

## Postpartum Depression and Infant Socio-Emotional Development: Systematic Review

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**Abstract:** Postpartum depression (PPD) is a regularly occurring mental health ailment that may have serious implications for maternal well-being and toddler development. Growing proof suggests that PPD performs a crucial role in shaping the socio-emotional consequences of toddlers for the duration of the early years of life. This systematic literature overview pursues to synthesize current-day findings on the connection between PPD and toddler socio-emotional development, become aware of research gaps, and highlight implications for practice and policy. Using established choice standards, we analyzed seven peer-reviewed studies published between 2020 until 2025 that examined maternal depressive signs and symptoms and child developmental outcomes. The evaluation discovered regular evidence linking persistent maternal depression with accelerated behavioral problems, reduced emotional variability, and delays in socio-emotional milestones amongst babies and young children. Furthermore, cumulative publicity to each prenatal and postnatal despair is associated with exacerbating developmental risks. While a few studies also explored maternal sleep, parenting stress, and physiological correlates including oxytocin stages, those findings have been much less conclusive. Notwithstanding methodological variation, the reviewed literature supports the urgent need for early identification and intervention for maternal despair to limit lengthy-term negative consequences on kids. Those findings underscore the significance of integrating intellectual health offerings into maternal and child fitness programs and get in touch with for further research on mediating and moderating elements that have an impact on developmental trajectories.

**Keywords:** postpartum depression, socio-emotional development, maternal mental health, infant development, early intervention

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## Introduction

Postpartum Depression (PPD) is a vast public health problem that affects about 10–20% of women globally in the course of the first 12 months after childbirth, with probably long-lasting implications not best for maternal dysregulation mental health but also for child development. (Jalal Khan et al., 2025) The early postpartum length is a crucial section for the establishment of maternal-infant bonding, emotional attunement, and responsive caregiving elements which can be foundational for healthy toddler socio-emotional improvement. (Roy et al., 2024) A growing body of evidence shows that maternal depressive signs and symptoms in the course of this sensitive window can interfere with the quality of early mom-infant interactions, probably resulting in long-term adverse outcomes in kids, such as emotional, attachment insecurity, behavioral issues, and reduced social competence.

There are many good scientific reasons for choosing to focus on studies published between 2020 and 2025. First, there has been a big increase in research on maternal mental health in the last five years, including better ways of thinking about and doing research on PPD. Second, this time frame captures the unique context of the COVID-19 pandemic, which introduced unprecedented psychosocial stressors such as social isolation, reduced access to healthcare, economic instability, and heightened caregiving burdens that have been shown to elevate the risk and severity of PPD. As a result, studies done during this time give us timely information about how global crises change the mental health of mothers and the development of infants. Third, from 2020 onward, there will be big changes in how PPD is screened and treated. These changes will include more use of digital screening tools, telehealth-based postpartum support, and new clinical guidelines that aim to improve early detection and intervention. These

developments provide a more contemporary understanding of how PPD is identified, monitored, and addressed within evolving healthcare systems (Wendland et al., 2022).

At the same time, the first years of life constitute a critical window for socio-emotional development, as infants begin to form foundational capacities for bonding, trust, emotional expression, and interpersonal interaction. Disruptions in this sensitive period, especially those linked to compromised maternal mental health, can increase the likelihood of later behavioral difficulties, anxiety symptoms, and challenges in social relationships. Examining the relationship between PPD and infant socio-emotional development using the most recent body of evidence is therefore essential for informing effective early intervention strategies and maternal–child health policies (Suarez et al., 2023a).

