Reviewer’s report

Title: Maternal and birth cohort studies in the Gulf Cooperation Council countries: a systematic review and meta-analysis

Version: 1 Date: 20 Aug 2019

Reviewer: Carmen Figueroa

Reviewer's report:

Dear authors

Thank you for considering my previous comments. Your manuscript has improved a lot.

I still have some concerns.

Major
- Please consider revising your title. As it is right now, I believe is not reflecting what is your manuscript about.
- Please revise your background to include information about what is affecting pregnant women/children in GCC. Make sure you include epidemiology on your selected outcomes (maternal obesity, CS, fetal macrosomia). The difference or the importance of maternal/child care for this region/compared to other regions. When you do this, do not forget to keep it short and sharp. Right now you're providing more than enough information about what can affect maternal and infant health, without giving the readers any information about the situation of maternal/child mortality/morbidity in the region.
- Please note that your objectives (general and specific) are not clear enough. They sound repetitive. I would suggest you to revise them carefully. "systematically review and to chronicle exposures and outcomes... specific objectives include 1) to chronicle the exposures and outcomes". You could say The objective of this systematic review is to describe the different prenatal exposures that can affect pregnant women and/or their child and estimate their association with three selected outcomes 1) maternal obesity, 2) caesarean section and 3) fetal macrosomia.
- Please justify the selection/importance of the selected outcomes
- Please revise your inclusion/exclusion criteria: are you including only cohorts? Justify the exclusion of solid study designs such as RCTs, cross-sectional and case control. Note you're also excluding conference abstracts and grey literature (also make sure you include this in your limitations). Any exclusion on publication language. Please make sure to specify how many titles you found in GCC languages and include in your limitations that you did not search in regional/national databases.
- Please specify how many people were involved in resolution of conflicts from selection criteria and data extraction
- Please justify the decision of the six exposure domains, and consider including an additional category of "mixed". I believe some are overlapping (medical/medical service, maternal/reproductive and perinatal, maternal or infant and sociodemographic), as you mention in the next sentence "a study could incorporate more than one exposure...". I would also suggest for you to define each exposure domain, in the same section and not separate (for example: we categorized measured exposures into: 1. xxxx). To evaluate associations you should be able to have a clearly defined category, otherwise how you can exclude mixed associations? Regarding the measured outcomes please note these are overlapping as
well, what is the difference between birth and maternal, perhaps it should be pregnancy, maternal and neonatal outcomes.

- Again the results appear more as a summary of the individual studies than results from a systematic review, when describing your results make sure you're describing any particularities identified in a certain country and differences by age, educational level, etc. (i.e. x country reported higher rate of CS, a study in x, reported xx% of women had fetal macrosomy)
- Revise your discussion, according to my previous comments.
- Revise your limitations, some are missing, while others are not as relevant.

Minor
- To make the manuscript easy to read, I would suggest you to reduce its length by removing duplicate or unnecessary information, for example possible categorization of ROB (yes, no, can't determine...) just mention what tool you used, what aspects the tool was evaluating and how many people did the ROB assessment.
- Make sure to describe in data extraction, information needed for the meta-analysis.
- Suggest to revise your conclusion, to make a stronger and shorter statement
- Revise your references, there are some typos or some do not follow journal style. There are also two references, not clear to me which one was the most recent version.
- Suggest to revise your tables. For example Table 1 is very long, when you have a high number of articles you can present a summary of findings table, where instead of including each article you mention the number of articles reporting your outcome and include the reference. Suggest you to search for examples in other reviews with >50 articles

Level of interest
Please indicate how interesting you found the manuscript:

An article of limited interest

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

Needs some language corrections before being published

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

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No