

The impact of postpartum depression symptom on breastfeeding outcomes: a literature review

Pengaruh Gejala Depresi Pascapersalinan terhadap Keberhasilan Menyusui: Studi Literatur

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ABSTRACT

Background: Postpartum depression is among the most prevalent mental health conditions during the postpartum period. Postpartum depression is regarded as detrimental to breastfeeding. Depressed mothers may experience a diminished interest and attraction towards their infants. Ultimately, the mother is incapable of adequately caring for her infant, including the inability to breastfeed directly.

Objective: Consequently, we performed a literature analysis to rigorously assess the evidence regarding the correlation between postpartum depressive symptoms and breastfeeding habits.

Methods: A literature review utilized the PubMed, Scopus, and Science Direct databases, referencing selected publications published between 2019 and 2024. A total of 9,146 articles were obtained from the specified databases and subsequently analyzed using the PRISMA.

Results: The review of 22 selected articles revealed a strong correlation between postpartum depression symptoms and decreased breastfeeding success. Depressed mothers tend to have lower breastfeeding initiation rates. In addition, other factors influence breastfeeding success, such as the benefits of breastfeeding, societal and ecological assistance, malnutrition, insomnia, social and demographic characteristics, psychological factors, and patterns of breastfeeding.

Conclusion: Postpartum depression symptoms correlate with breastfeeding success. Health practitioners should implement mental health evaluation in breastfeeding programs to identify maternal risk, which can be treated early. This enhances the rates of successful breastfeeding practices and supports the mother's and child's health.

Keywords: breastfeeding mother, postpartum depression symptoms, postpartum mother

ABSTRAK

Latar Belakang: Depresi pascapersalinan merupakan salah satu gangguan kesehatan mental yang paling sering terjadi pada masa nifas dan berdampak negatif terhadap praktik menyusui. Ibu dengan depresi dapat mengalami penurunan minat dan keterikatan terhadap bayinya, sehingga berakibat pada ketidakmampuan merawat bayi secara optimal, termasuk dalam menyusui secara langsung.

Tujuan: Penelitian ini bertujuan menganalisis bukti ilmiah mengenai hubungan antara gejala depresi pascapersalinan dan kebiasaan menyusui.

Metode: Metode yang digunakan adalah *literature review* dengan pencarian pada basis data PubMed, Scopus, dan Science Direct terhadap publikasi terpilih tahun 2019–2024. Sebanyak 9.146 artikel diperoleh dan dianalisis menggunakan metode PRISMA.

Hasil: Hasil telaah dari 22 artikel terpilih menunjukkan adanya korelasi kuat antara gejala depresi pascapersalinan dan rendahnya keberhasilan menyusui. Ibu dengan depresi cenderung memiliki tingkat inisiasi menyusui yang lebih rendah. Selain itu, keberhasilan menyusui juga dipengaruhi oleh manfaat menyusui, dukungan sosial dan lingkungan, status gizi, gangguan tidur, karakteristik sosial demografi, kondisi psikologis, dan pola menyusui.

Simpulan: Gejala depresi pascapersalinan terbukti berkorelasi dengan keberhasilan menyusui. Oleh karena itu, tenaga kesehatan perlu melakukan evaluasi kesehatan mental dalam program menyusui guna mengidentifikasi risiko secara dini, sehingga dapat dilakukan penanganan tepat yang meningkatkan keberhasilan menyusui serta mendukung kesehatan ibu dan bayi.

Kata kunci: gejala depresi pascapersalinan, ibu menyusui, ibu nifas

INTRODUCTION

Postpartum depression (PPD) affects numerous new mothers worldwide, with estimates indicating that up to 20% of women may exhibit depressive symptoms after childbirth [1], [2]. After giving birth, postpartum depression, a common and possibly severe mood disorder, affects women. In the first year following childbirth, PPD affects roughly one in seven women. PPD is multifaceted, mainly attributable to hormonal fluctuations, genetic susceptibility, and environmental factors interacting at various stages surrounding childbirth. PPD is underrecognized because of the stigma attached to illnesses of the mind, which inhibits individuals from acknowledging their symptoms; estimates suggest that up to 50% of instances go unreported [3]. PPD can impact maternal mental health, infant development, and the general equilibrium of the family unit. The primary consequence is the disturbance of breastfeeding patterns, frequently resulting in premature weaning or diminished breastfeeding efficacy [4].

