

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Knowledge level and factors influencing prevention of COVID-19 pandemic among residents of Dessie and Kombolcha city administrations, northeast Ethiopia: A population-based cross-sectional study
AUTHORS	Kassa, Ayesheshim; Mekonen, Asnakew; Yesuf, Kedir; Woday, Abay; Bogale, Getahun

VERSION 1 – REVIEW

REVIEWER	Steven Kator lorfa University of Nigeria Nsukka Nigeria
REVIEW RETURNED	06-Sep-2020

GENERAL COMMENTS	<p>The author(s) have attempted an important and timely area of research. Specifically, I believe their findings will help influence COVID-19 policies in Ethiopia and elsewhere around the world. The manuscript however needs further refining, and I have raised some concerns below.</p> <p>The abstract is not well structured and in a bid to fit into the required structure, author(s) have omitted important information about the study participants (e.g gender distribution, age range/mean) and the variables measured in the study.</p> <p>In the abstract, and else where in the manuscript, the author(s) should confirm their use of multivariable logistic regression as against multivariate logistic regression. These approaches have been suggested to differ significantly in a number of ways. Check out the article by Hidalgo and Goodman (2013), I have attached it for you.</p> <p>Edit the manuscript for avoidable language errors and adhere to the use of inclusive language all through. For example, you may use "elderly persons", "older adults/persons" rather than "elders".</p> <p>Pg 3, Ln 64: Update COVID-19 case numbers to match current situation as at when returning the review and also pin a citation to it. You may choose to go with the WHO reports, or the John Hopkins or whichever suits you. Do same for Lines 65-66.</p> <p>Across countries, nationwide lock-downs have been lifted. Consider reflecting this in Line 67 as it is no longer the case.</p> <p>Lines 70-74: Consider restructuring for more clarity. Also note the wrong use of grammar in Ln 73 (...because of this continent has less...)</p> <p>Ln 74: You may choose to enrich your review on weak health care systems in Africa by citing the works of Chukwuorji and lorfa</p>
-------------------------	--

	<p>(2020) as well as that by Olusola et al. (2020). I have also attached these works for your perusal.</p> <p>Lines 75-76: Update case numbers also and anywhere else in the manuscript.</p> <p>Ln 77: State when this State of Emergency was declared and cite a reference source.</p> <p>Ln 86: It is unclear what knowledge of the public means. Do the author(s) mean knowledge of the pandemic?</p> <p>Ln 114: KAP is used here for the first time. It is not clear what it means. I will suggest the abbreviation is explained somewhere earlier in the manuscript, then in subsequent uses, the abbreviation can be adopted, or better still, included in the list of the abbreviations.</p> <p>Lines 126-130: What do the author(s) mean by scientific information regarding COVID-19 is not available at national level? Please state in more clear terms. Also, the justification for using the single population proportion formula does not relate. Consider revising.</p> <p>Ln 135: Do the authors intend to say "double population ..."? Confirm with Ln 127 above.</p> <p>Consider replacing the use of "poor/good knowledge" with "inadequate/adequate knowledge"</p> <p>There are no clear implications of the findings. Please add this to your discussions.</p> <p>The author(s) have not stated limitations to the study.</p> <p>I recommend that the author(s) get the manuscript thoroughly edited for grammar errors and better expression in the English language.</p>
--	---

REVIEWER	Serwaa Dorcas Institute of Life and Earth Sciences (Including Health and Agriculture), Pan African University, University of Ibadan, Nigeria.
REVIEW RETURNED	13-Sep-2020

GENERAL COMMENTS	<p>The manuscript is important as it highlights epidemiological information to be considered in reviewing control programmes in resource limited countries where the COVID-19 pandemic has been reported. However, before it is considered for publication the following should be addressed: In generally, the manuscript has several grammatical errors - sentences should be checked for spelling, syntax (especially the results section) and punctuation. The document also contains some ambiguous sentences (see document for clarification)</p> <p>Comments TITILE: Knowledge level and influencing factors towards prevention of COVID-19 epidemic among residents of Dessie and Kombolcha city administrations, northeast Ethiopia: A population-based cross-sectional study</p> <p>General comments The manuscript is important as it highlights epidemiological information to be considered in reviewing control programmes in resource limited countries where the COVID-19 pandemic has been reported. However, before it is considered for publication the following should be addressed: In generally, the manuscript has several grammatical errors - sentences should be checked for spelling, syntax (especially the results section) and punctuation. The document also contains some ambiguous sentences (see document for clarification)</p>
-------------------------	---

	<p>Specific comments</p> <p>TITLE:</p> <p>Page 2 of 23; Line 2: COVID-19 epidemic among....., the epidemic should be replaced with Pandemic</p> <p>ABSTRACT:</p> <p>It is advised to revise the structure of the “Abstract” to improve the quality of the paper</p> <p>Page 3 of 23; Line 23: he knowledge level which might be affected by several factors has not been well studied..... = Sentence not clear and vague and must be rewritten.</p> <p>Page 3 of 23; Line 25: COVID-19 epidemic among....., the epidemic should be replaced with Pandemic</p> <p>Page 3 of 23; Line 29-32: Eligible participants were household heads and/or the age of above 18 years old..... = Sentence not clear and should be checked for syntax and punctuation. Please break this sentence into two or three, and write correctly.</p> <p>Page 3 of 23; Line 33: The authors lack specific details in the statistical analysis. I suggest the authors to include the statistical software and version was used for the data analysis.</p> <p>INTRODUCTION:</p> <p>Page 4 of 23; Line 60-63: World Health Organization (WHO) declared that the current outbreak constituted a public health emergency of international concern based on growing case notification rates on Chinese and international locations when the virus causes a large burden of morbidity and mortality.... = check sentence for syntax and punctuation. Please break this sentence and write correctly</p> <p>Page 4 of 23; Line 63: COVID-19 has threatened the world with a public health crisis.... = Better to be written or deleted</p> <p>Page 5 of 23; Line 68-70: Effectiveness, applicability and feasibility are attributes which indicate that the interventions are going to be more appropriate in the community as the knowledge regarding any new infection improves the preparedness in both the healthcare professionals and the general public... = first the sentence is not clear, hence has to be rephrased. Second check for syntax and punctuation.</p> <p>Lastly, Paragraph above difficult to flow with, kindly rearrange if possible. Therefore, this portion can be added to the paragraph above.</p> <p>Page 5 of 23; Line 76:The country has not taken national wide lockdown, but the country declared state of emergency ...=kindly rewrite as Although, the country has not instituted a nation-wide lockdown, a state of emergency has been declared.</p> <p>Page 5 of 23; Line 78: government sector has implemented different measurement plans to prevent the virus.....= measurement should be replaced with measures</p> <p>Page 5 of 23; Line 78: In community still there is gap in using prevention mechanism despite many media and organization mobilizes the community and advocacy strategy to curb...=can be rewritten as “despite the advocacy strategies by the media and numerous organizations to curb the spread of the pandemic, there still exist a gap in adoption and adhering to preventive mechanisms within communities.</p> <p>Page 6 of 23; Line 88-89..... There is a huge gap in preventing viruses since it is new emerging little is known about the awareness of the disease communications by general public...=rewrite the sentence</p>
--	--

	<p>Page 6 of 23; Line 89-92..... This all show the need for research in every aspect, but in developing countries the prioritize prevention is the only effective way to cut virus so to do this the community must know and prevent prevention mechanism. For the intervention need to have evidence that show levels of intervention and to continue it..... = full of grammatical errors, kindly revisit and rewrite.</p> <p>METHODS: Page 7 of 23; Line 114-115..... conducted to assess KAP and factors about COVID-19 among the residents of Dessie and Kombolcha City administrations from July 01-07, 2020.... = sentence needs clarification, kindly revisit. Page 7 of 23; Line 122..... Household heads and/or the age of above 18 years old.....= sentence is ambiguous please rewrite Page 7 of 23; Line 126-127..... Since, COVID-19 is the new emerging disease and scientific information related COVID-19 is not available at national level.....Sentence is incomplete and contain grammatical errors, kindly rewrite.</p> <p>RESULTS: Page 10 of 23; Line 189-196.... = the authors should rewrite the sociodemographic characteristics to improve the quality and readability. Page 12 of 23; Line 201-206.... = the authors should rewrite the household level and media related characteristics to improve the quality and readability. Page 13 of 23; Line 210-230.... = the writings can be improved to ensure the quality and readability.</p> <p>DISCUSSION: The discussion section contains multiple explanations which are overly simplistic. More detailed explanations should be provided e.g. Page 14 of 23; Line 242-2245. Overall the discussion is well conducted.</p> <p>CONCLUSION None</p>
--	---

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1 / Steven Kator Iorfa

C4. The author(s) have attempted an important and timely area of research. Specifically, I believe their findings will help influence COVID-19 policies in Ethiopia and elsewhere around the world. The manuscript however needs further refining, and I have raised some concerns below.

