

# 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.

Section	Comment
Abstract	
Background	
<ol style="list-style-type: none"> <li>1. The Covid-19 pandemic has affected the globe in all spheres of human life: physical health, mental health, economic burden, and social lives.</li> <li>2. Use of the term "third world countries"</li> <li>3. The use of prevalence</li> </ol>	<ol style="list-style-type: none"> <li>1. Please rewrite this statement for clarity</li> <li>2. The use of the term "third world" is offensive and outdated. It oversimplifies complex economic, social, and political realities. The use of this term can perpetuate stereotypes and reinforce negative perceptions. It's better to use terms like "developing countries," "low-income countries," or refer to specific regions or nations by name.</li> <li>3. Use alternative and more accurate terms!</li> </ol>
Abstract	
Results:	
<ol style="list-style-type: none"> <li>1. Johnson</li> <li>2. Those who tested for Covid-19 vaccines.</li> <li>3. Those who travelled outside the country</li> </ol>	<ol style="list-style-type: none"> <li>1. Please make sure to clearly state the name of the vaccine. I don't think there was any vaccine brand with the name "Johnson".</li> <li>2. Did you mean those who had previously tested positive for Covid-19? I am not clear what this means " those who tested for Covid-19 vaccines". This needs clarity.</li> <li>3. Travelling outside at which point? Prior to the introduction of the vaccination or during the period of vaccination? If during the vaccine period, how do you explain their legibility for inclusion?</li> </ol>
Abstract	
Conclusion	
<ol style="list-style-type: none"> <li>1. The use of <b>prevalence of Covid-19 vaccine uptake</b> in the region</li> <li>2. Conclusion statement</li> </ol>	<ol style="list-style-type: none"> <li>1. "Prevalence" is a term used to describe the proportion of a population affected by a particular condition at a specific point in time. It is commonly associated with the occurrence of diseases or health-related states. The term "vaccine uptake" itself is more directly associated with the percentage or proportion of individuals who have received a vaccine. Therefore, instead of "prevalence of Covid-19 vaccine uptake," it would be more accurate and clearer to use a term like Covid-19 vaccination coverage.</li> <li>2. Try to align the conclusion with the aim/objectives and the findings</li> </ol>
Main text	
Introduction	
<ol style="list-style-type: none"> <li>1. severe acute respiratory syndrome coronavirus</li> <li>2. Pandemics</li> <li>3. The Covid-19 pandemics have affected the globe in all spheres of human life: physical</li> </ol>	<ol style="list-style-type: none"> <li>1. Capitalise each word: Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2)</li> <li>2. singular: pandemic</li> <li>3. This statement can be rewritten for clarity. Example, the global impact of the Covid-19 pandemic is evident across various aspects of human existence, encompassing physical and mental health, economic challenges, and disruptions to social lives.</li> </ol>

