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: 3 Date: 26 Mar 2019

Reviewer: Kedra Wallace

Reviewer's report:

Methods:

- Please define what is meant by physiological labour.

- How were 710 duplicates removed? If all of the publications in CINAHL (n=561) and PsycINFO (n=102) were also repeated in Pubmed that only equals 663. Perhaps the search terms used should be added to the text, and if the authors mean that 4,749 publications yielded from the search terms and among those there were 710 duplicates then that should be clarified. I think that is what is meant, but it is not clear.

- Please remove the word an from line 10 on page 7

- The statement about RIA being included since it was the most reliable technique is inappropriate since this is a review of manuscripts. The authors did not choose what technique was used to assess oxytocin, rather they are reporting on what other authors used. Likewise the following lines, about the reliability of oxytocin measurements in saliva and other fluids are also in appropriate as this again is a systematic review. They should be definition of a systematic review be included, especially in light of more recent work using saliva and other bodily fluids to assess oxytocin. If the authors care to make an a suggestion about the validity or the ease of using these other fluids then that should be done in the discussion.

- Maybe I missed it but were there ZERO papers that met the inclusion/exclusion published after 2001? If so then how does the results from this systematic review relate to what we practice/teach/theorize in 2019?
Results:

- The comments made after each review of a manuscript make this systematic review appear to be a review of oxytocin assay. Is that the goal of the authors? If so this needs to be clarified. If not these comments need to be removed, as they are unnecessary.
Discussion:

- Again it's not clear what the authors want the readers to understand from this review. Is it the central actions of oxytocin (as the title would imply) or the utility of RIA vs other bioassays. Either way, the manuscript needs to pick just one of these topics and be condensed greatly to reflect this topic.

**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?**
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:

Acceptable

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