Breastfeeding plays a vital role in supporting child health and survival, as recommended by the World Health Organization (WHO) due to its proven benefits in preventing infections, chronic illnesses, and developmental issues in children[5], [6]. However, despite these advantages, postpartum depression (PPD) can significantly interfere with a mother's ability to initiate and maintain exclusive breastfeeding (EBF). Studies reveal that depressive symptoms during the postpartum period are negatively associated with breastfeeding success, resulting in shorter breastfeeding duration and increased reliance on formula feeding. Postpartum depression (PPD) can significantly hinder breastfeeding mothers, impacting their capacity to commence and sustain exclusive breastfeeding (EBF)[7], [8]. Research indicates that depression symptoms in the postpartum period correlate negatively with breastfeeding success, leading to reduced breastfeeding length and heightened formula utilization[1].

Postpartum depression (PPD) directly affects breastfeeding outcomes. Mothers experiencing depressive symptoms may face difficulties in breastfeeding, including reduced milk production and negative perceptions of the feeding process. On the other hand, challenges in breastfeeding can worsen depressive symptoms, creating a cycle that affects both the mother's mental health and the child's well-being[9]. Recent studies show that positive breastfeeding experiences among mothers with prenatal mental health problems can lead to better outcomes, such as stronger mother–infant bonding, higher self-

confidence, and improved recovery. However, inconsistent support and guidance from health professionals, especially about health concerns and medication safety, may cause uncertainty, influence breastfeeding decisions, and worsen perinatal mental health problems. Providing strong support, clear breastfeeding education, and accurate information about medication safety is important to improve the breastfeeding experience for mothers with different mental health conditions[6].

Investigating the impact of postpartum depression symptoms on breastfeeding efficacy is essential, particularly given the increasing recognition of maternal mental health and the significance of breastfeeding in child development. This literature review aims to evaluate current research on this topic, identify key aspects influencing the influence of postpartum depression (PPD) on breastfeeding, and provide insights for healthcare professionals to enhance support for affected mothers during their breastfeeding experience.

METHODS

Study design

This literature review summarizes and analyzes current scientific evidence regarding the relationship between postpartum depression symptoms and breastfeeding outcomes. The research question formulated for this review is: *“How do postpartum depression symptoms influence breastfeeding initiation, duration, and overall success?”*. This review asserts that research topics must be empirically grounded and connected to the theoretical framework to contribute meaningfully to the discourse in the field. The PEO (Population, Exposure, Outcome) Framework is being used to conduct a literature search [10], [11].

Search Strategy

A variety of internet resources were used to collect the primary literature, including PubMed, Scopus, and Science Direct. To find articles, the PEO Framework's keywords are used, consistent with the PEO Framework itself. This research focuses on breastfeeding women with postpartum disorders.

Eligibility Criteria

Articles from the search were selected according to how well they satisfied the inclusion and exclusion criteria. The subsequent criteria delineate the inclusion and exclusion of specific literary works in this investigation.

The inclusion criteria for this review were articles published between 2019 and 2024, written in English, available in full text, and presenting original research on breastfeeding mothers with postpartum disorders. The exclusion criteria were non-research publications such as books, reviews, or editorials, as well as articles that were not accessible in full text. [12].

Study Selection Process

Using this data, a PubMed search for papers released in 2019 or later produced 2.163 results, Scopus produced 665 articles published in 2019 or later, and ScienceDirect yielded 6.286 results. An additional 32 articles were identified through hand-searching of related literature. From this process, 22 eligible articles were obtained using the keywords *breastfeeding mother, postpartum depression symptoms, and postpartum mother*.

PRISMA Flow Diagram

The search was documented according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria and illustrated in the PRISMA flowchart presented in Figure 1. The PRISMA flowchart consists of four stages: identification,

screening, eligibility, and included[13]. The "part identification" box contains the total records identified through database searches, records obtained from external sources, and items discovered following deduplication. A checkbox known as "stage screening" denotes that, when checked, the selection of literature sources has taken into account the study question, inclusion-exclusion criteria, and keywords [14].

