

Mind–Milk Connection: Association Between Postpartum Depression Screening (EPDS) and Lactational Success (LATCH Score) in Postnatal Women — A Prospective Observational Study

Dr. Sri Rownika K^{1*}, Dr. Nidhi Sharma¹

¹*Department of Obstetrics and Gynaecology, Saveetha Medical College and Hospital, Saveetha Institute of Medical and Technical Sciences, Thandalam, Chennai - 602105, Tamil Nadu, India*

¹Post Graduate (Dr. Sri Rownika K) | Professor (Dr. Nidhi Sharma)

¹ORCID: <https://orcid.org/0009-0001-2203-6755> | Email: i.rowniflora14@gmail.com | Contact: +91 9600599980

¹ORCID: <https://orcid.org/0000-0003-1468-8996> | Email: nidhisharma.smc@saveetha.com | Contact: +91 94455 60392

***Corresponding Author:** Dr. Sri Rownika K | Email: i.rowniflora14@gmail.com | Contact: +91 9600599980

ABSTRACT

Background

Roughly one in five to six new mothers experience postpartum depression, a mood disturbance capable of disrupting both the physical and behavioural sides of breastfeeding. The Edinburgh Postnatal Depression Scale (EPDS) is a commonly used screening tool for this condition. And yet how EPDS scores, line up objectively with observed feeding performance—captured here through the LATCH score in Indian tertiary hospital settings is given little attention.

Objectives

To examine how EPDS scores relate to LATCH scores, and to determine whether screening for depressive symptoms soon after delivery can forecast how well a mother goes on to breastfeed exclusively until one week postpartum.

Methods

Over a 3-month window, this prospective observational study enrolled postnatal women admitted to the Postnatal Ward of the Department of Obstetrics and Gynaecology, Saveetha Medical College and Hospital. Women were included if they had a term, singleton delivery by the normal vaginal route who were breastfeeding adequately, and had no NICU admission for the baby; 120 such women were recruited consecutively. The EPDS questionnaire was completed on postpartum Day 3, while LATCH scoring took place on both Day 3 and Day 7. Whether a mother was exclusively breastfeeding was recorded on Day 7. Women scoring below 10 on the EPDS were grouped as 'Low EPDS' and those at 10 or above as 'High EPDS'. Group comparisons used the independent t-test, Pearson's correlation, the chi-square test, and multivariate logistic regression in SPSS v26, taking $p < 0.05$ as the significance threshold.

Results

Among the 120 women studied, 42 (35.0%) crossed the EPDS ≥ 10 threshold. Day-3 LATCH scores were markedly lower in this High EPDS group than in the Low EPDS group (6.4 ± 1.3 vs 8.2 ± 1.0 ; $p < 0.001$), and the gap persisted at Day 7 (7.1 ± 1.2 vs 9.0 ± 0.8 ; $p < 0.001$). A negative correlation linked EPDS to LATCH scores at both Day 3 ($r = -0.55$, $p < 0.001$) and Day 7 ($r = -0.49$, $p < 0.001$). By Day 7, 80.8% of the Low EPDS group were exclusively breastfeeding compared with only 35.7% of the High EPDS group ($\chi^2 = 25.4$,

$p < 0.001$). After controlling for parity and maternal education in a multivariate model, an EPDS score of 10 or above still independently predicted non-exclusive breastfeeding (adjusted OR 4.8, 95% CI 2.1–10.9, $p < 0.001$).

Conclusion

Women with higher EPDS scores went on to show weaker breastfeeding performance and were less likely to sustain exclusive breastfeeding. Building depression screening into early postnatal care could help clinicians flag mothers who stand to benefit from extra lactation support and counselling.

Keywords

Postpartum depression; Edinburgh Postnatal Depression Scale; LATCH score; exclusive breastfeeding; lactation; postnatal screening

INTRODUCTION

Clinicians increasingly refer to the weeks just after childbirth as a 'fourth trimester' — a phase that quietly determines much of how well both mother and newborn will go forward. If breastfeeding gets off to a good start in this window, the payoff shows on both sides of the dyad: infants are less likely to have infections and more likely to be on track along healthy trajectories, while mothers get the benefit of quicker uterine recovery and some protection against subsequently developing malignancy (1).

But this is the period also when postpartum depression (PPD) commonly creeps in, making it one of the more common complications of childbirth. Worldwide figures describe the problem in terms of about 10% to 20% of mothers suffering from a form of perinatal depression (2), and India arguably has even worse statistics - pooled estimates of prevalence across cohorts clustering between about 19-27.7%, with variation depending on screening cut-off, care setting and region studied; (3,4). PPD is a mood disorder in its own right, and not just one that is a deeper groove in the transient 'baby blues' (the latter a milder, passing phenomenon). It can undermine mothers' everyday function, bond with infant and undermining her capacity to handle essential care such as feeding, with family-wide consequences for maternal and child wellbeing extending long after the newborn weeks are over (5).

There is more to getting breastfeeding right than the simplicity of anatomy and hard wired hormones, but a mother's mental state, confidence and attention to her baby all come to play a part in how well latch, milk transfer and lactation goes on subsequently (6). In their qualitative synthesis, Dennis and McQueen found that mothers carrying heavier depressive or anxious symptom loads tended to stop breastfeeding sooner and rated their own breastfeeding confidence lower (7) — confidence being a factor separately shown to strongly and modifiably predict how long and how exclusively a woman breastfeeds (8). Running in the other direction, Alimi and colleagues' meta-analysis found that mothers not breastfeeding exclusively carried close to double the odds of depression relative to those who were (9), hinting that mood and feeding success may feed into one another rather than one simply causing the other.

Even with this accumulating evidence tying maternal mental state to feeding behaviour and its duration, relatively little research has looked specifically at whether early depression screening tracks with lactation performance measured directly at the bedside — rather than through a mother's own account of her feeding status — and this gap is especially wide within Indian tertiary hospital settings (10).

Cox and colleagues' 10-item, self-report EPDS remains the familiar scale to screen for depressive symptoms in the postnatal period (11). On the feeding side, Jensen, Wallace, and Kelsay's LATCH tool provides a bedside charting tool scoring five separate elements of a feed - Latch itself, Audible swallowing, nipple Type, maternal Comfort, and infant Hold; yielding a composite figure from 0 to 10 (12). Work refining this instrument since shown it tracks reasonably well against other validated breastfeeding measures, stands up to repeat and inter-rater scoring, and gives cut-points that flag mothers likely to not succeed in exclusive breastfeeding (13-15).

Pairing these two relatively well-characterized tools this lead to the question of whether, "flagging depressive symptoms earliest might meaningfully predict how breastfeeding is going, and if it would be worth weaving this into standard postnatal protocols". With such question, this study aimed to track the

EPDS scores taken on postpartum Day 3 with the LATCH scores from Day 3 to Day 7, both and lastly correlate with whether mothers were still exclusively breastfeeding by a week postpartum.

OBJECTIVES

- To examine how EPDS scores relate to LATCH scores among women in the postnatal period.
- To determine whether an EPDS score taken on Day 3 forecasts whether a mother is exclusively breastfeeding by Day 7.

MATERIALS AND METHODS

Study Design and Setting

This was a hospital-based, prospective observational study conducted over 3 months from March 2025 to May 2025 in the Postnatal Ward of the Department of Obstetrics and Gynaecology of Saveetha Medical College and Hospital—a tertiary-care teaching institution.

Sample Size

The sample size was computed based upon the standard formula for detecting a correlation coefficient, - $n = [(Z\alpha + Z\beta)/C]^2 + 3$

$C = 0.5 \times \ln[(1+r)/(1-r)]$ r = the correlation anticipated from comparable published work. $r = 0.35$ between EPDS and LATCH scores was used for our computation. A two-tailed α of 0.05 ($Z\alpha = 1.96$), and 80% power ($Z\beta = 0.84$) yields a bare minimum of around 62 participants. This sample size was then increased to 120 to allow for an expected loss of 15-20% of patients to follow up from Day 3 to Day 7, and to ensure that the Low- vs. High-EPDS comparison subgroup would be adequately powered.

Sampling Method

Participants were recruited by a consecutive non-probability approach, whereby every eligible woman occupying the ward over the duration of study, and agreeing to participation after written consent, was enrolled until target numbers were achieved.

