Reviewer’s report

Title: PREVALENCE OF GOITER AND ITS ASSOCIATED FACTORS AMONG PRIMARY SCHOOL CHILDREN IN CHOLE DISTRICT, ARSI ZONE, ETHIOPIA: A CROSS SECTIONAL STUDY

Version: 2 Date: 28 Sep 2018

Reviewer: Hasina Rakotomanana

Reviewer's report:

I would like to thank the authors for editing the manuscript according to the comments. Most of them were addressed but there are still some points that need more clarification. See detailed comments below.

Abstract

Line 38
Not necessary

Line 44
From the 422 study participants…

Lines 46-50
Separate into two or more sentences. It would be better to separate positive and negative associations.

Line 48
...family in a single room…

Line 52
Reword "preventive", maybe "protective"?

Introduction

Line 68
Replace "like" by "such as"

Lines 67-70
Break into two sentences

Line 71
Replace "in food and drinks" by "intake"

Line 79
Of the world is still estimated…
The African continent…
When was this prevalence of 4.7 to 28%?
That question is valid whenever the authors report prevalence.

…school-aged children
Correct this for the rest of the manuscript

Remove ">" and "<" signs

What do the authors mean by "ease of access"?

Double-check, "and" is bolded

Date for prevalence data

Delete "prevalence of"

The majority of the population
…highland… correct this for the rest of the manuscript

Most of the people in Ethiopia

Remove "/" signs

Delete "has"

Replace "among the people in the country" by "of the population"

Replace "so" by "still"

Methods
Lines 143-144
Delete "Chole district…Arsi zone".

Lines 144-149
Are these details necessary?

Line 152
Delete "Ethiopia"

Line 178
Delete "food"
What do the authors mean by "eating practices in their respective households"?

Lines 192-193
Double-check this sentence, not clear

Lines 209-212
Seems to be repetition of lines 178-179

Lines 219 to 224
Break down into two or more sentences

Results

Lines 231-232
From the total 422 study participants, 407 (96.6%) completed the questionnaire.

Line 233
Replace "SD" by the plus or minus sign

Table 1
Education status of mothers, secondary. There is a plus sign
Have a space before parentheses, correct that for the rest of the manuscript

Line 240
Consider rewording this title.
We are not sure yet of these are actually contributing to iodine deficiency because you did not test for iodine deficiency, you tested presence or absence of goiter. Also, your analysis does not allow you to draw that conclusion. Consider rewording it to "dietary factors associated with goiter".

Line 245
…milk at least once during the previous week.

Table 2
Milk consumption was asked. Does it include dairy products or just fresh milk? For the iodine test, how can the test distinguish between the 0 ppm and the <15 ppm? Correct "PPM" by "ppm" for the rest of the manuscript.

Figure 1
Please remove the decimals from the y-axis
This graph would be better if it was not in a 3-D shape.

Lines 269-273
Bivariate results are not often reported in the manuscript. They can be attached as supplemental materials. Also, the authors are already reporting the COR in table 4.

Table 4
Please differentiate variables and categories by having headings or indenting the categories within a variable. They should not be at the same level, that will make the table easier to read.

Line 285
Replace "during" by "in"

Table 4
Please report significance by using the conventional "+" or "**" or "***" next to the AOR. On the "age" variable, why the reference category is not the same for COR and AOR? Double check format of table

Discussion
Lines 309-311
This sentence needs reference.

Line 311
Replace "was one of the significant" by "is"

Line 314
Our findings showed that…

Lines 318-320
Which one has higher altitude? SSD or Chole? Complete the sentence.

Line 322
Where in India? Prevalence?

Lines 328-329
Reword this sentence. The prevalence was just higher in the older group of children.

Lines 334-336
Reference 33 is not appropriate for this statement.

Line s336-340
This statement does not need reference.

Lines 344-348
Good argument. Could be explained further, it is not very clear in this sentence why children living with family members who has had/have goiter are more likely to have goiter.

Lines 348-349
Delete

Line 352-353
Explain further, some readers may not understand what does wealth index have to do with iodine intake?

Line 355
Delete "what is more"
…consumed cabbage at least once a week…

Lines 358-360
Break down into two sentences.

Lines 362-364
Break down into two sentences.
What examples of food rich in iodine do you have that are available locally?
Makes more sense to have this in the last paragraph of discussion.

Line 366
Did the authors collect data on "access to milk"? why was not it included in data analysis?
Be careful in interpreting odds ratios, it just means higher or lower likelihood of having goiter.

Lines 369-371
Milk and dairy are fairly good source of iodine

Line 374
Delete "in line with"

Line 383
What does the authors mean by "insufficient iodization if salt"?
Salt was not properly iodized from the beginning?
The monitoring of iodine content in salt mentioned in the conclusion should be discussed here.
No need to reference.

Line 388
Replace "to the contrary" by "additionally"
Lines 388-389
What foods rich in iodine did the authors test? Why was it not reported in the dietary factors associated with goiter?
Lines 396-397
Explain further why would that be a problem?

Conclusion
The conclusion section should be just a summary of findings and discussion. The authors should not include new information not previously discussed in the discussion section.

Line 405
Was ability to access milk tested in the analysis?

Line 407-408
This was not discussed in the discussion

Lines 411-414
This is a good argument, it may be better to discuss this further in the discussion section.

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

No

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:

Needs some language corrections before being published

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license ([http://creativecommons.org/licenses/by/4.0/](http://creativecommons.org/licenses/by/4.0/)). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal