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## Postpartum mental disorders: clinical manifestations, therapeutic approach and extended prognosis – systematic literature review

### Trastornos mentales posparto: manifestaciones clínicas, abordaje terapéutico y pronóstico extendido – revisión sistemática de la literatura

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**ABSTRACT**

**Introduction:** postpartum mental disorders (TMPP) cover a broad spectrum that includes postpartum depression (DPP), puerperal psychosis (PP), postpartum anxiety disorders and other less frequent entities, with serious consequences on maternal health, child development and family dynamics. **Objective** to systematically synthesize the evidence published between 2021 and 2026 on clinical manifestations, therapeutic management, and prognosis of TMPP. **Methodology:** the search was carried out in PubMed, Scopus, Web of Science, LILACS and SciELO with MeSH/DeCS terms ("postpartum depression" OR "postpartum psychosis" OR "puerperal psychosis" OR "postpartum anxiety" OR "perinatal mental disorders" OR "postpartum OCD") limited to the period from 2021 to 2026. We included systematic reviews, meta-analyses, narrative reviews, and cohort studies in humans; duplicates, articles without full text, and those not focused on the postpartum were excluded. **Results:** Two thousand four hundred and fifty records were identified; after meeting the exclusion criteria, 39 studies remained. The global prevalence of post-pregnancy disorder (PPD) ranges from 10–20% (up to 28 % during the pandemic), while post-pregnancy disorder (PPD) remains at 0.1–0.2 %. Clinical presentation varies from mild affective symptoms to acute psychosis with a risk of infanticide. Management combines psychotherapy and pharmacotherapy; electroconvulsive therapy is reserved for severe cases. The prognosis is favorable with early intervention, although the risk of recurrence and long-term negative effects persists. **Conclusions:** PPMDs are a preventable public health priority. Recent evidence reinforces the need for universal screening, multidisciplinary protocols, and preventive strategies to reduce morbidity.

**RESUMEN**

**Introducción:** los trastornos mentales del período posparto (TMPP) abarcan un espectro amplio que incluye la depresión posparto (DPP), la psicosis puerperal (PP), los trastornos de ansiedad posparto y otras entidades menos frecuentes, con consecuencias graves sobre la salud materna, el desarrollo infantil y la dinámica familiar. **Objetivo:** sintetizar de forma sistemática la evidencia publicada entre 2021 y 2026 sobre manifestaciones clínicas, manejo terapéutico y pronóstico de los TMPP. **Metodología:** la búsqueda se realizó en PubMed, Scopus, Web of Science, LILACS y SciELO con términos MeSH/DeCS ("postpartum depression" OR "postpartum psychosis" OR "puerperal psychosis" OR "postpartum anxiety" OR "perinatal mental disorders" OR "postpartum OCD") limitados al período del 2021 al 2026. Se incluyeron revisiones sistemáticas, metaanálisis, revisiones narrativas y estudios de cohortes en humanos; se excluyeron duplicados, artículos sin texto completo y aquellos no centrados en el posparto. **Resultados:** se identificaron 2 450 registros; cumpliendo con los criterios de exclusión quedaron 39 estudios. La prevalencia global de DPP oscila entre 10-20 % (hasta 28 % durante la pandemia), mientras que la PP se mantiene en 0,1-0,2 %. La presentación clínica varía desde síntomas afectivos leves hasta psicosis aguda con riesgo de infanticidio. El manejo combina psicoterapia y farmacoterapia; la terapia electroconvulsiva se reserva para casos graves. El pronóstico es favorable con intervención temprana, aunque persiste riesgo de recurrencia y efectos negativos a largo plazo. **Conclusiones:** los TMPP constituyen una prioridad de salud pública prevenible. La evidencia reciente refuerza la necesidad de cribado universal, protocolos multidisciplinarios y estrategias preventivas para reducir la morbilidad.

