Reviewer's report

Title: De-medicalization of birth by reducing the use of oxytocin for augmentation among first-time mothers - a prospective intervention study

Version: 0 Date: 23 Aug 2017

Reviewer: Eva Rydahl

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To the authors:
Generally I have few comments and non, that are essential to the understanding. I bring comments as they show up and not by their importance.

line 39: Minor: this result-section is a bit inconsistent regarding presenting percentages with or without decimals and presenting results with or without p-values.

line 48: The sentence starting "Women were more likely..." I think the message of sentence becomes a bit blurry to understand. If the mission is to point to an independent risk associated with oxytocin, I would suggest it rewritten with more focus: E.g. Women receiving oxytocin were more likely to have an operative vaginal birth even after adjusting for birthweight, epidural analgesia ..........

line 74-76: You indicate, that oxytocin can cause asphyxia. Then why not use this as an outcome measure. It is a pity, that you do not include Apgar score <7/5 min, as I think many will think this or other fetal measures important when evaluating the change in treatment and as I think you have all necessary results, but just not use them as an outcome measure but rather a baseline characteristic.

line 107: Please explain the idea behind the before and after period and the wash-out time in between. Respectively 8 months, 12 months wash out and 13 months of intervention, which is a bit strange. It should be clear, that you did not manipulate the months fitting the best. I was
initially puzzled, that the before-period are considerably shorter than the intervention-time. But later under discussion you explain this. Please bring the explanation up to the method sector and please say something about the wash-out period.

line 120: Maybe you don't have enough words, but as a reader, I become curious why the guideline was changed and which evidence lies behind the new ones? (seems to be lack of evidence for both the initial and the new one)

line 122: You talk about "educational program". What is this consisting of? You tube video, lectures, internetbased ?? As a reader I need to now, how much effort had been made to implement a change.

line 131: Will your total length of labor not be arbitrary as you do not count from a certain dilatation but totally random. If a primipara comes 1 cm dilated, effaced cervix and painfull regular contractions she can contribute a hell of minutes compared to the 8 cm lady coming late. What I'm saying is, does it make sense to make a before/after measurement on such an arbitrary measure?

line 178: I would leave out "only" as it is an interpretation saying, that this is a good trade off. Bring it in the discussion if necessary.

line 228: You state, that it is a strength, that you have good data quality. However, the reader have not earlier heard about your data quality as you earlier just stated, that data are collected from medical records. So perhaps such a statement should have been validated earlier under method section.

line 232-36: Discuss which implications this can have for your results.

line 243-44: You state, that later use of oxytocin makes fetal surveillance less necessary. This is however a statement undocumented in the figures. Perhaps you should bring more data on the fetal outcomes.
line 248-49: But your guideline are not "allowing labor to progress more slowly up to 6 cm" as the sentence indicate. So the text should rather be, that an effect of the intervention might be, that allowing 2 hours without progress resulted in fewer oxytocin treatments before 6 cm- which is in accordance with Zhang....

line 252-52: The meaning of the sentence is unclear

**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

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If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I recommend additional statistical review

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