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IMPACT OF MODE OF DELIVERY ON EARLY INITIATION OF BREASTFEEDING AND EXCLUSIVE BREASTFEEDING AT DISCHARGE AMONG POSTNATAL MOTHERS: A HOSPITAL-BASED CROSS-SECTIONAL STUDY

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ABSTRACT

Background: Breastfeeding is a cornerstone of infant nutrition and survival. Early initiation of breastfeeding within one hour of birth and exclusive breastfeeding for the first six months are recommended by the World Health Organization. Mode of delivery may significantly influence breastfeeding practices, particularly the timing of breastfeeding initiation.

Objectives: To assess breastfeeding practices among postnatal mothers and evaluate the impact of mode of delivery on early initiation of breastfeeding and exclusive breastfeeding at discharge.

Materials and Methods: A hospital-based cross-sectional study was conducted among 100 postnatal mothers delivering at a tertiary care teaching hospital. Maternal demographic characteristics, obstetric factors, neonatal characteristics, and breastfeeding practices were recorded using a structured questionnaire. Data were analyzed using descriptive statistics.

Results: Among the study participants, 40% were aged 18–25 years, 35% were aged 25–30 years, 20% were aged 30–35 years, and 5% were aged 35–40 years. Seventy mothers underwent cesarean section while 30 delivered vaginally. Gestational diabetes mellitus and hypertension were present in 20% and 15% of mothers respectively. Among neonates, 90% were term and 10% were preterm. Birth weight ranged between 2.5 and 3.0 kg in 85% of newborns. Breastfeeding was initiated within one hour in 30% of mothers, after 4 hours in 50%, after 12 hours in 10%, while 10% had not initiated breastfeeding at the time of assessment. Colostrum feeding was practiced by 60% of mothers. Formula supplementation was given to 20% of infants. Lactation counselling was received by 90% of mothers. Exclusive breastfeeding at discharge was achieved in 90% of newborns.

Conclusion: Despite a high prevalence of lactation counselling and exclusive breastfeeding at discharge, early initiation of breastfeeding remains suboptimal. High cesarean section rates may contribute to delayed breastfeeding initiation. Strengthening postnatal breastfeeding support and counselling may improve breastfeeding outcomes.

Keywords: Breastfeeding, Cesarean Section, Normal Vaginal Delivery, Early Initiation, Exclusive Breastfeeding, Lactation Counselling.

INTRODUCTION

Breastfeeding provides optimal nutrition and immunological protection to newborns and is associated with reduced neonatal morbidity and mortality.

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The World Health Organization recommends initiation of breastfeeding within one hour of birth and exclusive breastfeeding for the first six months of life (1,2).

Several maternal and neonatal factors influence breastfeeding practices. Among these, mode of delivery has been identified as a major determinant. Mothers undergoing cesarean section often experience delayed initiation of breastfeeding due to postoperative pain, delayed mother-infant contact, and separation of the newborn for observation (5–8). India continues to face challenges in achieving universal early initiation of breastfeeding despite

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ongoing national programs promoting breastfeeding awareness. Understanding current breastfeeding practices and factors influencing initiation is important for planning targeted interventions.

The present study was undertaken to assess breastfeeding practices among postnatal mothers and evaluate the influence of mode of delivery on breastfeeding initiation and exclusive breastfeeding at discharge.

MATERIALS AND METHODS

Study Design

Hospital-based cross-sectional study.

Study Setting

Department of Obstetrics and Gynecology and Department of Pediatrics of a tertiary care teaching hospital.

Study Population

One hundred postnatal mothers and their newborns.

Inclusion Criteria

- Mothers delivering live-born infants.
- Mothers willing to participate in the study.

Exclusion Criteria

- Critically ill mothers.
- Neonates requiring prolonged intensive care.
- Mothers unwilling to provide consent.

Statistical Analysis

Data were entered into Microsoft Excel and analyzed using descriptive statistics. Continuous variables were expressed as means and categorical variables as frequencies and percentages.

RESULTS

Maternal Characteristics

Total of 100 postnatal mothers were included in the study. The majority of mothers were aged between 18 and 25 years (40%), followed by 25–30 years (35%), 30–35 years (20%), and 35–40 years (5%). Regarding educational status, 50% of mothers had education below the 10th standard, 30% had completed higher secondary education, 10% were graduates, and 10% were uneducated. Most participants were homemakers (85%), while 15% were employed. Obstetric evaluation revealed that 70% of mothers underwent cesarean section delivery, whereas 30% delivered vaginally. Gestational diabetes mellitus was present in 20% of mothers, and hypertensive disorders of pregnancy were observed in 15% of the study population.

Table 1. Maternal Characteristics

Variable	Number (%)
LSCS	70 (70%)
NVD	30 (30%)
GDM	20 (20%)
Hypertension	15 (15%)
Working mothers	15 (15%)
Homemakers	85 (85%)

Neonatal Characteristics

Of the 100 newborns evaluated, females constituted 65% and males 35% of the study population. Term deliveries accounted for 90% of births, while 10% were preterm. The majority of neonates (85%) had a birth weight ranging from 2.5 to 3.0 kg. Low birth weight (<2.5 kg) was observed in 10% of neonates, whereas 5% of newborns weighed between 3.5 and 4.0 kg at birth.

Table 2. Neonatal Characteristics

Variable	Number (%)
Male	35 (35%)
Female	65 (65%)
Term	90 (90%)
Preterm	10 (10%)
<2.5 kg	10 (10%)
2.5–3.0 kg	85 (85%)
3.5–4.0 kg	5 (5%)

Breastfeeding Practices

Regarding breastfeeding practices, early initiation of breastfeeding within one hour of birth was observed in 30% of mothers. Half of the mothers (50%) initiated breastfeeding after 4 hours of delivery, while 10% initiated breastfeeding after 12 hours. Breastfeeding had not been initiated in 10% of mothers at the time of data collection. Colostrum feeding was practiced by 60% of mothers, whereas formula supplementation was provided to 20% of newborns. The majority of mothers (90%) received lactation counselling during their hospital stay, and

exclusive breastfeeding at discharge was reported in 90% of neonates.

Table 3. Breastfeeding Practices

Variable	Number (%)
Initiated within 1 hour	30 (30%)
Initiated after 4 hours	50 (50%)
Initiated after 12 hours	10 (10%)
Not initiated	10 (10%)
Colostrum feeding	60 (60%)
Formula feeding	20 (20%)
Lactation counselling	90 (90%)
Exclusive breastfeeding	90 (90%)

DISCUSSION

The present study demonstrated that although exclusive breastfeeding at discharge was achieved in 90% of newborns, only 30% of mothers-initiated breastfeeding within the first hour after birth. This finding highlights a significant gap between breastfeeding initiation and maintenance.

The high cesarean section rate observed in this study may have contributed to delayed initiation of breastfeeding. Similar studies have reported reduced early initiation rates among mothers undergoing cesarean delivery due to postoperative discomfort and delayed mother-infant contact (6–9).

Lactation counselling was provided to 90% of mothers, which may explain the high exclusive breastfeeding rate at discharge. However, colostrum feeding was practiced by only 60% of mothers, indicating the persistence of misconceptions regarding colostrum(5).

Strengthening antenatal counselling, immediate postnatal breastfeeding support, and implementation of Baby Friendly Hospital Initiative practices may improve breastfeeding outcomes.

Limitations

- Single-center study.
- Small sample size.
- Lack of direct comparison between LSCS and NVD groups for breastfeeding initiation.
- No follow-up after discharge.

CONCLUSION

Early initiation of breastfeeding remains suboptimal despite high rates of lactation counselling and exclusive breastfeeding at discharge. High cesarean section rates may contribute to delayed breastfeeding initiation. Focused breastfeeding support immediately after delivery may improve maternal and neonatal outcomes.

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Nil.

Conflict of Interest

None declared.

Ethical Approval

To be added.

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