

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Intention to vaccinate against COVID-19 and adherence to non-pharmaceutical interventions against COVID-19 prior to the second wave of the pandemic in Uganda: a cross sectional study
AUTHORS	Wafula, Solomon; Mugume, Innocent; Sensasi, Benjamin; Okware, Solome; Chimbaru, Alexander; Nanyunja, Miriam; Talisuna, Ambrose; Kabanda, Richard; Bakyaite, Tabeley; Wanyenze, Rhoda K; Byakika-Tusiime, Jayne

VERSION 1 – REVIEW

REVIEWER	Caijun Sun Sun Yat-Sen University
REVIEW RETURNED	15-Oct-2021

GENERAL COMMENTS	<p>This manuscript performed a phone survey to investigate the compliance to COVID-19 preventive measures, acceptance and influence factor of COVID-19 vaccines in Uganda. There are numerous major and minor concerns regarding this manuscript.</p> <ol style="list-style-type: none">1. There have been many similar investigation, and the innovation of this work is insufficient.2. When studying the factors related to the compliance of prevention guidelines and vaccination willingness, multivariate analysis was directly performed. Authors should conduct the single factor analysis first to find the variables with statistical differences, and then performed the multivariate analysis.3. 1053 respondents were included in this survey. Please state how to calculate the minimum sample size of participants in this survey.4. No description of the sampling method in this study.5. Was a pre-investigation performed to validate the correctness of their phone questionnaire? Please state how or why not?6. Attach the questionnaire as an Appendix to help readers better understand the study aims and contents.7. Although the author mentioned that it is important to understand the reasons for the delay or refusal of vaccination (vaccine hesitancy), they did not further analyze the possible correlates and reasons for vaccine hesitancy.8. No information on ethical statement was provided.9. The quality of English writing needs improvement.10. Page 3 line 8: "This investigated" should be "This study investigated"11. Page 11 line 25: "928/" should be "928"
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REVIEWER	Tadesse Nigussie Salale University
REVIEW RETURNED	26-Dec-2021

GENERAL COMMENTS	<p>Dear editor thank you for your invitation to review this manuscript. It is well written and well organized manuscript. I have only the following minor corrections. Authors have clarify.</p> <ol style="list-style-type: none"> 1. How quota was given for age? How age was classified prior to assign quota? 2. Telephone number might be registered by adult and user might be children. Author have to show how they overcome this issues. 3. Authors have to clearly show the contents of the questionnaire. 4. In method section authors have to clearly put how outcome variables were categorized. By putting appropriate citation to set cut off point. 5. For all composite variables like knowledge and perception authors have to clarify how they have measured and classified. 6. The sample size has to be calculated using appropriate formula which can answer the intended research question. How 1070 participants were proposed? Can 1070 sample be representative for 60 districts? 7. Proportional allocation have to be made based on their population size for each four regions of Uganda. 8. How random selection was assured? Authors have to explain what the frame to select participants was. 9. While putting recommendation it is better if authors on focused of factors associated with outcome variables.
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dr. Caijun Sun, Sun Yat-Sen University

Comments to the Author:

This manuscript performed a phone survey to investigate the compliance to COVID-19 preventive measures, acceptance and influence factor of COVID-19 vaccines in Uganda. There are numerous major and minor concerns regarding this manuscript.

Thank you, Dr, for raising these important concerns and we have attempted to address the best way we can.

1. There have been many similar investigation, and the innovation of this work is insufficient.

- We Knowledge this concern of innovativeness however the information on adherence and vaccination intent changes over time and predictors may also change over time. This study was conducted just before the second wave of COVID-19 in Uganda and findings could help explain the surge in COVID-19 cases immediately after the study. This can inform future efforts to avoid resurgences.

2. When studying the factors related to the compliance of prevention guidelines and vaccination willingness, multivariate analysis was directly performed. Authors should conduct the single factor analysis first to find the variables with statistical differences, and then performed the multivariate analysis.

- We conducted bivariate analysis (single predictor-outcome analysis before) and used it as basis for choosing variables to include in final model as stated in the methods but since we preferred fewer tables, presented the final model only in the manuscript. We have now however provided single factor analysis (bivariate analysis) results as supplementary file.

3. 1053 respondents were included in this survey. Please state how to calculate the minimum sample size of participants in this survey.

- Thank you for the concern. Sample size was originally calculated and now we have provided the calculation procedures and assumptions

4. No description of the sampling method in this study.

- We have now provided full sampling procedures

5. Was a pre-investigation performed to validate the correctness of their phone questionnaire? Please state how or why not?

- Yes, pre-investigation phone calls with a few selected participants in different languages and this were conducted to determine clarity of the questions and length of time interviews would take on average. This feedback obtained was used to improve the tool clarity and correctness.

