Reviewer's report

Title: Iodine level concentration, coverage of adequately iodized salt consumption and factors affecting proper iodized salt utilization among households in North Ethiopia: A Community Based Cross sectional Study

Version: 0  Date: 15 Jun 2018

Reviewer: Lena Hulthén

Reviewer's report:

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The aim of the study by the authors Abraham Aregay Desta et al was to "determine iodine concentration in the salts by iodometric titration techniques to assess salt coverage and factors affecting to proper iodized salt utilization among the households of Ahferom District".

Title: The title is too long, too many words and not easy to find the focus.

Abstract: Introduction: "Different studies showed that households using adequately iodized salt at the household level were below the WHO standard in Ethiopia as well as in Tigray region". If the households used the adequately iodized salt at the household level how could they be below WHO-standard? Difficult to understand "in Ethiopia as in Tigray region"? Do you mean in Tigray region and in other regions in Ethiopia? This statement include that the studies were performed at household level. Why do another one?

Results: Why do you use the word "about", indicating that the figure given is not exact and then for the same figure give percentage with four figures (52.83%)?

You determine iodine concentration of salt but what is meant by assess iodize salt coverage?

Background: figures are given for prevalence of iodine deficiency in different parts of the world "already" affected with IDD. What do you mean by "already"? The reference is 25 years old and much more recent facts are available.

It would be much interesting to get the prevalence of IDD for Ethiopia and different areas. Recently WHO presented Ethiopia as iodine sufficient.

Results from other studies showed that iodine was found in clumps of the salt and not even distributed in the salt. What did you find? You took three samples from each household, top, middle and bottom of the pack. What did you find? Was the distribution of iodine even?
In the discussion you refer to studies with much higher iodized salt utilization without indicating that the study used questionnaire and not analyzed values.

The discussion is not well organized. You are repeating information in different parts of the discussion.

Include information of main iodine sources for the intake in Ethiopia.

The reference list must be updated.

The whole paper must be shortened.

rwrite this text when adding your comments to the authors.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited
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