Numerous number one studies and narrative evaluations have explored the association between PPD and toddler effects. But, these works range extensively in methodology, theoretical frameworks, and the developmental domain names assessed a few recognition predominantly on behavioral elements, others on attachment styles, and nonetheless others on neurobiological correlates. (Tsai et al., 2023) While those studies provide valuable insights, they have a tendency to be fragmented, regularly constrained by means of narrow age tiers, inconsistent outcome measures, or a lack of longitudinal follow-up. (Shinde, 2023) the complex mechanisms via which PPD influences toddler socio-emotional development—whether through biological, mental, or environmental pathways—remain incompletely understood and insufficiently synthesized (Basrowi et al., 2024).

The preceding literature critiques have not systematically consolidated the evidence regarding the character, strength, and temporal patterns of the association between PPD and infant socio-emotional development. As a result, vital knowledge gaps persist, specifically in identifying shielding elements, timing of vulnerability, and the capability for healing or resilience in affected infants. there's also a lack of complete synthesis that integrates findings across various contexts and cultural settings, which is important for informing public fitness interventions, early screening applications, and coverage development.

To address these challenges, this systematic literature review seeks to thoroughly integrate empirical studies investigating the correlation between postpartum depression and infant socio-emotional development. This evaluation aims to (1) delineate the diverse socio-emotional outcomes examined in infants of mothers with PPD, (2) assess the consistency and robustness of institutions proposed across studies, and (3) pinpoint methodological trends, deficiencies, and implications for future research. Through this synthesis, we purpose to enhance a greater integrative information of the developmental consequences of PPD and make contributions to the layout of greater focused and effective early interventions.

## Method

This systematic literature review was conducted following the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure transparency and methodological rigor. A comprehensive search strategy was employed across four major electronic databases: PubMed, SpringerLink, Science Direct and ProQuest to identify relevant studies published between January 2020 until June 2025. Furthermore, the search was restricted to studies published between January 2020 and June 2025. This time frame was intentionally selected to capture the most recent evidence, particularly in the context of the COVID-19 pandemic, which has significantly influenced maternal mental health and early child development. The period also reflects advancements in screening practices, digital health interventions, and updated clinical guidelines for postpartum depression. These databases were selected due to their extensive coverage of peer-reviewed literature in the fields of public health, maternal health, psychology, and interdisciplinary health sciences. Collectively, they provide access to a wide range of high-quality empirical studies relevant to postpartum depression and infant development. While other databases such as Scopus, Web of Science, and PsycINFO also offer valuable resources, they were not included primarily due to institutional access limitations and to maintain feasibility within the scope of this review. Nevertheless, it is acknowledged that the exclusion of these databases may have led to the omission of some relevant studies. In addition, this review included only studies published in English. This language restriction was applied to ensure consistency in data extraction and interpretation. The search used a combination of keywords and Boolean operators, including (“postpartum depression” OR “postnatal depression” OR “maternal depression”) AND (“infant” OR “child”) AND (“socio-emotional development” OR “social development” OR “emotional development” OR “attachment” OR “emotion regulation” OR “behavioral outcomes”). Studies were included if they (1) were original empirical studies published in peer-reviewed journals, (2) examined postpartum depression as an exposure, (3) assessed infant socio-emotional development outcomes in children using validated measures, and (4) were published in English. Exclusion criteria included studies focusing solely on antenatal depression, cognitive or physical

development, or those lacking methodological clarity. Study selection was performed by authors: initial screening of titles and abstracts, followed by full-text review of potentially eligible articles.

