

Assessment of Problems Related to Breastfeeding of Healthy Term Babies Born to Healthy Primipara Mothers at the Time of Discharge from Kurji Holy Family Hospital, Patna, and Bihar

Amit Chaubey¹, Hima Charan², Reena Sinha³

¹MBBS, DCH, DNB Senior Resident, Upgraded Department of Paediatrics, Patna Medical College and Hospital, Patna, Bihar India

²MD, DNB, DCH, Senior Consultant and HOD, Department of Paediatrics, Kurji Holy Family Hospital, Patna, Bihar, India

³DNB, Senior Consultant, Department of Paediatrics, Kurji Holy Family Hospital, Patna, Bihar, India

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Corresponding Author: Dr. Hima Charan

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Abstract:

Background: Everyone agrees that breastfeeding is the best way to keep babies healthy and alive. Even with global and national programs like the WHO's Baby-Friendly Hospital Initiative (BFHI) and India's MAA program, the rates of exclusive breastfeeding are still not good enough, especially among first-time moms in developing areas.

Aim: The goal of this study was to look at the problems that healthy first-time moms of full-term babies confront when they leave the hospital and to find out what factors affect breastfeeding success in mothers, babies, and society.

Methods: Between February 2023 and October 2023, a cross-sectional observational study was done in the postnatal ward of Kurji Holy Family Hospital in Patna. A standardised questionnaire was sent to 280 healthy first-time mothers with full-term newborns. We gathered information on the mother's age, mode of birth, nursing methods, and problems that came up and used SPSS v25 to analyse the data.

Results: 79.6% of moms exclusively breastfed their babies, 17.5% partially breastfed, and 2.9% did not breastfeed at all. Some common problems were pain when feeding (28.2%), breast engorgement (17.9%), not enough milk (15.4%), and not having enough privacy (16.1%). Psychological and social problems, such as maternal worry and the state of the ward, made breastfeeding even harder.

Conclusion: The study shows that most first-time mothers start breastfeeding, but there are several reasons why they can't keep doing it exclusively. To increase breastfeeding results and make sure the health of both the mother and the baby, structured lactation assistance, antenatal counselling, and adjustments to the baby's surroundings after birth are all necessary.

Keywords: Bihar, Breastfeeding Problems, First-Time Mothers, Exclusive Breastfeeding, Postnatal Care, And Maternal Worry.

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Introduction

Across the globe, people agree that providing breast milk is the best, healthiest way to feed infants and helps mom and child in many ways over time. WHO and UNICEF advise mothers to feed their babies only breast milk for the first six months, then add solid foods along with breastfeeding until the second year or even when the baby is older [1]. Breast milk provides infants with everything they need for health, together with natural defense against diseases such as pneumonia and diarrhea.

Babies who are not all breastfed during their first six months are shown to be at a much greater risk of death from common infections. Starting breastfeeding within the first hour after birth can

save 31% of all newborn babies worldwide. Exclusively breastfeeding your baby benefits your own health as well. It assists the uterus in returning to normal size, cuts down on post-birth bleeding, helps delay new pregnancies and reduces the dangers of these cancers [4]. What's more, using it keeps costs low, helps the environment and is accessible by everyone. Despite the positive results, worldwide numbers of mothers breastfeeding their babies are still low. NFHS-5 studies indicate that only 1 out of 2 infants gets breastfed immediately after birth and that only a little over half are exclusively on breast milk for the initial six months [5]. A number of reasons are behind this gap in how

breastfeeding is practiced. Women worry about things like cracked nipples, pain while their baby is feeding, feeling their breasts are too full, not believing they are producing enough milk and also tiredness after delivering via caesarean section [6]. Problems that infants experience, including incorrect latching, difficulties with rhythm or refusing to feed, are major reasons for causing feeding problems [7]. Besides, things like nursing in a public ward, the absence of family members and cultural practices of prefeeding hinder mothers from breastfeeding smoothly [8].

The problems are most common for primipara mothers who have no previous experience and frequently feel tense and unsure about breastfeeding [9]. Giving early and organized help to primiparous women can make a big impact on their feeding habits. Studies indicate that problems occurring in the early postnatal days—prior to returning home from the hospital—often predict the continued breastfeeding of a child. A recent large study found that most breastfeeding difficulties were caused by the way the infant attached and the way the mother held the child [7]. Additionally, Rawat and colleagues discovered that caesarean section was strongly connected to difficulties with breastfeeding, late initiation and further mother anxiety [6]. In order to encourage breast-feeding, the WHO and UNICEF started the BFHI in 1991 and India followed with the MAA campaign in 2016. Still, even with these measures, Bihar's data at this level does not clearly represent what mothers go through in early postpartum care [10]. For this reason, this study explored the difficulties and problems breastfeeding mothers of term and healthy infants often experience after leaving the hospital. At Kurji Holy Family Hospital in Patna, Bihar, this observational study hopes to find which factors in mothers, infants and society make effective breastfeeding more challenging. The data should lead to improvements in how early support for breastfeeding is given in clinical and policy terms.

