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

Aloisio Cotta[1]

1 Universidade Federal do Espírito Santo

Potential competing interests: No potential competing interests to declare.

The manuscript needs minor modifications (detailed in the attached file) for publication in your esteemed journal.

Other points are detailed below:

In general, the text can be abbreviated and some detailed discussions of results summarized, highlighting only the most relevant details and findings.
- The newspaper would benefit from the insertion of a location map.

- The entire section (Operating conditions and instrument calibration) can be deleted. Just move the reference to TABLE 3, and the final sentence to the previous topic.

The manuscript by Cotta et al. (2020) could be used in the introduction as an example of groundwater contamination.

Cotta, A.J.B., Fachetti, P.S. & de Andrade, R.P. Characteristics and impacts on the groundwater of the Guriri beach resort, São Mateus, ES, Brazil. Environ Dev Sustain 23, 10601–10622 (2021). https://doi.org/10.1007/s10668-020-01074-5

some phrases like (Fluoride concentrations of 0.7–1.2 mg/l in drinking water will protect against tooth decay.) appear twice and one MUST be deleted. The discussion should be summarized, so that the work become more focused just on the most relevant topics.

Avoid the expression (extremely significant), as in:
...The one-sample t-test result showed that there was an extremely significant difference (p0.01)...

A very puzzling issue (which needs further explanation) is the detection of (total coliforms (TC) levels in 43.48% of the drinking water samples...), although all samples tested had a reasonable level of chlorine (The result of the analysis of the water samples analysis shows that the residual free chlorine concentrations were 0.21mg/l, 0.26mg/l, 0.23 mg/l and 0.198mg/l for source, reservoir, tap water and E-users (domestic container), respectively... All water samples were within

the WHO recommended limit (0.5 mg/l), which indicates the efficiency of disinfection in the distribution system.)

sentences such as (Nitrate concentrations were 1.033 mg/l, 1.693 mg/l, 1.724 mg/l and 2.12 mg/l in source, reservoir, tap water and final consumer water samples, respectively.) can be summarized in (Nitrate concentrations were between 1.03 and 2.12 mg/l in the samples) and highlight that these values are much lower than the tolerable upper limit of 50 mg/l (WHO, 2017).

Furthermore, since Nitrate and Iron are present in low concentrations. I don't see the reason why the thread is correlated. (THUS the discussion: The correlation coefficient(r) between Nitrate and Iron was (r=0.535/1.00, P <0.01). This indicates that as one parameter increases, the other increases with a strong association and vice versa (Shigut et al., 2017, Kassegne and Leta, 2020). Significant positive correlation ($p < 0.01$) of stated water quality parameters may reveal that these ions have the same sources.) MAY be shortened.

in the Conclusions

The initial statement (below) can be deleted.

(The collected water sample was tested for bacteriological (FC and TC) and physicochemical parameters, such as temperature (T), pH, EC, TDS, NO3-, NH3, PO4-3, residual free chloride, Fe, TH, Mg+2 , NO2-, F-, Mn, Pb, Zn, Co, Cu and Ni were measured.) DELETE.