Reviewer’s report

Title: Factors associated with dental attendance and barriers to utilisation of oral health care services in a sample of antenatal mothers in north-eastern Malaysia

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Reviewer: María Esther Esther Josefina Irigoyen

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Comments on the article: Factors associated with dental attendance and barriers to utilization of oral health care services in a sample of antenatal mothers in north-eastern Malaysia

Is the question posed by the authors well-defined?

The paper does not clearly pose a specific research question, but aims to describe the self-reported oral health, factors associated with dental attendance and service utilisation in a group of antenatal mothers attending an O&G clinic in Malaysia.

Are the methods appropriate and well-defined?

Major compulsory revisions

1. The participant’s selection method requires some clarification. In this section it is mentioned that it is a systematic random sampling, but it is not clear if there was a sample frame available to carry out a random selection of the pregnant women. How many women were invited? How many refused to participate in the study? If some women refused to participate in the study, what were the main reasons for refusing to fill in the questionnaire?

2. There is not enough information on the type of women who have access to the Hospital Universiti Sains and characteristics of the institution. For example: is it a free G&O clinic? can any pregnant woman become a patient?

3. Inclusion and exclusion criteria to participate in the study are not given.

Major compulsory revisions

4. An association was detected between receiving dental education and attending dental services. The timeframe of the response of the patients is unclear; probably patients who attended dental services during their pregnancy were those receiving dental education. This aspect needs clarification.

Minor essential revisions

5. In the methods section of the paper, there is no information on the statistical test applied.

Are the data sound?

It appears that the data are consistent.

Minor essential revisions
6. Some comments on the tables. Table 1: the authors need to indicate the meaning of MYR at the bottom of the table.

7. Table 2: the total number of self-reported oral health problems was 143, and the total number of women included was 124, so I suppose that some women had several oral health problems. It would be useful to know how many women had two or more oral health problems; possibly there were women who perceived no oral health problems. Were women with several problems more likely to attend the dental surgery? This additional information could be useful for the reader.

8. Table 4: the title is: ‘Factors associated with dental attendance among mothers’, but several factors that are in the table were not statistically significantly associated with dental attendance. The title of the table could be improved. In this table it could be appropriate to include the odds ratios estimates. In the Ethnic group category there is no value of the # 2 tests and there is a super index a that has no explanation. In the case of this variable, owing to the small number of subjects in some subgroups, it is appropriate to apply the Fisher exact test (not Pearson # 2).

9. Table 5: the number of women attending dental services was 36, and the sum of the reasons for visit column is 59; it may be that several reasons were given by some women but it would be interesting to know the number of women showing a combination of reasons.

10. Table 6 regarding barriers to utilisation of oral health care services has several items that sum up to more than the total number of women not visiting the dentist, probably because the participants provided several answers to some questions. The commonest combinations may be illustrative of the study group; also, the number of women that did not have misconceptions, or did not fear dental treatment, would give the reader more information on the participating women.

Are the discussion and conclusions well balanced and adequately supported by the data?

The discussion and conclusions are coherent with the findings.

Minor essential revisions

11. The authors did not find an association between income, education and dental attendance, even though more than half of the women used private dental services. No consideration is given to this finding in the discussion.

Are limitations of the work clearly stated?

Minor essential revisions

12. Some of the study limitations were acknowledged in the article. It could, however, be useful to point out some additional problems: for example, dental examinations were not performed on the pregnant women studied, so it is difficult to estimate the participants’ dental treatment needs. Also, considering that the women were interviewed in a health setting they may have felt compelled to indicate that they attended dental services.
Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Yes, the bibliographic references are adequate.

Do the title and abstract accurately convey what has been found?
Yes, these sections provide relevant information.

Is the writing acceptable?
Minor essential revisions
13. Yes. Page 8 refers to Mexico; I believe it should say New Mexico. Reference 35 needs revision.

Does the manuscript adhere to the relevant standards for reporting and data deposition?
The manuscript is well-organised and has coherent data presentation.

Discretionary revisions
14. The data analysis could benefit from the computation of Odd Ratios. This could provide information on the strength of the associations found between dental attendance and the socio-demographic characteristics, perceived oral health status and beliefs towards dental treatment during pregnancy.

Discretionary revisions
15. In the text it is mentioned that women reported other dental problems (page 6) besides the ones provided in the list given by the authors. It would be interesting to know some of these problems mentioned by the women.

Discretionary revisions
16. The study encompassed women aged 19 to 45 years old, and given the association of age and oral health and age and several health behaviours detected in many groups, it could be useful to built up a statistical model controlling for this variable fitting dental attendance as the dependent variable and include independent variables such as dental education or awareness of the relationship between maternal oral health and pregnancy outcomes.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.