

# Breastfeeding Practices among New Mothers in the Postnatal Ward of District Hospital, Ujjain, Madhya Pradesh: A Knowledge, Attitude, and Practice Study

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## Abstract

**Aims:** This study compares 1<sup>st</sup>-time mothers with those who have previously given birth, examines factors that affect infant feeding practices, and evaluates the knowledge, attitudes, and practices (KAP) regarding breastfeeding among new mothers in the postnatal ward of a district hospital in Ujjain, Madhya Pradesh.

**Introduction:** Breastfeeding is vital for the health of infants because it supports their immune systems and provides necessary nutrients. Because of varying degrees of knowledge, attitudes, and sociocultural influences, breastfeeding behaviors vary despite its well-established advantages. Understanding these characteristics is critical for developing tailored interventions that support good breastfeeding.

**Materials and Methods:** This mixed-method, cross-sectional study was carried out in the Ujjain District Hospital's postnatal ward. Convenience sampling was used to collect data from new mothers who completed a standardized questionnaire. The KAP of breastfeeding was investigated in the study, with a focus on contrasting the answers of 1<sup>st</sup>-time mothers with those of women who had previously given birth.

**Results:** The study's findings showed that while the majority of moms knew the advantages of breastfeeding, they lacked thorough understanding of exclusive breastfeeding techniques. Practices differed, with some mothers unable to start breastfeeding within the 1<sup>st</sup> h after giving birth or to maintain breastfeeding exclusively for 6 months, despite generally positive attitudes. Compared to moms who had previously given birth, 1<sup>st</sup>-time mothers had a higher need for assistance and direction.

**Conclusion:** According to the survey, new moms in Ujjain have serious gaps in their knowledge and habits about nursing. To increase breastfeeding behaviors and results, more healthcare practitioners should give instruction and support.

**Keywords:** Breastfeeding, infant feeding practices, knowledge-attitude-practice, new mothers, postnatal ward, Ujjain

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## INTRODUCTION

Since nursing gives babies essential nutrients, strengthens immunity, and promotes mother-infant bonding, it is widely accepted to be the best method of nourishing babies. The World Health Organization (WHO) recommends breastfeeding for the first 6 months of a baby's life. Following that, kids must stay breastfeeding and consume supplemental diets for a minimum of 2 years (WHO, 2023). However, in many nations, including India, breastfeeding is

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still not always the best choice despite its well-established benefits.<sup>[1]</sup>

In India, the prevalence of exclusive breastfeeding is still a problem. According to a study by Reddy *et al.*, only 54% of Indian newborns under 6 months are exclusively breastfed, which is much lower than the WHO's recommended rate.<sup>[2]</sup>

The Ministry of Health and Family Welfare (2021)<sup>[3]</sup> claims that this trend is made worse by the high newborn mortality rates, which are approximately 23 deaths for every 1000 live births. One of the risk factors contributing to this high death rate is inadequate breastfeeding, which is linked to an increased risk of infections, malnourishment, and other newborn health issues.<sup>[4]</sup>

Despite the fact that breastfeeding is crucial during the first few months of life, several obstacles still stand in the way of its widespread adoption in India. These factors include cultural norms, ignorance, socioeconomic status, and insufficient support from healthcare systems.<sup>[5]</sup> The attitudes, knowledge, and practices (KAP) of new mothers with respect to breastfeeding are also largely unknown, particularly in rural areas like Ujjain, Madhya Pradesh, where access to medical care and health education may be limited.

Several studies have looked at breastfeeding practices in India, highlighting regional variations and the challenges mothers have in adhering to recommended practices. According to Dhama *et al.*, for instance, there was a significant knowledge and practice gap in rural areas despite the fact that breastfeeding rates were comparatively greater in urban areas.<sup>[6]</sup> The postnatal wards in district hospitals, particularly in smaller cities like Ujjain, where medical facilities and cultural norms may influence breastfeeding practices, have not, however, received much attention.

The purpose of this study is to assess breastfeeding practices among new mothers in the postnatal ward of a district hospital in Ujjain, Madhya Pradesh, using a KAP study framework. This study aims to identify maternal knowledge gaps and suggest interventions to enhance optimal nursing by evaluating breastfeeding-related KAP. Additionally, the results of the study can contribute to better maternal and newborn health outcomes in the region by supplying knowledge on effective systems of education and support for new mothers.