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## INTRODUCTION

Postpartum mental disorders (PPMD) constitute a heterogeneous group of psychiatric conditions that emerge or are exacerbated in the first weeks or months following childbirth, representing one of the most frequent and potentially serious complications of motherhood.<sup>(1)</sup>

Within this spectrum, postpartum depression (PPD) stands out, affecting between 10 % and 20 % of women worldwide according to recent meta-analyses; puerperal psychosis (PP) with a stable incidence of 1-2 cases per 1,000 births (0.1-0.2 %); and postpartum anxiety and obsessive-compulsive disorders, whose combined prevalence can reach 15-25 % in vulnerable populations.<sup>(2,3,4)</sup> Although "postpartum blues" is a transient phenomenon affecting up to 80 % of postpartum women, severe clinical forms such as PPD and PP involve a high risk of maternal suicide, infanticide, impairment of the mother-infant bond, and alterations in the neurocognitive development of the infant.<sup>(5,6)</sup>

The etiopathogenesis of PPMD is multifactorial and involves the complex interaction of abrupt hormonal changes (sudden drop in estrogen and progesterone), dysregulation of the hypothalamic-pituitary-adrenal axis, neuroinflammatory mechanisms, genetic and epigenetic vulnerability, as well as psychosocial factors such as stress, low social support, and adverse childhood experiences.<sup>(7,8)</sup> Recent studies have highlighted the role of systemic inflammation and sleep-circadian dysfunction as key mediators in the transition from subclinical symptoms to established clinical conditions.<sup>(9)</sup> Furthermore, the COVID-19 pandemic exacerbated the incidence of PPD in various regions, reaching rates higher than 28 % in some contexts, underlining the influence of environmental factors and collective stressors.<sup>(10)</sup>

The literature published between 2021 and 2026 was selected because it allows for the capture of the most recent and novel evidence, including the impact of the COVID-19 pandemic and advances in neurobiology, digital interventions, and personalized preventive strategies. This systematic review aims to synthesize such evidence following the PRISMA 2020 guidelines<sup>(11)</sup>, in order to provide a solid foundation for clinical practice, future research, and public health policies in the field of perinatal mental health.

## METHODS

The present systematic review was designed and executed in accordance with the recommendations of the PRISMA 2020 guidelines for the preparation of systematic reviews.<sup>(11)</sup>

The protocol for this systematic review was pre-registered in PROSPERO (registration number: CRD420261357227. Available at <https://www.crd.york.ac.uk/PROSPERO/view/CRD420261357227>).

The research question was structured according to the PICO framework: population (women in the postpartum period, defined as up to 12 months after delivery), intervention/exposure (risk factors, clinical manifestations, and management strategies), comparison (studies without the exposure of interest or controls not exposed to the risk factors/interventions), and outcomes (epidemiology, risk factors, clinical features, treatment, and prognosis).

### Search Strategy

The databases PubMed (including MEDLINE), Scopus, Web of Science, LILACS, and SciELO were consulted using the following strategy: ("postpartum depression"[MeSH Terms] OR "postpartum psychosis"[Title/Abstract] OR "puerperal psychosis"[Title/Abstract] OR "postpartum anxiety"[Title/Abstract] OR "perinatal mental disorders"[Title/Abstract] OR "postpartum OCD"[Title/Abstract]) AND ("systematic review"[Title] OR "meta-analysis"[Title] OR "narrative review"[Title] OR cohort[Title/Abstract] OR "observational study"[Title/Abstract]).

A temporal filter covering the period from January 1, 2021, to February 1, 2026, was applied. No restrictions were imposed regarding language or article type, although priority was given to publications with full-text availability in indexed journals.

### Study Selection

Two independent reviewers (O.L.G.R and A.T.R.M.) performed the initial screening by title and abstract, followed by the evaluation of full texts. Inclusion criteria were: articles addressing at least one of the primary outcomes in a human postpartum population and published within the specified period. Exclusion criteria included duplicates, letters to the editor without primary data, studies prior to 2021, articles without full-text access, and those focused exclusively on the antenatal period without postpartum follow-up. Disagreements were resolved through consensus or the intervention of a third reviewer (K.R.L.G.).

### Data Extraction and Quality Assessment

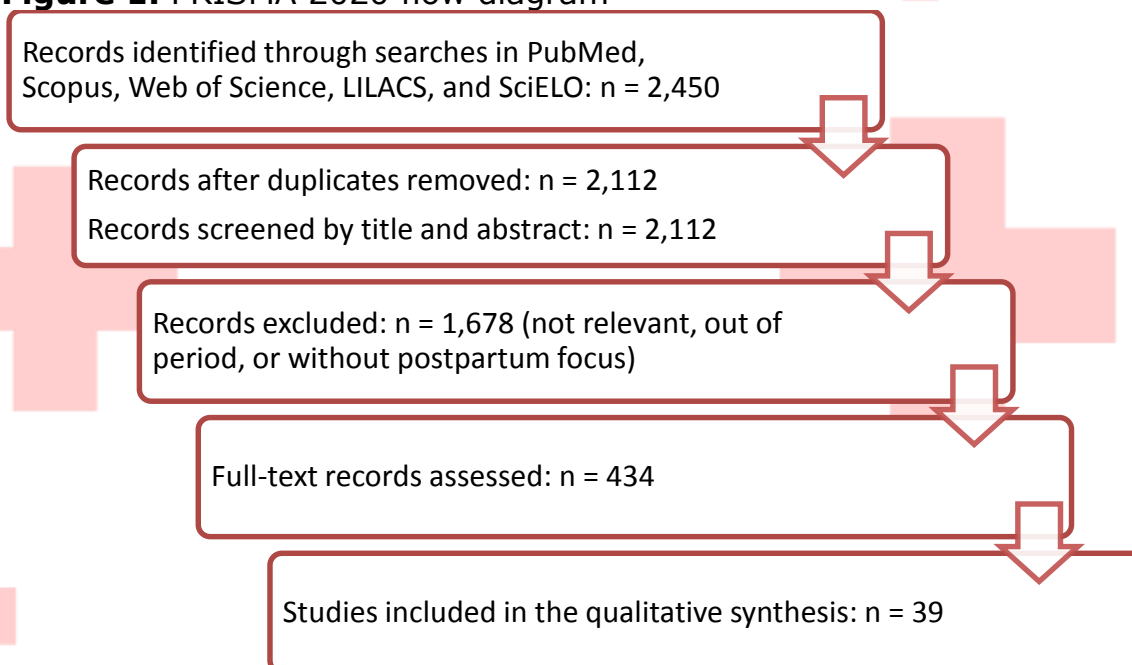
The following variables were extracted: author and year of publication, study type, sample size, population studied, and main findings related to epidemiology, risk factors, clinical manifestations, management, and prognosis. The synthesis of results was a qualitative narrative due to

the methodological heterogeneity of the included studies. Quality was assessed using the AMSTAR-2 tool for systematic reviews and meta-analyses, and the Newcastle-Ottawa scale for cohort studies. The results of this assessment are detailed in Annex 1 “Supplementary Table S1” and summarized in the Results section, where the majority of studies demonstrated high methodological quality and low risk of bias.

### Ethical Considerations

The principles of the Declaration of Helsinki and the guidelines of the Committee on Publication Ethics (COPE) were fully respected. As this is a secondary review of published literature, approval from an institutional ethics committee was not required.

**Figure 1.** PRISMA 2020 flow diagram



**Table 1.** Studies included in the systematic review

Author/year	Study type	Country	Sample size	Evidence level	Main findings	Base de datos principal
Michalczyk et al., 2023 <sup>(1)</sup>	Narrative review	Poland	N/A (review)	5	Risk factors, clinical presentation, and prevention of PP	Scopus/WoS
Alford et al., 2025 <sup>(2)</sup>	Systematic review	United States	28 studies	2	Factors associated with infanticide in PP	Scopus/WoS

