

Review of: "Covid-19 vaccine uptake 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.

This cross-sectional study looks at the association between socio-economic and demographic variables and COVID-19 vaccination in a region of The Gambia in 2021. Overall, the study needs a lot of improvement in writing, literature review, and interpretation of results before being of publication level quality.

Major comments

Abstract

- Suggest reducing current text in background.
- Last sentence of methods is unnecessary in the abstract.
- As a major outcome of consideration is vaccination prevalence, it would be helpful to know when vaccination started in the country and in the Africa region. The COVID-19 vaccination rate results are not very helpful because there is no relative point of comparison. Add this to the background.

Introduction

- There is a lot of text that needs referencing.
- The structure of the introduction and the purpose of each paragraph is unclear. The focus keeps going from global to country level.
- There is a lack of literature review on other Gambian or regional studies; therefore, it is difficult to understand the contribution of this study. Are there not larger national health surveys available? For example, see the following:
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10146577/#:~:text=Most%20studies%20revealed%20that%20considerable,to%20COVID%2D19%20vaccine%20uptake>
 - <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-023-15116-w>
 - <https://www.tandfonline.com/doi/full/10.1080/21645515.2022.2060020>
- The contribution of the study is unclear.

Methods

- Was vaccination confirmed from the vaccination card?
- The participants are over 18, but the population described includes under-five children and mothers in the first paragraph; these are irrelevant.
- What is the definition of physically and mentally healthy?
- Add a citation for sample size determination.
- Describe the parameters of the equation or remove the equation; suggest the latter.
- Explain how "information about Covid-19 vaccination, vaccination, and vaccine hesitancy" is defined.
- Is there any other specific reason this region was chosen, or what is the significance of choosing this region?

Results

- Standard deviation should not be written in the text, only described in brackets.
- Some time frame should be provided for travelling out of the country or being infected, for example, travelled within the last month, last three months, etc.
- The figures are unnecessary if only describing one binary variable. A scatterplot or bar graph showing the relationship between two or more variables would be more interesting.
- If AOR is provided before brackets, then no need to provide it within.
- There is no need to describe both percentage change and odds ratio; would suggest choosing one.

Discussion

- Please elaborate on this "The acceptance of vaccination may be associated with regulations regarding vaccination status being a requirement in some public offices and schools."
- The discussion section needs substantial work. At this point, there are many related meta-analyses. For example, see the following studies:

- <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-14029-4>
- <https://www.nature.com/articles/s41562-023-01733-3>
- [https://www.ajicjournal.org/article/S0196-6553\(21\)00460-0/fulltext](https://www.ajicjournal.org/article/S0196-6553(21)00460-0/fulltext)
- There also needs to be a thorough discussion about the interpretation of the results through a literature review. Now, there are some allusions to the possible reasons, but the discussion overall is unsatisfactory.
- What implications are there for future vaccination programs?
- How have vaccination rates changed over time? This study was conducted in 2021.
- The conclusion is too vague.

General comments

- Thorough grammar and writing check is required.
- Check consistency in verb tense.
- The overall writing style is often non-scientific; for example, the text “vaccination is undoubtedly among the outstanding health interventions in reducing the spread and effects caused by Covid-19, preserving lives, alleviating pain and suffering, and easing restrictions on various socio-economic activities.”
- The reference style is incorrect; references should be after punctuation.