Reviewer’s report

Title: Maternal plasma levels of oxytocin during physiological childbirth – a systematic review with implications for uterine contractions and central actions of oxytocin

Version: 1 Date: 21 Nov 2018

Reviewer: Aviva Lee-Parritz

Reviewer's report:

This manuscript attempts to distill information about oxytocin function and effects during labor form a wide variety of smaller studies, via a systematic review.

1. This is not really research, more of a very long and overly written review of the literature, not a meta-analysis. The studies reviewed span a long time frame, with a variety of techniques and outcomes. Is it not clear to me why the authors would comment on old, sub-optimal studies?

2. Page 2 line 45-46: Why look at both of these, and why only if reported?

3. The writing is laborious, tedious and redundant.

4. There is nothing really new here, nor is there anything that a clinician or scientist would use to for clinical care or research plan.

5. The there was not much difference between the introduction and the conclusions, except that the authors made conjectures about how things might be understood or how administration of oxytocin might be modified for more physiological results, none of which are really supported by the data or by experimentation.

6. Page 9 line 195-199. The authors state the studies diverge on almost all aspects and therefore, decided to embark on a narrative description. They do not state why this would be needed or helpful.

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.

No
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors'
responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal