Reviewer's report

Title: Symphysis-fundus height measurement to predict small-for-gestational-age status at birth: a systematic review

Version: 1 Date: 17 December 2014

Reviewer: Ellen Blix

Reviewer's report:

Thank you for the opportunity to review this study. The research question is highly relevant and of importance to all with interest in antenatal care. The article is systematically written, but some parts are too little detailed. I have some suggestions for changes that you may consider:

1. Background, line 76. You write that a major goal of antenatal care is to detect and prevent FGR. It is probably more correct write .... To detect FGR and prevent adverse outcomes associated with FGR. (Discretionary revision)

2. The background section is very short. In my opinion, the article will be better if you explain that routine SF measurement in antenatal care is a screening test, a couple of paragraphs to explain what a screening test is meant to be, provide more information about FGR, adverse outcomes associated with the condition and if measuring SF height is a routine part of antenatal care in Western countries. You could provide information about the proportion neonates born as SGAs to indicate if this is an important public health issue. You could also give a more detailed description of how the SF measure is performed (by a tape measurer), and what “further investigation of fetal growth and well-being” is (like CTG, ultrasound to assess fetal size, umbilical cord flow, etc). (Minor revision)

3. Background or Methods: Please provide a short description on the most used SF curves. (Minor revision)

4. Methods/Criteria for considering studies for this review/Index test, line 115: ......, compared with a reference or gold standard in the population....... (Minor revision)

5. You should explain what a reference standard is, compared to a gold standard. The reference standard is birth weight – in my opinion that a gold standard rather than a reference standard. (Discretionary revision)

6. Data collection and analyses/Assessment of methodological quality: You should present the tool used for assessment in an additional file. (Minor revision)

7. Data collection and analyses/Statistical analyses and data synthesis: If you provide a short information about what LRs are (the increase/decrease in odds for having the disease/reference standard after a positive negative test result) and what they tell us (e.g. that a test is regarded as useful if PLR>5 and NLR<0.2 or other values you find more correct, and provide a reference for your choice of threshold), it will be helpful for clinicians and other readers who do not have extensive knowledge in how to assess screening/diagnostic tests. You should
also explain DOR. (Minor revision)

8. Data collection and analyses/Investigation of heterogeneity: Could you write a few paragraphs about assessment of clinical heterogeneity, and add the results in the result section? (Major revision)

9. Results, lines 182-184: 721 citations were excluded, probably during the first screening of titles and abstracts. Why were they excluded? Please provide full references in Additional file 1. A flow-chart showing the selection process of eligible studies would be useful. (Minor revision)

10. Results, Table 1: Please provide information in the table about quality assessment, and if the study was of high quality or not. (Minor revision)

11. Results, Figure 1: The figure is not very useful, it is better if you provide more information on each study in Table 1 (Discretionary revision)

12. Results, Figure 3: The information in the Figure is overlapping with information in Tables 2-4. You may consider removing it. (Discretionary revision)

13. Conclusion/Implications for practice, lines 313-315: The paragraph “Other techniques that could improve upon this limitation (e.g., cardiotocography, Doppler ultrasound, and biophysical profile score) have not been implemented in the routine prenatal care setting.” It is unclear what you mean, please explain.

Hammerfest, 17.12.2014

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1. Is the question posed by the authors well defined? - yes
2. Are the methods appropriate and well described? – yes, but could be more detailed
3. Are the data sound? - yes
4. Do the figures appear to be genuine, i.e. without evidence of manipulation? - yes
5. Does the manuscript adhere to the relevant standards for reporting and data deposition? – A bit too short and sometimes superficially descriptions
6. Are the discussion and conclusions well balanced and adequately supported by the data? - yes
7. Are limitations of the work clearly stated? - yes
8. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? - yes
9. Do the title and abstract accurately convey what has been found? - yes
10. Is the writing acceptable? – I think it needs minor revisions (English is not my first language)
Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests