

Breastfeeding Practices, Sociocultural Influences, and Health-System Factors Among Mothers in Rural Etawah, Uttar Pradesh: A Cross-Sectional Study

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Background: Breastfeeding is a critical determinant of child survival and maternal health. Despite global and national policy commitments, suboptimal breastfeeding practices persist in rural India, driven by a complex interplay of sociocultural norms, health-system gaps, and knowledge deficits. Uttar Pradesh (UP) consistently records among the lowest exclusive breastfeeding (EBF) rates nationally, making community-level evidence urgently required.

Objectives: To assess breastfeeding initiation, exclusive breastfeeding rates, and reported sociocultural and health-system factors among mothers residing in rural Etawah district, Uttar Pradesh.

Methods: A cross-sectional study was conducted among 99 eligible mothers with children aged 0 to 24 months attending the Rural Health Training Centre (RHTC), Department of Community Medicine, UPUMS, Saifai. Eligible mothers attending the RHTC outpatient department were consecutively recruited using purposive sampling during the study period. Data were collected using a pre-tested, structured interviewer-administered questionnaire on breastfeeding practices, reasons for delayed initiation or non-exclusive breastfeeding, supplementary feeding patterns, traditional beliefs, family support, and healthcare provider interactions. Descriptive statistics were used to summarize the data, and frequencies and proportions were reported.

Results: Antenatal care (ANC) coverage was 85.9%, and institutional delivery was reported in 92.9% of cases. Early initiation of breastfeeding within one hour of birth was observed among 65.7% of mothers, while 34.3% experienced delayed initiation, primarily due to maternal health issues (44.7%) and post-delivery fatigue (42.1%). Exclusive breastfeeding for six months was practiced by 70.4% of mothers (69/98). Among mothers who did not practice exclusive breastfeeding (n=29), perceived insufficient milk supply was the most commonly reported reason (51.9%). Traditional beliefs influenced breastfeeding practices in 12.4% of cases, with honey and gutti administration reported for religious and cultural reasons. Family support for breastfeeding was high (92.9%), and the mother-in-law emerged as the principal influencer of infant feeding decisions (68.5%). Healthcare providers discussed the benefits of breastfeeding with 79.6% of mothers, while 54.1% received breastfeeding-related educational materials.

Conclusion: While EBF rates and early initiation in this cohort appeared higher than state estimates, these findings should be interpreted cautiously because of the descriptive study design and purposive sampling. Perceived milk insufficiency, maternal fatigue, and traditional practices were commonly reported barriers. Strengthening frontline worker counselling, community-based demand generation, and family-inclusive lactation support may improve breastfeeding practices.

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Introduction

Breastfeeding represents one of the most cost-effective public health interventions for child survival and optimal development. The World Health Organization (WHO) and UNICEF recommend exclusive breastfeeding (EBF)

for the first six months of life, followed by continued breastfeeding alongside safe, nutritionally adequate complementary foods up to two years of age and beyond.¹ When these recommendations are adhered to universally, it is estimated that breastfeeding could prevent approximately 820,000 deaths in children under five years annually, constituting 13% of all under-five mortality globally.²

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In India, suboptimal breastfeeding practices remain a major contributor to child undernutrition and mortality. The National Family Health Survey-5 (NFHS-5, 2019–21) reported that approximately 63.7% of children under six months were exclusively breastfed nationally, while early initiation of breastfeeding within one hour of birth was observed in 41.8% of newborns.³ Despite improvements over previous survey rounds, substantial regional variations in breastfeeding practices continue to exist across the country. Uttar Pradesh, home to approximately 230 million people, remains one of the most populous and nutritionally vulnerable states, where breastfeeding indicators consistently fall below national benchmarks.

Early initiation of breastfeeding—within one hour of birth—stimulates colostrum production, provides passive immunity through secretory immunoglobulins, and significantly reduces neonatal mortality risk. Studies from India have documented that delayed initiation is associated with a 33–100% increase in neonatal mortality.⁴ Despite high institutional delivery rates nationally (88.6%, NFHS-5), early initiation and EBF rates have not improved commensurately, suggesting that health-system, sociocultural, and knowledge-related barriers operate independently of delivery setting.³

