

Review of: "Determinant of Vaccination Status among Children Under Five years in Mattu Town, Oromia Regional State, Ethiopia"

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Potential competing interests: No potential competing interests to declare.

I acknowledge the authors for conducting research on a very important public health issue, particularly the preventive approach. I have thoroughly gone over the document and forwarded the following comments and suggestions.

Title: The term "vaccination status" is not specific.

- I recommend the authors specify either "poor vaccination status" or otherwise.

ABSTRACT

Objectives: "Vaccination prevents 2-3 million deaths from diphtheria, tetanus, and measles."

- This information is incomplete and shallow. Today, there are dozens of vaccine-preventable diseases.
- This shouldn't be part of an objective statement. The authors should add an introduction/background segment to the abstract part and discuss facts like this under that.

Methods:

- The authors didn't mention the study design, sampling procedure, and data collection approach in this section. I suggest that the authors do so.

Results:

- The authors didn't appropriately interpret their findings. They didn't include very important parameters like adjusted odds ratio and level of certainty (usually 95%).

Conclusions:

- The authors concluded their findings as follows: "Of a total of 118 children, only 68 (57.6%) completed the vaccination, and 27 (42.4%) of them did not complete their vaccination."
- The term "completed and not completed" is not the same as "status."
- Hence, it is inconsistent with their title and objective, which say, "Determinants of Vaccination Status among Under-Five Year-Old Children."
- Therefore, I recommend the authors specify the topic as "poor vaccination status/good vaccination status" and

conclude their findings with similar terms.

Recommendations:

- The authors didn't drop recommendations for the stakeholders to take any corrective action.

Introduction

- Lines 34–43 discuss multiple issues, but only one reference is given at the end of the paragraph to support all these claims. This is not enough. I advise the authors to support the information by providing sufficient and relevant references.
- I also recommend the authors reduce the unnecessary details and redundancies in this section.

Methods:

Population: The authors collected data from the parents of 1–5 children. These children are still actively taking the vaccines. Therefore, it is not possible to judge whether they have completed them or not.

- *Sample size determination: the authors used the correction formula after calculating the sample size, which is not recommended.*
- *The authors should justify why they used a 0.09 margin of error in the sample size calculation.*

Result:

Socio-demographic: Lines 187–188: The statement 'Among a total of 118 children included in the study, 68 (57.6%) were female and 50 (42.4%) were female' is an error. Please correct it.

The findings (the output) of the logistic regression were not interpreted.

Conclusion: The authors were expected to express their judgments about the vaccination status. But they repeated (re-presented) their findings in the conclusion part.

Recommendations: The authors didn't recommend any action for any stakeholders