Reviewer’s report

Title: Oxidative stress levels and oral bacterial milieu in the saliva from pregnant vs. non-pregnant women

Version: 0 Date: 03 Oct 2019

Reviewer: Sadeq Ali Al-Maweri

Reviewer's report:

It was really a great pleasure reviewing this manuscript entitled "Oxidative stress levels and oral bacterial milieu in the saliva from pregnant vs. nonpregnant women". While this work addressed a very important and an interesting research question, there are some methodological limitations that should be addressed. Additionally, although the authors made a lot of efforts in writing this manuscript, the overall quality of writing is below average and hence some revisions are highly recommended. My specific comments to help improve the quality of this work are as following:

Title: Appropriate

Abstract: Overall, it needs some revisions.
- In the background subheading please explicitly mention the aims of the study.
- The methods should be elaborated: the procedure, techniques and statistical analyses should be highlighted.
- the Study design should be revised (please see below in the methods section).

Background:
- This section could have been better written. I recommend rewriting this part with more focus on the the association of oral health with pregnancy outcomes such as preterm birth and low birth weight. Additionally the rational of the study should be clearly set, and the gap in the literature should be highlighted.

Methods:
major limitations of this study include small sample size; lack of any clinical data such as dental caries and periodontal parameters, both of which are potential confounding factors for both bacterial loads and oxidative stress. Other specific comments are as following:
- Kindly follow STROBE guidelines
- Please double-check the study design
- Inclusion and exclusion criteria should be extensively highlighted
- Please mention how sample size was estimated.
- I wonder why only pregnant women in their second trimester were recruited. Why did not you include other pregnant women at different pregnancy stages so as to compare the levels of bacterial milieu and OS between pregnant women based on the stage of gestation.
- Again as stated above, I wonder why no any clinical data such as dental caries, tooth loss, and gingival inflammation indicators were established. Such factors might have responsible for the differences in the bacterial load and OS found in this study rather than the pregnancy status.
Additionally, a part from the subject's age, no other relevant data were obtained including smoking status, BMI, nutritional status, systemic health, medications use, oral hygiene practices... etc

Result: Relatively good, though some sentences need some refining for better clarity.
- Captions of figures should be moved from this section.
- I wonder why no statistical analysis was conducted to determine if there is any correlation between OS and bacterial load

Discussion
This section is too long, so I would recommend to make it concise and focused, as per the STROBE guidelines; in the first paragraph you may restate the main objective along with a brief summary of the key findings of the study. Additionally, the findings of this study should be interpreted and compared with other previous studies. Finally, the limitations of this study should be elaborated.

Figures and tables: Please indicate which statistical test was used

Language:

This work would highly benefit from extensive English editing by a native speaker

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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.

I recommend additional statistical review
**Quality of written English**
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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