Reviewer’s report

Title: Socio-behavioural factors and early childhood caries: A cross-sectional study of preschool children in central Trinidad:

Version: 2 Date: 2 April 2013

Reviewer: Roos Leroy

Reviewer’s report:

1. The English language can be improved
2. The document is still sloppy with a lot of typo’s; several sentences miss a subject and a conjugated verb… Many sentences in the abstract should be re-phrased.
3. I question the reliability of the kappa value - it decreased from 1 to 0.9 without any explanation...
4. The Fisher-Owens model is cited but not applied in the study. Why not?
5. How were teeth lost due to trauma taken into account in the study?
6. How were missing values taken into account?
7. The authors should make a difference between higher proportion of children with visible caries experience and a higher rate of caries. They should make clear to the reader what outcome is considered in every analysis. Now, it looks like they interchange both themselves.
8. That the final model results in both “having a previous dental visit” and “having difficulty finding a dentist” being associated with dental caries is striking and should be better elaborated in the discussion.
9. The definition of S-ECC is not correctly cited. What is more, it is different for the different age categories that were seen in this study!
10. Do we need in the introduction citations of more than 20 years old?
11. Re-phrase aims and objectives; one of both is sufficient.
12. Omit the word influence in a cross-sectional study!
13. Why is it an analytical survey?
14. The sample selection will have introduced selection bias, which needs discussion in that section!
15. The reader needs more precise, more concrete description of the clinical variables! E.g. what is the difference between tooth status and caries experience?
16. It still has not been elucidated why the FRankl Behaviour rating scale was applied.
17. It should be d3 and not D3, and this should be added to the abstract.
18. I still dispute the calculation of mean dmft-scores as they are no good measures of central tendency in a non-normal distribution, so meaningless.

19. Hearing and eyesight are not considered part of general health?

20. If results are not statistically significant, they should not be reported as such in the results section! E.g. SES and caries. Elaborate this aspect also better in discussion section (page 13)

21. Only results of multivar model should be in abstract.

22. Replace results by OR’s and 95% CI’s, but first bring some categories with small numbers together (as was suggested in the former review!)

23. How should the reader interpret the estimated rate in table 4? Please explain thoroughly. It should be 85% CI with lower and upper limits.

24. Fig 1: can be deleted as it does not add anything to what is explained in the text. (as was suggested in the former review!)

**Level of interest:** An article of insufficient interest to warrant publication in a scientific/medical journal

**Quality of written English:** Not suitable for publication unless extensively edited

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

**Declaration of competing interests:**

I declare that I have no competing interests