Reviewer’s report

Title: Geo-mapping of time trends in childhood caries risk - a method for assessment of preventive care

Version: 4 Date: 20 November 2011

Reviewer: Marit S Skeie

Reviewer’s report:


Level of interest: The paper is of importance in its field.
To succeed in preventive care is difficult, and papers focusing this field are needed.

The comments I would like to address are in accordance with this list:

1. Is the question posed by the authors well defined?
The question posed by the authors is more clearly defined in the abstract than in the introduction. I therefore suggest the abstract version should be copied into the introduction.

2. Are the methods appropriate and well described?
The first sentence in the method section: “The vast majority of all children in the region…”. If the percentage, based on the total child population in the region could be given, it had sounded more like a scientific statement.

The two study populations (2006 and 2010) consisted of children between 3-6 years of age. The age distribution within the groups in the respective years should have been commented on. Different percentages of 5-yr-olds one year to the other, could have affected the level of caries prevalence.

A sentence defining the exact characteristics of the post-secondary education had been welcomed. In literature the content of this term “post-secondary education” varies.

3. Are the data sound?
The underlying methods for the existing data are previously approved and found sound.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data?

Yes.

Anyhow, I have a comment to the authors; you write about caries burden: …“in fact, it may be questioned whether or not it is possible to reach even lower”. Later you write: “---the goal is to optimize the strategies to eradicate early childhood caries”. I’m a little bewildered- Are you pessimistic or optimistic in regard to improve oral health of young children? As researchers in this field, you are almost obliged to be optimistic.

6. Are limitations of the work clearly stated?

Yes

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes

8. Do the title and abstract accurately convey what has been found?

Yes

9. Is the writing acceptable?

The term “caries-free children” is used many places (abstract, manuscript, tables). As enamel caries not is included, this term is misleading to use. I recommend that “caries-free children” should be substituted with “children with no obvious decay”.

Table 1. the number section “7-35” should be placed more to the right.

Both in the MM and Result sections, the descriptions of the parish-specific changes should have been more clearly written. As it appears now, it is a bit difficult for the readers to understand.

Otherwise the language is acceptable.

The reviewer’s conclusion is:
Accept after Minor Essential revisions.

Statistical review: the manuscript does not need to be seen by a statistician.

Declaration of competing interest: I declare that I have no competing interest

Level of interest: An article of importance in its field

Quality of written English: Acceptable
**Statistical review:** No, the manuscript does not need to be seen by a statistician.