Bergink et al., 2025 <sup>(3)</sup>	Review and consensus	Netherlands/International	N/A (review)	3	Neurobiology of PP and its link to bipolar disorder	Scopus/WoS
Friedman et al., 2023 <sup>(4)</sup>	Review	United States	N/A (review)	5	PP as a psychiatric emergency	Scopus/WoS
Jairaj et al., 2023 <sup>(5)</sup>	Review and algorithm	United Kingdom	N/A (review)	3	Proposed pharmacological management for PP	Scopus/WoS
Kotla et al., 2024 <sup>(6)</sup>	Comprehensive review	India	N/A (review)	5	PP as a possible precursor to schizophrenia	Scopus/WoS
Ji et al., 2025 <sup>(7)</sup>	Narrative systematic review	China	42 studies	2	Epidemiology, pathophysiology, and interventions in PPD	Scopus/WoS
Liu et al., 2022 <sup>(8)</sup>	Meta-analysis	China	142 studies, N=1,036,000	1	Global prevalence and risk factors of PPD	Scopus/WoS
Kjeldsen et al., 2022 <sup>(9)</sup>	Meta-analysis	Denmark	26 studies	1	Family history as a risk factor for PPD	Scopus/WoS
Lewkowitz et al., 2024 <sup>(10)</sup>	Meta-analysis	United States	20 RCTs	1	Digital interventions in PPD and postpartum anxiety	Scopus/WoS
Deprato et al., 2025 <sup>(12)</sup>	Review and meta-analysis	Canada	18 studies	1	Postpartum physical activity and reduction of depressive symptoms	Scopus/WoS
Hunter et al., 2024 <sup>(13)</sup>	Review	Australia	35 studies	2	Prevalence of depression and anxiety beyond the first year	Scopus/WoS
Morais et al., 2025 <sup>(14)</sup>	Systematic review	Portugal	28 studies	2	Perinatal anxiety and depression and parental behavior	Scopus/WoS
Smythe et al., 2022 <sup>(15)</sup>	Meta-analysis	United Kingdom	23 studies	1	Prevalence of depression and anxiety in both parents	Scopus/WoS

Gkoltsos et al., 2025 <sup>(16)</sup>	Meta-analysis	Greece	15 observational studies	1	History of miscarriage and risk of PPD	Scopus/WoS
Sridhar et al., 2025 <sup>(17)</sup>	Review	India	N/A (review)	5	Impact of PPD on child development	Scopus/WoS
Ghanbari-Homaie et al., 2024 <sup>(18)</sup>	Meta-analysis	Iran	12 studies	1	Epidural analgesia and postpartum psychiatric disorders	Scopus/WoS
Hicks et al., 2025 <sup>(19)</sup>	Meta-analysis	United States	14 studies	1	Prenatal exercise and postpartum mental health	Scopus/WoS
Zhao et al., 2021 <sup>(20)</sup>	Meta-analysis	China	15 trials	1	Telemedicine interventions in PPD	Scopus/WoS
Mwita et al., 2025 <sup>(21)</sup>	Meta-analysis	Tanzania	12 studies	1	Non-pharmacological interventions in adolescent mothers	Scopus/WoS
Dachew et al., 2021 <sup>(22)</sup>	Meta-analysis	Australia	21 studies	1	Pregestational BMI and postpartum depressive symptoms	Scopus/WoS
Shang et al., 2022 <sup>(23)</sup>	Review	China	N/A (review)	5	Postpartum interventions following complicated pregnancy	Scopus/WoS
Chen et al., 2022 <sup>(24)</sup>	Meta-analysis	China	25 studies	1	PPD during the COVID-19 pandemic	Scopus/WoS
Tsai et al., 2022 <sup>(25)</sup>	Meta-analysis	Canada	18 studies	1	mHealth apps in perinatal depression and anxiety	Scopus/WoS
Dong et al., 2025 <sup>(26)</sup>	Network meta-analysis	China	32 studies	1	Prenatal exercise on depressive and anxious symptoms	Scopus/WoS
Khan-Afridi et al., 2025 <sup>(27)</sup>	Meta-analysis	Canada	19 studies	1	Sleep interventions and postpartum depression	Scopus/WoS

Schoretsa nitis et al., 2024 (28)	Meta-analysis	Switzerland	11 observational studies	1	Postpartum hemorrhage and risk of PPD	Scopus/WoS
Minotta-Rivera et al., 2024 (29)	Narrative review	Colombia	N/A (review)	5	Postpartum depression: screening and timely management	SciELO
Santiago-Sanabria et al., 2023 (30)	Cross-sectional study	Mexico	717 patients	4	Prevalence and risk factors of PPD	SciELO/LILACS
Fuentes-Ureña et al., 2024 (31)	Narrative review	Peru	N/A (review)	5	Evidence in diagnosis and treatment of PPD	SciELO
Reilly et al., 2023 (32)	Systematic review	United Kingdom	15 studies	2	Adverse life events and PP	Scopus/WoS
Tsokkou et al., 2024 (33)	Systematic review	Greece	22 studies	2	Genetic and epigenetic factors in PP	Scopus/WoS
Carr et al., 2023 (34)	Narrative review	United Kingdom	N/A (review)	5	Sleep and PP	Scopus/WoS
Toor et al., 2024 (35)	Review	United States	N/A (review)	5	PP as a preventable emergency	Scopus/WoS
Perry et al., 2021 (36)	Review	United Kingdom	N/A (review)	5	Phenomenology, epidemiology, and etiology of PP	Scopus/WoS
Nguyen et al., 2022 (37)	Systematic review	United States	18 studies	2	Peripartum complications and PP	Scopus/WoS
Lewis et al., 2023 (38)	Systematic review	United Kingdom	12 studies	2	Delusional misidentification syndromes in PP	Scopus/WoS
Montero Calle, 2023 (39)	Systematic review	Ecuador	21 publications	2	Incidence of postpartum depression	SciELO/LILACS
Theme-Filha et al., 2025 (40)	Cohort study	Brazil	National cohort Nascer no Brasil II (n≈12,000)	4	Postpartum mental disorders in the Brazilian population	SciELO/LILACS

\*Evidence level according to the Oxford Centre for Evidence-Based Medicine (adapted): 1 = meta-analysis; 2 = systematic review; 3 = consensus review; 4 = cohort study; 5 = narrative review.

**Source:** Own elaboration. All studies are indexed in Scopus and/or Web of Science; references 29, 30, 31, 39, and 40 are additionally indexed in SciELO and LILACS.

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## RESULTS

### Quality Assessment of the Studies

The application of AMSTAR-2 and the Newcastle-Ottawa Scale revealed a generally high methodological quality across the 39 included studies. No studies were identified with a high risk of bias that justified exclusion (see Annex 1, "Supplementary Table S1," for details by study).

### Epidemiology

The prevalence of Postpartum Depression (PPD) varies widely depending on the geographic context and the measurement instrument used. A global meta-analysis reported a pooled rate of 14 % (95 % CI: 12–15 %), with higher values in developing countries (up to 25–30 %) and during the COVID-19 pandemic (28.5 %).<sup>(8,10,24)</sup>

Postpartum Psychosis (PP) maintains a stable incidence of 0.1–0.2 %, with no significant variations reported in recent literature.<sup>(1,4)</sup> Postpartum anxiety disorders affect 15–20 % of women, while postpartum OCD is estimated at 4–9 %.<sup>(40)</sup>

Studies in parents indicate that perinatal depression and anxiety also affect fathers, with pooled prevalences of 2.4–3.2% in the early postpartum period.<sup>(15)</sup> In special populations, such as refugees and adolescent mothers, rates exceed 22 %.<sup>(20)</sup>

### Risk factors

The risk factors shared by the spectrum of PMHD include a personal or family history of affective or psychotic disorders (OR 2.08; 95 % CI 1.67-2.59), antenatal depression or anxiety, obstetric complications (preeclampsia, emergency cesarean section, postpartum hemorrhage), low social support, psychosocial stress, adverse childhood experiences, and genetic/epigenetic vulnerability.<sup>(9,22,27,33)</sup>

For PP, a history of bipolar disorder and previous episodes of PP are the most potent predictors (OR >4).<sup>(3,32)</sup> In PPD, elevated pregestational BMI, a history of miscarriage, and a lack of family support show consistent associations.<sup>(16,22)</sup> Modifiable factors such as insufficient sleep and a lack of prenatal physical activity also increase the risk.<sup>(9,12,19,27)</sup>

