

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.

Dear Editor,

Thank you for the opportunity to review this manuscript.

Please find attached my comments for consideration.

Best wishes,

Abstract:

The last sentence at the conclusion should be restructured to give it a better understanding.

Introduction:

1. "Immunization programs have improved the primary care infrastructure in developing countries...." Can you please expand on this, such as how immunisation programs improved...." infrastructure"?

Paragraph 3:

1. "Vaccine-preventable diseases cover about 25% of the 10 million deaths occurring annually among under 5 years of children"..... Please review this sentence.

Paragraph 4: "

1. The research conducted in Indonesia showed that 32% of the children were fully immunized in 2012".... Referring to a 2012 paper might be somewhat misleading since 11 years down the line the evidence might have changed. Can you refer to a more recent study?
2. Please write EDHS in full the first time it is introduced.
3. "As the health office of Mettu town reports showed that Mettu town has a high vaccination problem (by using interview office workers)."... This statement looks incomplete to me.
4. "To the best of my knowledge, no studies have been conducted in Mettu town regarding the determinants of

vaccination status among under-five year-old children.” ...The study has multiple authors, so why is the statement referring to an individual other than a group or team?

5. The studies cited in the introduction do not communicate with one another. The authors should ensure that the paragraphs reporting on similar studies communicate either that they are showing contrasting findings or that they are corroborating one another. This makes reading more interesting.
6. With multiple studies on the topic reported in Ethiopia, why is there a need to conduct this particular one? I think the authors should make this clear, please.
7. The introduction should end by stating what the study will add to existing knowledge or practice.

STUDY DESIGN AND PERIOD.

1. I think the sample size (118) should be deleted from this section and added to the sample size section.

The period can come under the data collection procedure.

STUDY AREA

1. Is there a justification for this study area? Are there any health facilities there? Is immunization a problem there?

STUDY POPULATION.

1. I think the study tool or questionnaire should be a separate subheading under which the study variables can fall.
2. Also, please state whether the questionnaire was adopted from a previous study, hence cited, or if developed by researchers. If developed by researchers, can you please state the Cronbach alpha (inter-rater reliability).
3. “The validity of the questionnaire used for the study was checked through the pilot survey by taking samples of 10% of the population”. Please note, this statement isn’t clear. Which population are you referring to? Was this pilot sample added to the final results for analysis? Please clarify.

INCLUSION CRITERIA

1. Since it was mothers that were interviewed, it will be more appropriate to say “Mothers with babies below five years and below were included, while those mothers whose babies were older than 5 years were excluded.”

SAMPLE SIZE DETERMINATION:

1. Please take off “ (1).”

Method of data collection

1. “The validity of the questionnaire used for the study was checked through the pilot test by taking a sample of 10% of the population.” This information is redundant. It has been repeated above.

ANALYSIS

1. I suggest that you summarise the analysis rather than adding the formulas and describing them.

RESULTS.

1. Even though you have presented the detailed results in a table (sociodemographics), you have also detailed the description of the results. I suggest you give a summary of the vital parts of the results and refer to the tables for details.

DISCUSSION

1. The 1st paragraph should be sent to the end of the introduction or the conclusion of the discussion ("The results of this study might be used as a source of information for concerned bodies like regional, zonal, and district admiration offices, and health offices, as well as for future researchers.")
2. You report that the current finding is similar to previous findings, comparing 57.6% to 49.3%. I think the difference is too telling, and hence reasons for the difference should be stated.
3. "The result showed that the odds of vaccine status for those whose education is College/University were 0.143 times more likely than those whose education is illiterate at a 5% level of significance, keeping all other factors constant."
4. The above statement should be reported as "...1.4 times less likely" rather than how it has been stated, please. Remember, 0.143 is less than 1, hence less likely.
5. Please review the discussion column again since it doesn't communicate the findings very well.
6. "The result indicated that the odds of vaccine status for those who live in urban areas were 3.773 times more likely than for those who live in rural areas, keeping all other factors constant". This statement is true, so using the same principle, correct the previous statement as stated above.
7. Can you provide evidence supporting the assumptions you make to support the findings, please (references).
8. Are there limitations to this study?
9. What are the strengths?
10. Implications for practice or research?

Conclusion:

1. It seems to be a summary of the findings; please discuss the implications and what needs to be done.