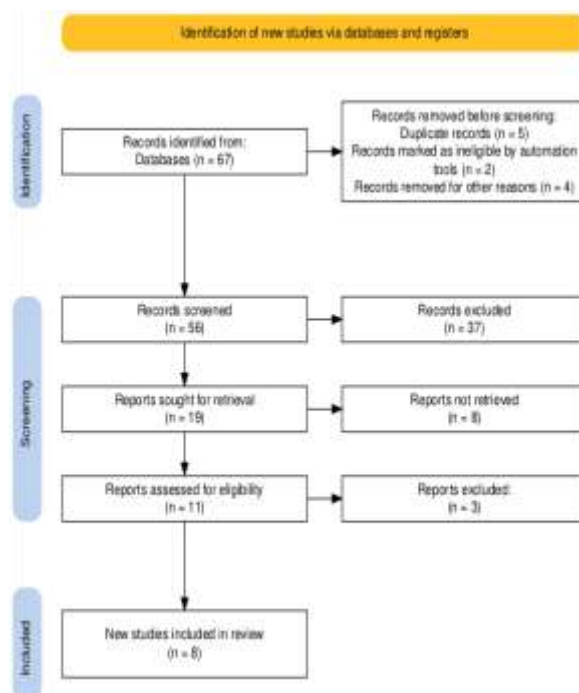


Figure 1 . Flowchart PRISMA.

## Results and Discussion

The findings of this systematic literature review consistently demonstrate that postpartum depression (PPD) is significantly associated with various dimensions of infant and early childhood socio-emotional development. Longitudinal studies indicate that persistent maternal depressive symptoms from the postpartum period into early parenthood are linked to increased behavioral problems and lower socio-emotional competence in children (Korja et al., 2024). Similarly, children of mothers with consistently high depressive symptoms exhibit more pronounced behavioral difficulties, whereas improvements in maternal mental health over time are associated with better child outcomes (Suarez et al., 2023b). Infants of mothers diagnosed with PPD also display reduced emotional variability and inhibited emotional expression, particularly in facial affect and gaze behavior (Væver et al., 2020). In addition, large-scale population-based evidence shows that PPD is associated with developmental delays across multiple domains, including language, personal-social, fine motor, and gross motor skills (Lubotzky-Gete et al., 2021). Other studies highlight that maternal perceptions of sleep disturbances and parenting stress, rather than objective sleep measures, are more closely associated with depressive symptoms and may influence the mother–infant bond (Rudzik et al., 2023), while perceived bonding difficulties are more prevalent among depressed mothers despite minimal differences in biological indicators such as oxytocin levels (Richards et al., 2024).

Beyond these descriptive findings, a cross-study synthesis reveals important patterns in the strength and consistency of the reported associations. Evidence from large population-based studies tends to demonstrate more robust and statistically consistent relationships, likely due to greater sample size and statistical power. For example, Lubotzky-Gete et al. (2021) reported increased odds of developmental delays across several domains, indicating a measurable effect size of PPD on early child development. In contrast, smaller laboratory-based or cohort studies provide more detailed insights into mother–infant interaction and emotional processes but often yield more variable findings, which may be influenced by limited sample sizes and context-specific measurements.

Differences in study design also contribute to variability in findings. Longitudinal studies (e.g., Suarez et al., 2023a; Korja et al., 2024; Wendland et al., 2022) consistently report stronger and more reliable associations, particularly when maternal depressive symptoms are persistent or span both prenatal and postnatal periods, suggesting a cumulative effect on child development. Conversely, studies with cross-sectional or short-term designs tend to show weaker or less consistent relationships, highlighting the importance of timing and chronicity of exposure.

The overall strength of evidence can be considered moderate to strong, supported by convergence across multiple studies and methodological approaches. However, heterogeneity in measurement tools, outcome definitions, and confounding control limits direct comparison of effect sizes across studies. Importantly, studies with higher methodological rigor—such as those employing validated instruments, longitudinal follow-up, and appropriate adjustment for confounders—tend to produce more consistent and reliable findings compared to studies with less robust designs.

The findings synthesized in this review highlight a generally consistent pattern in which PPD is associated with poorer socio-emotional outcomes in infants. However, the strength and clarity of these associations vary across studies, indicating the need for cautious interpretation (Wendland et al., 2022). One of the primary reasons for these divergent findings is methodological heterogeneity. Studies reporting strong associations typically employ validated diagnostic tools, longitudinal designs, and robust developmental measures, while those with inconclusive findings often rely on cross-sectional approaches or less sensitive instruments (Suarez et al., 2023a). Variability in confounding control, as well as cultural differences in parenting practices and maternal emotional expression, may further influence the observed relationships (Ningsih & Hutasoit, 2023; Palupi, 2020). Additionally, differences in the timing of developmental assessments contribute to mixed results, with stronger associations generally observed in studies assessing children beyond the first year of life, when socio-emotional behaviors become more stable and measurable (Jannah & Latifah, 2022).

