

# Review of: "Assessment of Quality of drinking waterbased on the water quality index method in Hawassa Zuria Woreda, Sidama Regional State, Ethiopia"

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Potential competing interests: No potential competing interests to declare.

Review Report on Manuscript - Qeios ID: DNX6O2: [Assessment of Quality of drinking waterbased on the water quality index method in Hawassa Zuria Woreda, Sidama Regional State, Ethiopia](#)

## Title

This title should change to "Assessment of Quality of drinking water in Hawassa Zuria Woreda, Sidama Regional State, Ethiopia" because other indices (HPI, HEI) apart from WQI and microbial analysis were used in the study

## General Observations

- No map showing the relative positions of the sampling points
- No tables and figures in the manuscript
- The grammar need to be improved upon.
- The citation should also be improved upon.
- Repetitions should be minimized and unnecessary statements should be removed.
- Other remark are included in the attached reviewed manuscript.

## Materials and Methods

### Water Points Selection

The sampling point should be labeled by their names rather than terms like borehole, reservoir, tap, end-user, etc. The authors used specific in the presentation of result which was better and easy to understand.

## Manuscript Arrangement

There should be a heading like "Water Assessment Indices" after which the indices will follow in this order:

### Water Quality Index (WQI)

## Heavy Metal Pollution Index (HPI)

## Heavy Metal Evaluation index (HEI)

## Microbial Analysis

## Results

- The values used should be limited to 2 decimal places
- The presentation of the physicochemical parameters should be rewritten precisely.
- Nitrite and ammonia was not presented in the physicochemical result but popped up in the discussion.
- The correlation was poorly presented. The authors should present  $r$  – value without add for example. 0.986/1.00. They should also add tabulated value of that was used to determine the level of significance based on appropriate degree of freedom ( $Df - 2 @ 0.05$  or  $0.01, 0.001$ )
- Using t-test to determine significant variations between recorded values and acceptable limits is not necessary. What is required is whether the recorded values are either lower or higher than the limits and how significant or the magnitude of the variation.
- Terms like “in this study”, “in this research”, “in the current study” etc should be eliminated.

## Discussion

- The arrangement of the discussion should be the result presentation format – physicochemical parameters, WQI, heavy metals, HPI, HEI, microbial – TC, FC
- Please include values when comparing with a related work for easy appreciation.
- A lot of citations were hanging because they were placed the sentence or statement has ended after the fullstop.
- The authors should review and minimize the use of the word “respectively”
- Authors should also minimize or eliminate the inclusion of their study results in discussion but they can include the ones they are comparing with
- They should also review the use of the word “groundwater”

## Conclusion

- Should be very concise and in line with the finding of the study.
- The indices should be used in the conclusion rather the individual parameters. That is the essence of using indices.
- Some of the recommendations are not feasible and should be removed

## References

- The references were current and relevant.
- The given names of some authors were used instead family names eg. Helena, Monica, Regina, etc. Some references were presented with full names of the authors instead of family names and initials eg. Onyenmechi 2020
- Some of the WHO and UNICEF references were not in there. Please crosscheck and confirm them.

## Recommendation

The data set for the manuscript is very robust and relevant to drinking water management. Therefore I recommend:  
MAJOR REVISION.