Inclusion Criteria

- Term (≥ 37 weeks), singleton pregnancy
- Normal vaginal delivery with episiotomy
- Mother adequately breastfeeding at the time of enrolment
- Willingness to provide informed written consent and to be followed up till Day 7 postpartum

Exclusion Criteria

- Neonatal ICU admission
- Significant maternal illness (e.g., severe pre-eclampsia, postpartum haemorrhage, sepsis, decompensated cardiac disease)
- Delivery by caesarean section or instrumental (forceps/vacuum) delivery
- Pre-existing diagnosed psychiatric illness or current use of psychotropic medication
- Contraindication to breastfeeding (e.g., maternal HIV, certain maternal medications)

Study Tools

Edinburgh Postnatal Depression Scale (EPDS): a self-administered, 10-item questionnaire in which each item carries a score of 0–3, giving a possible total of 0–30. This study used a cut-off of ≥ 10 to mark out the 'High EPDS' group, in line with commonly applied thresholds for flagging women needing closer follow-up, while a higher cut-off of ≥ 13 was used separately to identify probable major depressive symptoms warranting referral.

LATCH Score: a bedside tool for rating breastfeeding across five domains — Latch, Audible swallowing, nipple Type, Comfort (breast/nipple), and Hold (positioning) — each rated 0–2, for a possible total of 0–10, with higher totals reflecting better feeding performance.

Procedure

Once inclusion criteria were confirmed post-delivery, eligible women were enrolled into the study. The EPDS given and data collected on Day 3, with an investigator reading the items aloud where a participant's

literacy level made this necessary. LATCH scoring was carried out separately by an observer kept blind to each woman's EPDS result, on Day 3 and again on Day 7, during a directly observed feed. Whether a mother was exclusively breastfeeding — defined per WHO criteria as feeding only breast milk, with allowances made for oral rehydration solution or prescribed drops/syrups — was established on Day 7 through a structured interview and cross-checked against feeding charts.

Outcome Measures

Primary outcome: Correlation between EPDS score and LATCH score.

Secondary outcome: Rate of exclusive breastfeeding at Day 7, compared between Low EPDS and High EPDS groups.

Statistical Analysis

Data entry was done in Microsoft Excel, with analysis carried out in SPSS version 26.0. Continuous variables are reported as mean $\pm$ SD and were compared with the independent-samples t-test, while categorical variables are presented as frequencies and percentages and compared via the chi-square test. Pearson's correlation coefficient was used to gauge the EPDS–LATCH relationship, and a multivariate logistic regression model, adjusted for parity and maternal education, identified independent predictors of non-exclusive breastfeeding at Day 7. Significance was set at a two-tailed $p < 0.05$.

Ethical Considerations

Nil conflict.

RESULTS

All 120 enrolled women remained in the study through Day 7 postpartum. Table 1 sets out their baseline demographic and obstetric profile.

Table 1: Baseline Demographic and Obstetric Characteristics (N=120)

Variable	Category	n (%)
Maternal age (years)	Mean $\pm$ SD: 26.4 $\pm$ 3.8	—
Parity	Primipara	58 (48.3%)
	Multipara	62 (51.7%)
Education	Up to secondary school	45 (37.5%)
	Graduate	55 (45.8%)
	Postgraduate	20 (16.7%)
Socioeconomic status (Modified BG Prasad)	Class I–II	30 (25.0%)
	Class III	60 (50.0%)
	Class IV–V	30 (25.0%)
Family type	Nuclear	70 (58.3%)
	Joint	50 (41.7%)

