Reviewer’s report

Title: Toothache and associated factors in Brazilian adults: a cross-sectional population-based study.

Version: 1 Date: 29 July 2008

Reviewer: Christopher Okunseri

Reviewer’s report:

Toothache and Associated factors in Brazilian adults: Cross-sectional population-based study

Major Compulsory Revisions

Abstract

1. The author’s use of “Poisson regression analyses following hierarchial framework is not necessary in my opinion, because a straightforward poison regression analyses is adequate for the data collected. I would like the authors to explain why they used Poisson regression analyses following hierarchial framework and provide at least one citation from a statistical journal to justify it's use in their data set.

2. What other similar population-based studies are authors referring to in their conclusion? Please revise/rewrite the conclusion.

Introduction

3. The background section of the manuscript needs to be rewritten. There are several terms (e.g. “indices” in the 1st line, “panorama” and “index of permanent teeth experiencing caries) that don’t fit with the information authors are trying to convey.

4. Toothache is not an “excellent indicator of oral health”, as written by authors, but a symptom of dental caries. Please correct. Please provide citation(s) for the 1st sentence in para.3 or rewrite it.

5. Although authors have a well defined research question, but they failed to clearly articulate the real gaps in the literature that their study addresses.

Methods

6. The sequencing of information in the methods section makes it difficulty to understand. Please rewrite.

7. The description of the sampling method is incomplete. For example authors should provide information on how they selected the adults in the household for the study.
8. Why were variables with values of p#0.25 in the bivariate analysis included in the multivariable analysis?

Results

9. Authors should be consistent on the use of either toothache and/or dental pain. The information regarding the word toothache or dental pain being used interchangeably should be well documented in the background section.

Minor Essential Revisions

10. Authors should be consistent in writing: 95% confidence Interval or 95% CI in the whole of the manuscript.

11. Please revise the title on Table 2, so it can be self explanatory.

12. The writing is unacceptable in the background, methods and results sections. The discussion section is better written than other sections however, it requires some minor editing.

Discretionary Revision

13. There is no need to have male 728 (40.4) in Table 1, since we have female 1,077 (59.6).

14. What do authors mean by dental service in the last attendance in Table 1?

15. Any particular reason why authors decided to use different denominators for all the different variables. Why not clean the data to allow the use of one denominator and delete incomplete information.

16. The discussion section provides a balanced argument however, there are few instances of authors overstating their results

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

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

I declare that I have no competing interests.