

## THE PREVALENCE OF EARLY COMPLEMENTARY FEEDING PRACTICES AMONG MOTHERS OPD OF SELECTED HOSPITALS OF NAVI MUMBAI

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### ABSTRACT

Along with breastfeeding or formula feeding if a child is given other liquids, solids and semisolid foods, when milk alone is not sufficient to meet the nutritional needs of the growing child it is known as complementary feeding. A descriptive study was conducted with a quantitative approach. The study aimed to assess the prevalence of early complementary feeding practices among mothers. To find out the association between prevalence of early complementary feeding practices among mothers with selected demographic variables. Sample were selected through non-probability convenient sampling method consisted of 139 mothers with children in the age group of 2 – 24 months attending out patient departments of selected hospitals of Navi Mumbai. A structured questionnaire was prepared for data collection after validating with 23 experts and reliability was done by test-retest method ( $r=0.75$ ). Analysis of the data after categorical coding showed that 71.2 % of mothers practiced early complementary feeding. Prevalence of early complementary feeding was significantly associated with education ( $p=0.021$ ), occupation ( $p=0.017$ ) and educational qualification ( $p=0.033$ ) of mother. Thus, concluding that majority of the mothers practice early complementary feeding before the child completed six months of age.

**Key Words:** Prevalence, self-structured questionnaire, mothers, children between 2-24 months.

### INTRODUCTION

Infant nutrition during the first six months of life plays a vital role in determining a child's immediate and long-term health outcomes. The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months, with the introduction of nutritionally adequate complementary foods thereafter, alongside continued breastfeeding up to two years or beyond. However, despite global recommendations, the practice of introducing complementary foods before six months—commonly referred to as early complementary feeding—remains prevalent in many settings.

Early complementary feeding can expose infants to health risks such as increased susceptibility to infections, allergies, and malnutrition, due to their immature digestive and immune systems. Several factors contribute to this practice, including lack of maternal knowledge, cultural beliefs, misinformation, socioeconomic pressures, maternal employment, and inadequate healthcare support.

Understanding the prevalence of early complementary feeding is essential to informing public health strategies aimed at promoting optimal infant feeding practices. Identifying the

sociodemographic and cultural determinants that influence mothers' decisions can guide targeted educational and policy interventions.

This study aims to assess the prevalence of early complementary feeding practices among mothers and to explore the underlying factors contributing to these practices. By identifying patterns and influences, the research seeks to support efforts to enhance awareness and adherence to recommended infant feeding guidelines, thereby improving child health outcomes.

Globally only 38% of infants are exclusively breastfed which means giving the infant only breastmilk and nothing else not even milk from other sources, during this first six months of life as per the guidelines given by WHO.<sup>3</sup>

In a study conducted by Koletzo B, Hirsch N L, Jewel J M, et. al. in the year 2017, regarding National Recommendations for Infant and Young Child Feeding in the European Region of World Health Organization. Data was available for thirty-four countries in which the recommended age for introducing complementary feeding was six months for twenty-five countries, four months in six countries and five months for three countries for breastfed infants. For non-breastfed infants, almost all the countries recommended earliest introduction of complementary feeding around four months of age.<sup>4</sup>

#### **NEED OF THE STUDY**

Child survival under 2 years of age is directly impacted by Infant and Young child feeding practices and their nutritional status. Thus, improvement of feeding and nutrition in children in the age group of 0-23 is therefore an important aspect for nutrition, health and development of children. The current indicators for measuring Infant and Young Child Feeding practices have been more focused on breastfeeding, thereby constraining improvements in nutritional outcomes as there is lack of measurement for complementary feeding practices & inappropriate feeding practices.<sup>5</sup>

As per IYCF evidence it was seen that the combination of two practices, optimal breastfeeding & complementary feeding in the first year of the child's life could prevent one fifth of under five deaths. The complementary feeding should include age appropriate solid, semi-solid and soft food at six months age. In spite of the well-established benefits seen by age appropriate IYCF practices, little attention is given to nutritional programmes in many areas. Studies provide evidence that from six months of age the introduction of safe, appropriate and adequate complementary food lead to better growth and nutrition outcomes. Stunting has been markedly & rapidly reduced by the introduction of good complementary feeding practices especially vulnerable populations. Still children do not receive safe, age appropriate, frequent & adequate complementary feed. The poor quality of complementary feed has been overlooked. Globally, only 60% of children receive timely complementary solid, semi-solid or soft foods which highlights the deficiency in its timely introduction in the child's diet. As per a report by UNICEF in 2013, twenty-four countries were profiled according to its Infant and Young Child Feeding practices and it was seen that there was only 8% data reflecting quality & frequency of complementary feeding for children in the age group of 6-8 years.<sup>6</sup>