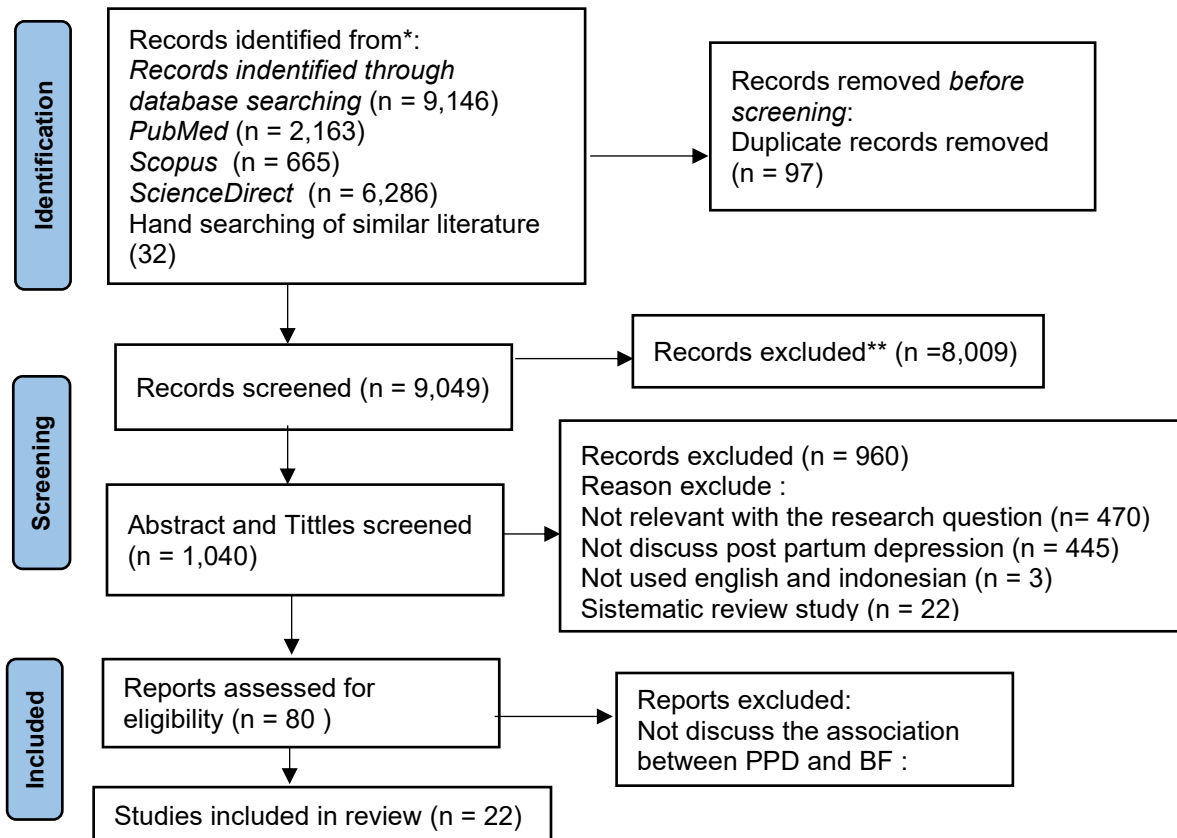


Figure 1. PRISMA Flowchart

RESULT

Table 1. Charting Data

No	Author(s)/Year/Title	Country	Purpose	Research Design and Sample Size	Result
1	Miksic et al. 2020, Positive Effect of Breastfeeding on Child Development, Anxiety, and Postpartum Depression [15]	Croatia	Examine the effects of breastfeeding on infant development, anxiety, and postpartum depression.	Prospective cohort; postpartum mothers; n = 202	Breastfeeding improved child development and reduced maternal anxiety and postpartum depression symptoms, showing the protective role of breastfeeding on maternal mental health.
2	Papadopoulou et al. 2023, Postpartum Depression Is	Greece	Investigate the correlation between maternal postpartum	Cross-sectional; postpartum	Postpartum depression was significantly related to reduced breastfeeding

