

Dear Editor:

Many thanks for the review report and suggestions by the reviewer as well as the Editor. The peer-suggestions have helped us improve the scientific quality and clarity of the manuscript for the readership. We have clarified all the queries and have incorporated these ideas in our revised manuscript. The grammar and language has been reviewed by a native English-speaking colleague.

Best regards.

Professor Paul Swamidhas Sudhakar Russell

Corresponding Editor

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**Reviewer 1**

**ABSTRACT**

*1. Conclusion: needs to match aim.*

Thank you for the suggestion. We have matched the conclusion to the aim as follows:

“....In this meta-analysis, we established the summary global diagnostic parameter and clinical utility of the non-English versions of the Edinburgh Postnatal Depression Scale in India; ...”

(Page: 4; Section: Abstract)

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*2. How does this work inform practice clinical work?*

Thank you for the clarification. We have included the following information as:

“.....This work demonstrates that these non-English versions are accurate in their diagnosis of Postnatal Depression and can help clinicians in their diagnostic reasoning.....”

(Page: 4; Section: Abstract)

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**MAIN TEXT**

*3. Explain in more detail: Provide more background on past research about non-English versions of the Edinburgh Postnatal Depression Scale (EPDS) in India and the need for this study.*

Thank you for the suggestion. We have included the following details in the introduction section as:

“...This measure has been translated and validated in eight regional languages of India: Assamese, Bengali, Gujarati, Kannada, Konkani, Marathi, Punjabi and Tamil, and has been validated in clinical and community setting in India against a variety of reference standards. The total EPDS threshold score for diagnosing PND has ranged from 6/7 to 12.5/13. Reflecting the possible effect of varying prevalence of PND, setting of the study, threshold-score of EPDS, reference standard used or other methodological differences, the sensitivity and specificity have varied from 71-100% and 77-98% respectively (further details are given in Table 1). Furthermore, good diagnostic accuracy need not always translate to good clinical utility among measures. The clinical utility of EPDS has not been studied previously in India. Therefore, because of the wide variation in diagnostic accuracy parameters, there is a need to get the summary diagnostic accuracy parameters from the pooled studies for use across India, and the clinical utility needs to be demonstrated as well...”

(Page: 5-6; Section: Introduction)

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*4. Be more specific about what your comparisons will be based on the gap in the literature you seek to fill.*

Thank you for the suggestion. We have included the following statement:

“...Using this meta-analysis we aim to fill-in the lacunae in the existing literature namely, the absence of a summary global diagnostic accuracy and clinical utility parameter for use in India for non-English EPDS. Hence we: (1) establish the summary global diagnostic accuracy of the non-English EPDS versions in India; (2) evaluate the clinical utility of the measure for Post-natal Depression.....”

(Page: 6; Section: Introduction)

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*5. It is unclear what your outcomes will be.*

Thank you for the clarification.

We have used the HSROC and the AUC of that for evaluating the summary global diagnostic accuracy parameter. The other outcome for this meta-analysis was the post-test probability of non-English versions of EPDS. These information has been included in the amended version as:

“...We used the Area Under the Characteristic Curve of the Hierarchical Summary Receiver Operating Curve (HSAUROC), with random effects model, to establish the global diagnostic accuracy of EPDS.[11] This was the first outcome of this meta-analysis. Using the 2X2 table we calculated the positive and negative likelihood ratios (+LR and -LR respectively). From these likelihood ratios we evaluated the post-test probabilities of EPDS using the Fagan’s nomogram (Bayesian approach); these post-test probabilities indicating the clinical utility was the second outcome of our study. [12] We calculated the 95% Confidence Interval (95%CI) whenever indicated. All analyses were done at study level and not at participant level. The analyses were done with STATA (version 15) using the MIDAS and METANDI modules.....”

(Page: 7; Section: Statistical analysis)

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## **DISCUSSION**

*What has previously been published on this topic and what does this work add to the existing literature?*

Thank you for the suggestion.

We have included the published international literature on non-English versions of EPDS as follows in the revised version of the manuscript:

“....Our finding about the diagnostic accuracy of EPDS versions is comparable with the values reviewed for the English versions in native English speaking countries. [6,7] In comparison to some of the other selected non-English EPDS versions among African languages, the Chichewa version in Malawi, the Shona version in Zimbabwe and the Nigerian version, relatively lower diagnostic accuracy than the summary value are reported in this meta-analysis.[23,24] The translated version of EPDS in Afrikaans, Zulu, Tswana, Sotha and Xhosa has demonstrated higher diagnostic accuracy for EPDS in South Africa.[25] Among the European languages, the Danish version of EPDS has an Area Under the Curve of 0.96 and is comparable to our summary data [26], the Spanish version had an overall accuracy of 87.4% [27], the French versions of EPDS has a sensitivity and specificity of 80 and 92%, and thus had lower diagnostic accuracy.[28] The other Asian language where EPDS has been validated includes Arabic [29], Chinese [30] and Japanese[31]; they have been found to have lower or similar diagnostic accuracy as in our meta-analysis. ...”

(Page: 8-9; Section: Discussion)

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*What are the strengths of your study?*

Thank you for the suggestion.

We have included the strengths of this study in the amended version as:

“...The strengths of this study from a methodological perspective are that we followed the guideline recommended by the Cochrane Diagnostic Test Accuracy Protocol. To present the summary of the global diagnostic accuracy of the EPDS we used a summary line (HSROC) than summary point, as studies with various EPDS threshold values and two reference standards were analysed together. Furthermore, we anticipated the sensitivity as well as specificity of EPDS to differ widely between studies from the literature and used the random effects model over the fixed effects model for analysis. [6,7] There was no publication or small study bias in our meta-analysis. ...”

(Page: 9; Section: Discussion)

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*What are the clinical or policy implications of this research?*

*Thank you for the suggestion.*

The policy implications of this research has been revised as:

“...Finally from the policy implication standpoint, in about 69069 births expected per day in India [32], the need to identify the 22% of mothers with PND and deliver the integrated management of mother-baby dyad is a huge task but can be achieved if PND is identified and EPDS is used as a valuable measure.[33] The National Mental Health Program should incorporate the use of EPDS as the screening measure for PND in India through its District Mental Health approach routinely. ...”

(Page: 9; Section: Discussion)

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