#### **PROBLEM STATEMENT**

A study to assess the prevalence of early complementary feeding practices among mothers attending outpatient departments of selected hospitals of Navi Mumbai

#### **METHODOLOGY**

A descriptive research design was adopted with a quantitative research approach and the study was conducted among 139 mothers of children belonging to the age group of 2-24 months, attending out patient departments of selected hospital of Navi Mumbai. The sample was selected by using non-probability convenient sampling method. Questionnaire was developed by the investigator after review of literature on similar topics and after consulting the experts. The structured questionnaire was developed to measure the research variables under study, prevalence of early complementary feeding practices which consisted of 8 questions and contributing factors of early complementary feeding practices consisted of 35 statements and administered after validation by 23 experts. Reliability of the tool was checked using test-retest method followed by correlation coefficient calculation between the two sets of results giving the value 0.75 suggesting the tool being reliable.

**RESULT**

**Section I: Demographic data of mothers:**

**n=139**

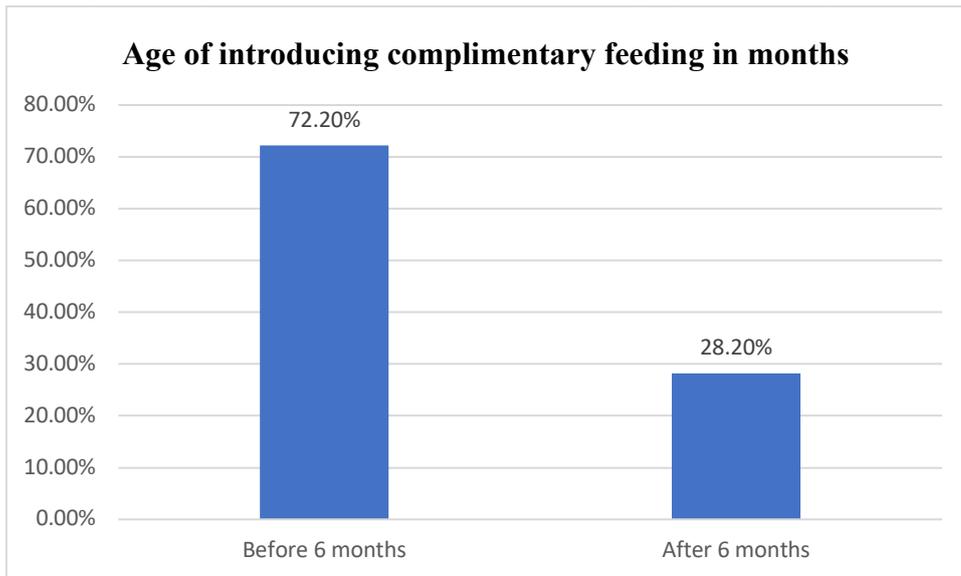
SR NO	DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE
1	<b>Age of mother in years</b>		
	Above 25 yrs	101	72.2
	Below 25 yrs	38	27.3
2	<b>Education qualification of mother</b>	–	
	Graduate and above	73	52.5%
	Higher secondary	48	38.5%
	Secondary	9	6.5%
	Primary	9	6.5%
3	<b>Occupation of the mother</b>		
	Homemakers	43	30.9
	Government Employees	35	25.2
	Private sector	31	22.3
	Self-employed	30	21.6
4	<b>Religion of mother</b>		
	Hindu	98	70.5
	Muslim	35	25.2
	Christian	6	4.3
5	<b>Monthly family income in rupees</b>		
	Above Rs. 30,000/ Between 10,000 and 20,000	80 59 (42.4%)	57.6 42.4
6	<b>Area of residence</b>		
	Urban areas Rural areas	107 32	77 23
7	<b>Type of family</b>		
	Nuclear Joint	72 67	51.8 48.2

8	<b>Number of children</b>		
	Two	84	60.4
	One	45	32.4
	Three	10	7.2
9	<b>Type of delivery</b>		
	Normal vaginal delivery	97	69.8
	Caesarean section	42	30.2
10	<b>Birth weight of the child</b>		
	Between 1.6 to 3 kg	89	64
	Between 3.1 to 4.5 kg	50	36
11	<b>Initiation of breastfeeding after delivery</b>		
	Within 24hrs of delivery	89	64
	Between 25 to 48 hrs of delivery	27	19.4
	Between 49 to 73 hrs of delivery	17	12.2
	Never breastfed the child after	6	4.3