No	Author(s)/Year/Title	Country	Purpose	Research Design and Sample Size	Result
	Associated with Maternal, Sociodemographic and Anthropometric Characteristics, Perinatal Outcomes, Breastfeeding Practices [16]		depression and breastfeeding behaviors.	mothers; n = 389	initiation and duration, with sociodemographic factors influencing the relationship.
3	Gordon et al. 2021, A Mixed Methods Study of Perinatal Sleep and Breastfeeding [17]	United States	Examine the correlation between perinatal sleep disruptions and breastfeeding results in women predisposed to postpartum depression.	Mixed methods; women at risk for PPD; n = 215	Poor sleep quality during pregnancy was linked to reduced breastfeeding duration and higher depression risk postpartum.
4	Gila Diaz et al. 2020, Association between Maternal Postpartum Depression, Stress, Optimism, and Breastfeeding Pattern [18]	Spain	Evaluate the correlation among postpartum depression, stress, optimism, and breastfeeding within the initial six months.	Cross-sectional; postpartum mothers; n = 423	Exclusive breastfeeding was associated with lower stress and depression levels, while optimism enhanced breastfeeding outcomes.
5	Shimao et al. 2021, Influence of Infants' Feeding Patterns and Duration on Mothers' Postpartum Depression [19]	Japan	Examine the influence of infant feeding practices on maternal postpartum depression within a Japanese population.	National cohort; postpartum mothers; n = 71,448	Exclusive breastfeeding for six months decreased the risk of postpartum depression compared to mixed feeding.
6	Beyazgul et al. 2023, The Effect of Exclusive Breastfeeding Time on Mother-Infant Attachment and Postpartum Depression [20]	Turkey	Assess the length of exclusive breastfeeding and its impact on mother-infant bonding and postpartum depression levels.	Cross-sectional; postpartum mothers; n = 308	Longer exclusive breastfeeding was related to stronger mother-infant attachment and lower postpartum depression levels.
7	Franco et al. 2022, A randomized controlled trial evaluating the effect of a brief motivational intervention to promote breastfeeding in postpartum depression [21]	Spain	Examine the effects of a short motivational intervention on breastfeeding practices and the prevention of postpartum depression.	Randomized controlled trial; postpartum mothers; n = 120	Motivational intervention increased breastfeeding duration and decreased depression symptoms compared to the control.
8	Rodriguez et al. 2024, Evaluation of the Impact of a Midwife-	Spain	Assess the efficacy of a midwife-led breastfeeding support	Cluster randomized controlled	Midwife-led breastfeeding support improved exclusive breastfeeding rates and

No	Author(s)/Year/Title	Country	Purpose	Research Design and Sample Size	Result
	Led Breastfeeding Group Intervention [22]		group in mitigating postpartum depression.	trial; postpartum mothers; n = 368	reduced postpartum depression symptoms.
9	Nisar et al. 2024, Impact of an intervention for perinatal anxiety on breastfeeding [23]	Pakistan	Investigate the impact of a cognitive-behavioral therapy intervention on breastfeeding outcomes in women experiencing perinatal anxiety.	Randomized controlled trial; mothers with perinatal anxiety; n = 120	Cognitive-behavioral intervention improved breastfeeding rates and reduced anxiety-related depressive symptoms.
10	Tuthill et al. 2020, HIV infection, hunger, breastfeeding self-efficacy, and depressive symptoms are associated with exclusive breastfeeding self-efficacy, and depressive symptoms are associated with exclusive breastfeeding to six months [24]	Kenya	Examine the impact of HIV infection, food insecurity, breastfeeding self-efficacy, and depressive symptoms on exclusive breastfeeding practices in Western Kenya.	Longitudinal cohort; HIV-positive mothers; n = 343	Depressive symptoms and food insecurity increased the likelihood of early breastfeeding cessation among HIV-positive mothers.
11	Agler et al. 2021, Postpartum depressive symptoms following implementation of the 10 steps to successful breastfeeding program [25]	Democratic Republic of Congo	Assess the correlation between the implementation of the Baby-Friendly Hospital Initiative (BFHI) steps and postpartum depression, as well as breastfeeding challenges.	Cohort; postpartum mothers; n = 800	Implementation of the Baby-Friendly Hospital Initiative significantly reduced postpartum depression and improved breastfeeding outcomes.
12	Coo et al. 2020, The Role of Perinatal Anxiety and Depression in Breastfeeding Practices [26]	Chile	Assess the impact of prenatal anxiety and depression on breastfeeding behaviors.	Cross-sectional; postpartum mothers; n = 315	Perinatal anxiety and depression negatively affected breastfeeding duration and exclusivity.
13	Braithwaite et al. 2023, Breast May Not Always Be Best: Moderation of Effects of Postnatal Depression by Breastfeeding and Infant Sex [27]	United Kingdom	Investigate the moderating effects of breastfeeding and newborn gender on the association between postnatal depression	Prospective epidemiologic al; postpartum mothers; n = 510	Postnatal depression correlated with higher negative infant emotionality, particularly among breastfeeding mothers with female infants.