Rural Etawah district, located in south-western Uttar Pradesh, represents a typical high-burden setting characterised by poor maternal literacy, entrenched patriarchal family structures, reliance on traditional birth attendants and community healers, and limited access to trained lactation support. Sociocultural Factors—including the influence of mothers-in-law, the practice of pre-lacteal feeding (honey, gutti, animal milk), and cultural taboos around colostrum—have been documented as significant barriers to breastfeeding in rural UP.^{5,6} Simultaneously, health-system Factors such as absence of skilled lactation counselling, lack of written educational materials, and inadequate post-delivery support limit the translation of institutional delivery gains into optimal breastfeeding outcomes.^b

Despite the growing national commitment to breastfeeding promotion—through the Mother's Absolute Affection (MAA) programme, the Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), and guidelines of the National Health Mission (NHM)—community-level studies documenting the specific Factors of breastfeeding failure in rural Etawah are absent from the published literature. This evidence gap limits the capacity of district planners and programme managers to design contextually appropriate interventions.

The present study was undertaken to generate such context-specific data, with a focus on breastfeeding initiation, exclusivity, supplementary feeding, traditional beliefs, family support patterns, and the quality of healthcare provider interaction, thereby informing both programmatic and policy responses.

Although several studies have evaluated breastfeeding practices across different regions of India, most have primarily reported prevalence estimates of early initiation or exclusive breastfeeding. Few studies have simultaneously described breastfeeding practices, supplementary feeding, traditional beliefs, family influences, and healthcare-provider interactions among mothers in rural Uttar Pradesh. Therefore, this study provides context-specific information that may support locally appropriate breastfeeding promotion strategies in similar rural settings.

Rationale

Although several studies from different regions of India have described breastfeeding practices, most have focused primarily on the prevalence of early initiation or exclusive breastfeeding. Relatively few studies have comprehensively described breastfeeding practices together with supplementary feeding, traditional beliefs, family influences, and healthcare-provider interactions in rural Uttar Pradesh. The present study addresses this knowledge gap by providing context-specific information from rural Etawah, which may help inform locally appropriate breastfeeding promotion strategies and programme planning in similar rural settings.

Etawah district has received limited attention in the published breastfeeding literature relative to other UP districts. No published community-based study was identified that specifically examined the intersection of sociocultural factors (family hierarchy, traditional practices, beliefs), health-system responsiveness (provider counselling, educational materials, post-delivery assistance), and breastfeeding behaviours among rural Etawah mothers. This study addresses this gap by providing context-specific descriptive evidence that may support local programme planning and breastfeeding promotion strategies at the district level.

Aim

To assess breastfeeding practices and their sociocultural and health-system factors among mothers in rural Etawah, Uttar Pradesh.

Primary Objective

To determine the prevalence of exclusive breastfeeding for the first six months among mothers of children aged 0 to 24 months in rural Etawah, Uttar Pradesh.

Secondary Objectives

- To determine the prevalence of early initiation of breastfeeding (within one hour of birth).
- To identify the reported reasons for delayed initiation of breastfeeding and non-exclusive breastfeeding.
- To document supplementary feeding practices before six months of age.
- To describe family support, traditional beliefs and key decision-makers influencing breastfeeding practices.
- To describe healthcare-provider interactions related to breastfeeding counselling, educational material provision and post-delivery support.

Materials And Methods

Study Design

A facility-based cross-sectional study was conducted at the Rural Health Training Centre (RHTC), Department of Community Medicine, UPUMS, Saifai.

Study Setting

The study was conducted at the Rural Health Training Centre (RHTC), Department of Community Medicine, UPUMS, Saifai, which provides primary healthcare services to the rural population residing in the field practice area of the Department of Community Medicine. Mothers attending the RHTC outpatient department (OPD) for maternal and child health services from different villages within the RHTC catchment area were considered eligible for recruitment. No individual villages were purposively selected because participant recruitment was facility-based rather than village-based.

Study Period

The study was conducted from January 2024 to March 2024.

Study Population

The study population comprised mothers with children aged 0 to 24 months attending the RHTC outpatient department during the study period. Eligible mothers who fulfilled the inclusion criteria and provided written informed consent were included in the study.

Inclusion criteria

Resident mothers with a child aged 0–24 months; willingness to participate; ability to communicate in Hindi.

Exclusion criteria

Mothers who were seriously ill; mothers with children admitted to neonatal intensive care units (NICU) at the time of birth (as breastfeeding decisions would be medically driven); transient/migrant mothers.

Sample Size and Sampling Method

A purposive sampling method was employed. Eligible mothers with children aged 0–24 months attending the Rural Health Training Centre (RHTC) outpatient department during the study period were consecutively screened for eligibility and invited to participate after obtaining written informed consent. Mothers attending the RHTC OPD were from villages within the RHTC catchment area and were referred through the routine maternal and child healthcare referral system, including referrals by Accredited Social Health Activists (ASHAs). No villages were purposively selected for the study, as recruitment was facility-based rather than village-based. ASHA workers facilitated routine referrals to the health facility but were not involved in participant selection, interviewing, or data collection for the study. Recruitment continued until 99 eligible mothers were enrolled. The sample size was determined by the number of eligible mothers attending the RHTC during the study period. As this was a descriptive facility-based study, a formal sample size calculation was not performed; this has been acknowledged as a limitation. Purposive sampling was adopted because a complete sampling frame of eligible mothers was not available, and recruitment depended on the availability of eligible mothers attending the RHTC during the study period. This non-probability sampling approach may have introduced selection bias and limits the generalizability of the findings beyond the study population.

Data Collection Tool

Data were collected using a pre-tested, structured interview schedule developed in Hindi, adapted from validated tools used in similar community-based studies in rural India.^{8,9} The instrument was pre-tested on 10 mothers in an adjacent village (not included in the main study) and revised for clarity and local relevance. The schedule captured: (i) sociodemographic profile; (ii) antenatal and delivery history; (iii) breastfeeding initiation and exclusivity; (iv) reasons for delayed initiation or non-EBF; (v) supplementary feeding practices; (vi) traditional beliefs and family support; and (vii) healthcare provider interactions.

Data Collection Procedure

Eligible mothers attending the Rural Health Training Centre (RHTC) outpatient department during the study period were consecutively screened for eligibility. After obtaining written informed consent, face-to-face interviews were conducted in a private area of the outpatient department using the structured interview schedule. Interviews were conducted in Hindi and lasted approximately 20 to 30 minutes. Completed questionnaires were reviewed daily by the principal investigator for completeness and consistency.

Data Analysis

Data were entered into Microsoft Excel and analysed using descriptive statistics. Frequencies, percentages and proportions were calculated for categorical variables. For questions with multiple responses, each response was coded separately and percentages were calculated using the relevant denominator. Since the study employed a non-probability purposive sampling method and the primary objective was descriptive, inferential statistical analyses were not performed.

Operational Definitions

Early initiation of breastfeeding

Initiation of breastfeeding within one hour of birth.

Exclusive breastfeeding

Feeding only breast milk for the first six months of life without any additional food or drink except medicines, oral rehydration solution, vitamins or mineral supplements.

Pre-lacteal feeding

Administration of any food or liquid other than breast milk before initiation of breastfeeding.

Results

Participant Characteristics

A total of 99 mothers were enrolled. Antenatal care (ANC) was received by 85.9% of participants. Institutional delivery was recorded in 92.9% of cases, consistent with the national trend of improving institutional delivery rates following Janani Suraksha Yojana (JSY) implementation. Table 1 summarises key participant characteristics.

Breastfeeding Practices

Table 2 presents an overview of breastfeeding practices across key indicators.

Table 1: Participant Characteristics (n = 99)

Variable	Category/Response	n	%
Total participants	—	99	100.0
ANC received	Yes	85	85.9
	No	14	14.1
Mode of delivery*	Institutional	92	92.9
	Home / other	7	7.1
Breastfeeding initiation	Within 1 hour	65	65.7
	Delayed (>1 hour)	34	34.3

*Denominators may vary where data were missing.

Table 2: Breastfeeding practices among study participants

Breastfeeding indicator	Response	n	%
Initiation within 1 hour (n=99)	Yes	65	65.7
	No (delayed)	34	34.3
Exclusive breastfeeding for 6 months (n=98)	Yes	69	70.4
	No	29	29.6
Introduced food/liquids before 6 months (n=99)	Yes	28	28.3
	No	71	71.7
Traditional beliefs affecting breastfeeding (n=97)	Yes	12	12.4
	No	85	87.6
Family support received (n=98)	Yes	91	92.9
	No	7	7.1

Breastfeeding was initiated within one hour of birth by 65.7% of mothers. Among those with delayed initiation (34.3%), the reasons were predominantly maternal health issues and fatigue (Table 3). Exclusive breastfeeding for the recommended six-month duration was practiced by 70.4% (n=98). Pre-six-month introduction of supplementary foods or liquids was reported by 28.3% of participants.