Taken together, these findings underscore the importance of considering study design, methodological quality, and contextual factors when interpreting the relationship between PPD and infant socio-emotional development. They also highlight the need for more standardized, longitudinal, and methodologically rigorous research to strengthen causal inference and improve the comparability of findings across different settings.

Table 1. Results

Title	Authors	Method	Result	Conclusion
Long-term effects of maternal depression during postpartum and early parenthood period on child socioemotional development	Anna Suarez, Liubov Shraibman and Vera Yakupova (Suarez et al., 2023)	The study utilized a longitudinal design, collecting data from three cohorts of Russian women who gave birth within 12 months prior to data collection periods in 2020, 2021, and 2022. Participants were recruited through social media, childbirth education classes, and healthcare professionals, and they completed surveys about their mental health and their child's development at two stages, with the second stage occurring when the children	The study found that maternal depression during the postpartum and early parenthood periods is linked to child behavioral problems, with children of mothers experiencing consistently high depressive symptoms showing the most significant issues. However, children whose mothers' depressive symptoms decreased over time exhibited the lowest scores in behavioral problems, highlighting the importance of early intervention and support for maternal mental health.	The research concludes that maternal depression poses a significant risk to the socioemotional development of children, particularly when depressive symptoms are consistently high from postpartum to early parenthood. However, if maternal depressive symptoms decrease over time, children tend to have lower scores in behavioral problems, highlighting the importance of early intervention and support for maternal mental health.
Trajectories of maternal depressive and anxiety symptoms and child's socio-emotional outcome during early childhood	Riikka Korja, et al (Korja et al., 2024)	The study used latent growth mixture modelling (LGMM) to identify trajectories of maternal depressive and anxiety symptoms from pregnancy to two years postpartum. Maternal symptoms were assessed using the EPDS for depression and the SCL-90 for anxiety, while child socio-emotional outcomes were evaluated using the BITSEA at ages 2 and 5.	The study identified distinct trajectories of maternal depressive and anxiety symptoms from pregnancy to two years postpartum, with these trajectories being associated with varying levels of child socio-emotional problems and competence at two years of age. Notably, the "High and stable," "High and Decreasing," and "Postnatal" symptom trajectories were linked to higher child socio-emotional problems, while the "Elevated stable"	The research paper concludes that maternal depressive and anxiety symptoms during pregnancy and the postnatal period can significantly impact child socio-emotional development, with depressive symptoms showing a more robust association with child socio-emotional problems. It also highlights the importance of understanding the timing and duration of maternal anxiety symptoms, as their effects on child development are less clear and generally have smaller effect sizes.
Maternal postpartum depression is a risk factor for infant emotional variability at 4 months	Mette Skovgaard Væver et al (Væver et al., 2020)	The study involved 82 Danish mother-infant dyads, with interactions scheduled to fit the infants' routines and conducted in a controlled laboratory setting. The interactions were recorded using video cameras and high-quality microphones, and microcoding was used to analyze infant gaze, facial affect, and vocal protest during a specific 3-minute segment of the interaction.	The study found that infants of mothers with a PPD diagnosis exhibited significantly fewer high negative events and vocal protests, but more neutral/interest events compared to infants of nonclinical mothers. Additionally, these infants had fewer gaze-off events, although there were no differences in the total duration of gazing away between the two groups.	The research paper concludes that maternal postpartum depression (PPD), whether measured as symptoms or a clinical diagnosis, is associated with inhibited emotional expressions and reduced variability in infants' emotional communication. It suggests that these effects are more pronounced in infants of mothers with higher depressive symptoms, impacting the infants' ability to switch between different emotional displays and gaze behaviors.
Relationships between postpartum depression, sleep, and infant feeding in the early postpartum: An exploratory analysis	Alanna E. F. Rudzik, et al (Rudzik et al., 2023)	The study used a prospective longitudinal design, with data collected at six, 12 and 18 weeks postpartum. We collected data on total sleep time, longest sleep period, wake after sleep onset, and night waking for mothers and infants objectively from actigraphic records and subjectively from maternal sleep logs. Participants reported on sleep disturbances using the General Sleep Disturbances Scale, on maternal sleepiness, and on depression symptomatology using the Edinburgh Postnatal Depression Scale.	Scores on the Edinburgh Postnatal Depression Scale and General Sleep Disturbances Scale were consistently correlated with each other (6 weeks $r = 0.452, p < 0.01$ ; 12 weeks $r = 0.317, p < 0.05$ ; 18 weeks $r = 0.493, p < 0.01$ ), and did not correlate with objective measures or subjective reports of maternal or infant sleep.	Postpartum depression may be associated with disturbed sleep due to negative perception of sleep among depressed women, rather than disrupted sleep causing postpartum depression. With regard to infant feeding method, exclusively breastfeeding women are not more likely to suffer from postpartum depression, and different pathways may predict development of postpartum depression symptoms in exclusively breastfeeding and exclusively formula feeding women.
The Impact of Postpartum	Misty C. Richards, et al (Richards et al., 2024)	The present study examined whether	Depression was associated with experiences of heightened	Findings highlight the importance of early intervention for