- Phone questionnaire was not validated but was developed based on review of WHO documents on COVID-19 and other previously published studies on COVID-19. There was no validated questionnaire available for COVID-19 vaccine intent or adherence to non-pharmaceutical guidelines

6. Attach the questionnaire as an Appendix to help readers better understand the study aims and contents.

- Many thanks for the guidance. A full questionnaire in English has now been added as supplementary file 1.

7. Although the author mentioned that it is important to understand the reasons for the delay or refusal of vaccination (vaccine hesitancy), they did not further analyze the possible correlates and reasons for vaccine hesitancy.

- Thanks for highlighting this. We collected information for not intending to vaccinate and we now highlight them in the manuscript.

8. No information on ethical statement was provided.

- This was actually provided Under Declarations in the subheading "Ethical considerations". This is after discussion section.

9. The quality of English writing needs improvement.

- Thanks for highlighting this important concern, we have read through the manuscript multiple times and we have improved the coherence and also removed any typos. Thank you.

10. Page 3 line 8: "This investigated" should be "This study investigated"

- Thank you for the observation. We have rephrased this.

11. Page 11 line 25: "928/" should be "928"

- Thanks for the observation, I have corrected this.

Reviewer: 2

Mr. Tadesse Nigussie, Salale University

Comments to the Author:

Dear editor thank you for your invitation to review this manuscript.

It is well written and well organized manuscript. I have only the following minor corrections. Authors have clarify.

- Dear Reviewer, Thanks a lot sir for your important comments, we have addressed them as best as we can.

1. How quota was given for age? How age was classified prior to assign quota?

- We have now clarified the sampling to cater for all this quota information and basis for choosing the categories.

2. Telephone number might be registered by adult and user might be children. Author have to show how they overcome this issues.

- Indeed true, a few cases were observed where the registered names are different from those using the phones. If the respondent still met the same requirements (quota-age, gender and location), they were interviewed otherwise not interviewed. These cases accounted for less than 5% and therefore didn't affect our study significantly.

3. Authors have to clearly show the contents of the questionnaire.

- Thank you, I have now attached the questionnaire as suggested.

4. In method section authors have to clearly put how outcome variables were categorized. By putting appropriate citation to set cut off point.

- We have clarified measurement of the outcome variables. We did not see need to cite previously published work on measurement of adherence because we developed our own definition based on our thoughts on how adherence should be measured, one had to adhere to all stated guidelines and not just some of them. For vaccine intent we have now cited a study which categorized the outcome in the same way we did. Thank you.
- 5. For all composite variables like knowledge and perception authors have to clarify how they have measured and classified.
 - Thank you so much, we have now provided this information. We initially didn't include them for fear of not meeting the word limit requirements
- 6. The sample size has to be calculated using appropriate formula which can answer the intended research question. How 1070 participants were proposed? Can 1070 sample be representative for 60 districts?
 - This has been done as you recommended. Thank you. Sample size was calculated a priori. And has now been added.
- 7. Proportional allocation have to be made based on their population size for each four regions of Uganda.
 - This is true and that is what we did and we now provide details on the sampling strategy and quotas used and the numbers in each quota.
- 8. How random selection was assured? Authors have to explain what the frame to select participants was.
 - This is provided in the sampling strategy now. Thank you.
- 9. While putting recommendation it is better if authors on focused of factors associated with outcome variables.
 - This is well noted observation and, in our revision, we have made sure that all recommendation come from the results

VERSION 2 – REVIEW

REVIEWER	Caijun Sun Sun Yat-Sen University
REVIEW RETURNED	03-Mar-2022

GENERAL COMMENTS	The references are not updated, i.e. ref.2, lack of recent publications related to similar topic, ref.21 means what? The quality of English writing needs further improvement.
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REVIEWER	Tadesse Nigussie Salale University
REVIEW RETURNED	16-Mar-2022

GENERAL COMMENTS	Authors have to add citation for definition of adherence they have used.
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VERSION 2 – AUTHOR RESPONSE

Reviewer: 1

Dr. Caijun Sun, Sun Yat-Sen University

Comments to the Author:

The references are not updated, i.e. ref.2, lack of recent publications related to similar topic, ref.21 means what?

The quality of English writing needs further improvement.

Thank you, Dr. Caijun, for raising these important concerns and we have attempted to address the best way we can.

We have updated the references and details about COVID-19 statistics to reflect current trends. Ref 21 has been updated; it was citation for the Kish Leslie sample size formula for cross sectional studies. Some references did not need updating.

Your comment on English language was well appreciated. Indeed, some gross errors were noticed and thorough review and proof reading was done to eliminate most errors. We believe the current document is now of acceptable English quality for the readers.

Reviewer: 2

Mr. Tadesse Nigussie, Salale University

Comments to the Author:

Authors have to add citation for definition of adherence they have used.

- Thank you for your comment but we believe, we do not need to cite this operational definition. We (the authors) proposed and used this definition because we believed that for better protection from COVID-19, people needed to observe "all preventive guidelines all the time" and NOT "just some of the time".