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	Home blood pressure monitoring in the diagnosis and treatment of hypertension in
Title	pregnancy: a systematic review and meta-analysis
	Karen Tran MD MHSc, Raj Padwal MD MSc, Nadia Khan MD MSc, Mary Doug
Authors	Wright BSc MLS, Wee Shian Chan MD MSc
Reviewer 1	Swapnil Hiremath
Institution	Ottawa Hospital Research Institute, Ottawa, Ont.
General comments (author response in bold)	Tran and colleagues have conducted a systematic review and metanalysis of the utility of home blood pressure monitoring in pregnancy. This elected 6017 studies in the systematic review and report variable adherence by the patients for performing home blood pressures. Similar to the literature outside pregnancy, they report that home blood pressures are lower than office blood pressures. The study and analysis itself seems to be reasonably done. This reviewer has a few comments that would help the reader if they were addressed.
	Was an information specialist or a librarian involved in the literature search? The search terms appeared a little simplistic. Thank you. A librarian was not consulted. KT was responsible for conducting the search and the search was reviewed by the senior investigator.
	2. The figure 1 appeared a little bit garbled in the PDF that this reviewer reviewed. This is seems to persist in the HTML version as well Thank you. We have made changes to Figure 1.
	3. For figure 2 and figure 3, would the authors consider using a different legend for the Forest plot? Unlike an intervention trial, these results do not favor home or office blood pressure. It would be more accurate to say home blood pressure is lower on one side and home blood pressure is higher on the other side, or use office blood pressure instead. Thank you. We have revised the legend on the Forrest plot to show on one end Home blood pressure is lower, and the other end Office blood pressure is lower.
	4. I understand that for figure 3, the authors probably give a command to the stats package not to include a few studies which did not use validated monitors. However the way the figure appears, the studies are included with a weight of 0 and hence excluded in the meta-analysis and forest plot. This appears a little bit confusing to the unwary reader. Redoing this for his blood with just those four studies would be preferable in this reviewer's opinion Thank you. Given the high heterogeneity in our meta-analysis, we elected to remove the sensitivity analysis of the validated monitors.
	5. This reviewer did not see the presentation of the quality assessment, or the publication bias. There is mention of asymmetry, but the funnel plot is not presented nor are any statistics. Thank you. We will include the funnel plot in the Appendix.
	6. Consider using the word adherence instead of compliance We have made this change in the manuscript.

7. The authors make a big deal about using validated monitors. However, from figure 2 and figure 3, it does not look like there is any difference between the results. Perhaps validation does not matter? Thank you for this comment. Due to the small sample size, this will require further studies to see if validation of home BP monitors is important in pregnancy and preeclampsia.

8. Similarly, there is a major emphasis made about the use of schedules according to the guidelines. The guidelines themselves seem to be from the European Society of hypertension from 2008. Subsequent studies, especially the one from the McManus group suggest that fewer readings might be sufficient. Should not that be more important than some consensus based guidelines? Thank you for your comment. We agree that fewer readings may be sufficient in pregnancy, however, an optimal schedule has not yet been established. Furthermore, there are concerns that home BP average that we use in the non-pregnancy population, may not be suitable for pregnant women with evolving preeclampsia as BP can rapidly change towards the end of the pregnancy. Further studies are required to evaluate this.

Reviewer 2

Institution

General comments

(author response in bold)

Nausheen Siddiqui

University of Toronto, Toronto, Ont.

Dear authors (Tran et al),

Thank you for this thoughtfully planned and executed study. Overall, I think that your research will be a welcome contribution to the field of hypertension management in pregnancy. I agree that there is a paucity of evidence and we need better data to help guide our patients.

My few recommendations are as follows:

1. Can you consider defining the terms "validated" and "approved" with respect to the BP monitors for pregnancy? i.e. how are they validated, or what characterizes validity for the monitors, approved by whom, etc.

Thank you. I have defined this in our PICO box.

2. You allude to the quality of included studies (using the NOS scale), this is not really further brought up in the discussion. Consider doing so; the "poor quality" of the studies is alluded to but 9/12 studies were of fair/good quality, as per your data.

Thank you. We have included this in our manuscript.

There were also a number of grammatical issues that I noted, please revise:

- 1. Page 8, line 35 should read "four studies used telemonitoring or medical apps" (not three studies, based on the number of studies you've listed).
- 2. Page 9, line 31 (first sentence) please clarify this sentence (unclear what is being said, is there a word missing?)
- 3. Page 11, line 24: should read "could under-diagnose" (not "under-diagnoses")
- 4. Page 11, line 31...the sentence starting with "This may stem from..." is not clear,

please correct (e.g. This may stem from the limited availability of validated HBP monitors in pregnancy, costs, and lack of knowledge....")

- 5. Page 11, line 40: There isn't an obvious "first" item, but this paragraph starts "Second". Consider changing.
- 6. Page 11, line 47: should read " HBPM was noted to worsen when patients WERE asked to monitor..." (rather than ARE asked to monitor)
- 7. Page 12, line 6: should this read "prognosticate HBP readings" (rather than "prognostic HBP readings)
- 8. Page 12, line 49: This last sentence is quite confusing; needs to be altered (e.g. "There is wide heterogeneity of these two meta-analyses secondary to variability in study design; patient selection and HBP devices used warrants further thought before clinical implementation and assuming equivalency between home and clinic BP".)

Figure 1 - some of the text within the boxes was cut off, formatting needs to be fixed.

Thank you for your comments. We have corrected these grammatical issues.