Reviewer's report

Title: Oral Health of Visually Impaired Schoolchildren in Khartoum State, Sudan

Version: 1 Date: 28 January 2013

Reviewer: Maria Beatriz Gaviao

Reviewer's report:

All comments are major compulsory revisions.

The aim of this study was to assess the clinical oral health status and the oral health-related quality of life for the visually challenged primary schoolchildren in Khartoum State, the Sudan.

This is an interesting and important issue, but there are doubtfully points, as follows.

The term “primary schoolchildren” along the manuscript must be clarified, since the age range of the sample was 6-18 years. Thus, the term can be misinterpreted by readers from abroad.

Considerations about oral health for partial visual impairment and blind children should be emphasized in the introduction, since the studied sample was distributed in this way. Moreover, the oral health quality of life should also be pointed out, showing how nowadays this variable for visual impairment and blind children has been considered in the literature.

Child-OIDP questionnaire was validated previously in a Sudanese language for children aged 12 years. It was unreliable to apply the same questionnaire for children under that age, considering the age range of the sample, 6-12 years. Although it is comprehensive that some questions should be deleted from the original Child-OIDP version in Sudanese language, the application of the questionnaire without confirmed psychometric properties is questionable.

The explanation about dependent and independent variables in bivariate analysis needs to be clarified: the visual impairment cannot be considered as dependent. In fact, the oral conditions and oral health quality of life are the dependent variables, in accordance with the aim of the study. The visual impairment and socio demographic determinants are the independent ones. Some cited odds ratio along the text are not matching with the Table 2, generating doubts.

It is necessary to show in Table 1 where the differences occurred, since the sample was distributed in 3 groups in accordance with OHI-S.

Table 2 needs to be rewritten. It is hard to understand.

The discussion is empirical. The considerations about results are supported for conditions that were not assessed, such as: in page 12, line 5 about the lack of training of respective caregivers in providing oral health care for this group of children; in page 12, first paragraph about the school building: it was not assessed where the trauma occurred; and so on.
The low caries prevalence was not well discussed. The DMFT and dmft were very low. The SiC values were not discussed.

The conclusions are not reliable and they need to be focused on the results. Considering the DMFT and dmft values and the OHI-S the oral conditions are satisfactory. In this way the SiC should be considered along the discussion, in order to get objective conclusions. Oral care programs to be established for parents, teachers, and children are not conclusions, since the respective needs were not assessed. These considerations may be inserted in the discussion.

**Level of interest:** An article of importance in its field

**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.