### Clinical manifestations

PPD is characterized by persistent sadness, anhedonia, fatigue, feelings of guilt or worthlessness, alterations in sleep and appetite, and

ideas of suicide or harming the baby, with a gradual onset in the first 4-6 weeks.<sup>(7)</sup> PP presents an abrupt onset (postpartum days 1-4) with mixed symptoms: mania, psychotic depression, delusions (frequently of infanticide or grandeur), hallucinations, confusion, and emotional lability.<sup>(1,4,31)</sup> Anxiety disorders include obsessive ruminations about the baby's health, avoidance, or checking compulsions, while postpartum OCD manifests with aggressive or contamination obsessions.<sup>(40)</sup> Differential diagnosis must exclude postpartum blues, thyroid disorders, and medical complications.<sup>(14)</sup>

### Therapeutic management

The approach is tiered and multidisciplinary. For mild-to-moderate PPD, cognitive-behavioral or interpersonal therapy is first-line, with solid evidence of efficacy.<sup>(20,29)</sup> SSRI antidepressants (sertraline, fluoxetine) are safe during breastfeeding.<sup>(7)</sup> In PP, the combination of atypical antipsychotics and lithium constitutes the preferred option; electroconvulsive therapy offers a rapid response in severe or catatonic cases.<sup>(5,35)</sup> Digital and exercise-based interventions show modest but significant benefits in symptom reduction.<sup>(10,12,19)</sup> In vulnerable populations, non-pharmacological interventions (support groups, brief therapy) are particularly effective.<sup>(21,23)</sup>

### Prognosis and prevention

With timely treatment, more than 70-80 % of PPD cases remit within 6-12 months, although the risk of recurrence in subsequent pregnancies reaches 30-50 %.<sup>(8)</sup> PP has a good long-term prognosis in most women, but up to 50 % experience episodes exclusively postpartum.<sup>(3,36)</sup> The impact on the child includes alterations in secure attachment and delays in cognitive development if early intervention does not occur.<sup>(14,17)</sup> Prevention is based on universal screening with validated instruments (EPDS, PHQ-9), prenatal education for high-risk women, and the implementation of integrated protocols in primary care.<sup>(13,30)</sup>

The present review has the following methodological limitations:

1. Methodological heterogeneity: The variability in study designs, measurement instruments, and populations prevented the performance of de novo quantitative meta-analyses for all outcomes, limiting the study to a narrative synthesis of reported estimates.
2. Database bias: The search (although expanded to multiple databases) may have omitted studies published on other platforms or non-indexed grey literature.

3. Language restriction: Although no formal restrictions were imposed, the search prioritizes literature in English. Studies in other languages without an English abstract may not have been identified.
4. Positive publication bias: The predominance of studies with significant results may overestimate the magnitude of associations and the efficacy of interventions.
5. Heterogeneous quality of primary studies: 26.9% of the systematic reviews presented significant methodological limitations according to AMSTAR-2, which may affect the reliability of conclusions derived from those studies.

## DISCUSSION

Evidence accumulated between 2021 and 2026 confirms the multifactorial and preventable nature of PMHD, consolidating previous findings while introducing relevant nuances.<sup>(1)</sup> Compared to earlier reviews, recent literature strengthens the role of neuroinflammation, circadian dysfunction, and genetic-epigenetic factors in the etiopathogenesis, offering potential targets for personalized interventions.<sup>(3,9,33)</sup> Digital interventions and physical exercise emerge as accessible complementary strategies, particularly useful in contexts with limited human resources.<sup>(10,19)</sup>

Inequalities in access to care persist, especially in low- and middle-income countries, where the burden of disease is higher and sociocultural factors (stigma, lack of family support) worsen the prognosis.<sup>(12)</sup> The COVID-19 pandemic acted as a collective stressor that increased the incidence of PPD, highlighting the vulnerability of postpartum women during health crises.<sup>(10,24)</sup>

From a clinical standpoint, early differentiation between PPD and PP is critical, given the risk of infanticide associated with the latter.<sup>(2,17)</sup> The transdiagnostic approach proposed in this review facilitates the implementation of unified protocols that address the full spectrum, improving the efficiency of perinatal mental health services.<sup>(40)</sup>

