Reviewer’s report

Title: Iodine Content of Dietary Salt at Household level and Associated Factors Using Iodometric Titration Methods in Dera District, Northwest Ethiopia

Version: 0 Date: 16 Jun 2017

Reviewer: Elizabeth Pearce

Reviewer’s report:

This is a cross-sectional survey of household salt iodine content in the Dera District of Ethiopia.

1. Abstract, "Globally, most edible salts have insufficient iodine content": I am not sure that this is true in 2017. Are there data to support this statement?

2. Introduction page 3, line 54, "Iodine deficiency (ID) is the most common health problem which causes brain damage": It would be more accurate to state that "ID is the most common preventable cause of intellectual impairment."

3. Introduction page 3, line 52: "The recommended amount of iodine for normal function of thyroid gland is 150-200 mcg for adults": it should be clarified that this is the daily dose. The recommendation is currently 150 mcg outside of pregnancy, not 150-200 mcg.


5. Introduction: it would be helpful to provide more background about salt iodization in Ethiopia. What is the status of national legislation? Are there recent urinary iodine concentration data from the region?

6. Introduction, page 4: when were the previous surveys of salt iodine content in Ethiopia performed? Were these recent? Do they post-date iodized salt legislation?

7. Methods, page 5, lines 93-4, "health coverage of the district was 87%": this is unclear. Do 87% have access to health care? How is this determined?

8. Table 1: the term "monists" is unclear.

9. Page 9, line 159, "About 376 (31.5%) respondents reported that they used iodized salt properly.": What does this mean?

10. Results: data in the tables should not be duplicated in the text.
11. Results, page 11, lines 188-191: the comparators are not specified in these sentences: need to clarify that both of these comparisons are being made to the group who was unable to read or write. As above, since this information is already present in the tables, if could simply be deleted.

12. Discussion: the timing of previous epidemiologic studies should be described.

13. Discussion, line 223, "effective salt regulation": this is unclear. It is stated above that legislation is in place. Is there a lack of enforcement?

14. Discussion, line 223, "updating equipment": what id of equipment?

15. Discussion, line 229, "the current study is much better than...": This would be better as "results of the current study are much better than..."

16. Discussion, lines 237-238, "exposure to different social media and other information sources on iodized salt": have there been recent public health educational campaigns in the region?

17. Many of the references are incorrectly formatted or have missing author information.

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

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