Review of: "Acceptance of COVID-19 vaccination at different hypothetical efficacy and safety levels in Nigeria."

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Acceptance of COVID-19 Vaccination in Nigeria		
No.	**Comments**	**Editorial Use**
1.	**Overview:** **Work on an important area in relation to the pandemic**	
	Concerns are noted below.	
	Language and Typos • Some sentences need rephrasing to better convey the meaning. • *"Roadblocks*" on page 2 on the HBM. Double check, "Not barriers?" • Inconsistency in the use of terms: poor, rich, semi-rich countries and the LMICs and HICs. HICs used without first defining it. Also, it may not be appropriate to refer to Nigeria as a poor country. • Some sentences are long, meaning is not clear and need rephrasing. Example page 2/14. *"In order to estimate the impacts of the vaccine during outbreaks,,,,, a vaccination approach,,, "* . Even the sentence before this one is the meaning is not clear. • Some sentences are too long and or disjointed. The meaning in the first part does not correlate with the latter part. Examples, page 7/14. Par 3: *"According to research by Marzo et al males are more likely, ,,,, the opinions of medical professionals and the cost of the vaccine are crucial factors.. "* Par 4: "*In this study the clinical updates on the health status ,, even though ,,, although the groups recognised the same fundamentals ,,,, "*	
2.	**Introduction and Objective** • The purpose is now clearly stated. • Introduction is quite informative. However, more clarity on the statement about the decline in vaccine acceptance in Nigeria due to the "*revelations*" about harmful side effects and the decline in vaccine vaccination acceptance and hesitancy in Nigeria would be enriching..	
	Concern • As it is, the statement above is hard to interpret and the reference does not give further clarity. The sentence may have a different connotation to the intended meaning. • The background is a bit long and may benefit from condensing it and aligning some information to the focus of the study.	
3.	**Method and Data Analysis**	
	• Fairly well stated. • Am happy you removed the word "Fictitious"	
4.	**Results**	
	Concerns • The table of results does not indicate that the information can be considered valid. For example. How can there be so many more people who accept a vaccine that has a lower efficacy and higher side effects rate (2nd column 50% efficacy and 50% side effects) than the vaccine that has a high efficacy and much lower side effects (1st column, 95% and 5%). Either the participants did not understand or something really went wrong with the results or data capture. • With this being the case (as above), further interpretation along these lines including that age and different categories are associated with higher vaccination acceptance becomes a challenge. • Some figures are missing, some do not make sense. There are odds ratio (OR) figures there is no confidence intervals (CI), or the CI is 0,00 to 0,000 on table 3, see pages 9-10 in particular. • The results are given and interpreted only in relation to table 1 which does not give p values and Confidence Intervals (CI). A large majority of these results have very high p values and the CI includes 1. Therefore this must be taken into account when results are presented and interpreted. The understanding is that one cannot draw an association when the p value is large, in such a case one must consider the '*Null Hypothesis*" • There is a serious inconsistency in the table of the results and the categories that were set up according to methodology**In the method**	

	there were 4 categories of vaccines with different safety and effectiveness. **In table 1 of the results there are now 5 categories.** Furthermore, Vaccine A, in the method has efficacy of 95% and side effects at 20%. Yet now in the tables this is now Vaccine A has 95% efficacy and 5% side effects. There is also an additional category of 50% efficacy and 50% side effects. • Inconsistency in what is written under results and the table of results. For example, knowledge about one's health status: in the table 21% of participants did not know if they had diabetes and similar (21%). did not know if they had a heart condition and 78% knew whether they had diabetes or a heart condition; 41% did not know about a pulmonary condition and 38,9% did not know if they had hypertension. Yet in the result 1st paragraph 3rd sentence, " *In the table less than one fifth,,,,*". Yet nothing in the table adds to this one fifth. This same sentence is emphasised again under Discussion in paragraph 4.	
5.	**Discussion and Conclusion**	
	Positives • The discussion refers to other similar studies.	
	Concerns • Inconsistency in what is written under results and the table of results is further emphasised and discussed (see above about the knowledge of one's clinical condition). • It is not clear how the authors got to conclusion that is stated in the second paragraph: *"Results indicate that COVID-19 vaccine acceptance is inversely proportional to the age ,,, which increases the acceptance rate to 27 (15),,,,at 50%,,,"*. Furthermore, it is hard to understand this statement. The increase is to 27 what (of what units) from what baseline? and the and the from the results. • One cannot agree with the statement under paragraph 3, it is a problematic statement "*Willingness to accept vaccination does not varied by age (typo in sentence also)"* One would very well consider that the association between age and acceptance of vaccination would vary in different settings and by context. This statement cannot be accepted by one merely refuting the findings of one author. • The number of people who are 51years and older is few, which should have an impact on the interpretation of results, which is a significant focus of the outcome of this study. Authors do not seem to have considered this.	
6.	**References**	
	Fairly good.	