**Table 1:** represents demographic variables of mothers included in the sample for study.

**Section II- Prevalence of early complementary feeding**

The results showed that, there was prevalence of early complementary feeding practices as [71.2% (99)] of mother had introduced complementary feeding before the completion of 6 months of age of the child. Majority of them being female children [54.7% (76)], with payasam/kheer [58.3% (81)] as the first complementary feed given by the mother-in-law [42.4% (59)], the child preferring cerelac [46.7% (65)], frequency being once a day [41% (57)] everyday [100% (139)] and continuation of breastfeeding or formula feeding along with complementary feeding till the child is 7-12 months of age [48.9% (68)].



**Figure 1** shows the prevalence of early complimentary feeding practices among mothers at 72.20%

**Section III: Prevalence of early complementary feeding practices among mothers was significantly associated with education, occupation and educational qualification of mother.**

Association between prevalence of early complementary feeding with selected demographic variables. Educational qualification of mother (p 0.021), occupation of mother (p 0.17) and type of family (p 0.033) have significant association with the selected demographic variables. Whereas age of mothers (p 0.088), religion (p 0.664), monthly income (p 0.145), area of residence (p 0.252), number of children (p 0.519), type of delivery (p 0.812), birth weight of the same child (p 0.972), initiations of breastfeeding after birth for the child given complementary feeding (p 0.811) were not significantly associated, The level of significance being 0.05.

## DISCUSSION

In the present study demographic data was discussed with similar study conducted by Geetika Srivastava et. al. 2017 (Lucknow) conducted study assess complementary feeding practices of children. The majority of the infants were male 54.3 %, 42.6 % of mothers have educational qualification below class 10, 90.2 % of mothers were not working, 65.2 % of mothers belonged to joint family, 45.3 % had medium standard of living.<sup>7</sup>

In the present study, 71.2% of mothers introduced complementary feeding before six months. Among these, 54.7% of female infants received early feeds. The first complementary food was kheer/payasam for 46.7% of infants, while 58.3% preferred Cerelac. In 42.4% of cases, the first feed was given by the mother-in-law. Additionally, 48.9% continued breastfeeding or formula feeding for 7–12 months.

Rana Kakati, Rupali Barua and Madhur Borah conducted a cross sectional study to assess the practice of complementary feeding and its determining factors in Kamrup district of Assam, India in the year 2016, it was found out that majority of the mothers at 56.8 % had started early complementary feeding and majority of the gender was male.<sup>8</sup>

In the present study association exists between prevalence of early complementary feeding with selected demographic variables is associated with educational qualification of mother, occupation and type of family.

Tuhina Rastogi, Geetanjali Sreevastava and Shally Awasthi conducted a cross sectional study to assess the complementary feeding practices among children in rural part of Lucknow, India in the year 2017. The results concluded that education of the mother, religion of the mother and type of family was significantly associated with early complementary feeding practices.<sup>9</sup>

Josilene Maria Ferreria Pinheiro, et. al. conducted a cohort study on early weaning and feeding practices in the neonatal period in Natal, Brazil in the year 2019, it was seen that mothers practiced weaning as early as between seven to twenty-eight days of the child's birth which were associated with maternal age of less than 20 years or equal to twenty years, primiparity and caesarean delivery.<sup>10</sup>

## LIMITATIONS

- The study was limited to assessing data
- The study was limited to a small group of mothers attending outpatient departments of selected hospitals of Navi Mumbai
- The results could not be generalized due to small sample size.

## RECOMMENDATIONS:

- The study can be replicated in assessment of knowledge regarding complementary feeding practice

- The study can be replicated in assessment of effectiveness of information booklet on the knowledge, practice and attitude of mothers.
- A correlation study can be conducted.

## CONCLUSION

The present study highlights a significant prevalence of early complementary feeding practices among mothers, with many introducing solid or semi-solid foods before the recommended age of six months. While some mothers were informed about appropriate feeding timelines, a substantial number lacked adequate knowledge or were influenced by cultural beliefs, family pressure, or misconceptions about infant hunger and growth. These findings underscore the need for strengthened health education and community outreach programs focusing on the importance of exclusive breastfeeding for the first six months of life, as recommended by the WHO and UNICEF. Empowering mothers with accurate information and involving family members in awareness campaigns can help address the factors contributing to early complementary feeding. Overall, targeted interventions by healthcare professionals and policymakers are crucial to promote optimal infant feeding practices and ensure better health outcomes for children.

**Conflict of Interest:** The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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