No	Author(s)/Year/Title	Country	Purpose	Research Design and Sample Size	Result
			and infant emotional outcomes.		
14	Suzuki et al. 2020, Relationship between Postpartum Depression and Lactation Status at a Japanese Perinatal Center [28]	Japan	Investigate the correlation between postpartum depression and breastfeeding status one-month post-childbirth process.	Cross-sectional; postpartum mothers; n = 158	No significant difference in depression rates between exclusive and mixed-feeding mothers one month postpartum.
15	Chen et al. 2022, Association between Exclusive Breastfeeding and Postpartum Post-Traumatic Stress Disorder [29]	China	Investigate the correlation between exclusive breastfeeding and postpartum PTSD.	Epidemiologic al; postpartum mothers; n = 580	Exclusive breastfeeding within six weeks postpartum reduced the risk of postpartum PTSD symptoms.
16	Fukui et al. 2021, Exclusive Breastfeeding Is Not Associated with Maternal-Infant Bonding in Early Postpartum, Considering Depression, Anxiety, and Parity [30]	Japan	Examine the reciprocal association between exclusive breastfeeding and maternal mental health throughout the early postpartum period.	Cross-sectional study postpartum mothers; n = 472	Exclusive breastfeeding was not directly associated with bonding, but depression and anxiety strongly influenced mother–infant attachment, emphasizing the role of psychological well-being in postpartum bonding.
17	Palanci et al. 2024, The Effect of Maternal Functional and Postpartum Depression Status on Breastfeeding Self-Efficacy [31]	Turkey	Assess the impact of maternal functional and postpartum depression on breastfeeding self-efficacy.	Cross-sectional; postpartum mothers; n = 312	Postpartum depression negatively affected maternal confidence and breastfeeding self-efficacy.
18	Borra et al. 2020, New Evidence on Breastfeeding and Postpartum Depression [32]	United Kingdom	Examine the causal impact of breastfeeding on postpartum depression utilizing longitudinal data.	Longitudinal; postpartum mothers; n = 564	Breastfeeding intention and mental health during pregnancy influenced the risk of postpartum depression and duration of breastfeeding.
19	Tancherla et al. 2023, The Relationship Between Breastfeeding Pattern and the Risk of Postpartum Depression in Mothers in Tangerang [33]	Indonesia	Assess the correlation between breastfeeding practices and the incidence of postpartum depression among women in Tangerang.	Cross-sectional; postpartum mothers; n = 120	Exclusive breastfeeding was associated with a lower risk of postpartum depression among Indonesian mothers.

No	Author(s)/Year/Title	Country	Purpose	Research Design and Sample Size	Result
20	Chang et al. 2023, Associations between Breastfeeding Intention, Practices, and Postnatal Depression [34]	Multi-country (Brazil, South Korea, Taiwan, Thailand, UK)	Investigate the correlations among breastfeeding intentions, behaviors, and postnatal depression during the COVID-19 pandemic.	Cross-sectional; mothers from Brazil, Korea, Taiwan, Thailand, UK; n = 1,210	Women who did not plan to breastfeed but later breastfed showed a higher risk of postnatal depression than those who planned and breastfed.
21	Rosenbaum et al. 2023, Feeling Let Down: Breastfeeding Expectations, Body Functionality, and Depression Symptoms [35]	USA	Examine the correlation between breastfeeding anticipations, bodily functionality, and depressed symptoms in postpartum women.	Cross-sectional; postpartum women; n = 536	Mismatch between breastfeeding expectations and reality increased depressive symptoms and reduced body appreciation.
22	Farias et al. 2020, Maternal Mood Symptoms in Pregnancy and Postpartum Depression: Association with Exclusive Breastfeeding [36]	Brazil	Assess the correlation between mental symptoms during gestation and exclusive breastfeeding at three months, with mother depression at twelve months postpartum.	Cohort; postpartum mothers; n = 4,275	Maternal mood symptoms during pregnancy were associated with lower exclusive breastfeeding rates and higher postpartum depression risk.

