Author’s response to reviews

Title: Influence of different preoperative fasting times on women and neonates in cesarean section: a retrospective analysis

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Author’s response to reviews:

MS: PRCH-D-18-00073R3

TI: “Influence of different preoperative fasting times on women and neonates in cesarean section: a retrospective analysis”

Dear editor:

Our manuscript entitled “Influence of different preoperative fasting times on women and neonates in cesarean section: a retrospective analysis” has been carefully revised according to the Editor Comments. The manuscript has been professionally edited for English language readability prior to resubmission to the journal. We have taken the comments into account and wish to respond as follows:

Editor Comments: 1

As you will see, reviewer 2 is still raising some major concerns regarding your handling of some of their points. Please revise your manuscript, and thoroughly respond to their points, particularly:
a) Why the mothers had fasted in a different way and for differing lengths of time. Although we acknowledge that you've revised to say that the fact that they did might introduce bias, we do not see that you've explained why there are differences, and what sort of bias this might effect.

Answer: Dear editor, we have pointed out in the title and background of the study that this is a retrospective analysis. Therefore, the enrolled mother does not have a process of random assignment. In other words, the mother's different fasting time is not determined before the mother gives birth. Because these mothers are undergoing cesarean section in an emergency, each mother's fasting before surgery is different. In the retrospective study, we only divided the mother's different fasting conditions for the purpose of research, in order to obtain scientific research conclusions. In order to determine the potential impact of different fasting conditions of women on the health of women and neonates, we grouped women according to different fasting conditions, which were divided into 5 groups: (A) solid food ≥ 8h; clear fluids ≥ 6h; (B) solid food ≥ 8h; clear fluids ≥ 2h < 6h; (C) solid food ≥ 6h < 8h; clear fluids < 2h; (D) solid food ≥ 2h < 6h; clear fluids < 2h; (E) solid food < 2h; clear fluids < 2h. We have explained these contents in the relevant section, which are shown in manuscript, on page 5, lines 19 to 22, highlighted in blue.

Although the evidence level of retrospective analysis is not as strong as that of randomized controlled trials, it is also an important method of clinical research. We can't let mothers to follow different fasting plans (This is a very controversial topic) in order to complete the randomization principle, because this involves medical ethics and medical concerns. In addition, most of the cases receiving cesarean section are treated at the emergency department (The timing of the visit to the operation is uncertain depending on mother's condition), which makes it impossible to adhere strictly to established fasting plans. After careful questioning before the operation, the doctor got detailed data about diet. Therefore, this is a retrospective analysis.

b) What the clinical relevance for reporting vomiting only for the time frame you've used is.

Answer: Studies have confirmed that the preoperative diet of a mother undergoing cesarean delivery is directly related to the occurrence of vomiting during surgery. And vomiting during surgery increases the risk of suffocation and lung infection in the mother. Therefore, this indicator is one of the important observation indicators in this study. The observation time on vomiting is from the beginning of anesthesia to the end of surgery and recorded by anesthesiologists. The details are shown in manuscript, on page 5, lines 2 to 4, highlighted in blue. We also clarified this issue in the discussion section, which is shown in discussion section, on page 10, lines 13 to 14, highlighted in blue.
c) Your clinical scoring includes overlap (so 5 and 7 both belong to multiple groups), this needs to be clarified, and if necessary, please explain how you have changed your analysis.

Answer: This is a clerical error, our grouping is 0-3, 4-6 and 7-10.

We took this grouping because of a reviewer's proposal (Question from Reviewer 2: Further, the student’s T-test is a statistical test suitable for normally distributed data. If the data is not normally distributed (as it is not for the Apgar score), then you cannot use this test to analyse these data, and you should use non-parametric tests instead. In addition, because the Apgar score values are a score, and not actual numerical values, the whole statistical analysis of this test becomes even more complicated. I recommend that you seek advice from a statistician at your institute to discuss how you can best present/analyse this data). So, we decided to adopt the opinions of reviewer. We divided the score of Apgar score into three partition segments: 0-3, 4-6 and 7-10. We calculate the number and percentage of each section for a descriptive statistic. In this way, we convert continuous measurement data into count data to facilitate the implementation of more reasonable statistical methods. These changes are shown in new Table 4, highlighted in blue and revised Figure 3.

Reviewer reports:

Reviewer 2 (Reviewer 2): REVISION ASSESSMENT FROM THE ACADEMIC PEER REVIEWER:

Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution? No

Reviewer comments: Point 1: this remains unaddressed.

Point 2: this has been clarified. Vomiting was recorded by the anesthetist if observed from anesthesia to delivery of the baby; this is usually a time interval of a few minutes. This should be reflected in the abstract and in the discussion section. I wonder what is the clinical meaning of reporting vomiting just for this time frame.

Point 3 and 4: partially answered, but the lack of understanding of the authors remains. They subdivided cases in 3 groups: score 0-5, 5-7 and 7-10. To which group was a score of 5 or 7 assigned?

Answer: These issues are the same as before, and we will not repeat them.
Thank you very much for your great efforts on our manuscript. We would like to express our great appreciation again to the reviewers and the editing staff at BMC Pregnancy and Childbirth for the manuscript comments.

We look forward to hearing from you, and, as before, please address all communications regarding this manuscript to me as the corresponding author.

Thank you very much for your attention to our paper.

Sincerely yours,

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