

# Review of: "Determinant of Vaccination Status among Under-Five Year-Old-Children: In Case of Mattu Town, Oromia Regional State, Ethiopia"

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Potential competing interests: No potential competing interests to declare.

## General comments:

Research studies on vaccines with the aim of finding potential ways of increasing coverage or improving timeliness are important given the vaccines effectiveness in preventing infectious diseases. Also, the new challenge of vaccine hesitancy, which is quickly spreading to the Low and Middle Income Countries (LMICs) and the goal of leaving nobody behind is making vaccine topics relevant. However, a lot of work has been done around the childhood vaccine coverage and timeliness, therefore, any new research study must be compelling and clearly states its contribution. In which case, I find the current study lacking and therefore, I suggest that the authors reconsider how to present their study findings against a well described problem. Also, the authors should consider editing services from experts, minimize repetitions and avoid unnecessary details that the peers are expected to know.

## Specific comments:

1. Title: This can be improved, for example, "Determinants for childhood vaccines uptake among under-five years old in Mattu Town in Oromia Regional State, Ethiopia"

## Abstract

1. In line 11, consider changing the sub-title from "Objectives" to "Background"
2. The bracketed "2012" in line 12 is not necessary
3. The justification for conducting this study under lines 13 and 14 is weak
4. Information under methods is too brief
5. Lines 19 and 20, after providing proportion of those who received vaccine, it is unnecessary to provide the remaining bit that did not
6. Confirm how you would like to report results from logistic regression model, for example: AOR = xxx 95% CI: xxx, xxx.
7. I am not sure if the recommendation given under conclusion is related to the study findings.

## Introduction

1. The opening statement, line 34, is not impactful i.e., does not assert the importance of vaccines as effective public

health intervention

2. The statement running from lines 37 to 38, “It benefits individuals, 38 communities, countries, and the world” is not clear
3. Reference line 39
4. Reference line 44
5. You have not captured vaccines like Diphtheria, Tetanus and Pertusis in your summary of vaccines given to children in Ethiopia, see lines 45 to 50.
6. Revise line 51
7. Line 52 reports coverage in Indonesia in the year 2012, two concerns with this: 1). The data is too old, and 2). Why Indonesia?
8. Consider reducing information from Indonesia and Cameroon studies. You can reference them to support your claim. You can retain the details you have provided about the survey conducted in Ethiopia but at least provide the year and location.
9. Lines 71-77: What is EDHS in full and is it possible to find a more recent report than the 2011 one?
10. After starting a discussion about Ethiopia, I do not expect to see details from other countries, in this case Nigeria (Lines 82). Adopt the funnel shape model for conducting literature review.
11. A lot of details you have provided from previous research studies are meant to provide evidence about the low vaccine coverage and known determinants for childhood vaccines uptake. I suggest you summarize your message in two paragraphs and reference the discussed research studies appropriately. You are not supposed to present the research studies summarized findings but to help you assert your thoughts.
12. Again, there is no strong justification for conducting this research study. You have further diluted the need by stating, “As the health office of Mettu town reports showed that Mettu town has a high vaccination problem (by using interview office workers)”, lines 105 to 106. Consider answering the following questions, what is the contribution of your study findings? Why was it important to conduct your study in Mettu town and not any other place?

## Materials and methods

1. Line 115, which samples were you collecting?
2. Consider tabulating your variables and provide how they were structured too, for example, sex was captured as male and female.
3. Line 165 is not necessary
4. Lines 177 to 185 are not necessary for your audience although important for academics.

## Results

1. What was your response rate, 100%?
2. Sex of your participants was female and female, lines 187 to 188
3. You need to be very clear whose details are being reported, i.e., participants (under-five children) or mothers/caregivers?

4. Line 208, choice of words. Pie chart is used to present results therefore, we do not say, “The result from pie-chart”, rather, the pie chart shows ...
5. Details in Table 1 can be merged with those of Table 2
6. Table 4 is not necessary
7. The pie-chart is not necessary because one statement is sufficient to report the figures.

## **Discussion**

1. Your discussion section reads like the results section. We expect a discussion around the study findings with regard to implications on policy. How useful are your findings in enhancing childhood vaccination coverage?