Reviewer's report

Title: Prevalence and severity of anemia among school children in Jimma Town, Southwest Ethiopia

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Reviewer: Marly A Cardoso

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This a cross-sectional study using 423 schoolchildren in Jimma Town, Southwest Ethiopia. Sociodemographic data and health related information were collected using a pre-tested questionnaire. Capillary blood was taken from the finger tip of each child and hemoglobin was measured using HaemoCue digital photometer. The manuscript is of value providing prevalence data on anemia in African schoolchildren. However, the manuscript needs major revision as a descriptive paper:

- Abstract: should provide prevalence by age groups as the study is using children and adolescents. Providing information on "All necessary safety measures were taken during blood collection" should be described in details in the methods section but not in the abstract.

- Methods: improvements in writing are needed. Please describe more details on collection and classification of all independent variables. Anthropometric measurements are not described in the methods. On page 4, why the authors described the "non-anemic group" as a control group in a cross-sectional study? Why the authors are using logistic regression models in a cross-sectional study and with an outcome with overall prevalence of 38 %? Please consider the use of prevalence ratio instead of odds ratio. The following information provided in the abstract is inadequate: "logistic regression model was applied to reduce confounders" (?). Please provide information on criteria and framework used for selection and analysis of independent variables in multiple models.

- Discussion: The authors should discuss the study limitations including cross-sectional design, using of capillary blood sample in children, among others. An update literature review should be consider in other developing countries.

- Conclusion: The use of "risk factors for anemia" should be avoided in cross-sectional studies. This study does not support the recomendation of micronutrient supplementation - why not consider dietary improvements considering production, availability and access to local vegetable foods?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable
**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

None to declare.