Reviewer's report

Title: Effectiveness of the bucco-lingual technique within a school-based supervised toothbrushing program on preventing caries: a randomized controlled trial

Version: 3 Date: 22 November 2010

Reviewer: Satu Lahti

Reviewer's report:

The paper aims to assess if the bucco-lingual technique can increase the effectiveness of a school-based supervised tooth-brushing program on preventing caries. The revised version has addressed the main shortcomings. Especially, the revision of the Figure 1 improved in understanding the design.

Major compulsory revisions

1. The justification for the selection of the schools still remains a bit unclear, possibly due to the order how the issues are presented. Was the Sao Vicente area selected on the basis that supervised toothbrushing was already applied as a preventive measure in that area and author wanted to study the effect of professional toothbrushing? If so, this should be said first and then the randomization of the school in that area.

2. It is also mentioned that lot of manpower and material resources are used in this area for disease prevention. If the interest was in the effectiveness of different brushing technique it should be at least discussed why more frequent brushing interval was applied for the test group thus leading to more frequent fluoride exposure and especially to use of more human and material resources. If cost-effectiveness calculations are not done this difference should at least be discussed.

Minor revisions

3. I am also a bit bothered about the expression and justification of the skin color variable as it might rather be a proxy for socio-economic differences. As it was not used in the modeling the author could consider its importance in this paper.

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, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests