

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.

Title

The body of the research is almost all about physico-chemical parameters. WQI components are all physico-chemical parameters. Thus, the title should be adjusted.

Abstract

Background should introduce about drinking-water quality, not Ethiopia

Methods

What is your study design and sampling techniques?

What are the number of your population or households specifically that are served by the water scheme being studied?

Sample size per scheme should be determined based on served population as per WHO DWG.

Are the sample size from the storage of households enough? Is it in the recommended range?

The samples were collected between 7:00 and 8:00 in the morning. Is it a feasible time for a trip and sample collection with logistic arrangement?

Why constant temperature range of 4-10 0C? Why not 4 0C?

WHO in his 4th edition (2011) recommend inductively coupled plasma (ICP) or inductively coupled plasma mass spectrometry (ICP-MS). Why you prefer FAAS (APHA, 1999)?

Why you prefer air-acetylene to nitrous oxide-acetylene?

Why you present your result in mg/L; why not in µg/L?

What is the limitation of your study?

Result

Under subtopic bacteriological quality of drinking water

In paragraph 2 “Water samples taken from the tap were classified by Tadesse (2014) as low-risk, while samples taken from household containers were classified as high-risk, and samples taken from the source and reservoir were classified as no-risk. This categorization was based on mean counts of faecal coliforms”. It is not clear.

The number of the table should be minimized.

Statistical tests

Is correlation reliable statistical test to produce scientific evidence? If not why you used it?

Is there significance differences in mean coliforms among sites of water samples? Why?

Discussion

In the discussion the values for each studies in other area should be stated with respective references in the brackets for clear comparison.

In paragraph 12 what does Ethiopian norms mean?

In paragraph 13 “disparity may be the result of inadequate water management and unsanitary conditions in sources and reservoirs” is presented as possible reason. Have you included sanitary inspection in your study? If not you need to reference it from others scholars.

In paragraph 16 “These differences might be due to geological factors, agricultural activity, and the soil types of the study area”. How could these factors be the reason for the differences in EC?

In paragraph 17 “Turbidity values of source water and reservoirs did not comply with both Ethiopian standards and WHO which is 7 and 5, respectively (ESA, 2013, WHO, 2017). It is confusing and write it again by mentioning the recommended limits of National and WHO.