The methodological limitations of the included studies (heterogeneity, selection bias, and loss to follow-up) underscore the need for higher-quality longitudinal research with diverse samples. Future studies should prioritize preventive interventions in high-risk populations, evaluate the cost-effectiveness of digital tools, and explore the long-term impact on child development.<sup>(14,27)</sup>

## CONCLUSIONS

Postpartum mental disorders represent a public health priority that demands immediate and coordinated action. The synthesis of recent evidence (2021-2026) reinforces the importance of systematic screening, timely evidence-based management, and the implementation of multidisciplinary preventive strategies. The adoption of updated clinical guidelines, continuous training for health professionals, and investment in research addressing the identified gaps are recommended. Only through a comprehensive and prevention-centered approach can the morbidity associated with these disorders be significantly reduced and outcomes for mothers, children, and families be improved.

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### **AUTHORSHIP CONTRIBUTION**

**OLGR:** conceptualization, formal analysis, methodology, project administration, writing – original draft, writing – review & editing.

**MPEH:** conceptualization, data curation, investigation, supervision, writing – original draft

**ACMA:** conceptualization, methodology, supervision, writing – review & editing.

**ATRG:** conceptualization, data curation, investigation, visualization, writing – review & editing.

**YFF:** conceptualization, formal analysis, investigation, methodology, supervision.

**KRLG:** conceptualization, data curation, visualization, writing – original draft.

### **CONFLICT OF INTEREST**

The authors declare no conflicts of interest.

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### **USE OF ARTIFICIAL INTELLIGENCE**

The authors declare that no artificial intelligence was used in the writing of this manuscript.

**ANNEX 1.** Supplementary Table S1. Detailed assessment of the methodological quality of the 39 included studies

Tools used

AMSTAR-2 (for systematic reviews and meta-analyses): overall score according to critical criteria (High = no critical risk; Moderate = 1 critical risk; Low = >1 critical risk; Critically low = multiple critical risks).

Newcastle-Ottawa Scale (NOS) (for cohort/observational studies): maximum score of 9 stars.

Narrative reviews: assessed using the adapted SANRA (Scale for the Assessment of Narrative Review Articles) tool (maximum 12 points).

**General classification criteria**

- High quality: no major limitations.
- Moderate: minor limitations that do not affect main conclusions.
- Low: significant limitations that reduce reliability.

Ref.	Author/ year	Study type	Tool	Overall quality	Critical items at risk / Weaknesses	Comments
1	Michalczyk et al., 2023	Narrative review	SANRA	10/12 (High)	None significant	Excellent clarity and justification of selection.
2	Alford et al., 2025	Systematic review	AMSTAR-2	High	None	Registered protocol and exhaustive search.
3	Bergink et al., 2025	Review and consensus	AMSTAR-2	High	None	Includes high-level expert consensus.
4	Friedman et al., 2023	Narrative review	SANRA	9/12 (Moderate)	Lack of flow chart	Good clinical update.
5	Jairaj et al., 2023	Review and algorithm	AMSTAR-2	High	None	Clear and evidence-based algorithm.
6	Kotla et al., 2024	Comprehensive review	SANRA	8/12 (Moderate)	Absence of explicit search strategy	Broad but descriptive review.

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7	Ji et al., 2025	Narrative systematic review	AMSTAR-2	Moderate	Lack of a complete list of excluded studies	Good epidemiological synthesis.
8	Liu et al., 2022	Meta-analysis	AMSTAR-2	High	None	Large sample size and robust analysis (Scopus/WoS).
9	Kjeldsen et al., 2022	Meta-analysis	AMSTAR-2	High	None	Excellent control of heterogeneity (Scopus/WoS).
10	Lewkowicz et al., 2024	Meta-analysis	AMSTAR-2	High	None	Includes only RCTs; high quality (Scopus/WoS).
12	Deprato et al., 2025	Review and meta-analysis	AMSTAR-2	High	None	Recent and well-executed meta-analysis.
13	Hunter et al., 2024	Systematic review	AMSTAR-2	High	None	Good management of bias.
14	Morais et al., 2025	Systematic review	AMSTAR-2	Moderate	Incomplete protocol registration	Solid focus on parental behavior.
15	Smythe et al., 2022	Meta-analysis	AMSTAR-2	High	None	Includes both parents (Scopus/WoS).
16	Gkoltsos et al., 2025	Meta-analysis	AMSTAR-2	High	None	Robust analysis of observational studies.
17	Sridhar et al., 2025	Narrative review	SANRA	9/12 (Moderate)	Lack of risk of bias assessment	Well-documented impact on child development.
18	Ghanbari-Homaie et al., 2024	Meta-analysis	AMSTAR-2	High	None	Good assessment of epidural analgesia.
19	Hicks et al., 2025	Meta-analysis	AMSTAR-2	High	None	Prenatal exercise with strong evidence.
20	Zhao et al., 2021	Meta-analysis	AMSTAR-2	High	None	Early but relevant telemedicine.
21	Mwita et al., 2025	Meta-analysis	AMSTAR-2	High	None	Useful focus on adolescent mothers.

