



# Untangling the Connection: A Literature Review Examining Premenstrual Dysphoric Disorder (PMDD) as Risk Factor for Perinatal Depression (PND)

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## INTRODUCTION

- Perinatal depression (PND), defined by symptom onset during pregnancy and/or the first year postpartum, can have profound adverse psychological and physical consequences for both the mother and infant.
- Many risk factors of PND have been identified, including personal or family history of depression, history of physical or sexual abuse, having an unplanned or unwanted pregnancy, pregestational or gestational diabetes, and complications during pregnancy (e.g., preterm delivery or pregnancy loss).
- There have been many studies that posit premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) as possible conditions that increase the risk of perinatal depression.
- Although the link between PMS/PMDD and PND has been a topic of research inquiry for decades, the connection is not widely understood nor universally embraced.
- Untangling the connection between two mood disorders that both appear during a woman's reproductive years is an important area of investigation within women's health; if PND and PMDD are indeed associated, crucial risk factors could then be identified and utilized for early intervention.

### Questions Guiding Literature Review

**Is there a connection between PND and PMDD?**

**What are the gaps in the research landscape regarding PMDD's potential connection with PND?**

## METHODS

### Literature Review

#### Databases consulted:

- Google Scholar
- PubMed
- PsycINFO
- EMBASE

#### Boolean strings utilized:

- The main strings used were "premenstrual dysphoric disorder" OR "premenstrual syndrome" AND "perinatal depression" OR "postpartum depression".
- To provide further information on the causal underpinnings of PMDD and PND, search terms also included "etiology" AND "premenstrual dysphoric disorder" OR "postpartum depression" OR "perinatal mood disorder".

**Inclusion Criteria:** Peer-reviewed

**Exclusion Criteria:** Dissertation studies

## RESULTS

- This literature review found evidence that both PMDD and PMS are significantly associated with the occurrence of PND.
- Although the etiology of all three phenomena is likely a complex interplay of biopsychosocial factors, the research at present suggests that reproductive hormonal fluctuation (e.g., the menstrual cycle, the childbirth trajectory) can trigger affective dysregulation in a unique subgroup of hormone-sensitive women.
- Further studies are needed to confirm such a subgroup and to disentangle the role of reproductive hormones from other factors of affective change (e.g., neurosteroids, HPA reactivity, neural function, genetics) in the context of specific reproductive states.
- A major barrier to researching the connection between PND and PMDD is in the latter's rigorous prospective diagnosis. The research landscape at present does not include enough studies that use the "gold standard" of PMDD diagnosis.

## DISCUSSION

- Despite evidence showing PMDD and PND as frequently co-occurring reproductive mood disorders, the lack of prospective PMDD diagnoses within study design serves as a major limitation to generalizability and/or applicability of findings.
- A "pure" diagnosis of PMDD per DSM-5 criteria requires daily symptom ratings for at least two consecutive menstrual cycles and evidence that the symptoms are not a premenstrual exacerbation of a different disorder. The rigor and specificity of the diagnosis makes it difficult to design a cohort study with prospectively diagnosed PMDD participants.
- Tracing mood disorder vulnerability throughout a woman's reproductive life strengthens the overall future of women's healthcare. Untangling the question of PMDD as a possible risk factor for PND is a steppingstone toward that aim.
- To ensure confidence in the existing research, prospective diagnoses within new cohort studies is essential.

### Key "Take-Aways"

**PMDD and PND have been shown to be significantly associated.**

**Lack of prospective PMDD diagnosis within the research landscape limits applicability of findings.**

## REFERENCES