Despite its significance, this study has limitations to consider. The study may not fully represent the greater number of new mothers in India because it will only concentrate on one district hospital in Ujjain. Additionally, the study would rely on self-reported data, which may introduce biases or lead to erroneous evaluations of breastfeeding practices. Future research could address these issues by employing qualitative research methods, a larger and more diverse sample, and an evaluation of how specific treatments affect nursing behaviors.

In conclusion, by shedding light on the breastfeeding practices of new mothers in the postnatal ward of a district hospital in

Ujjain, Madhya Pradesh, this study aims to contribute to the body of knowledge on maternal health in India. It might also be used as a guide for future public health campaigns that promote breastfeeding and reduce infant mortality.

## Objective

The primary objectives of the study are as follows:

1. To assess the knowledge, attitudes, and practices regarding breastfeeding among new mothers (1<sup>st</sup>-time mothers) and mothers with two or more previous deliveries at the district hospital in Ujjain.
2. To compare breastfeeding practices between 1<sup>st</sup>-time mothers and mothers who have had two or more deliveries at the district hospital in Ujjain.
3. To identify socio-demographic, cultural, and other contextual factors that influence infant feeding practices among new mothers.
4. To examine the major sources of advice related to infant feeding provided to new mothers.
5. To identify the barriers, myths, and misconceptions surrounding breastfeeding as perceived by new mothers.

## Hypothesis

- ( $H_0$ ): In the postnatal ward of the district hospital in Ujjain, there is no discernible difference in nursing habits between moms who are breastfeeding for the 1<sup>st</sup> time and mothers who have two or more children.
- ( $H_1$ ): In the postnatal ward of the district hospital in Ujjain, there is a notable difference in breastfeeding practices between moms who are breastfeeding for the 1<sup>st</sup> time and mothers who have two or more children.
- ( $H_0$ ): New mothers' breastfeeding habits in the postnatal ward are not significantly impacted by sociodemographic characteristics like age, education, or occupation.
- ( $H_1$ ): In the postoperative ward, breastfeeding patterns among new moms are greatly influenced by sociodemographic characteristics as age, education, and occupation.

## MATERIALS AND METHODS

### Research approach

For the current study, both qualitative and quantitative research approaches were adopted. A mixed-methods approach is considered most suitable to explore the various dimensions of breastfeeding practices. This study is hospital-based, focusing on mothers admitted to the postnatal ward of the district hospital in Ujjain, Madhya Pradesh.

### Research design

A cross-sectional mixed-methods design is appropriate for this study, as it will allow the collection of both quantitative and qualitative data at a specific point in time. This design facilitates the comparison of breastfeeding practices among different groups (1<sup>st</sup>-time mothers and those with multiple children) and enables an exploration of associated factors.

## Study setting

The study will be conducted in the postnatal ward of the district hospital in Ujjain, Madhya Pradesh, which serves as the primary healthcare center for mothers in the region.

## Population

The study population consists of mothers admitted to the postnatal ward of the district hospital, Ujjain, who have one or more children.

## Sample size

The sample size for this study is 100 participants, comprising new mothers and mothers with two or more children admitted to the postnatal ward. The sample size is calculated scientifically based on the total estimated number of new mothers and mothers with multiple children in the hospital.

## Sampling technique

The sampling technique for this study will be convenience sampling. This non-probability sampling method will be used due to the availability of participants in the postnatal ward of the district hospital, Ujjain. The sample will consist of 100 new mothers and mothers with two or more children who are admitted to the postnatal ward and meet the inclusion criteria.

## Rationale for convenience sampling

- The study is hospital-based, and participants are selected based on their availability during the study period.
- This technique allows for quick and easy access to the target population within the study setting.

## Sampling criteria

### Inclusion criteria

- Women who have delivered in the postnatal ward of the district hospital, Ujjain
- Women who voluntarily agree to participate in the study
- Women who can understand the Hindi language.

### Exclusion criteria

- Women who do not consent to participate in the study
- Women who do not understand the Hindi language
- Women who have lost their baby.

## Development and description of tool

A structured interview questionnaire was developed to gather data. A self-reporting technique using paper and pencil was employed to collect the responses. The questionnaire was semi-structured, designed to assess key factors influencing breastfeeding practices. It was translated into Hindi (and back into English for accuracy) and pre-tested before data collection began. The tool ensured anonymity, and no personal identification was recorded.

The tool was divided into two sections:

- Section 1: Demographic variables such as age, religion, community, educational status, type of house, household type, and occupation.

- Section 2: This section contained 32 items categorized into the following areas:
  - Child spacing
  - Breastfeeding initiation
  - Exclusive and continued breastfeeding
  - Bottle feeding and use of pacifiers
  - Knowledge on breastfeeding
  - Weaning and complementary feeding.

## Data collection

Primary data will be collected from new mothers and those with multiple children admitted to the district hospital. The data collection process will follow the WHO/UNICEF case definition of breastfeeding and good practices. Written consent will be obtained from each participant, and permission will be secured from the district hospital authorities before initiating the study.

## RESULT

A structured knowledge questionnaire was used to obtain the data for this study's analysis and interpretation. Descriptive statistics were used to analyze the data, and the results were shown in the following sections:

### Section 1: Sample characteristics

The sample population's demographics are shown in this section, broken down by age, religion, community, educational attainment, dwelling type, household type, and occupation. Table 1 displays the demographic data for primiparas (1<sup>st</sup>-time moms) and multiparas (mothers with many children). Primipara women were generally younger, with most aged 15–20 years, while multipara women were more commonly 21–25 years. Hinduism was the predominant religion in both groups, and the majority identified as other backward class. Educational levels were generally low, with a higher proportion of multipara participants being uneducated. Most participants lived in joint families, though primipara women had a higher prevalence of kaccha housing. The primary occupation for both groups was housewife, followed by labor work.

### Section 2: Area-wise distribution of structured interview questionnaire scores

Table 2 shows the frequency and percentage distribution of responses pertaining to breastfeeding behaviors and knowledge among primiparas (1<sup>st</sup>-time moms) and multiparas (mothers with many children). Child spacing, breastfeeding initiation, exclusive and sustained breastfeeding, bottle and dummy use, breastfeeding education, and weaning habits are some of the factors that make up the table. In child spacing, all primipara mothers were experiencing their first delivery, while all multipara mothers had previous deliveries. The majority of both groups initiated breastfeeding, with most opting to feed colostrum within 3 days postpartum. Exclusive breastfeeding rates were high, but a small percentage introduced other liquids early, often due to familial advice. Bottle feeding

**Table 1: Frequency and percentage distribution of demographic variables of sample (n=100)**

S. No.	Variables	Primipara (n=50)		Multipara (n=50)	
		Frequency	Percentage	Frequency	Percentage
1	Age				
	15–20	31	62	3	6
	21–25	16	32	26	52
	26–30	2	4	14	28
2	31–35	1	2	7	14
	Religion				
	Hindu	36	72	41	82
	Muslim	13	26	8	16
3	Christian	0	0	0	0
	Jain	1	2	0	0
	Community				
	SC	10	20	6	12
4	ST	7	14	12	24
	OBC	21	42	21	42
	GEN	2	4	11	22
	Education Status				
5	Uneducated	14	28	19	38
	Primary	12	24	13	26
	High School	13	26	15	30
	Higher Secondary	4	6	1	2
	Graduate	4	8	1	2
	Postgraduate	1	2	1	2
6	Type of house				
	Pucca	13	26	17	34
	Semi-Pucca	5	10	5	10
7	Kaccha	32	64	28	56
	Household type				
	Joint	45	90	37	74
7	Nuclear	5	10	13	26
	Occupation				
	Housewife	33	66	32	64
	Worker	2	4	1	2
	Seller	0	0	1	2
	Medical person	0	0	0	0
	Teacher	3	6	0	0
	Labor	12	24	14	28
Other	0	0	2	4	

and pacifier use were rare in both groups. Knowledge on breastfeeding varied, with a higher proportion of multipara mothers receiving guidance. Weaning practices predominantly began after 6 months, influenced by cultural and family factors. This data highlights variations in infant feeding practices and breastfeeding knowledge between primipara and multipara mothers.

## DISCUSSION

In the postnatal ward of a district hospital in Ujjain, Madhya Pradesh, the current study sought to evaluate the breastfeeding behaviors, attitudes, and knowledge of primiparas (new mothers) and multiparas (mothers who have had two or more children). In order to prevent language hurdles from impeding the data gathering process, a self-developed, semi-structured questionnaire was translated into Hindi. The study looked at the breastfeeding habits of 86% of primipara moms and 84% of multipara mothers who said they fed their infants colostrum, an important technique for giving newborns their first immunity. This is in line with research showing how crucial colostrum feeding is for the health of newborns.<sup>[7]</sup>

However, the study also found that a small percentage of moms (6% of multipara mothers and 8% of primipara mothers) did not nurse their children because they thought that there was not enough milk. This result is comparable to that of Huang *et al.*, who found that a perceived lack of milk production was a major deterrent to starting to breastfeed.<sup>[8]</sup> The moms used alternative feeding techniques, including Sanchi or cow milk, when breastfeeding was not an option. According to research by Kumar *et al.*, the use of substitute milks is still widespread in India, particularly in rural areas.<sup>[9]</sup>

Regarding breastfeeding education, it was discovered that just 28% of multipara moms received instruction from family members, with little assistance from medical professionals, while 60% of primipara mothers had no formal instruction at all. The need for improved outreach and education by healthcare providers is highlighted by this study. It is alarming that health workers contribute so little to breastfeeding education (22% for primipara and 16% for multipara), especially in light of the global significance that healthcare professionals have in promoting breastfeeding (Gravin *et al.*,

**Table 2: Frequency and percentage distribution of responses related to breastfeeding practices and knowledge (n=100)**

Area-wise distribution of questionnaire response			Primipara		Multipara	
Category	Question	Response	Frequency	Percentage	Frequency	Percentage
Child spacing	First delivery	Yes	50	100	0	0
		No	0	0	50	100
	Have you children	Yes	50	100	50	100
		No	0	0	0	0
	Number of children	01-Feb	50	100	34	68
		03-Apr	0	0	13	26
		5+	0	0	3	6
		None	0	0	0	0
		Number of pregnancies	01-Feb	50	100	34
		03-Apr	0	0	13	26
	5+	0	0	3	6	
	Don't know	0	0	0	0	
	None	0	0	0	0	
Breastfeeding initiation	1. Ever breastfed your child?	Yes	46	92	47	94
		No	4	8	3	6
	2. Why did you not breastfeed?	Mother sick	0	0	0	0
		Lack of milk	4	8	3	6
		Did not wish	0	0	0	0
		Lack of knowledge	0	0	0	0
		Not to spoil figure	0	0	0	0
		Doctor advised it	0	0	0	0
		Other	0	0	0	0
	3. What was given instead of breast milk?	Cow milk	2	4	3	6
		Sanchi milk	2	4	3	6
		Tea	1	2	1	2
	4. When was child first put to breast?	Immediately	2	4	1	2
		Within 1 <sup>st</sup> h after birth	22	44	29	58
		Within 1 <sup>st</sup> day	23	46	12	24
		Within 2 <sup>nd</sup> day	3	6	8	16
Don't Know		0	0	0	0	
1. Colostrum feeding within 3 days?	Yes	43	86	42	84	
	No	6	12	4	8	
	Don't Know	1	2	4	8	
2. Given anything else before feeding?	Yes	4	8	7	14	
	No	45	90	42	84	
	Don't Know	1	2	1	2	
3. What given before breastfeeding?	Milk (not breast milk)	2	4	4	8	
	Tea/Infusions	1	2			
	Traditional Medicine	1	2			
	Other (specify)	1	2			
4. Currently breastfeeding child?	Yes	49	98	42	84	
	No	1	2	8	16	
5. Child drank any liquids yesterday?	Breast Milk	48	96	45	90	
	Plain Water	0	0	1	2	
	Other (powdered/animal milk)	2	4	2	4	
6. Reason for giving other liquids	Baby liked it	1	2	6	12	
	Mother-in-law advised	6	12	17	34	
	Good for baby	40	80	25	50	
	Traditional reason	2	4	0	0	
	Not good for baby	30	60	18	36	
7. Why not give liquids?	Medical staff advised	15	30	25	50	
8. Duration of breastfeeding	6 months	5	10			
	12 months	14	28			
	18 months	15	30			
	24 months	13	26			
1. Bottle feeding and use of pacifiers	Yes	0	0	1	2	
	No	50	100	49	98	
	2. Use of pacifier	Yes	0	0	1	2
	No	50	100	49	98	
	3. Reason for pacifier use	Lack of milk	1	2		
Knowledge on breastfeeding	1. Taught about breastfeeding?	Yes	20	40	37	74
		No	30	60	14	28
	2. Best time to start breastfeeding?	Immediately	13	26	5	10
		Within 1 day	24	48	29	58
		When baby wants	7	14	8	16
	When mother is ready	4	8	2	4	

(Contd...)