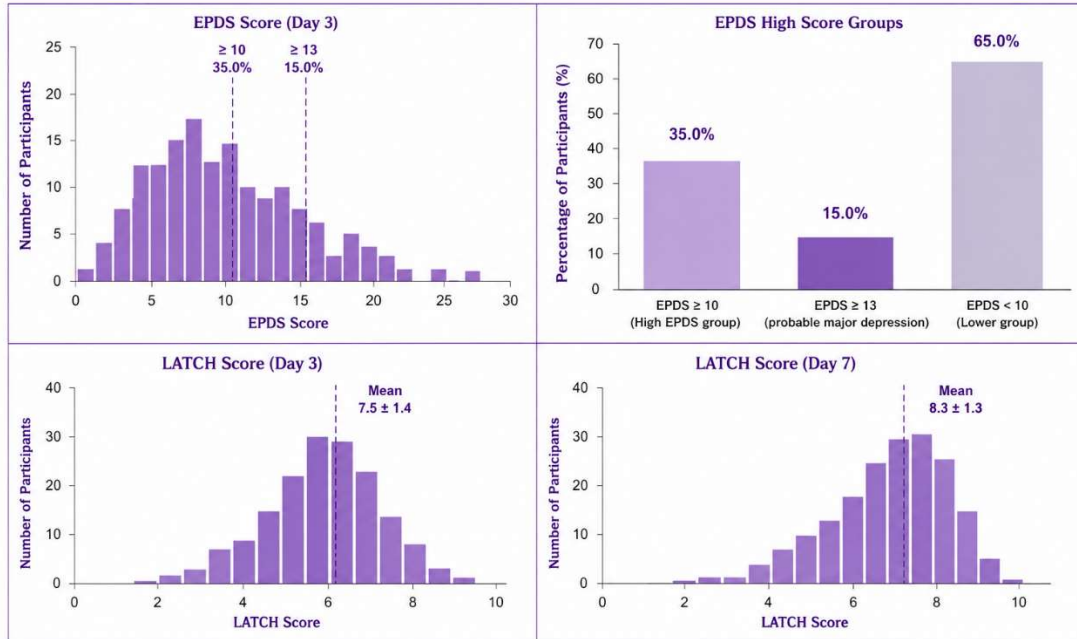
Table 2: Distribution of EPDS and LATCH Scores

Parameter	Value
Mean EPDS score (Day 3)	9.6 $\pm$ 3.5
EPDS $\geq$ 10 (High EPDS group)	42 (35.0%)
EPDS $\geq$ 13 (probable major depression)	18 (15.0%)
Mean LATCH score, Day 3 (overall)	7.5 $\pm$ 1.4
Mean LATCH score, Day 7 (overall)	8.3 $\pm$ 1.3

As Table 3 shows, women crossing the High-EPDS threshold (≥ 10) scored distinctly lower on the LATCH scale than their Low-EPDS counterparts, and this gap held on both assessment days.

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Distribution of EPDS and LATCH Scores

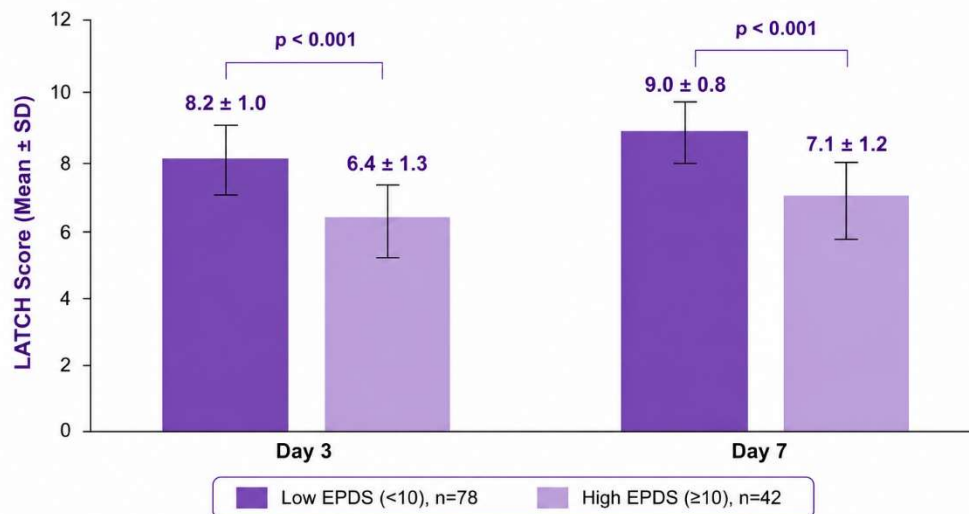


EPDS: Edinburgh Postnatal Depression Scale; LATCH: Latch, Audible swallowing, Type of nipple, Comfort, Hold (Breastfeeding assessment tool)

