Reviewer's report

Title: Dose and side effects of sublingual misoprostol for treatment of postpartum hemorrhage: What difference do they make?

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Reviewer: Nils Chaillet

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This study aims to determine whether a dose of 600 mcg sublingual misoprostol would be associated with a lower incidence of high fever (#40°C) for treatment of postpartum hemorrhage in Ecuador.

It’s a well conducted pilot study with an interesting question, however, some questions remain: 1) it would be interesting to understand the reason of the high fever rate (36% vs 0-9% in others countries); and 2) same if the results show a diminution of high fever rate, the incidence remains high compared to others countries (16% vs 0-9%), is it possible to provide an explanation?

Findings of this study show a diminution of the risk level associated to a diminution of sublingual misoprostol dose. Findings are interesting, however the lack of power to discuss the efficacy limit the transferability of these findings. It seems that 600 mcg is just 55% more effective than 800 mcg to reduce high fever, but the efficacy is also reduced to treat PPH (82% vs 90%). Authors think that the cause of high fever rate in Ecuador could have an epigenetic origin, however clinical practices and method for measuring fever could be investigated as well.

For instance: epidural may increase the maternal temperature. Is the study could be adjusted regarding women with and without epidural? Equally, as high fever is the main outcome, is maternal temperature was noted as high fever as soon as the temperature was over 40 degrees or after some time over 40 degrees?

In all, some improvements have to be made to reinforce this paper. I strongly suggest to the authors to conduct secondaries analysis to take into account some others potential confounders about clinical practices as soon as epidural rate and to adds some comments in the limitation section of the paper about sample size.

Equally, abstract of this paper should indicated that findings of this study are insufficient alone for policy-makers to change practices and that futures researches are needed.

Because of all these limitations, including the sample size lower than the expected calculated sample size (50 vs 75), I am not sure if the conclusion is appropriated for policy makers or health professional. Conclusions should be more axed on futures direction of the research on this topics.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests