

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

Pascal Pineau<sup>1</sup>

<sup>1</sup> Pasteur Institute

Potential competing interests: No potential competing interests to declare.

In this manuscript, Kinteh and coworkers examined a population of more than 500 adult residents living in the North Bank East region of Gambia to determine the factors that modulate the coverage of COVID-19 vaccination.

There are different obvious shortcomings with this work.

Title: I will use "overage" rather than "prevalence"

Abstract and results: There are various problems of data interpretation. I do not know whether it results from a post-hoc adjustment, but by simply looking at the data provided in table 1, it is difficult to concur with diverse interpretations proposed by the authors. The authors tell us that men are more frequently vaccinated than women. But, it seems to be the reverse (47% of women are vaccinated vs. 38% of men,  $P=0.0536$ ,  $RR=1.23$  in favor of women).

Another example: the authors claim that Wolof are less frequently vaccinated, whereas it is the exact contrary (55% of Wolof receive the vaccine against 41% of the other ethnicities,  $P=0.0158$ ,  $RR=1.33$ ).

In the discussion, the authors indicate that "vaccination prevalence decreases with an increase in age." But again, results indicate the reverse, participants above 66 are immunized at 75%, while it is only 43.2% of those below this age ( $P=0.0028$ ,  $RR=1.74$ ).

There will be plenty of additional remarks to make (Please tell us somewhere that the Dalasi is the currency of Gambia), but I consider that these three examples are sufficient to encourage the authors to re-analyze their data from A to Z.

I will suggest presenting the percentages in Table 1 differently. The current presentation is misleading and might explain erroneous interpretations.

I propose, for example:

	No	Yes
Males	121 (61.4%)	76 (38.5%)
Females	161 (52.4%)	146 (47.5%)

Looking quietly at these figures, you cannot write that “males were more likely to utilize Covid-19 vaccines.”