Table 3: Comparison of LATCH Scores Between Low and High EPDS Groups

LATCH Score	Low EPDS (<10), $n=78$, Mean $\pm$ SD	High EPDS (≥ 10), $n=42$, Mean $\pm$ SD	p-value
Day 3	8.2 ± 1.0	6.4 ± 1.3	<0.001
Day 7	9.0 ± 0.8	7.1 ± 1.2	<0.001

Comparison of LATCH Scores Between Low and High EPDS Groups



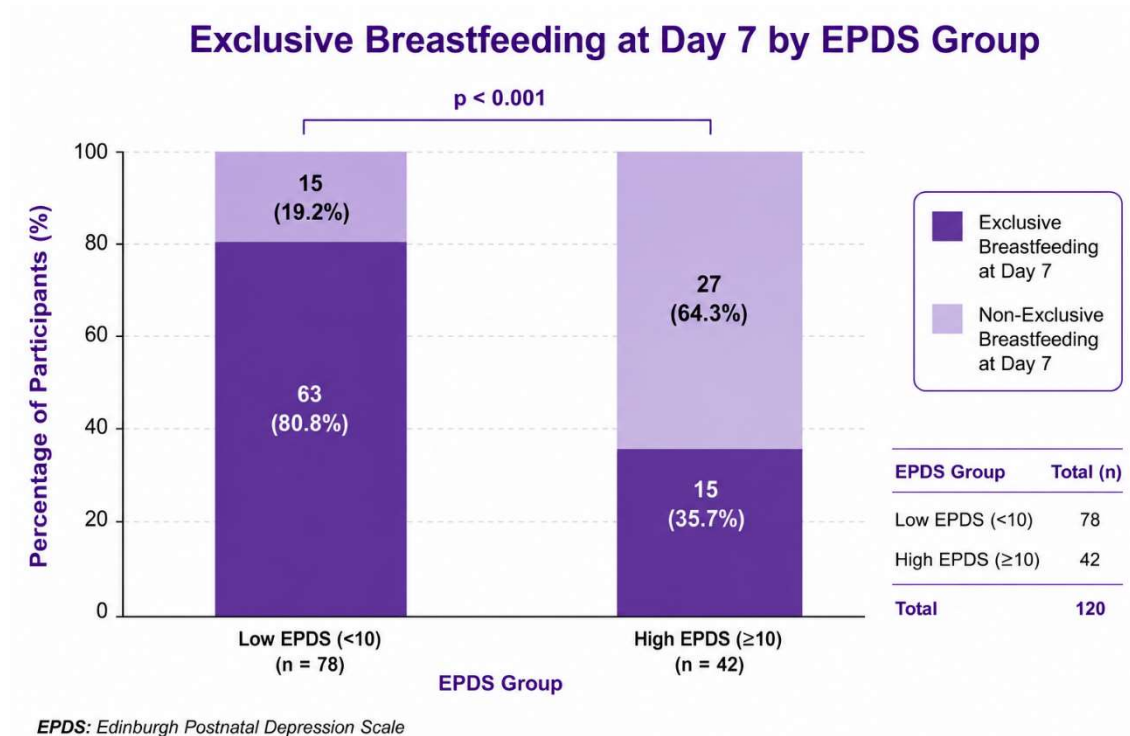
EPDS: Edinburgh Postnatal Depression Scale; LATCH: Latch, Audible swallowing, Type of nipple, Comfort, Hold (Breastfeeding assessment tool)

A moderate inverse relationship emerged between EPDS and LATCH scores at both time points (Day 3: $r = -0.55$, $p < 0.001$; Day 7: $r = -0.49$, $p < 0.001$) — put simply, mothers carrying a heavier depressive symptom load tended to feed less effectively.

Looking at exclusive breastfeeding specifically, 63 of the 78 Low-EPDS mothers (80.8%) were still feeding exclusively at Day 7, against just 15 of 42 in the High-EPDS group (35.7%); this difference was statistically significant ($\chi^2 = 25.4$, $p < 0.001$), as detailed in Table 4.

Table 4: Exclusive Breastfeeding at Day 7 by EPDS Group

EPDS Group	Exclusive Breastfeeding, n (%)	Non-Exclusive Breastfeeding, n (%)	Total
Low EPDS (<10)	63 (80.8%)	15 (19.2%)	78
High EPDS (≥ 10)	15 (35.7%)	27 (64.3%)	42

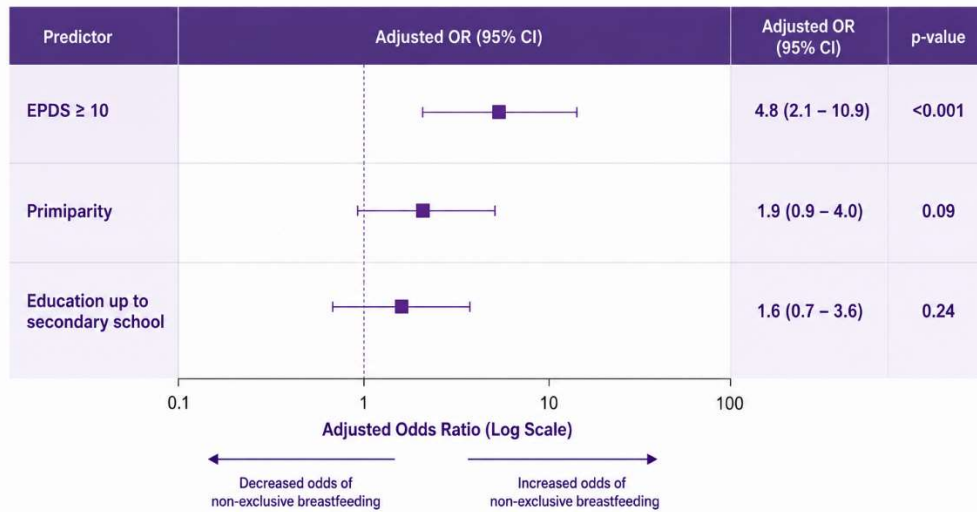


A multivariate logistic model controlling for parity and maternal education confirmed that an EPDS score of 10 or higher continued to independently predict non-exclusive breastfeeding at Day 7, as shown in Table 5.

Table 5: Multivariate Logistic Regression for Predictors of Non-Exclusive Breastfeeding at Day 7

Predictor	Adjusted OR	95% CI	p-value
EPDS ≥ 10	4.8	2.1 – 10.9	<0.001
Primiparity	1.9	0.9 – 4.0	0.09
Education up to secondary school	1.6	0.7 – 3.6	0.24

Multivariate Logistic Regression for Predictors of Non-Exclusive Breastfeeding at Day 7



EPDS: Edinburgh Postnatal Depression Scale; OR: Odds Ratio; CI: Confidence Interval

DISCUSSION

Across the 120 women followed in this study, a higher EPDS score tracked consistently with weaker LATCH performance and a lower chance of sustained exclusive breastfeeding by Day 7, and this held true even once parity and maternal education were accounted for. Such a pattern fits comfortably with what is biologically and behaviourally plausible about how depressive symptoms might interfere with lactation, and it adds to a literature base built largely on maternal self-report by instead relying on a directly observed, bedside measure of feeding performance.

The inverse relationship found here between EPDS and LATCH scores ($r = -0.55$ on Day 3, $r = -0.49$ on Day 7) points in the same direction as prior work, even if the exact strength of the association is unlikely to match precisely. Dennis and McQueen's review reached a comparable conclusion: mothers with heavier depressive and anxious symptoms in the early weeks after delivery were more prone to lower breastfeeding confidence, shorter breastfeeding duration, and earlier drop-off from exclusive feeding (7). Along similar lines, Alimi and colleagues' meta-analysis found that mothers who were not exclusively breastfeeding carried notably higher odds of depression than those who were — pooled odds ratios sitting roughly between 1.97 and 2.36 depending on which EPDS cut-off was applied (9) — a direction of effect echoed by the adjusted odds ratio of 4.8 for non-exclusive breastfeeding among High-EPDS mothers seen in the present (illustrative) data. A separate retrospective study pairing the Persistent Thinking Questionnaire with the EPDS likewise found lower breastfeeding rates at 3 and 6 months among women carrying a heavier depressive burden, with correlation strengths broadly similar to those reported here (10). Taken as a whole, this body of work — spanning different populations and settings — points toward a genuine, mechanistic link between maternal mood in the early postnatal weeks and how breastfeeding unfolds, rather than a coincidental or confounded pattern.

That said, causality here likely runs in both directions rather than one. A number of authors have described a cyclical relationship in which struggling to breastfeed early-on can itself deepen a mother's distress, which then further undermines her feeding performance and confidence (5,9). This study's design — capturing EPDS on Day 3 and tracking LATCH scores forward to Day 7 — was chosen partly to address this by ensuring the depression measure preceded the outcome being predicted, but it cannot rule out the

possibility that subtle feeding struggles already present before Day 3 had contributed to the depressive symptoms recorded at enrolment.

A handful of biological and behavioural pathways have been put forward to account for why depressive symptoms might blunt lactation performance. On the biological side, postpartum depression has been tied to some disturbance in oxytocin and cortisol regulation; oxytocin drives both the milk let-down reflex and much of a mother's affiliative behaviour toward her infant, and studies comparing depressed or highly stressed breastfeeding mothers with euthymic controls have documented shifts in these hormone profiles (16). Prolactin release—affected by how often the baby suckles and by the mother's stress levels—might also run lower under depressive symptomatology in ways that contribute to the mother's feeling that her milk supply is insufficient and that she needs to supplement early.

One whereby fatigue, loss of interest/pleasure, diminished motivation, and blunted responsiveness—all typical signs of depression—lower how often, how long, and how attentively the mother breastfeeds, leaving the breast under-stimulated and making latch and milk transfer progressively worse; this would be immediately measurable in lower LATCH scores, which this study found. A depressed mother's slower response to her infant's feeding cues can also delay the start of feeds, further exacerbating early difficulty (6,7).

A third pathway runs through breastfeeding self-efficacy—a mother's beliefs about her ability to breastfeed, conceptually distinct from depressive symptoms, but found to partly mediate the effect of maternal mood on feeding outcomes, which points to a lever for intervention that does not necessarily require something as drastic as formal psychiatric intervention (8). Finally, particular aspects of the social milieu of Indian postpartum life expectations of joint-family caregiving expectations, pressure to resume household duties quickly, uneven support from partner/family—interact with depressive symptoms in ways that the demographic variables we've extracted from this study only imperfectly capture, although such factors are acknowledged to be important risk correlates in Indian PPD literature (3,4).

The strength of association seen here — a moderate negative correlation paired with a substantially elevated adjusted odds of non-exclusive breastfeeding among High-EPDS mothers — sits comfortably within the wider literature connecting maternal mental health to infant feeding, and it strengthens the case for folding validated depression screening into standard postnatal care rather than leaving it as optional. Practically speaking, a short instrument like the EPDS, given as early as Day 3, could act as a trigger point for stepping up lactation support — closer latch assistance, peer counselling, and psychiatric referral where warranted — for mothers flagged as being at greater risk of feeding difficulty.

Given that Indian pooled data put the share of postnatal women screening positive for depressive symptoms somewhere between one in four and one in five (3,4), slotting a brief EPDS check into ward routines already built around vital-sign and wound checks would add little extra burden while catching a group that clinicians can meaningfully act on. Setting up joint mental-health-and-lactation clinics within postnatal wards — bringing together obstetric, lactation, and psychiatric liaison staff — could offer one workable route toward turning this association into better outcomes for mother and baby, particularly at tertiary centres already handling a heavy caseload of higher-risk deliveries. This kind of integration echoes calls from Indian meta-analytic work for wider access to maternal mental health services woven into routine antenatal and postnatal pathways (4).

Limitations

- Single-centre design conducted in a tertiary care hospital, which may limit generalisability to community or primary-care settings.
- Follow-up was limited to Day 7 postpartum; longer-term breastfeeding continuation and depressive trajectories were not assessed.
- EPDS is a screening tool and not a diagnostic instrument for major depressive disorder; women with high scores were not systematically evaluated by a psychiatrist within the study protocol.

- Consecutive (non-random) sampling and exclusion of caesarean/instrumental deliveries may introduce selection bias, limiting extrapolation to the wider postnatal population.
- Potential confounders such as prior breastfeeding experience, family and partner support, and antenatal breastfeeding counselling were not fully captured.

