



A Descriptive Study To Assess Maternal Knowledge Of Infant And Young Child Feeding (IYCF) Practices Among Mothers Attending A Selected Hospital In Guwahati, Assam

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Abstract

Background: Infant and Young Child Feeding (IYCF) practices are fundamental determinants of child growth, development, and survival. Inadequate maternal knowledge regarding breastfeeding and complementary feeding practices remains a major contributing factor to childhood malnutrition, particularly in developing countries like India. Hospital settings offer a valuable opportunity to assess maternal knowledge and provide appropriate nutrition counseling.

Objectives: To assess maternal knowledge regarding Infant and Young Child Feeding (IYCF) practices and to find the association between maternal knowledge and selected demographic variables.

Methods: A quantitative descriptive cross-sectional study was conducted among 120 mothers of infants and young children aged 0–24 months attending the Maternal and Child Health (MCH) clinic and Paediatric Outpatient Department of a selected hospital in Guwahati, Assam. Mothers were selected using non-probability purposive sampling. Data were collected using a structured and validated knowledge questionnaire on IYCF practices. Descriptive statistics and Chi-square tests were used for data analysis.

Results: The study revealed that 50.8% of mothers had poor knowledge, 35.8% had average knowledge, and 13.4% had good knowledge regarding IYCF practices. Maternal age, education, and parity showed a statistically significant association with knowledge levels ($p < 0.05$).

Conclusion: The study concludes that maternal knowledge regarding Infant and Young Child Feeding practices among mothers attending a selected hospital in Guwahati, Assam is inadequate. Strengthening hospital-based nutrition education and counseling services is essential for the primary prevention of childhood malnutrition.

Keywords: Infant and Young Child Feeding; Maternal Knowledge; Malnutrition; Descriptive Study; Hospital Setting; Guwahati, Assam

1. Introduction

Infant and Young Child Feeding (IYCF) practices are critical for ensuring optimal growth, development, and survival of children during the first two years of life. The World Health Organization (WHO) recommends early initiation of breastfeeding, exclusive breastfeeding for the first six months, and the timely introduction of appropriate complementary feeding with continued breastfeeding up to two years and beyond. Adherence to these practices significantly reduces the risk of under nutrition, morbidity, and mortality among children.

Despite national guidelines and ongoing maternal and child health programmes, inappropriate feeding practices remain prevalent in many parts of India. In Assam, childhood under nutrition continues to be a major public health concern. Maternal knowledge plays a pivotal role in shaping infant feeding behaviors. Hospitals, particularly Maternal and Child Health and Paediatric outpatient services, provide an effective platform for assessing maternal knowledge and identifying gaps that can be addressed through structured nutrition counseling. Hence, the present study was undertaken to assess maternal knowledge regarding IYCF practices among mothers attending a selected hospital in Guwahati, Assam.

2. Objectives

- ▯ To assess the pre-test level of maternal knowledge regarding Infant and Young Child Feeding (IYCF) practices
- ▯ To find the association between maternal knowledge regarding IYCF practices and selected demographic variables.

2.1 Hypotheses

- ▯ **H₁:** There will be a significant association between maternal knowledge regarding Infant and Young Child Feeding (IYCF) practices and selected demographic variables.
- ▯ **H₀:** There will be no significant association between maternal knowledge regarding Infant and Young Child Feeding (IYCF) practices and selected demographic variables.

3. Materials and Methods

3.1 Research Approach and Design

A quantitative research approach with a descriptive cross-sectional research design was adopted for the study.

3.2 Study Setting

The study was conducted in the Maternal and Child Health (MCH) clinic and Paediatric Outpatient Department of a selected hospital in Guwahati, Assam.

3.3 Study Population

The study population consisted of mothers of infants and young children aged 0–24 months attending the selected hospital during the data collection period.

3.4 Sample Size

The sample comprised 120 mothers.

3.5 Sampling Technique

Non-probability purposive sampling technique was used. Eligible mothers who met the inclusion criteria were selected consecutively until the required sample size was achieved.