Reasons for Delayed Breastfeeding Initiation

Among 34 mothers who experienced delayed initiation (multiple responses permitted), maternal health issues were cited most frequently (44.7%), followed by fatigue after delivery (42.1%). Lack of breastfeeding knowledge was reported by 18.4%, while lack of staff assistance was cited by only one respondent (2.6%). Notably, family traditions were not reported as a reason for delayed initiation by any participant.

Exclusive Breastfeeding and Reasons for Non-Exclusive Breastfeeding

Among 29 mothers who did not practice EBF, perceived lack of sufficient milk was the most common reason (51.9%), followed by the perception that the baby was not

Table 3: Reasons for delayed breastfeeding initiation (n = 34; multiple responses)

Reason	n (out of 34)	%
Health issues (maternal)	17	44.7
Fatigue after delivery	16	42.1
Lack of breastfeeding knowledge	7	18.4
Others	2	5.3
Lack of staff assistance	1	2.6
Family traditions	0	0.0

Note: Percentages exceed 100 due to multiple responses per participant.

Table 4: Reasons for non-exclusive breastfeeding (n = 29; multiple responses)

Reason	n (out of 29)	%
Perceived lack of milk	14	51.9
Baby not satisfied/not feeling full	10	37.0
Workload/lack of time	3	11.1
Others	3	11.1
Health issues (maternal)	2	7.4
Misconceptions / lack of knowledge	2	7.4
Family pressure	1	3.7
Baby illness	1	3.7
Pain during breastfeeding	0	0.0

Note: Percentages exceed 100 due to multiple responses per participant.

satisfied or full (37.0%) a related belief often rooted in the same misconception of inadequate milk supply. Workload and time constraints were cited by 11.1%, maternal health issues by 7.4%, and family pressure by 3.7%. Pain during breastfeeding was not reported as a reason for non-EBF (Table 4).

Supplementary Feeds Introduced Before Six Months

Among mothers who introduced supplementary feeds before six months of age (28.3%, n=28), the types of feeds reported included cow milk (most commonly cited), water, gutti (a traditional herbal preparation administered orally to neonates), buffalo milk, commercial infant formula (Lactogen), honey, biscuits, dalia (porridge), and homemade complementary foods. Reasons for introducing these feeds mirrored the barriers to EBF: perceived inadequate milk production, perception that the baby was not feeling full (expressed locally as 'pet nahi bharta tha'), episodes of infant vomiting, and family advice rooted in traditional beliefs.

Traditional Beliefs and Family Support

Traditional beliefs were reported to have affected breastfeeding practices in 12.4% of cases (n=97). The

specific beliefs documented included administration of honey for religious reasons and gutti due to family traditions. These are among the most prevalent pre-lacteal feeding practices documented in rural UP. Family support for breastfeeding was reported by 92.9% of participants (n=98).

Healthcare and Sociocultural Factors

Table 5 presents data on healthcare provider interactions and sociocultural influencers of feeding decisions.

The mother-in-law emerged as the most influential decision-maker regarding infant feeding (68.5%), followed by the husband (47.8%) and the participant's own mother (45.7%). Healthcare providers discussed breastfeeding benefits with 79.6% of participants, and 54.1% received educational materials. Hospital staff assisted with breastfeeding after delivery for 71.1% of participants. A majority (77.6%) reported comfort in discussing breastfeeding with their healthcare providers.

Discussion

The use of purposive sampling and recruitment of mothers attending a single Rural Health Training Centre may have introduced selection bias, as mothers utilizing healthcare services could differ from those not attending the facility in terms of health-seeking behaviour, breastfeeding knowledge, and family support. Therefore, the findings should not be considered representative of all mothers in rural Etawah or Uttar Pradesh.