**Table 2: (Continued)**

Area-wise distribution of questionnaire response			Primipara		Multipara	
Category	Question	Response	Frequency	Percentage	Frequency	Percentage
Weaning and complementary feeding	1. Age of weaning	At 6 months	4	8	7	14
		Older than 6 months	35	70	37	74
	2. Reason for weaning	Baby was hungry	5	10		
		Correct age	30	60		
		Mother-in-law advised	13	26		
		Husband advised	1	2		

2016).<sup>[10]</sup> Other research have raised concerns about the lack of engagement of healthcare providers in rural areas, which could be reflected in this situation.<sup>[11]</sup>

The participation of anganwadi workers, who helped 4% of multipara moms with their schooling, is another noteworthy finding of this study. This suggests that working with community health workers may present a chance to enhance breastfeeding behaviors. Anganwadi staff can be crucial in encouraging breastfeeding and are frequently the initial point of contact for new moms in many rural regions.<sup>[12]</sup> Breastfeeding initiation and exclusivity rates may therefore be raised by increasing the participation of healthcare professionals as well as community health workers like anganwadi workers.

It is clear from comparing the results with those of earlier research that although breastfeeding initiation is still rather high, problems like the perception of an inadequate milk supply and a lack of official breastfeeding teaching still exist. One significant distinction between our study and those from more urbanized areas is the comparatively low level of health worker involvement in educating mothers. This could imply that rural regions, like the one in this study, encounter particular difficulties such a shortage of qualified medical staff, inadequate teaching materials, and a lack of knowledge about the advantages of exclusive breastfeeding.

### Future directions

Future research should concentrate on enhancing breastfeeding teaching initiatives by enlisting more community health workers and healthcare professionals, particularly in remote locations. The use of alternative feeding techniques may be lessened with the support of interventions like lactation counseling that address mothers' worries about their milk supply. Breastfeeding practices can also be improved by governmental initiatives that guarantee lactation support is available in both rural and urban areas.

### CONCLUSION

To sum up, this study emphasizes the necessity of better breastfeeding instruction and assistance from medical professionals to improve new moms' knowledge, attitudes, and practices, which will eventually improve the health of both the mother and the child.

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### CONFLICT OF INTEREST

N.A.

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### REFERENCES

1. Valappil HC, Jayalakshmi R, Sewor C. Intersectional inequalities in exclusive breastfeeding practices in India: Analysis of national family health survey-4. *Int Breastfeed J* 2023;18:44.
2. Reddy NS, Dharmaraj A, Jacob J, Sindhu KN. Exclusive breastfeeding practices and its determinants in Indian infants: Findings from the National Family Health Surveys-4 and 5. *Int Breastfeed J* 2023;18:69.
3. Home-Ministry of Health and Family Welfare-GOI. (n.d.). Available from: <https://mohfw.gov.in> [Last accessed 2024 Nov 12].
4. Phukan D, Ranjan M, Dwivedi LK. Impact of timing of breastfeeding initiation on neonatal mortality in India. *Int Breastfeed J* 2018;13:27.
5. Dudeja N, Sharma D, Maria A, Pawar P, Mukherjee R, Nargotra S, *et al.* Implementing recommended breastfeeding practices in healthcare facilities in India during the COVID-19 pandemic: A scoping review of health system bottlenecks and potential solutions. *Front Nutr* 2023;10:1142089.
6. Dhami MV, Ogbo FA, Diallo TM, Olusanya BO, Goson PC, Agho KE, *et al.* Infant and young child feeding practices among adolescent mothers and associated factors in India. *Nutrients* 2021;13:2376.
7. Martin CR, Ling PR, Blackburn GL. Review of infant feeding: Key features of breast milk and infant formula. *Nutrients* 2016;8:279.
8. Huang Y, Liu Y, Yu XY, Zeng TY. The rates and factors of perceived insufficient milk supply: A systematic review. *Matern Child Nutr* 2022;18:e13255.
9. Kumar A, Mishra AK, Saroj S, Joshi PK. Impact of traditional versus modern dairy value chains on food security: Evidence from India's dairy sector. *Food Policy* 2019;83:260-70.
10. Gavine A, MacGillivray S, Renfrew MJ, Siebelt L, Haggi H, McFadden A. Education and training of healthcare staff in the knowledge, attitudes and skills needed to work effectively with breastfeeding women: A systematic review. *Int Breastfeed J* 2016;12:6.
11. Sriraman NK, Kellams A. Breastfeeding: What are the barriers? Why women struggle to achieve their goals. *J Womens Health (Larchmt)* 2016;25:714-22.
12. Ghosh A, Sengupta PR. Life and work of anganwadi workers: A literature survey. *Asian J Manage* 2022;13:120-6.

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