

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.

Thank you for inviting me to review this paper. I want to thank the writers for their effort. However, the study has major methodological flaws which make it nonsense to go through in detail.

1. The sample size determined is not appropriate. Given there are numerous studies on the subject, there is no justification to use the 50% proportion. And, they have used a margin of error of 0.09 which is larger than 0.05 and leads to errors.
2. The statistical analysis models used are not appropriate for the analysis. I do have a doubt why they want to use both chi-square and binary logistic regression, in which one is the advanced form of the other. They should use either of the two models. Especially using the chi-square test is not important if they employ binary logistic regression. Given they test the binary logistic regression model, they should test also the multiple logistic regression to control the confounding effect of variables as well. Here we don't know whether the variables significant during the binary logistic regression test go significant for the multiple logistic regression, which we want to see.
3. From the affiliations of the authors, I have learnt that the authors are statisticians, which may hinder their ability to understand the medical concepts and analysis techniques. Therefore, they should re-analyze and re-write the manuscript including a subject expert.