Reviewer’s report

Title: Using fetal scalp stimulation with Doppler ultrasonography to enhance intermittent auscultation in low-resource settings: A diagnostic trial from Tanzania

Version: 1 Date: 12 Jan 2019

Reviewer: Andrew Weeks

Reviewer’s report:

I am happy with the responses to the previous comments. However, I’m afraid that there are still a few minor issues:

Apologies for the previous advice, but I'm not sure that 'observational study' is quite the right term for this study; a new technique is being introduced so you are not really 'observing' usual practice. Whilst the use of pre- and post- is appropriate, the study might better be titled "A diagnostic trial testing fetal scalp stimulation with Doppler ultrasonography to enhance intermittent auscultation in Tanzania". In the abstract 'observational study' could also be replaced with 'clinical trial' or 'diagnostic testing study'

'Fetal scalp stimulation' should be added to the key words, along with 'intermittent auscultation'.

In methods, page 2 line 8, the term requiring them to "be " a planned CS is worded badly, women are women, not caesareans - same under study design.

In 'methods - outcome measure', there should be just one primary outcome (eg 'fetal acidosis (defined as umbilical artery pH <7.0 and BE >12mmol/l)'). The mild, moderate and severe definitions in this sentence are muddled up I think - it should be 'mild, moderate or severe… pH <7.2, 7.1 and 7.0 respectively'.

In results, the word parturients in labour is used twice. Parturient is an adjective to describe women in labour, so in labour is not required. X2

Table 1. 'Referral' should maybe say 'referred from outside facilities'

The term 'fetal distress' is still in the text. In the methods section it is correctly changed to NRFS - but it remains in the results.

Flow chart figure - on right under FSST Absent, the arrow should read 'FSST Absent', not 'FSST present'.

Table 3 should better define 'acidosis', specifying the pH used not just the BE

Table 4 would be easier to read if the IA and IA+FSST were all in one column, with the pH<7.2, pH <7.1 and pH <7.0 as subheadings going down the page
It is not standard to quote statistical tests for demographic data (table 1) and not to quote it for outcome data (table 2). I would suggest that the p values are removed in table 1 and added in table 2.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
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I am able to assess the statistics

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