Title	Authors	Method	Result	Conclusion
Depression on the Early Mother-Infant Relationship during the COVID-19 Pandemic: Perception versus Reality		parenting-related stress, perceived bonding impairments, the quality of observed mother–infant interactions, and salivary oxytocin levels differ between depressed and non-depressed mothers, along with differential impacts of COVID-19 on depressed mothers. Participants included 70 mothers (45 depressed, 25 controls) with infants aged 2–6 months. All data were collected remotely to ease participant burden during the pandemic.	parenting-related stress and bonding difficulties. These differences were not observed during mother–infant interactions or in salivary oxytocin levels. Differences in COVID-19-related experiences were minimal, though depressed mothers rated slightly higher stress associated with returning to work and financial impacts of the pandemic.	PPD to mitigate long-term effects on mothers, children, and families. Additionally, they underscore the need for early intervention to support the developing mother–infant dyad relationship during this crucial time.
Impact of the Timing of Maternal Peripartum Depression on Infant Social and Emotional Development at 18 Months	JaquelineWendland, et al (Wendland et al., 2022)	The study was a longitudinal cohort study that included six assessment points from the third trimester of pregnancy up to age 18 months (1 month). Assessment of mothers included the Edinburgh Postnatal Depression Scale and the State-Trait Anxiety Inventory, while assessments of infant included the Infant Toddler Social and Emotional Assessment (ITSEA) at 18 months. Mothers were categorized into one of the following groups: mothers who presented postnatal depression only (n = 19); mothers who presented both prenatal and postnatal depression (n = 14), and mothers who never showed perinatal depression symptoms (n = 38).	Mothers who presented both prenatal and postnatal depression showed significantly higher levels of depressive score, reactivity to stress and level of anxiety trait compared to mothers of the two other groups. Infants of prenatally and postnatally depressed mothers had higher scores on the internalizing subscore of the ITSEA.	The number of depression episodes during the study period was positively correlated with the externalizing and internalizing subscores of the ITSEA. These findings support the need to provide specific screening to identify women with prenatal depression.
Postpartum depression and infant development up to 24 months: A nationwide population-based study	S. Lubotzky-Gete, et al (Lubotzky-Gete et al., 2021)	A nation-wide population-based historical cohort study in the setting of the Mother and Child Health Clinics in Israel, where infants are routinely evaluated for growth and development. Data were retrieved on 96,623 infants born in 2014–2015 whose mothers had PPD screening. Logistic regressions were used to estimate the associations of PPD with the achievements of developmental milestones, controlling for potential confounders.	PPD was identified in 4,268 mothers (4.7%). PPD was associated with delays in language skills, including the production of voices in dialogue (OR=1.88, 95% CI: 1.41–2.52) and speaking 2–3 words (OR=1.24, 95% CI: 1.13–1.37). PPD was associated with about 1.5 times increased odds of delays in personalsocial skills, including reacting to voices (OR=1.43, 95% CI: 1.22–1.67) and pointing to selected objects (OR=1.47 95% CI: 1.10–1.97). Associations were also seen with delays in fine motor and adaptive skills, such as pinching (OR=1.50, 95% CI: 1.20–1.86), and gross motor skills, such as ground crawling (OR=1.36, 95% CI: 1.15–1.60)	In this population-based large cohort study, PPD as estimated in a national screening program, was associated with delays in early child development, which were shown in all assessed domains. Future studies should confirm our results and intervention programs should be developed to effectively minimize these gaps.