Table 5: Healthcare and sociocultural factors of breastfeeding (n varies)

Variable	Category	n	%
Healthcare provider discussed breastfeeding benefits (n=98)	Yes	78	79.6
	No	19	19.4
	Not stated	1	1.0
Educational materials received (n=98)	Yes	53	54.1
	No	45	45.9
	Yes	69	71.1
Hospital staff assistance after delivery (n=97)	No	24	24.7
	Not stated	4	4.1
	Yes	76	77.6
Comfortable discussing breastfeeding with providers (n=98)	No	15	15.3
	Maybe	7	7.1
	Mother-in-law	63	68.5
Major influencers of feeding decisions (n=92; multiple responses)	Husband	44	47.8
	Mother (own)	42	45.7
	Midwife/ASHA	15	16.3
	Others	6	6.5

Breastfeeding Initiation

Early initiation of breastfeeding within one hour of birth was documented in 65.7% of participants in the present study. This proportion appears higher than the Uttar Pradesh state average of 24.6% reported in NFHS-4 (2015–16) and the national estimate of 41.8% reported in NFHS-5 (2019–21). However, these comparisons should be interpreted cautiously because the present study employed purposive sampling and was not intended to provide population-representative estimates.³ Comparable community-based studies conducted in rural Uttar Pradesh by Singh *et al.* (2017) have reported early initiation rates ranging from 40 to 50% in similar settings.⁵ The higher proportion observed in the present study may be related to the high institutional delivery rate (92.9%) among participants, as facility-based deliveries are generally associated with improved breastfeeding initiation through skilled birth attendant support and postnatal counselling.¹¹

Maternal health issues (44.7%) and fatigue after delivery (42.1%) were the primary reasons for delayed initiation, findings consistent with a multicentre Indian study by Thakur *et al.* (2019), where maternal morbidity was the most frequently reported reason for delayed initiation.⁸ Importantly, lack of staff assistance (2.6%) was reported by only one participant, contrasting with studies from tertiary care settings in Uttar Pradesh where staff shortages were more frequently cited.¹² This difference may reflect the relatively supportive healthcare environment in the present study, where 71.1% of participants reported receiving post-delivery breastfeeding assistance from hospital staff.

Exclusive Breastfeeding

EBF was practiced by 70.4% of participants—substantially above the national estimate of 41.8% (NFHS-5) and the UP-state average, which remains below 50%.³ This finding, while encouraging, must be interpreted with caution given purposive sampling, which may have introduced selection bias toward mothers with higher health literacy or stronger social support. Additionally, recall bias in self-reported EBF is well-recognised in the literature and may lead to overestimation.¹³

Perceived milk insufficiency was the dominant reason for non-EBF (51.9%), a finding consistent with multiple Indian and international studies. A systematic review by Gatti (2008) identified perceived insufficient milk supply as the most commonly reported barrier to breastfeeding globally.¹⁴ This perception is frequently a functional concern rather than a physiological reality, often

triggered by infant crying or cluster feeding, and is highly amenable to skilled lactation counselling. The finding that 28.3% of mothers had introduced supplementary foods or liquids before six months—with cow milk and water being the most common—aligns with NFHS-5 data showing widespread early introduction of liquid feeds in rural north India.³

Supplementary Feeding and Pre-lacteal Practices

Pre-lacteal and supplementary feeds documented in this study—gutti, honey, cow milk, and buffalo milk—are consistent with findings from multiple rural north Indian studies. Upadhyay *et al.* (2012) and Srivastava *et al.* (2019) documented similar pre-lacteal feeding patterns in rural UP, attributing them to deeply embedded family traditions and the belief that breastmilk alone is insufficient.^{6,9} Honey administration for religious reasons and gutti for traditional health reasons represent culturally grounded practices that are difficult to modify through provider counselling alone and require community-level behaviour change communication (BCC) strategies.

Sociocultural Factors

The dominant role of the mother-in-law (68.5%) in infant feeding decisions—above even that of the husband (47.8%) or own mother (45.7%) is a distinctive feature of north Indian rural households and is well-documented in the literature. Raman *et al.* (2019) and Patel *et al.* (2018) both identified the mother-in-law as the primary influencer in breastfeeding decisions in rural Uttar Pradesh and Rajasthan, respectively.^{15,16} This hierarchical family dynamic implies that breastfeeding promotion strategies that target only the mother are insufficient; engaging mothers-in-law and husbands as active stakeholders in breastfeeding counselling is essential for sustained behaviour change.

Traditional beliefs affected breastfeeding in 12.4% of participants, a lower proportion than reported in some comparable studies (20–35%), potentially reflecting the relatively higher institutional delivery rate and healthcare provider interaction in this cohort.^{5,6} High family support (92.9%) is a protective factor documented in this study; however, the quality of support—specifically whether family members actively promoted EBF or inadvertently encouraged supplementary feeding—warrants qualitative exploration.

