

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

Zhihan Cui<sup>1</sup>

<sup>1</sup> University of California, Los Angeles

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

The author tries to find some national patterns in Nigeria about how different groups react to COVID-19 vaccines with different efficacy levels and side effect rates.

**Strengths:** the idea of using different hypothetical efficacy is great. It follows the frontier of current research in Public Health and may reflect some underlying real attitudes.

## Weaknesses:

(1) The sample size of this paper is limited, especially when the author tries to establish some cross-cohort differences across different age groups. For a lot of results, I am not able to fully evaluate their robustness because of the size. For instance, when there are a lot of coefficients to estimate, it is common that some of the coefficients go significant without having real effects (for instance, among 20 variables, there is expected to be one variable significant at 5% level). Such problems can be largely avoided by enlarging the sample size.

(2) The presentation of the results are a bit unstructured. In this study, what I care the most is that in different grids for age groups X efficacy X side effects (for instance, 31-40 yrs old, 75% efficacy, and 5% side effects, what's exactly that number?). Also, plotting tools like heat maps could help a lot with here.

(3) Income measurements. Given that it's very unevenly distributed, maybe at the next time you could use a scale that fits better into the national distribution in Nigeria? I understand that conducting such studies in developing countries is challenging, but it may help.

## Suggestions:

The main suggestion that I want to make is to triple the size, and try to see whether the basic findings of this current version could be replicated. After that, reorganizing your results and make it more intuitive to read.