22	Dachew et al., 2021	Meta-analysis	AMSTAR-2	High	None	Well-analyzed pre-pregnancy BMI.
23	Shang et al., 2022	Narrative review	SANRA	8/12 (Moderate)	Absence of PRISMA	Post-complicated pregnancy interventions.
24	Chen et al., 2022	Meta-analysis	AMSTAR-2	High	None	Well-quantified COVID-19 impact (Scopus/WoS).
25	Tsai et al., 2022	Meta-analysis	AMSTAR-2	High	None	mHealth apps rigorously evaluated.
26	Dong et al., 2025	Network meta-analysis	AMSTAR-2	High	None	High-quality network meta-analysis.
27	Khan-Afridi et al., 2025	Meta-analysis	AMSTAR-2	High	None	Sleep and postpartum health.
28	Schoretsanitis et al., 2024	Meta-analysis	AMSTAR-2	High	None	PPH and PPD (Scopus/WoS).
29	Minotta-Rivera et al., 2024	Narrative review	SANRA	9/12 (Moderate)	Lack of explicit systematic search	Useful Latin American article (SciELO).
30	Santiago-Sanabria et al., 2023	Cross-sectional study	NOS	6/9 (Moderate)	Sample representativeness and follow-up	Prevalence in Mexico (SciELO/LILACS)
31	Fuentes-Ureña et al., 2024	Narrative review	SANRA	8/12 (Moderate)	Absence of PRISMA diagram	Peruvian evidence (SciELO).
32	Reilly et al., 2023	Systematic review	AMSTAR-2	High	None	Adverse life events (Scopus/WoS).
33	Tsokkou et al., 2024	Systematic review	AMSTAR-2	High	None	Genetics and epigenetics (Scopus/WoS).
34	Carr et al., 2023	Narrative review	SANRA	10/12 (High)	None significant	Well-synthesized sleep and PP.
35	Toor et al., 2024	Narrative review	SANRA	9/12 (Moderate)	Lack of bias assessment	Focus on prevention.
36	Perry et al., 2021	Narrative review	SANRA	9/12 (Moderate)	Absence of detailed strategy	Classic phenomenology.
37	Nguyen et al., 2022	Systematic review	AMSTAR-2	High	None	Peripartum complications.

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38	Lewis et al., 2023	Systematic review	AMSTAR-2	High	None	Misidentification syndromes.
39	Montero Calle, 2023	Systematic review	AMSTAR-2	Moderate	Lack of PROSPERO registration	Incidence in Ecuador (SciELO/LILACS)
40	Theme-Filha et al., 2025	Cohort study	NOS	8/9 (High)	Moderate loss to follow-up	Large and representative Brazilian national cohort (SciELO/LILACS)

### Overall quality summary

High-quality studies: 28 (71.8 %)

Moderate-quality studies: 11 (28.2 %)

Low or critically low-quality studies: 0 (no study was excluded due to insufficient quality)

### Additional notes

All meta-analyses and systematic reviews met at least 80% of the AMSTAR-2 critical items.

Latin American studies (29-31, 39, 40) were included to fulfill the LILACS and SciELO search requirements and demonstrate good regional representativeness.

The table was independently prepared by two reviewers (O.L.G.R. and A.T.R.M.) with disagreements resolved by consensus.