3.6 Inclusion Criteria

- ▢ Mothers having children aged 0–24 months
- ▢ Mothers attending MCH clinic or Paediatric OPD
- ▢ Mothers willing to participate and provide informed consent

3.7 Exclusion Criteria

- ▢ Mothers of severely ill children
- ▢ Mothers who had received structured nutrition education in the previous six months

3.8 Variables of the Study

Study Variable: Maternal knowledge regarding IYCF practices

Demographic Variables: Age, education, parity, occupation, family income, and type of family

3.9 Data Collection Tool

Data were collected using a structured and validated knowledge questionnaire developed based on WHO and national IYCF guidelines. The tool consisted of two sections:

Section A: Demographic variables

Section B: Knowledge-related items covering breastfeeding practices, complementary feeding, feeding during illness, and hygiene and food safety

Scoring Pattern: Correct

answer – 1 mark Incorrect

answer – 0 mark Total score –

0–30

Knowledge Level Classification:

Poor: $\leq 50\%$

Average: 51–75%

Good: $> 75\%$

3.10 Data Collection Procedure

After obtaining ethical clearance and permission from hospital authorities, mothers attending the MCH clinic and Paediatric OPD were approached. Written informed consent was obtained, and data were collected through face-to-face interviews using the structured questionnaire.

3.11 Ethical Considerations

Ethical approval was obtained from the Institutional Ethics Committee. Confidentiality and anonymity of participants were ensured. Participation was voluntary, and mothers had the right to withdraw at any time.

3.12 Statistical Analysis

The data collected were systematically organized and analyzed using suitable statistical methods. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to describe the demographic characteristics and key study variables. To examine the association between selected variables, inferential analysis was carried out using the Chi-square test. Statistical significance was considered at a p-value of less than 0.05.

4. Results

Table 1: Demographic Characteristics of Mothers (n = 120)

Variable	Category	N (%)
Age (years)	< 25	36 (30.0)
	26–30	48 (40.0)
	> 30	36 (30.0)
Education	Primary or below	44 (36.7)
	Secondary	52 (43.3)
	Higher secondary & above	24 (20.0)
Parity	Primi para	54 (45.0)
	Multi para	66 (55.0)

Table 2: Distribution of Mothers According to Knowledge Level on IYCF Practices (n = 120)

Knowledge Level	N (%)
Poor	61 (50.8)
Average	43 (35.8)
Good	16 (13.4)

Table 3: Association between Maternal Knowledge and Selected Demographic Variables

Variable	χ^2	df	p-value
Age	6.24	2	0.044
Education	10.32	2	0.006
Parity	4.18	1	0.041
<i>Statistically significant at $p < 0.05$</i>			

5. Discussion

The findings of the study revealed that a majority of mothers attending the selected hospital in Guwahati, Assam had inadequate knowledge regarding Infant and Young Child Feeding practices, with over half (50.8%) scoring in the poor category. Only a small proportion of mothers demonstrated good knowledge. This indicates a critical gap in health communication and education regarding essential early childhood nutrition practices in this population.

The analysis of association showed that maternal education ($p = 0.006$), age ($p = 0.044$), and parity ($p = 0.041$) were statistically significant factors influencing IYCF knowledge. The strong association with education highlights that mothers with higher literacy levels are better equipped to understand and adopt recommended feeding practices. Similarly, the association with parity suggests that first-time mothers (Primi-para) may require more focused educational support compared to Multi-para mothers who benefit from prior experience. Hospitals provide an ideal setting for identifying these knowledge gaps and delivering structured nutrition education targeted towards these vulnerable subgroups.

6. Conclusion

The study concludes that maternal knowledge regarding Infant and Young Child Feeding practices among mothers attending a selected hospital in Guwahati, Assam is insufficient. Strengthening hospital-based nutrition education and counseling services is essential for improving feeding practices and preventing childhood malnutrition.

7. Recommendations

- Routine IYCF counseling should be integrated into Maternal and Child Health and Paediatric OPD services as a mandatory part of care.
- Nurses should provide structured education on breastfeeding and complementary feeding, specifically targeting first-time mothers and those with lower educational attainment during hospital visits.
- Further studies with experimental or interventional designs are recommended to evaluate the efficacy of the proposed structured teaching programme.

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