

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.

I recommend the title to be changed to "Covid-19 vaccination coverage and associated factors in The Gambia, a community-based cross-sectional study."

Therefore, the study objective should be written as follows: to determine Covid-19 vaccination coverage and associated factors among rural dwellers in the North Bank Region (NBR) of The Gambia.

In the first paragraph of the abstract, use "developing countries" instead of "third world countries."

The introduction is unnecessarily too long. The information related to EPI presented in the fourth paragraph should be shortened; instead, include information on vaccination coverage in developing countries and the associated factors. Also, a better justification of the variables included, especially smoking, is needed.

The authors should improve the language quality, such as:

"The study was carried out among 504 rural households across districts in the NBR through a multistage sampling procedure." A suggestion: The study included 504 rural households from districts in the NBR selected through a multistage sampling procedure.

The main problem of this manuscript is calculation errors that lead to misinterpretation.

The percentages presented in Table 1 are calculated using the total participants. I recommend for better interpretation to calculate them using the total participants in each group, for instance:

For gender, it should be: 76/197 (38.6%) for male vs. 146/307 (47.6%) for female

For ethnicity:

Yes	Total	%	
95	248	38.3	Mandinka
55	107	51.4	Fula
52	94	55.3	Wolof
2	9	22.2	Serahuli
2	5	40.0	Manjago
16	41	39.0	Serer

The two graphs do not contribute much; therefore, these results should just be described as text.

I do not agree with the results found in the regression analysis. I strongly recommend to do all the calculations again and consequently discuss these findings.

The description of the socio-demographic characteristics is confusing and mixed up with the associated factors. They should be separated into different sections. Income is presented as \$? Is that US dollars? It was not defined previously in the methodology. Social media was not mentioned as a variable.

Methodology

Include a map of the study place.

Indicate the target population for this time of the pandemic, as stated in the introduction.

It is not clear why only physically and mentally healthy individuals were included, since the initial target population was people with underlying conditions. Please explain why seriously ill persons were excluded. I suppose the reason was to provide accurate information about their vaccination status.

To estimate the sample size, the error should be 5%. It is not clear what is meant by a prevalence precision of 50%. The sample size was estimated for a descriptive study; how will increasing the sample size to 504 improve the power of the study?

Is "Ethnicity" or religion the variable?

Use a structured questionnaire instead of structured interviews