## Conclusion

This review provides an updated synthesis of the relationship between postpartum depression (PPD) and infant socio-emotional development. The findings suggest that PPD is consistently associated with less favorable socio-emotional outcomes in infants, particularly when maternal depressive symptoms are persistent or occur across both prenatal and postnatal periods. Evidence across studies indicates that such exposure may be linked to challenges in early emotional regulation, attachment formation, and social engagement, although the strength and direction of these associations vary depending on study design and methodological quality.

While the overall body of evidence points to a meaningful relationship between maternal mental health and early developmental trajectories, the predominantly observational nature of the included studies limits the ability to draw causal inferences. Therefore, these findings should be interpreted as indicative of associations rather than direct causal effects.

Nevertheless, the review highlights the importance of early identification and support for maternal mental health as part of comprehensive maternal and child health services. Strengthening screening practices and integrating mental health interventions into routine postpartum care may help mitigate potential risks and support optimal developmental outcomes. Future research employing longitudinal and experimental designs is needed to further clarify causal pathways and underlying mechanisms.

## Authors' Contribution

All authors contributed equally to every aspect of this research, from the initial study design and data collection to the analysis, interpretation, manuscript preparation, and critical revisions. All authors have read and approved the final version for submission.

## Conflict of Interests Statement

The authors declare no conflict of interest.

## Data Availability

The dataset presented in the study is available on request from the corresponding author during submission or after publication.

## Informed Consent

Written informed consent was obtained from the participants.

