

Scientific Quality: Grade B (Very good)

Novelty of This Manuscript: Grade C (Fair)

Creativity or Innovation of This Manuscript: Grade B (Good)

Scientific Significance of the Conclusion in This Manuscript: Grade B (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: Specific comments: Part 1 Introduction: The introduction provides a solid overview of the research topic, highlighting preeclampsia as a multifaceted condition with severe implications for maternal health. Areas for improvement: integrate a discussion on how various mechanisms linking BMI and blood pressure to PPD are explored or are yet underexplored in current literature. Part 2 Materials and Methods: The methodology is described clearly, with well-defined inclusion and exclusion criteria enhancing the study's reproducibility. Areas for improvement: Clarify the rationale for choosing specific monitoring times for blood pressure measurements. Discuss whether the method accounts for potential diurnal variations and its impact on data interpretation. Discuss the choice of the EPDS threshold (9 points) or its sensitivity/specificity in identifying PPD in the studied population. Discuss any assumptions made in the statistical tests performed and how they were validated. Part 3 Results: The results are logically organized with clear distinctions between different measured outcomes. Areas for improvement: Consider summarizing the key findings at the end of the results section to facilitate the transition to the discussion. Part 4 Discussion: The discussion effectively highlights the implications of the study's findings for clinical practice, offering insightful interpretations. Areas for improvement: Compare the findings with those of similar studies. Discuss potential biological mechanisms linking increased BMI, blood pressure variability, and PPD, drawing from recent pathophysiological insights. Part 5 Conclusion: The conclusion succinctly encapsulates the study's significant findings and clinical relevance. Areas for improvement: Include a more robust call to action that emphasizes not just further research, but also urges changes in clinical guidelines or patient management strategies based on the study's findings. Contextualize the potential impact of addressing PPD within broader public health and health policy frameworks, emphasizing the importance of optimizing maternal mental health. With the suggested enhancements, this study could contribute to understanding and managing PPD risks, ultimately benefiting clinical practices managing high-risk pregnancies.

Reply:

① In the introduction section, we have added a description of the various mechanisms between BMI, blood pressure, and PPD that have not been fully explored in the current literature, as suggested by the reviewer.

② In the methodology section, we have followed the reviewer's suggestion to clarify the reasons for selecting a specific monitoring time for measurement in

the methodology, and to add an explanation of the impact of daytime blood pressure changes on the data in the discussion.

③ In the result part, we have added the summary description in the result part according to the reviewer 's suggestion, so as to make a transition for the follow-up discussion.

④ In the discussion section, we have followed the suggestions of the reviewers and added comparisons with similar research results as much as possible, and analyzed the relevant biological mechanisms from a pathophysiological perspective. However, there is currently limited research on the relationship between pregnancy BMI, blood pressure variability, and preeclampsia induced PPD.

⑤ In the conclusion section, we have added a call to action as suggested by the reviewer.

Scientific Quality: Grade C (Good)

Novelty of This Manuscript: Grade B (Good)

Creativity or Innovation of This Manuscript: Grade C (Fair)

Scientific Significance of the Conclusion in This Manuscript: Grade B (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: Q1 Clarify the specific hypotheses being tested. Make explicit potential causal pathways hypothesized between BMI changes, blood pressure variability, and PPD, as they are essential for readers to understand the study's scope. Emphasize why understanding these relationships in the context of preeclampsia is crucial not only for improving maternal postpartum mental health but also for reducing overall maternal morbidity. Q2 Tables are well-presented and summarize critical quantitative data efficiently. Ensure all statistical significance values are provided for comparisons. Consider providing confidence intervals alongside p-values to emphasize effect sizes and the precision of estimates. Q3 Provide specific suggestions on how clinicians should integrate these findings into practice to mitigate PPD risk in preeclampsia patients effectively. Offer more explicit directions for future research, such as exploring interventions that could specifically target BMI and blood pressure variability in this patient population. Q4 Original: "It can be seen that preeclampsia exacerbates the risk of developing PPD." Revised: "This underscores the notion that preeclampsia intensifies the risk of postpartum depression."? Q5 Instead of stating that preeclampsia "exacerbates the risk of developing PPD," provide a more detailed explanation of the potential biological and psychological mechanisms that link the two conditions. Q6 Expand on the limitations of your study beyond just the sample size and representativeness. Discuss other potential biases (e.g., selection bias, confounding variables), and how future studies could address these limitations. Q7 Ensure that the language used is precise and accessible to readers who might not have specialized knowledge in

high-risk pregnancy and mental health research. This manuscript proves the complex interplay between gestational BMI, blood pressure variability, and the incidence of PPD in women with preeclampsia. The manuscript comprehensively examines the correlations between physiological changes during pregnancy and psychological outcomes postpartum, using rigorous statistical methods to derive its conclusions. Overall, the study is well-structured, and the results are presented clearly. After incorporating the revisions I have suggested, the manuscript can be considered for acceptance.

Reply:

① In the introduction section, we have emphasized the importance of exploring the relationship between BMI, blood pressure variability, and PPD during pregnancy in the context of preeclampsia to improve maternal mental health, as suggested by the reviewers

② We have added confidence intervals next to the P value in the table of multivariate analysis.

③ We have supplemented the recommended measures to reduce PPD in preeclampsia patients in the conclusion part.

④ For ' It can be seen that preeclampsias the risk of developing PPD. ', we have revised it according to the reviewer 's suggestion.

⑤ We have explained the potential biological and psychological mechanisms by which preeclampsia exacerbates postpartum depression in accordance with the reviewer 's recommendations.

⑥ In the conclusion part, we have supplemented how to solve the limitations of this study in the future according to the reviewer 's suggestions.

⑦ In order to ensure the accuracy of the language, we have made a professional grammatical polishing of the language description of the full text.