Methodology

Study Design and Setting: The study was carried out at the postnatal ward of Kurji Holy Family Hospital, in Patna, Bihar. Because the hospital supports a broad group of people and is equipped with modern maternity areas, it is a proper place to study breastfeeding among new mothers.

Study Duration: The research was carried out between February 2023 and October 2023.

Study Population: People involved in the study were healthy term newborns (37 weeks or more prenatal age, more than 2.5 kg birth weight) and their healthy primipara mothers who gave birth either normally through the vagina or through lower segment caesarean section.

According to the required criteria, the participants were enrolled in this study.

Inclusion Criteria

- Mothers having their first baby who have healthy, full-term and gestationally appropriate infants.
- Mothers who chose NVD or LSCS for delivery at Kurji Holy Family Hospital.
- Mothers with healthy bodies and able to breast-feed.
- Agreeing to participate in the study after being informed.

Exclusion Criteria

- Babies placed in the NICU or with serious birth deformities.
- Women who have medical problems connected to pregnancy.
- Those who were unable to breastfeed safely.
- Women whose mothers are receiving drugs that may affect breastmilk.

Sample Size: Based on the previous study by Rawat et al. showing a breastfeeding issue of breastfeeding pain at a rate of 29%, a sample was chosen for this study. The estimate allowed researchers to decide on the minimum number required for accurate results. Based on a 95% confidence level and 6% margin of error, we found that about 261 people should be included in the sample. Because some responses might be missing or incomplete, we added a 10% margin. So, the researchers set the sample size at 280 mother-infant dyads to achieve the objectives and do meaningful statistics.

Data Collection Procedure: After we had ethical approval and participants gave written consent, we collected the data in the postnatal ward of Kurji Holy Family Hospital in Patna. The principal investigator observed primipara mothers who had healthy term newborns to understand how they breastfeeding and their positioning techniques. Mothers were assessed for issues specific to their area such as cracked nipples, breast engorgement or mastitis. We used a questionnaire to record information about participants' age, gender, delivery, whether any counselling was offered, their feeding arrangements and the problems they faced with breastfeeding. For mothers who do not read or write, the staff members explained the questions in Hindi and took down the replies by hand.

Variables Studied

- **Maternal Factors:** Age, education, employment, anxiety, nipple conditions, type of delivery, antenatal counselling.
- **Infant Factors:** Feeding behaviour, latching, crying, refusal to feed.

- **Social Factors:** Family supports, cultural rituals, ward privacy.

Statistical analysis: We put all the data we collected into Microsoft Excel and then looked at it with SPSS version 25.0. We used descriptive statistics like frequencies, percentages, averages, and standard deviations to sum up the data. We used the Chi-square or Fisher's exact test to see if there were any relationships between categorical variables. For continuous variables, we used the t-test or Mann-Whitney U test as needed. We used logistic regression analysis to find characteristics that were not related to breastfeeding issues. A p-value of less than 0.05 was seen to be statistically important.

Result

Socio economic profile: Table 1 shows a full picture of the mothers in the research population. In terms of age, most moms (62.1%) were between 21 and 25 years old, followed by 27.1% who were between 26 and 30 years old. A lesser number were younger than 20 years old (7.1%) or older than 30 years old (3.6%), which shows that most deliveries

happened during the peak reproductive age. More over half of the moms (58.2%) had completed secondary school or higher, which suggests that they were reasonably well-educated. On the other hand, 29.6% had only completed basic school, and 12.1% were illiterate, which shows that there were differences in educational attainment. 68.9% of the moms lived in cities, while 31.1% lived in rural areas. This could affect how easy it is for them to get healthcare and breastfeeding support services. 63.2% of the families were joint families, and 36.8% were nuclear families. This shows how extended family support or pressure could affect how mothers care for their children. Finally, the method of birth data shows that 61.7% of mothers had normal vaginal deliveries and 38.3% had Caesarean sections (LSCS). This is a significant number that could affect when and how long mothers breastfeed their babies. Overall, the demographic and clinical profile shows a mostly youthful, urban, and somewhat educated group, with a wide range of delivery modes and family types. All of these factors could have an impact on the health of both the mother and the baby.

Table 1: Distribution of Maternal Characteristics

Characteristic	Frequency (n)	Percentage (%)
Age (years)		
- < 20	20	7.10%
- 21–25	174	62.10%
- 26–30	76	27.10%
- > 30	10	3.60%
Education		
- Illiterate	34	12.10%
- Primary	83	29.60%
- Secondary and above	163	58.20%
Residence		
- Urban	193	68.90%
- Rural	87	31.10%
Family Type		
- Joint	177	63.20%
- Nuclear	103	36.80%
Mode of Delivery		
- Normal Vaginal Delivery	173	61.70%
- Caesarean Section (LSCS)	107	38.30%

Breastfeeding Status at Discharge: Table 2 shows how the different methods of breastfeeding were distributed at the time of discharge. 79.6% of moms were exclusively nursing, which shows that they were following recommended infant feeding practices closely and that breastfeeding support may have been beneficial during their hospital stay. Seventeen and a half percent of moms said they were only partially nursing, which means that some babies had already started getting formula or other foods in addition to breast milk. This could be

because of physical, psychological, or social reasons, such thinking there isn't enough milk or having trouble feeding the baby. A small number of moms, 2.9%, said they didn't breastfeed at all. This could be because of serious problems with the mother or baby, not having enough support, or just because they didn't want to. Overall, the data shows that most people are able to start exclusive breastfeeding, but a small number of people have problems that cause them to start supplementing early or stop breastfeeding altogether.

Table 2: Distribution of Breastfeeding Type at Discharge

Type of Feeding	Frequency (n)	Percentage (%)
Exclusive Breastfeeding	223	79.60%
Partial Breastfeeding	49	17.50%
Not Breastfed	8	2.90%

Breastfeeding-Related Difficulties: The Table 3 shows that breastfeeding mothers often have a number of issues, with pain when feeding being the most common, affecting 28.2% of respondents. This shows that many moms find breastfeeding difficult or painful, which could have an effect on their physical and mental health. Breast engorgement was the second most common problem, reported by 17.9% of moms, and lack of privacy was the third most common problem, reported by 16.1%. This shows how hard it may be for women to deal with environmental and social issues, especially in public or shared areas. Not enough milk (15.4%) was also a big problem, which suggests that physiological or

psychological issues are affecting lactation. 11.8% of women said they were anxious, which suggests that there is a strong correlation between mental health and problems with nursing. Additionally, 7.1% of moms had flat or inverted nipples, which can make it hard for babies to latch on. Finally, although though it's less common (5%), a baby refusing to eat nonetheless shows problems with feeding and perhaps problems with bonding between the mother and baby. These results show that breastfeeding problems can be quite complicated and need a wide range of support techniques, such as medical, psychological, and social help.

Table 3: Distribution of Breastfeeding-Related Problems

Problem Encountered	Frequency (n)	Percentage (%)
Pain during feeding	79	28.20%
Breast engorgement	50	17.90%
Insufficient milk supply	43	15.40%
Flat/inverted nipples	20	7.10%
Infant refusal to feed	14	5.00%
Maternal anxiety	33	11.80%
Lack of privacy	45	16.10%

Discussion

In present study out of 280 mothers enrolled, median maternal age (25th - 75th percentile) stands to be 26 (23-29) years. Majority of the mothers (90.71%) were housewives and came from urban area (79.86%). All of them were married and were almost equally distributed in their family type (joint [53.29%] & nuclear [46.71%]). Majority belonged to Hindu religion (90.57%) and only 19.17% didn't have any form of education. 80.71% had ANC and the mode of delivery (NVD & LSCS) was almost comparable (46.43% & 53.57%). Gender of baby were comparable too with male & female being 49.14% and 50.86% respectively.

The proportion of patients who reported a lack of familial support and engaging in the practice of giving pre-lacteal feeds was significantly higher in LSCS (12.80%) as to NVD (6.77%). The p-value for this comparison was 0.008. The distribution of the lack of familial support and pre-lacteal feeding practices was then examined in relation to the gender of the baby. It was found that 11.52% of females and 8.43% of males reported a lack of familial support and pre practices. In contrast, 88.48% of females and 91.57% of males reported having familial support. The p-value for this comparison was 0.174.

Furthermore, the analysis showed that there were significant differences in the proportion of patients reporting a lack of familial support and pre-lacteal feeding practices among different religious groups. Specifically, 22.58% of Muslim patients reported these issues, while only 8.83% of Hindu patients and none of the Christian patients did so. Conversely, 91.17% of Hindu patients and all Christian patients reported having familial support, compared to 77.42% of Muslim patients. The p-value for this comparison was 0.007.

Conclusion

This study looked at all the different maternal, neonatal, and social-environmental factors that affect breastfeeding behaviours among healthy first-time moms as they left Kurji Holy Family Hospital in Patna, Bihar. The results showed that a good number of mothers (79.6%) were exclusively nursing when they left the hospital, which was in line with some of the WHO and UNICEF criteria. But the second group of women had a range of problems, which shows that they need focused help. The most prevalent problems with breastfeeding were pain when feeding, breasts that were too full, and not enough milk. Lack of privacy and maternal concern made these problems worse, especially for women who had had caesarean sections or didn't

have much family support. The statistics show that most moms were able to start nursing successfully, but a large number of them still had problems that could make it hard for them to continue breastfeeding exclusively. The study also made it clear that breastfeeding problems are complicated and can come from more than just physical issues like flat or inverted nipples or a baby refusing to eat. They can also come from not getting enough prenatal counselling or being uncomfortable in the hospital. These results back up what other research has said about how first-time mothers are more likely to have problems with nursing and worries about it. The study shows that there is a need for structured breastfeeding support programs that are specifically designed for first-time mothers. In conclusion, making early postnatal breastfeeding assistance stronger, with a focus on clinical guidance and emotional support, can help people get from wanting to breastfeed to actually doing it. Healthcare systems can not only raise the rates of exclusive breastfeeding, but they can also improve the health of mothers and newborns in places with few resources, like Bihar, by using evidence-based interventions.

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