

## Knowledge, Attitudes, and Practices of Breastfeeding Among Mothers in Khammam, India: A Cross-Sectional Study

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### Abstract

**Introduction:** Despite global recognition of breastfeeding benefits, suboptimal practices persist in India. This study assesses breastfeeding knowledge, attitudes, and practices (KAP) among mothers in Khammam, India, and correlates these practices with sociodemographic factors<sup>1</sup>.

**Methods:** A cross-sectional study was conducted at Mamata Medical College Hospital, Khammam, from November 2015 to June 2017. A structured questionnaire was administered to 512 mothers of children aged 0–2 years. Data on maternal education, delivery mode, initiation/duration of breastfeeding, and complementary feeding practices were analyzed using SPSS v17. Chi-square and Spearman’s correlation tests identified associations ( $p < 0.05$  significant).

**Results:** Only 46.09% initiated breastfeeding within one hour of birth, with significant delays after cesarean sections ( $p < 0.01$ ). Exclusive breastfeeding (EBF) lasted a mean of 4.5 months, influenced by maternal education ( $p < 0.01$ ). Prelacteal feeds (27%) and bottle-feeding (34.57%) were prevalent. Complementary feeding began at 6.5 months (73.17% used homemade foods).

**Conclusion:** While most mothers exhibited positive attitudes, gaps in early initiation, EBF duration, and pre lacteal feeding persist. Targeted antenatal counselling and workplace policies are recommended to improve breastfeeding outcomes.

**Keywords:** Breastfeeding practices, Exclusive breastfeeding, Maternal education, Prolactal feeds, Complementary feeding.

## Introduction

Breastfeeding is a cornerstone of infant health, reducing mortality and morbidity globally<sup>1</sup>. In India, only 46% of infants under six months are exclusively breastfed<sup>2</sup>, contributing to 2.4 million annual child deaths linked to suboptimal feeding<sup>3</sup>. Cultural practices, maternal education, and healthcare access influence these trends<sup>4</sup>.

This study evaluates KAP among mothers in Khammam, a region with high rural populations and mixed healthcare access. Findings aim to inform public health strategies to align practices with WHO guidelines<sup>5</sup>.

## Materials and Methods

### Study Design and Population

A hospital-based cross-sectional study included 512 mothers of children aged 0–2 years attending pediatric/OB-GYN departments at Mamata Medical College Hospital. Ethical approval was obtained, and informed consent was secured.

### Data Collection

A pretested questionnaire captured:

- **Sociodemographics:** Age, education, employment, socioeconomic status.
- **Breastfeeding practices:** Initiation time, EBF duration, prolactal feeds, complementary feeding.
- **Knowledge/attitudes:** Colostrum benefits, breastfeeding techniques.

### Declarations

- **Ethics Approval:** Obtained from Mamata Medical College Ethics Committee.
- **Consent:** Written informed consent secured.
- **Competing Interests:** None declared.

## Statistical Analysis

Descriptive statistics (mean, frequency) and inferential tests (Chi-square, Spearman's correlation) were performed using SPSS v17.

## Results

*Table 1: Sociodemographic Characteristics of Participants*

Variable	Percentage (%)
Maternal Education	
- Illiterate	38
- Secondary	62
Delivery Mode	
- Vaginal	68
- Cesarean	32

*Table 2: Breastfeeding Initiation by Delivery Mode*

Delivery Mode	Initiation <1 Hour (%)	Initiation <4 Hours (%)
Vaginal	57.23	90.57
Cesarean	3.00	73.00

## Participant Characteristics

- **Mean maternal age:** 26.4 years.
- **Education:** 62% had secondary education; 38% illiterate.
- **Delivery mode:** 68% vaginal; 32% cesarean.

## Breastfeeding Practices

- **Initiation:** 46.09% within one hour (vaginal: 57.23%; cesarean: 3%).
- **EBF duration:** Mean 4.5 months (median: 4 months).
- **Prelacteal feeds:** 27% (55.86% water; 20.68% glucose water).
- **Bottle-feeding:** 34.57% (mean initiation: 4 months).

## Knowledge and Attitudes

- **Colostrum:** 89.06% fed colostrum ( $p < 0.01$  for educated mothers).
- **Advantages:** 67.5% recognized breast milk as optimal; 20.5% cited lactational amenorrhea.
- **Technique:** 88.7% used correct positioning; 52% unaware of breast emptying importance.

## Complementary Feeding

- **Initiation:** 6.5 months (73.17% homemade foods).
- **Common foods:** *Ganji* (48.9%), ragi (17.29%), commercial feeds (26.83%).

## Discussion

### Key Findings

- **Delayed initiation** post-cesarean aligns with studies showing procedural delays and maternal discomfort<sup>6</sup>.
- **EBF duration** correlated with education, emphasizing the role of health literacy<sup>7</sup>.
- **Prelacteal feeds** persist due to cultural beliefs, necessitating community education<sup>8</sup>.
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## Comparison with Literature

- **Colostrum acceptance** (89.06%) exceeds rural Karnataka (41.6%)<sup>9</sup>, reflecting hospital counseling efficacy.
- **Bottle-feeding rates** (34.57%) mirror urban slum data<sup>10</sup>, driven by perceived milk insufficiency.

## Limitations

- Single-center design limits generalizability.
- Recall bias in self-reported practices.

## Conclusions

While most mothers exhibited favorable attitudes, disparities in early initiation and exclusive breastfeeding duration underscore the necessity for:

1. **Antenatal counseling** emphasizing the significance of colostrum and appropriate techniques.
2. **Workplace policies** that support breastfeeding employees.
3. **Community programs** that dispel misconceptions regarding prelacteal feeding.

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