
35-40	9

**Table 2: Socio-demographic profile and their association with knowledge of complementary foods among the participants (n=70).**

Factors	Total	Yes	No	P value	
Education of women	Illiterate	11	5	6	<0.05
	1-10 <sup>th</sup>	25	20	5	
	11 <sup>th</sup> -12 <sup>th</sup>	34	29	5	
Socio economic class	Lower	18	9	9	<0.05
	Lower middle	18	14	4	
	Middle	30	27	3	
	Upper middle	4	4	0	
Working/non-working	Working	30	24	6	>0.05
	Housewife	40	30	10	



**Figure 1: Initiation of complementary food.**



**Figure 2: Continuation of breast feeding.**

**Table 3: Practices of giving supplementary foods (n=70).**

S. no	Practices	Yes	No
1	Wash hands before giving food	69	1
2	Give water to their baby with wati spoon	61	9
3	Practices hygiene at home while feeding the babies.	70	0
4	Use commercial baby food products	17	53
5	Use ghee while making baby's food	63	7
6	Wash fruits before giving it to baby	70	0
7	Force to eat if at all baby doesn't want to eat/ sick	8	62
8	If baby dislikes a new item then mothers keep on giving it irrespective of baby's response	4	66
9	Doesn't knew proper introduction of new item in feeds	50	20
10	Use iodized salt in making baby's food	70	0
11	Continue both i.e. breast feeding & complementary feed when baby has diarrhea/vomiting	49	21
12	Observe only weight for baby's normal growth	51	19

## DISCUSSION

This study was carried out to assess knowledge and practices of mothers regarding complementary feeding. In our study mean age of study subjects was 26.3 years. Majority of the women were in the age group of 24-34 years. 34 (48.5%) women were educated till 12<sup>th</sup> standard, and maximum of them that is 48 (68.5%) belongs to middle and lower middle class. More than 50% women that are 40 were housewives. 54 (77.1%) women had knowledge of complementary feeding and started complementary food at the age of 6 months & perceived that it should be continued till 2 year of age. In a similar study conducted by Rao et al.<sup>5</sup> 155 (77.5%) women started complementary food at 6 months of age and in Garoma study only 55.4% started complementary food at the age of 6 months & 92.4% mother perceived that breast feeding should be continued till 2 year of age while in Owais et al.<sup>6,7</sup> study only 19% of mothers knew the correct age of starting of complementary foods. In Molla et al study 462 (97%) of mothers had satisfactory knowledge of complementary feeding which is far more than this study. 69 (98.5%) mothers continue breast feeding after 6 months of age. All women maintain hygiene while feeding the children.<sup>8</sup> In, Yitayih et al, study also almost all mothers 185 (93.4%) of the respondents washed their hands. 60 (85.7%) of mothers give water by wati and spoon and 12.9% give it by bottle, which should not be used.<sup>9</sup> In Mihreti study 90.8% women thought bottle feeding is better option for feeding.<sup>10</sup> 72.8% of mothers observe only weight of baby for normal growth whereas only 27.2% observe properly weight and height. Most of them didn't know about stunting.

## CONCLUSION

The study concluded that inadequate complementary feeding practices were present among some study subjects. The study also showed that various socio-demographic factors like education of mother and financial conditions play an important role in complementary feeding knowledge & practices. Therefore, these factors need to be addressed to ensure optimal feeding practices among the study population.

## LIMITATIONS

- Study is hospital based so the knowledge of mothers who are not coming to hospitals cannot be assessed.
- Study deals with small sample size.
- Study only includes mothers who live in urban areas.

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*Conflict of interest: None declared*

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

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