<p>and mental health, economic burden, and social lives.</p> <ol style="list-style-type: none"> <li>4. Compared to other WHO regions, the African region has the least number of confirmed cases, about 6 million cases</li> <li>5. AstraZeneca COVAX</li> <li>6. This effect of hesitancy has created myths and misinformation that affect the uptake of Covid-19 vaccination among <b>some</b> people.</li> </ol>	<ol style="list-style-type: none"> <li>4. Perhaps you could expand on the reason for this. Could it be that testing was very limited in the African region? Or that data was not well reported? Or there are other tangible reasons for this?</li> <li>5. COVAX is a global initiative for vaccine access. It is important to distinguish this from Oxford–AstraZeneca COVID-19 vaccine without confusing the public about the name. This should be reworded as "Oxford–AstraZeneca COVID-19 vaccine through COVAX". Also write the full name of COVAX before the abbreviation in subsequent usage. COVID-19 Vaccines Global Access (COVAX)</li> <li>6. Best practice to specify what you meant be some people.</li> </ol>
<p>Methodology</p> <p>Study Setting and Design</p> <ol style="list-style-type: none"> <li>1. The expanded programme of immunization's population target for the region is projected at 132,740 inhabitants, of which children less than five years old account for 20,840, and women of childbearing age account for 33,678.</li> <li>2. Inclusion and exclusion criteria</li> <li>3. Sample size determination</li> <li>4. Sampling procedure</li> <li>5. Variables</li> </ol>	<ol style="list-style-type: none"> <li>1. Here you need to be very specific about the targeted population because at the time of this study, only people who have been identified as high risk were eligible for vaccination as such, they will be your target population. This needs to be clearly stated.</li> <li>2. You stated this from the introduction "The vaccine was earmarked to be given to high-risk groups, including healthcare workers, people with underlying medical conditions, the elderly over 65 years, teachers, and immigration and security officers." Therefore, your sample can only be drawn out of this population.</li> <li>3. Your sample size was calculated as 424, yet you sampled 504. Your justification is not sufficient. Which formula or theoretical framework was used to increase the sample size from a statistically determined sample size of 424 to 504. Please cite the source of your sample size calculation.</li> <li>4. Please give clarity on the sampling procedure with relevant references. How did you manage houses with multiple households during the selection process? Again, doesn't the use of taxpayers list exclude none-taxpaying residents?</li> <li>5. The independent variable description wasn't clear to me especially the positivity status. It is very ambiguous.</li> </ol>
<p>Findings</p> <ol style="list-style-type: none"> <li>1. Vaccine type</li> <li>2. Income category</li> </ol>	<ol style="list-style-type: none"> <li>1. There was no mention of Johnson &amp; Johnson as one of the vaccine available for the community in your introduction. The only time this appeared was in the result section. Can you spare a paragraph to describe the vaccine brands that were available to the community?</li> <li>2. How were the income brackets determined? This should be clear in the methods section.</li> </ol>
<p>Discussion</p> <ol style="list-style-type: none"> <li>1. The approval and acceptance.</li> <li>2. "However, the coronavirus vaccination has been deemed safe and reliable, but the vaccination issue has sparked controversies and caused vaccine hesitancy and even denial in some instances".</li> <li>3. "This study found that the prevalence of Covid-19 vaccination among respondents was 44% lower than the targets for herd immunity".</li> <li>4. "These findings were similar to a study done in Kuwait, where vaccine acceptability was highest within the 21 – 24 age group and lowest among the 50 – 64 age group".</li> <li>5. Contradictions</li> <li>6. General comment</li> </ol>	<ol style="list-style-type: none"> <li>1. Although there was an approval, acceptance was yet to be determined at the time of this study.</li> <li>2. Please revise this statement for clarity. It is contradictory at its present state.</li> <li>3. What was the targets for herd immunity for the studied community?</li> <li>4. You stated "Thus, the vaccination prevalence decreases with an increase in age. These findings were similar to a study done in Kuwait, where vaccine acceptability was highest within the 21 – 24 age group and lowest among the 50 – 64 age group", This statement will be misleading because of the sampling techniques and the target of this study. At the time of this study, covid vaccination was only available to people who were identified as high-risk groups which included among other things working environment. If you sampled an entire population, you wouldn't expect the aged who were out of active employment to be well represented.</li> <li>5. This was under findings "The study revealed that males were 2.728 times [a OR: 2.728, 95% CI(1.638 - 4.542)] more likely to receive Covid-19 vaccines compared to females after controlling for confounders". Then under discussion "The vaccination prevalence was higher in females (29%) than in males." This is confusing. How do we reconcile these statements? "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." The above statement also needs to be relooked at for clarity.</li> <li>6. The discussion needs to be written again to reflect an actual discussion and not simply restating some of the findings. Please discuss and provide tangible explanations for your findings in relation to other peer reviewed studies.</li> </ol> <p><b>Strengths and Limitations</b></p>

<b>Strengths and limitations</b>	<p>This study has a lot of limitations. Mostly the methodology for sampling, population, etc. I do not see any strength in this study and the statement of strength is ambiguous. Please revisit this.</p>
<b>Conclusion</b>	<b>Conclusion</b>
<b>Availability of data and materials</b>	Rewrite the conclusion to align with the study objectives and the findings.
<b>Reference list</b>	Why is the data with school administration and not the corresponding author?
	What referencing style was used? The list of reference format does not align with the in-text citations,