## References

- Basrowi, R. W., Wiguna, T., Samah, K., Moeloek, N. D. F., Soetrisno, M., Purwanto, S. A., Ekowati, M., Elisabeth, A., Rahadian, A., Ruru, B., & Pelangi, B. (2024). Exploring mental health issues and priorities in Indonesia through qualitative expert consensus. *Clinical Practice & Epidemiology in Mental Health*, 20(1). <https://doi.org/10.2174/0117450179331951241022175443>
- Jannah, M., & Latifah, N. (2022). Literature review: Faktor-faktor yang mempengaruhi adaptasi psikologi (postpartum blues) pada masa nifas (puerperium). *Bhamada: Jurnal Ilmu dan Teknologi Kesehatan (E-Journal)*, 13(1), 64–68. <https://doi.org/10.36308/jik.v13i1.382>
- Khan, J., Lakhani, Z. I., Kabir, A., Rehman, A. U., Khan, K., & Ullah, I. (2025). Prevalence and risk factors of postpartum depression: A systematic review. *Kashf Journal of Multidisciplinary Research*, 2(01), 36–41. <https://doi.org/10.71146/kjmr196>
- Korja, R., Nolvi, S., Scheinin, N. M., Tervahartiala, K., Carter, A., Karlsson, H., Kataja, E.-L., & Karlsson, L. (2024). Trajectories of maternal depressive and anxiety symptoms and child's socio-emotional outcome during early childhood. *Journal of Affective Disorders*, 349, 625–634. <https://doi.org/10.1016/j.jad.2023.12.076>
- Lubotzky-Gete, S., Ornoy, A., Grotto, I., & Calderon-Margalit, R. (2021). Postpartum depression and infant development up to 24 months: A nationwide population-based study. *Journal of Affective Disorders*, 285, 136–143. <https://doi.org/10.1016/j.jad.2021.02.042>
- Ningsih, A., & Hutasoit, H. B. K. (2023). Depresi pasca melahirkan: Pencegahan dan penatalaksanaan. *MAHESA: Malahayati Health Student Journal*, 3(2), 485–493. <https://doi.org/10.33024/mahesa.v3i2.9342>
- Palupi, P. (2020). Studi fenomenologi: Pengalaman primipara saat mengalami depresi postpartum. *Jurnal Persatuan Perawat Nasional Indonesia (JPPNI)*, 4(2), 81. <https://doi.org/10.32419/jppni.v4i2.181>
- Richards, M. C., Ferrario, C. A., Yan, Y., & McDonald, N. M. (2024). The impact of postpartum depression on the early mother-infant relationship during the COVID-19 pandemic: Perception versus reality. *International Journal of Environmental Research and Public Health*, 21(2), 164. <https://doi.org/10.3390/ijerph21020164>
- Roy, S. K., Majumdar, S., Singh, R., & Paul, A. (2024). Prevalence and risk factors of depressive symptoms in the postpartum period: An experience from urban West Bengal, India. *Journal of Family Medicine and Primary Care*, 13(8), 2880–2885. [https://doi.org/10.4103/jfmpc.jfmpc\\_1050\\_23](https://doi.org/10.4103/jfmpc.jfmpc_1050_23)
- Rudzik, A. E. F., Robinson-Smith, L., Tugwell, F., & Ball, H. L. (2023). Relationships between postpartum depression, sleep, and infant feeding in the early postpartum: An exploratory analysis. *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsy.2023.1133386>
- Shinde, M. (2023). A study to assess the prevalence and risk factors regarding postnatal depression among postnatal mothers in postnatal ward, MGM Hospital, Aurangabad. *British Journal of Multidisciplinary and Advanced Studies*, 4(2), 64–70. <https://doi.org/10.37745/bjmas.2022.0167>
- Suarez, A., Shraibman, L., & Yakupova, V. (2023). Long-term effects of maternal depression during postpartum and early parenthood period on child socioemotional development. *Children*, 10(10), 1718. <https://doi.org/10.3390/children10101718>
- Tsai, J.-M., Tsai, L.-Y., Tsay, S.-L., & Chen, Y.-H. (2023). The prevalence and risk factors of postpartum depression among women during the early postpartum period: A retrospective secondary data analysis. *Taiwanese Journal of Obstetrics and Gynecology*, 62(3), 406–411. <https://doi.org/10.1016/j.tjog.2023.03.003>
- Væver, M. S., Pedersen, I. E., Smith-Nielsen, J., & Tharner, A. (2020). Maternal postpartum depression is a risk factor for infant emotional variability at 4 months. *Infant Mental Health Journal*, 41(4), 477–494. <https://doi.org/10.1002/imhj.21846>

Wendland, J., Benarous, X., Young, H., Brahim, T., Apter, G., Bodeau, N., Cohen, D., & Gérardin, P. (2022). Impact of the timing of maternal peripartum depression on infant social and emotional development at 18 months. *Journal of Clinical Medicine*, 11(23), 6919. <https://doi.org/10.3390/jcm11236919>