Reviewer’s report

Title: Improved prediction of gestational hypertension by inclusion of Placental Growth Factor and Pregnancy Associated Plasma Protein-A in a sample of Ghanaian women

Version: 0 Date: 25 Jan 2018

Reviewer: Sophie Alexander

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Comment on submitted paper for Reproductive Health

Improved prediction of gestational hypertension by inclusion of placental Growth Factor and Pregnancy Associated Plasma Protein-A in a Ghanaian cohort

Edward Antwi1,2, Kerstin Klipstein-Grobusch1,4, Joyce L.Browne1, Peter C. Schielen5, ,5 Kwadwo A. Koram3, Irene A. Agyepong2, Diederick E Grobbee1,

General appraisal

This paper contains interesting data, and contributes to the corpus of data regarding biochemical screening for preeclampsia / pregnancy induced hypertension risk. In particular there are at present only few data from LMICs and in particular from Sub-Saharan Africa. It requires in my view a change of position in the discussion and conclusion part, as formal recommendation of routine 1st trimester biochemical screening is still very much a subject of controversy for HICs, let alone where resources are limited (1).

As an example of this, Cheng et al did not find markers to be useful for detecting early or late onset preeclampsia in China (2).

For the present study, one option would be to replicate the study on a larger population in particular to have results for preeclampsia (early or late onset). Recommendation for local trials has been made in the discussion of the Cheng study which is probably the best option.

Another issue is that of the additional benefit of each separate marker to the prediction model, as each requires additional economic resources. This topic is well discussed by Prefumo and Farina (3).
Finally I looked up the UK screening portal, and other guidelines and Cochrane type evidence and could find NONE introducing population based 1st trimester preeclampsia screening.

Conclusion

The data are useful, and come from an African population for which there are not many studies, and therefore should be available to scientists in this area, which means they should be published.

The M&M section and the results section are up to standards. The fact that the main outcome is PIH and not preeclampsia is not a major issue because these diseases are linked and the aim is to add to the corpus of knowledge.

On the other hand the introduction and in particular the discussion lack both distance and reference to doubt regarding the appropriateness of introducing such screening.

If the authors can access more information about the limited level of evidence and transform their viewpoint and rewrite the introduction and section, I think this paper is of interest.


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Not suitable for publication unless extensively edited

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