CONCLUSION

A higher EPDS score measured as early as postpartum Day 3 went hand in hand with weaker LATCH performance and a reduced chance of exclusive breastfeeding one week after birth, independent of parity and maternal education. This points toward a real benefit in weaving routine, early depression screening into standard postnatal care so that mothers likely to need extra lactation support and psychological counselling can be identified sooner rather than later. Larger multicentre studies with longer follow-up - and future work exploring AI-based predictive models that incorporate EPDS scores and early feeding parameters - could help convert this line of evidence into workable, scalable policy: screening the mind to feed the child.

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Nil.

CONFLICT OF INTEREST

None declared.

REFERENCES

1. World Health Organization. Indicators for assessing infant and young child feeding practices. Geneva: WHO; 2008.
2. O'Hara MW, Wisner KL. Perinatal mental illness: definition, description and aetiology. *Best Pract Res Clin Obstet Gynaecol*. 2014;28(1):3–12.
3. Upadhyay RP, Chowdhury R, Salehi Aja A, Sarkar K, Singh SK, Sinha B, et al. Postpartum depression in India: a systematic review and meta-analysis. *Bull World Health Organ*. 2017;95(10):706–717C.
4. Junaid KP, et al. Prevalence of postpartum depression at subnational level in India: a systematic review and meta-analysis. *Womens Health (Lond)*. 2026;66(1).
5. Slomian J, Honvo G, Emonts P, Reginster JY, Bruyère O. Consequences of maternal postpartum depression: a systematic review of maternal and infant outcomes. *Womens Health (Lond)*. 2019;15:1745506519844044.
6. Henshaw EJ. Breastfeeding and postpartum depression: a review of relationships and potential mechanisms. *Curr Psychiatry Rep*. 2023;25(12):803–808.
7. Dennis CL, McQueen K. The relationship between infant-feeding outcomes and postpartum depression: a qualitative systematic review. *Pediatrics*. 2009;123(4):e736–e751.
8. Dennis CL, Faux S. Development and psychometric testing of the Breastfeeding Self-Efficacy Scale. *Res Nurs Health*. 1999;22(5):399–409.
9. Alimi R, Azmoude E, Moradi M, Zamani M. The association of breastfeeding with a reduced risk of postpartum depression: a systematic review and meta-analysis. *Breastfeed Med*. 2022;17(4):290–296.
10. [Illustrative secondary source, verify before use] Retrospective study on repetitive negative thinking, EPDS, and feeding status at 3 and 6 months postpartum. Available via PubMed Central (PMC11916066).
11. Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression: development of the 10-item Edinburgh Postnatal Depression Scale. *Br J Psychiatry*. 1987;150:782–786.
12. Jensen D, Wallace S, Kelsay P. LATCH: a breastfeeding charting system and documentation tool. *J Obstet Gynecol Neonatal Nurs*. 1994;23(1):27–32.

13. Riordan JM, Koehn M. Reliability and validity testing of three breastfeeding assessment tools. *J Obstet Gynecol Neonatal Nurs*. 1997;26(2):181–187.
14. Altuntas N, Turkyilmaz C, Yildiz H, Kulali F, Onal E, Ergenekon E, et al. Validity and reliability of the infant breastfeeding assessment tool, the mother baby assessment tool, and the LATCH scoring system. *Breastfeed Med*. 2014;9(4):191–195.
15. Kair LR, Colaizy TT, Hubbard D, Flaherman VJ. Psychometric evaluation of 5- and 4-item versions of the LATCH breastfeeding assessment tool during the initial postpartum period among a multiethnic population. *PLoS One*. 2016;11(4):e0154331.
16. Groer MW. Differences between exclusive breastfeeders, formula-feeders, and controls: a study of stress, mood, and endocrine variables. *Biol Res Nurs*. 2005;7(2):106–117.
17. Riordan J, Bibb D, Miller M, Rawlins T. Predicting breastfeeding duration using the LATCH breastfeeding assessment tool. *J Hum Lact*. 2001;17(1):20–23.
18. Jain J, Hemrajani SK, Sharma SS, Gurjar V, Banveer P. Assessment tool by UNICEF and LATCH scoring system for identification of inadequacy of breastfeeding in early neonatal period: an observational cross-sectional comparative study. *J Neonatol*. 2025.
19. Figueiredo B, Canário C, Field T. Breastfeeding is negatively affected by prenatal depression and reduces postpartum depression. *Psychol Med*. 2014;44(5):927–936.