Health-System Factors

Healthcare providers discussed breastfeeding benefits with 79.6% of participants, and 71.1% received post-

delivery breastfeeding assistance from hospital staff relatively high rates compared to other rural India studies where provider counselling rates of 40 to 60% are more typical.^{7,11} Yet despite these interactions, 34.3% of mothers experienced delayed initiation and 29.6% did not practice EBF, indicating that the content, quality, and follow-up of counselling may be suboptimal. Nearly half of participants (45.9%) did not receive educational materials, representing a missed opportunity for reinforcement of key messages.

The high comfort level with discussing breastfeeding with providers (77.6%) is encouraging and suggests a relatively enabling environment for targeted counselling at points of contact. Strengthening ASHA and ANM (Auxiliary Nurse Midwife) capacity in structured lactation counselling, including at home visits, could meaningfully improve EBF rates in this context.

Public Health Implications

The findings carry several actionable implications for programme planning in rural Etawah and comparable UP settings:

- Targeted lactation counselling addressing perceived milk insufficiency the principal driver of non-EBF should be integrated into all antenatal and postnatal contacts, using the Mother's Absolute Affection (MAA) programme framework.
- Family-inclusive counselling sessions that specifically engage mothers-in-law and husbands should be instituted at health facilities and through ASHA-led household visits, given the dominant role of the mother-in-law in feeding decisions.
- Community-based behaviour change communication (BCC) activities—including village health, nutrition, and sanitation days (VHSNDs)—should explicitly address pre-lacteal feeding practices (gutti, honey, animal milk) and frame EBF as both culturally compatible and physiologically adequate.
- Provision of illustrated, locally adapted breastfeeding educational materials to all mothers at the time of first ANC contact and at delivery should be standardised, given that 45.9% of mothers did not receive such materials.
- Strengthening post-delivery lactation support within facilities—through dedicated lactation counsellors or IBCLC-trained nurses—would address the gap between high institutional delivery and suboptimal EBF rates.
- Maternal fatigue and health complications as barriers to early initiation underscore the need for

adequate post-delivery rest, skilled obstetric care, and immediate postnatal follow-up.

Strengths

- This study provides context-specific, community-level evidence from rural Etawah, a setting previously underrepresented in published breastfeeding literature.
- The study comprehensively examines both sociocultural and health-system factors, enabling a multidimensional understanding of breastfeeding behaviour.
- The use of a locally pre-tested, Hindi-language interview schedule enhanced data quality and participant comprehension.
- Detailed documentation of supplementary feed types and traditional beliefs provides granular data actionable for BCC programme design.

Limitations

- Purposive sampling limits the representativeness and generalisability of findings to the broader district or state population.
- Cross-sectional design precludes causal inference; temporal relationships between factors and breastfeeding outcomes cannot be established.
- Recall bias is an inherent limitation in self-reported breastfeeding data, particularly for mothers of older infants within the study age window.
- Social desirability bias may have led to overreporting of EBF and underreporting of pre-lacteal feeding practices.
- The relatively small sample size (n=99) limits statistical precision; inferential analysis was not performed.

Conclusion and Recommendations

This community-based cross-sectional study in rural Etawah, Uttar Pradesh, documents breastfeeding initiation and exclusive breastfeeding rates that are encouraging relative to state averages, yet reveals persisting challenges rooted in perceived milk insufficiency, maternal fatigue, traditional pre-lacteal feeding practices, and limited reach of educational materials. The mother-in-law's dominant role in infant feeding decisions is a critical programmatic lever that remains underutilised in current breastfeeding promotion strategies.

To translate high institutional delivery rates into optimal breastfeeding outcomes, a multi-pronged approach is recommended: (i) facility-level structured

lactation counselling with family-inclusive components; (ii) ASHA-led community counselling using locally adapted BCC tools; (iii) targeted engagement of mothers-in-law and husbands; (iv) universal provision of breastfeeding educational materials at first ANC contact; and (v) strengthening of postnatal home-visit protocols to reinforce EBF messaging and identify barriers early.

Future research should employ probability sampling methods and larger sample sizes to generate representative estimates. Qualitative investigations into the perspectives of mothers-in-law, community healers, and ASHA workers would complement quantitative findings and inform more effective and culturally resonant programme designs.

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