Reviewer's report

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

Version: 1 Date: 18 December 2014

Reviewer: Liv Merete Reinar

Reviewer's report:

1. Major compulsory revisions: none
This is a good review, short, clearly written, and keeping to accepted guidelines for Reporting systematic reviews on diagnostic studies. The question is well defined, and the methods seem appropriate and well described. The discussion and conclusion are balanced, and in line with the reported the data. The title does not convey results, but the abstract is ok.
I do however have some comments.

2. Minor essential revision
2.1 Methods
Searches: The search criteria should be more specific. All databases must be mentioned accurately so that a search can be replicated by others, “general bibliographic databases such as” is not specific enough. Did the authors check reference lists or contact others to identify missing studies?

Index test: It is not clear when and how frequent SF is measured in different studies (every week, every second week etc.), does this mean that the procedure is relatively consistent across the included studies? Is the frequency of measurement related to diagnostic accuracy? From a clinical practice point of view it is important to know how often we need to measure SF.

2.2 Results
Methodological quality. The included studies were all published in the eighties or early nineties. All included studies were appraised according to the QUADAS-criteria, and all were judged to fulfil most criteria (i.e. low risk of bias on most domains). This is not usually the case, and it makes me wonder whether the QUADAS-criteria were applied too loosely. Of course, it is likely that the authors are perfectly right, but the process is not described, and as a reader it is difficult to understand how the authors have applied the quality criteria. It would certainly help with some information (e.g. supplementary table) that a) says something general about what kind of methodological flaws that can lead to biased conclusions when studying the question of interest b) states what concern the authors had when risk of bias was assessed to unclear or high.

2.3 Discussion
As the authors say, the SF height measuring has a low sensitivity and many false
positives. I agree with the authors that when this leads to over-referall it is probably of less concern than failing to identify pregnancies at risk. However, I miss a discussion round the issue that the referral can lead to increased anxiety for the women. It is crucial that the women are well informed about the limitations of the test and that midwives and clinicians are sensitive to this and that the women are well informed.

Women, I think, have a higher Body mass index now in general, than they did thirty years ago. What does that imply for the test today? Is it necessary to develop a new curve, or can we anticipate that SF height measuring and BMI are independent variables? Should such a curve be the same for all be specific to different groups of women? I’d like more details on how new studies should be designed.

3. Discretionary revisions
3.1 Background
I miss information of results from the Cochrane Review (ref number 11) - what were the conclusions from this review and why was it necessary to do a new one?

3.2 Results
Included studies: PRISMA suggest that the search results and the process from searching to including studies is shown in a trial flow chart. The authors should consider doing this.

The authors use the term article(s) instead of study sometimes in the text. I suggest the term study is used all over when referring to the included studies.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.