DISCUSSION

Postpartum depressive symptoms are closely associated with several dimensions of breastfeeding success, including initiation, duration, and exclusivity. Biologically, depressive symptoms can disrupt the regulation of oxytocin and prolactin, which are essential for the milk ejection reflex, leading to delays or difficulties during breastfeeding, emotional disturbances, and fatigue, which often accompany depressive states, further weakening maternal responsiveness and may undermine overall breastfeeding performance [1], [7]

Psychological and social mechanisms also contribute significantly to this relationship. Depressed mothers commonly report reduced confidence, impaired bonding, and heightened anxiety regarding their ability to breastfeed effectively [18], [21]. Inadequate support from family members and healthcare providers frequently amplifies these emotional barriers, reinforcing the vulnerability of breastfeeding outcomes within the context of postpartum depressive symptoms [37].

The thematic synthesis of the reviewed literature revealed three major areas of association. The first theme concerns breastfeeding initiation, where mothers with moderate to severe depressive symptoms face greater challenges and delays in initiating breastfeeding due to hormonal alterations and emotional strain [4], [17]. The second theme relates to duration and maintenance of exclusive breastfeeding, as depressive symptoms increase the likelihood of early cessation, particularly within the first six postpartum weeks. [16], [20]. The third theme focuses on moderating factors, indicating that emotional support, peer-based interventions, and structured counseling can reduce depressive symptoms while simultaneously improving breastfeeding outcomes [22], [23].

Most studies included in this review were observational, which means the identified associations primarily reflect correlation rather than causation. It is therefore important to avoid assuming a direct causal pathway from postpartum depression to breastfeeding failure. Several confounding variables, such as birth experiences, access to lactation counseling, and socioeconomic conditions, may influence the strength and direction of the observed associations [26], [27]. Notably, inconsistencies emerged across studies. For example, research conducted in Japan found no significant association between depressive symptoms and breastfeeding status[28]. Such variations may reflect cultural differences in breastfeeding norms, family support structures, and the use of different cut-off points in depression screening instruments[19], [30]. Contextual and methodological factors highlight the importance of interpreting findings within their cultural and measurement frameworks.

The reviewed studies employed a range of depression assessment tools, including the EPDS, PHQ-9, and BDI, each with differing cut-offs and psychometric properties. These variations may influence how depressive severity is classified and contribute to inconsistencies in findings across studies [18],[31]. As such, heterogeneity in screening instruments represents a key limitation when synthesizing the available evidence. The findings of this review carry meaningful clinical and policy implications. Routine screening for antenatal and postnatal depression should be integrated into maternal care services, particularly in facilities aligned with WHO breastfeeding support guidelines[2]. Evidence indicates that psychological support, structured breastfeeding education, and peer-group programs can reduce depressive symptoms while improving breastfeeding outcomes, underscoring the need for integrated maternal mental health and lactation support strategies [21],[22],[23].

This review has several limitations, including the predominance of observational designs, variations in depression measurement tools, and cultural heterogeneity across study settings. These limitations affect the generalizability and interpretation of the findings. Nevertheless, the thematic synthesis reveals a generally consistent pattern showing that postpartum depressive symptoms correlate with reduced breastfeeding success, and that adequate psychosocial support can help improve both maternal mental health and breastfeeding outcomes.

CONCLUSION

This literature review concludes that symptoms of postpartum depression significantly affect breastfeeding success. Mothers experiencing depressive symptoms tend to initiate breastfeeding later, have shorter durations of exclusive breastfeeding, and face greater challenges in maintaining breastfeeding continuity compared to mothers without depression. Depressive symptoms can reduce maternal self-efficacy, emotional bonding, and readiness to breastfeed, which in turn influence the frequency and quality of breastfeeding practices. Conversely, successful and sustained breastfeeding contributes to emotional stability and helps reduce depressive symptoms, indicating a reciprocal relationship between breastfeeding and maternal mental health. Although variations exist in study design and measurement instruments, overall findings confirm that postpartum depression symptoms negatively influence breastfeeding outcomes. Early identification and management of depressive symptoms are essential to enhance breastfeeding success and promote maternal and infant well-being.

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