Reviewer's report

Title: Oral health of 12-year-old Dai children in Yunnan Province, China

Version: 1 Date: 7 June 2015

Reviewer: Renata Saraiva Guedes

Reviewer's report:

Major Compulsory Revisions

1. The title should include the study design, for example: Oral health of 12-year-old Dai children in Yunnan Province, China: a cross-sectional.

2. In the abstract, you could describe the statistical tests used and detection criteria.

3. The introduction shows a coherence with descriptions about this subject. But I thought long, you can review a some topics:

3.1) Description criteria of the World Health Organization in lines 34, 35 and 36: "The caries experience measured by the mean DMFT score ('D' stands for decayed tooth, 'M' denotes a missing tooth due to decay, and 'F' Represents the filled tooth.)"

3.2) Description of ethnic groups in lines 42, 43 and 44: "China has 56 ethnic groups. The Han, the predominant ethnic group, constitute approximately 92% of the total population. Although the other 55 ethnic groups account for only 8% of the total population of China, nonetheless they number approximately 114 million [7]."

3.3) Also describes about the language in the line 47: "They speak over 80 languages, 30 of which have written forms [8]."

3.4) Another suggestion is to insert the description of the province of Yunnan (from line 54 up to 63) of the study methodology.

In addition, some data could also be inserted in the methodology (from line 75 up to 78): "The World Health Organization has selected 12 years the indicator the age groups for international bench marking of children's oral health. [15] The authors of this paper Conducted epidemiological surveys and Reported 12-year-old children in various regions and countries in southeast Asia."

4. what is your hypothesis?

5. The methodology of the study could be supplemented with some information that would clarify how the study was conducted for example: design of the study.

6. All children of the province of Yunnan were examined? It was a convenience
sample?

7. About this calibration process, the children were re-examined on the same day? This could generate a bias because the examiner could remember the details?

8) The calibration process was conducted during the study, or just before the study?

9. Describe about the data collect related to oral behaviours and oral health-related health knowledge for example:
9.1) Tooth-brushing practice: brushing once daily or brushing twice or more daily.
9.2) Snacking habits: eating snacks every day or eating snacks twice a week.
9.3) Dental visits: dental visits within last year.

10. What is the reason to make a stratified analysis of the data, between boys and girls? How can this be related to your purpose?

11. One suggestion is to insert a table with the baseline characteristics of the population or one table about caries experience (dmft) and variables studied. So that the reader better understand the data.

12. Na tabela 1, você pode descrever as siglas: decayed teeth (DT), missing teeth (MT), filled teeth (FT), severe untreated caries (PA), and visible apical infection (A).

13. You can include in Table 1 that the first value refers to "mean", next to the standard deviation. Mean DMFT(SD), Mean DT(SD), Mean MT(SD), Mean FT(SD), Mean PA(SD), Mean A(SD).

14. Review the data found on line 180 with the data from that table (table 2). Apparently are different: "Among the children surveyed, 96% (N = 766) Their teeth brushed at least once daily."

15. You could indicate that the text found in the 190 "Only 7% of the surveyed children had healthy gums (highest CPI = 0). Most of Them (93%, N = 762) had unhealthy gums (Highest CPI> 0), and the mean number of sextants (SD) with calculus was 5.1 (1.1). There was the statistically significant difference in the distribution of the CPI highest scores between the boys and girls. " refers to table 4.

Another suggestion is to delete this text, you can let de data only at the table.

16. Some data described in the text are not found in the tables? Because of the association, it might be relevant enter it in the table.

(from line 184 up to 186) "The mean dental knowledge score of the 12-year-old Dai children was 7.8 ± 3.6. Higher oral health related knowledge was found among the girls than among the boys (8.1 ± 3.3 vs. 7.5 ± 3.8, p=0.007)."

17. What are the limitations of the study?
Do you think that the convenience sample and the calibration process may have influenced or created a bias?

18. What the findings of their research can contribute to this population? What are the recommendations?

19. In conclusion you state that: "The prevalence of gingival inflammation and calculus was high." You compared his findings with which data?

Minor Essential Revisions

1. As it is about a cross-sectional study, you could exchange in the abstract the term "caries risk" (line 18) by a higher prevalence of caries in the sentence: "Girls and Those Who had visited the dentist During the previous year had higher caries risk."

Discretionary Revisions

1. To make the methodology more clearer, you would first describe the sample size calculation and then the selection of children.

2. Maybe you can make more clear the term "undetermined enamel" in the line 127. Because it can be confused with restrict enamel lesion.

3. You may inform in the introduction the previous published studies regarding pre-school children in the province of Yunnan. You can explain that there are few researches related to children in the specific ethnic minor group. The studies were related only among five years old children.


Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.