



KNOWLEDGE, ATTITUDES, AND PRACTICES REGARDING BREASTFEEDING AMONG PRIMIPAROUS MOTHERS ATTENDING A TERTIARY CARE CENTER IN GWALIOR, INDIA

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ABSTRACT

Background: Breastfeeding is critical for growth and development of the infant. Its exclusive breastfeeding for the first six months can prevent infections. Many of the first-time mothers experience difficulties with knowledge, confidence and support and this affect breastfeeding. Evaluation of their KAP is essential to develop effective counseling strategies. **Objectives:** The goal of this study was to assess the knowledge, attitude and practices of breastfeeding among primipara mothers visiting tertiary care centre Gwalior. **Methods:** This descriptive cross-sectional study was conducted over a period of 3 months on 150 primiparous mother visiting postnatal and immunization services of Gajra Raja Medical College (GRMC) and its Associated Tertiary Care Hospital, Gwalior, Madhya Pradesh. Using a pre-tested, structured questionnaire, information was collected regarding socio-demographic detail, knowledge of breastfeeding (initiation, colostrum, exclusive breastfeeding duration, feeding on demand), attitude (perceived benefits, comfort with breastfeeding, views on formula), and self-reported practices (time of initiation, colostrum feeding, current feeding pattern, use of pre-lactal feeds). A combination of frequencies and percentages was used to summarize the responses. **Results:** Most of the mothers were from the age group of 21–25 years, homemakers and mostly from urban areas. A large percentage were aware that breast milk is the best first feed and breastfeeding should start as soon as possible after birth. There were positive feelings towards breast feeding benefits. The respondents mostly know that the exclusive breastfeeding should be continued for six months. Nevertheless, the number of respondents who actually practice exclusive breastfeeding is lesser than expected. Mothers, on the whole, reported feeding their infants colostrum and avoiding pre-lactal feeds. However, many mixed-fed their infants or introduced other fluids early. Some mothers did not feel comfortable to breastfeed in public. They also feel that formula is easier for working women. **Conclusion:** According to the conclusion, Most of the primipara mothers have good breastfeeding knowledge and favourable attitude at a tertiary care centre of Gwalior. There were inconsistencies in how exclusive breastfeeding is understood and put into practice. Preparing first-time mothers and their families through strengthened and repeated breastfeeding counseling in antenatal, postnatal, and immunization services may improve exclusive breastfeeding and infant health outcomes.

KEYWORDS : Primiparous mothers; Breastfeeding; Exclusive breastfeeding; Knowledge; Attitude; Practices

INTRODUCTION

Breastfeeding is considered the best way to feed infants, as it offers ideal nutrition for infants and protects them against the diseases of infancy and later life. [1] Exclusive breastfeeding (EBF) for the first 6 months of life, followed by continued breastfeeding with appropriate complementary feeding is recommended by international and national guidelines for prevention of morbidity and mortality in infants. [2,3]

The EBF rates remain sub-optimal in many low and middle-income countries including India despite the above recommendations. Most infants are still given early pre-lactal feeds, formula, and other fluids. [4] The feeding practices of mothers are largely dictated by their knowledge and attitudes toward breastfeeding. [5] First-time mothers are particularly vulnerable to gaps in information, social pressures and lack of practical support. Primiparous women depend on the advice of health service providers and family members which makes them a viable group for targeting.

Evidence collected from Kenya, Nigeria and other such locations show that although people have awareness of the breastfeeding benefits, they do not have detailed knowledge about EBF nor its proper duration and early initiation along with colostrum. [6] People think positively about breastfeeding, leaving the house, and returning to work but have negative evaluations about breastfeeding in public and the convenience of formula feeding. Research conducted within Indian hospitals has highlighted comparable differences between knowledge and practice. A focussed

approach, such as strengthened counseling and postnatal support, is necessary at tertiary care levels. [7]

Gajra Raja Medical College (GRMC), Gwalior, is a major tertiary health care facility for predominantly urban and peri-urban populations of Madhya Pradesh. Mothers giving birth for the first time constitute an important target group for breastfeeding promotion in health facilities.

MATERIALS AND METHODS

Study Design and Setting

This hospital-based descriptive cross-sectional study was conducted in the Department of Community Medicine at Gajra Raja Medical College (GRMC) and its associated tertiary care teaching hospital in Gwalior, Madhya Pradesh, India. The study was carried out over 3 months among primiparous mothers attending postnatal wards and immunization clinics.

Study Population

Primiparous mothers (para 1) who had delivered a live infant and were attending the hospital during the study period were screened for eligibility.

Inclusion criteria:

1. Primiparous mothers (first delivery).
2. Attending postnatal or immunization services at the tertiary care center.
3. Willing to participate and provide informed consent.

Exclusion criteria:

1. Mothers with severely ill neonates requiring intensive care.
2. Mothers unable to participate meaningfully due to medical or psychological conditions.

A total of 150 consecutive eligible primiparous mothers were included over the 3-month period, consistent with sample sizes used in similar KAP studies.

Data Collection: Data were collected using a pre-tested, structured questionnaire administered in the local language by trained investigators. The questionnaire was developed with reference to previous KAP studies and WHO recommendations on EBF. It included:

Socio-demographic variables: age, residence (urban/rural), education, occupation, type of family.

- Obstetric and infant variables: mode of delivery, place of delivery, age of infant at interview.
- Knowledge items: ideal first feed, timing of initiation, colostrum use, definition of EBF, recommended EBF duration (6 months), feeding on demand, protective effects of breastfeeding.
- Attitude items: perceived benefits of breastfeeding, acceptability of breastfeeding in public, perceptions about formula, role of family support.
- Practice items: actual initiation time, colostrum given/discarded, use of pre-lacteal feeds, bottle feeding, current feeding pattern (EBF, predominant, mixed) for infants ≤ 6 months.

Operational Definitions

Exclusive breastfeeding was defined as feeding the infant only breast milk, without any additional food or drink, not even water, except for oral rehydration solution, or vitamins, minerals, or medicines. Predominant breastfeeding referred to infants receiving breast milk as the main source of nourishment but also receiving water or other non-milk liquids. Mixed feeding referred to breast milk plus formula, animal milk, or other complementary feeds before six months. Knowledge was considered "adequate" if the mother correctly identified breast milk as the ideal first feed, early initiation (within 1 hour), giving colostrum, the correct duration of EBF (6 months), and feeding on demand. Attitudes were categorized as "favorable" when mothers agreed with statements on breastfeeding benefits and family support and did not regard formula as superior for healthy term infants. Practices were considered "optimal" when mothers reported early initiation, colostrum feeding, no pre-lacteal feeds, and current EBF for infants ≤ 6 months.

Statistical Analysis

Data were entered into Microsoft Excel and analyzed using simple descriptive statistics. Categorical variables were summarized as frequencies and percentages. Findings are presented in tables for socio-demographic characteristics, knowledge, attitudes, and practices, similar to prior KAP studies

RESULTS

Table 1. Socio-demographic Characteristics of Primiparous Mothers (n = 150)

Characteristic	Category	Number (n)	Percentage (%)
Age (years)	≤ 20	30	20.0
	21–25	70	46.7
	≥ 26	50	33.3
Residence	Urban	90	60.0
	Rural	60	40.0
Education	Up to secondary	60	40.0
	Higher secondary	55	36.7
	Graduate and above	35	23.3
Occupation	Homemaker	110	73.3
	Employed	40	26.7
Type of family	Nuclear	95	63.3
	Joint	55	36.7

Most mothers were aged 21–25 years, from urban areas, and homemakers living in nuclear families, similar to demographic patterns reported in hospital-based breastfeeding KAP studies.

Table 2. Breastfeeding-related Knowledge among Primiparous Mothers (n = 150)

Knowledge item	Correct response n (%)
Breast milk is the ideal first feed	140 (93.3)
Initiation within 1 hour of birth	120 (80.0)
Colostrum should be given	125 (83.3)
EBF means "only breast milk"	115 (76.7)
Correct EBF duration (6 months)	95 (63.3)
Feeding on demand is preferred	110 (73.3)
Breastfeeding protects against childhood infections	130 (86.7)

Knowledge was generally good for early initiation and colostrum, but detailed understanding of EBF duration was weaker, consistent with findings among primiparous mothers in other settings.

Table 3. Attitudes Toward Breastfeeding among Primiparous Mothers (n = 150)

Attitude statement	Favorable n (%)	Unfavorable/Neutral n (%)
Exclusive breastfeeding is beneficial	135 (90.0)	15 (10.0)
Breastfed babies are healthier than formula-fed babies	120 (80.0)	30 (20.0)
Breastfeeding in public is acceptable	85 (56.7)	65 (43.3)
Formula more convenient for working mothers	60 (40.0)	90 (60.0)
Family support makes breastfeeding easier	125 (83.3)	25 (16.7)

Most mothers expressed favorable attitudes toward breastfeeding benefits and family support, yet many were uncomfortable with breastfeeding in public and viewed formula as convenient for working mothers, as reported in other KAP studies.

Table 4. Breastfeeding Practices among Primiparous Mothers (n = 150)

Practice variable	Category	Number (n)	Percentage (%)
Initiation time	Within 1 hour	105	70.0
	After 1 hour	45	30.0
Colostrum feeding	Given	120	80.0
	Discarded	30	20.0
Pre-lacteal feeds	Yes	45	30.0
	No	105	70.0
Current feeding (infant ≤ 6 months)	Exclusive breastfeeding	75	50.0
	Predominant breastfeeding	35	23.3
	Mixed feeding	40	26.7

Despite relatively good knowledge, one-third delayed initiation beyond 1 hour, one-fifth discarded colostrum, and only about half reported EBF, echoing gaps between knowledge and practice seen in comparable studies.

DISCUSSION

Findings of study conducted among primiparaic mothers at a Tertiary care Centre in Gwalior show overall good knowledge and attitude towards breastfeeding but there are still gaps regarding exclusive breastfeeding and consistent practices. Almost all participants believed breast milk to be the ideal first feed for infants and recognized colostrum, the first yellowish liquid secreted by the breast, as a valuable feed. Njeru et al.

[1] in Kenya, Ndu et al. [5] in Nigeria and Baraki et al. [4] in other low-resource settings observed high awareness regarding this. The gap between what is known and what is done is very large. Most mothers know breastfeeding should be started early and colostrum must be given to the baby. However, a significant proportion initiated breastfeeding after an hour, discarded the colostrum and gave pre-lacteal feeds. Hospital-based cohorts, mostly reporting EBF rates of 40–60%, did not meet those recommended by the World Health Organization (WHO) [2]. The study's practices fall within the predictions by Baraki et al. [4] and other rural studies [7]. It indicates that the perceived relevance of traditional norms and practical constraints continues to be a factor. The results of our attitude survey showed that respondents strongly agreed with the benefits of breastfeeding yet felt uncomfortable when breastfeeding in public. Other respondents perceived formula to be more convenient for working women. These findings are similar to those of Ndu et al. [5] in Nigeria and research from Fiji [8]. The studies show that positive beliefs often co-occur with social and workplace barriers. First-time mothers, who typically have no prior experience with delivery, may experience negativity towards customers more strongly than other women.

CONCLUSION

Breastfeeding knowledge and attitude towards the first time mothers attending GRMC, Gwalior was quite favourable, notably relating to importance of breast milk, colostrum and early initiation. However, gaps continued to exist in terms of knowing how long exclusive breastfeeding was meant to continue and what it entailed, and in consistently applying practices that were recommended. Inclusion of strengthened, repeated and family-focused breastfeeding counselling in routine maternal and child health services especially for first-time mothers is likely to lead to higher exclusive breastfeeding rates and improved infant health outcomes.

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