

Review of: "Covid-19 vaccine prevalence and its associated factors among rural households in The Gambia: a community-based cross-sectional study"

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Potential competing interests: No potential competing interests to declare.

Review Report

Title: Covid-19 vaccine prevalence and its associated factors among rural households in The Gambia: a community-based cross-sectional study

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Dear editor,

Thank you for giving me the opportunity to review this manuscript; I found this manuscript very important. This paper requires extensive editorial work to improve the logical flow of information and coherence in the description of the background, methods, results, discussion, and conclusion. The draft also requires correction of many grammatical errors. Saying this, I have detailed my concerns, comments, and questions below.

1. senior secondary educational level [aOR: 4.525, 95% CI (1.272 - 16.098)], for this factor, the point estimate is not at the equidistant from the interval estimate. Consider your analysis again for this variable?
2. Classification of income is based on what? It is difficult to understand the finding. Use the standard income classification developed by WHO, IMF, and the likes. How could it be considered as a significant factor as far as the vaccine is given for free?
3. Data was collected almost three years ago. Why have you failed to publish so far? Can we consider this finding as recent evidence?
4. Clearly specify your source and study population
5. Why were seriously ill persons excluded from the study?
6. The sampling procedure is not clear and is poorly written. How can the sampling error be avoided or minimized with such a technique? Needs gross modification
7. Add some missing components under Data collection
8. You've utilized a cut-off point of p-value ≤ 0.15 in bivariate analysis, which is commonly known in the literature. Justify it
9. Under Ethical Considerations, add the reference number of the approval letter
10. The calculated sample size was 423, but the data was collected from 504 subjects. If you did so, why did you calculate the sample size?

11. Under socio- ...you wrote Other variables found to be significant at a p-value gender, ethnicity, educational level, monthly income, cigarette smoking, having been tested for Covid-19, and having traveled outside the country. Here it is about presenting your participants in terms of frequency and percentage, not the associated factors. Remove it
12. Tables and figures captions are not self-explanatory. They lack important components
13. Add the 95% CI for the prevalence of hesitancy
14. Table 2 is also not constructed scientifically. Where is the cross-tabulation result, COR with its 95% CI, and P-value?
15. You have compared the result of your study to others and deemed them lower and higher, what was your cut-off value for being lower/higher?
16. In the discussion, it is written as... The vaccination prevalence was higher in females (29%) than in males. A reference is needed at the end.
17. After writing sex as significant determinants of hesitancy, you wrote the justification as *'More than half of those who received the Covid-19 vaccination were married, and approximately a quarter of these recipients were single. Consequently, married respondents were 72% more likely to take the Covid-19 vaccination, and single respondents were 88% more likely to receive vaccination against the widow.* 'you wrote a poor justification
18. Overall, the justifications provided for associated factors in the discussion are not good enough
19. Availability of data.... why school administrations are requested? Why not the corresponding author?
20. *Why did you fail to acknowledge the data collectors and supervisor?*