The abstract is not well structured and in a bid to fit into the required structure, author(s) have omitted important information about the study participants (e.g gender distribution, age range/mean) and the variables measured in the study.

R4. Corrected

C5. In the abstract, and elsewhere in the manuscript, the author(s) should confirm their use of multivariable logistic regression as against multivariate logistic regression. These approaches have been suggested to differ significantly in a number of ways. Check out the article by Hidalgo and Goodman (2013), I have attached it for you.

R5. Thank you for your reference. Correction made and reference cited.

C6. Edit the manuscript for avoidable language errors and adhere to the use of inclusive language all through. For example, you may use "elderly persons", "older adults/persons" rather than "elders".

R6. Thank you. Corrected.

C7. Pg 3, Ln 64: Update COVID-19 case numbers to match current situation as at when returning the

review and also pin a citation to it. You may choose to go with the WHO reports, or the John Hopkins or whichever suits you. Do same for Lines 65-66.

R7. The current cases and deaths are incorporated and cited

C8. Across countries, nationwide lock-downs have been lifted. Consider reflecting this in Line 67 as it is no longer the case.

R8. Corrected

C9. Lines 70-74: Consider restructuring for more clarity. Also note the wrong use of grammar in Ln 73 (...because of this continent has less...)

R9. Corrected

C10. Ln 74: You may choose to enrich your review on weak health care systems in Africa by citing the works of Chukwuorji and Iorfa (2020) as well as that by Olusola et al. (2020). I have also attached these works for your perusal.

R10. Thank you for your reference. We perfectly cited the articles.

C11. Lines 75-76: Update case numbers also and anywhere else in the manuscript.

R11. It is updated

C12. Ln 77: State when this State of Emergency was declared and cite a reference source.

R12. Corrected

C13. Ln 86: It is unclear what knowledge of the public means. Do the author(s) mean knowledge of the pandemic?

R13. It means "knowledge of the community towards the pandemic". It is corrected

C14. Ln 114: KAP is used here for the first time. It is not clear what it means. I will suggest the abbreviation is explained somewhere earlier in the manuscript, then in subsequent uses, the abbreviation can be adopted, or better still, included in the list of the abbreviations.

R14. "KAP" was stated in the manuscript with mistakes. It is replaced by "knowledge"

C15. Lines 126-130: What do the author(s) mean by scientific information regarding COVID-19 is not available at national level? Please state in more clear terms. Also, the justification for using the single population proportion formula does not relate. Consider revising.

R15. It is revised clearly in the manuscript.

C16. Ln 135: Do the authors intend to say "double population ..."? Confirm with Ln 127 above.

R16. Single population formula used for the first objective and double population proportion formula used to estimate for the second objective. It is stated clearly in the revised manuscript.

C17. Consider replacing the use of "poor/good knowledge" with "inadequate/adequate knowledge"

R17. Your comment is great. We appreciated and have replaced all in the manuscript

C18. There are no clear implications of the findings. Please add this to your discussions.

R18. Added to discussion

C19. The author(s) have not stated limitations to the study.

R19. It was stated at the end of the discussion section.

C20. I recommend that the author(s) get the manuscript thoroughly edited for grammar errors and better expression in the English language.

R20. A thorough editing made to the manuscript.

Reviewer: 2/ Serwaa Dorcas

C21. General comments: The manuscript is important as it highlights epidemiological information to be considered in reviewing control programmes in resource limited countries where the COVID-19 pandemic has been reported. However, before it is considered for publication the following should be addressed: In generally, the manuscript has several grammatical errors - sentences should be checked for spelling, syntax (especially the results section) and punctuation. The document also contains some ambiguous sentences (see document for clarification)

R21. Exhaustively checked and corrected

Specific comments:

TITLE:

C22. Page 2 of 23; Line 2: COVID-19 epidemic among....., the epidemic should be replaced

with Pandemic

R22. It was replaced by pandemic

ABSTRACT:

C23. It is advised to revise the structure of the "Abstract" to improve the quality of the paper. Page 3 of 23; Line 23: he knowledge level which might be affected by several factors has not been well studied..... = Sentence not clear and vague and must be rewritten.

R23. Rewritten and Corrected

C24. Page 3 of 23; Line 25: COVID-19 epidemic among....., the epidemic should be replaced with Pandemic.

R24. It was replaced by pandemic

C25. Page 3 of 23; Line 29-32: Eligible participants were household heads and/or the age of above 18 years old..... = Sentence not clear and should be checked for syntax and punctuation.

Please break this sentence into two or three, and write correctly.

R25. Correction made

C26. Page 3 of 23; Line 33: The authors lack specific details in the statistical analysis. I suggest the authors to include the statistical software and version was used for the data analysis.

R26. Statistical software and their versions included

INTRODUCTION:

C27. Page 4 of 23; Line 60-63: World Health Organization (WHO) declared that the current outbreak constituted a public health emergency of international concern based on growing case notification rates on Chinese and international locations when the virus causes a large burden of morbidity and mortality.... = check sentence for syntax and punctuation. Please break this sentence and write correctly

R27. Correction made to both rephrasing and syntax and punctuation

C28. Page 4 of 23; Line 63: COVID-19 has threatened the world with a public health crisis.... = Better to be written or deleted

R28. Deleted

C29. Page 5 of 23; Line 68-70: Effectiveness, applicability and feasibility are attributes which indicate that the interventions are going to be more appropriate in the community as the knowledge regarding any new infection improves the preparedness in both the healthcare professionals and the general public... = first the sentence is not clear, hence has to be rephrased. Second check for syntax and punctuation.

R29. All corrections made

C30. Lastly, Paragraph above difficult to flow with, kindly rearrange if possible. Therefore, this portion can be added to the paragraph above.

R30.

C31. Page 5 of 23; Line 76:The country has not taken national wide lockdown, but the country declared state of emergency ...=kindly rewrite as "Although, the country has not instituted a nation-wide lockdown, a state of emergency has been declared".

R31. Thank you. Corrected

C32. Page 5 of 23; Line 78: government sector has implemented different measurement plans to prevent the virus.....= measurement should be replaced with measures

R32. Replaced

C33. Page 5 of 23; Line 78: In community still there is gap in using prevention mechanism despite many media and organization mobilizes the community and advocacy strategy to curb...=can be rewritten as "despite the advocacy strategies by the media and numerous organizations to curb the spread of the pandemic, there still exist a gap in adoption and adhering to preventive mechanisms within communities.

R33. Thank you very much for your correction. Corrected

C34. Page 6 of 23; Line 88-89..... There is a huge gap in preventing viruses since it is new emerging little is known about the awareness of the disease communications by general public...=rewrite the sentence

R34. Amendments made

C35. Page 6 of 23; Line 89-92..... This all show the need for research in every aspect, but in developing countries the prioritize prevention is the only effective way to cut virus so to do this the community must know and prevent prevention mechanism. For the intervention need to have evidence that show levels of intervention and to continue it..... = full of grammatical errors, kindly revisit and rewrite.

R35. Thank you so much. As you see from the tracked change, it is revised

METHODS:

C36. Page 7 of 23; Line 114-115..... conducted to assess KAP and factors about COVID-19 among the residents of Dessie and Kombolcha City administrations from July 01-07, 2020.... = sentence needs clarification, kindly revisit.

R36. It is revised

C37. Page 7 of 23; Line 122..... Household heads and/or the age of above 18 years old.....= sentence is ambiguous please rewrite

R37. It is revised

C38. Page 7 of 23; Line 126-127..... Since, COVID-19 is the new emerging disease and scientific information related COVID-19 is not available at national level.....Sentence is incomplete and contain grammatical errors, kindly rewrite.

R38. It is well revised clearly in the manuscript.

RESULTS:

C39. Page 10 of 23; Line 189-196.... = the authors should rewrite the sociodemographic characteristics to improve the quality and readability.

R39. It is improved in the revised one

C40. Page 12 of 23; Line 201-206.... = the authors should rewrite the household level and media related characteristics to improve the quality and readability.

R40. Exhaustively revised

C41. Page 13 of 23; Line 210-230.... = the writings can be improved to ensure the quality and readability.

R41. It is well improved

DISCUSSION:

C42. The discussion section contains multiple explanations which are overly simplistic. More detailed explanations should be provided e.g. Page 14 of 23; Line 242-245. Overall the discussion is well conducted.

R42. Thank you for your ultimate and genuine comments. Explanations given to your comment.

VERSION 2 – REVIEW

REVIEWER	Steven Kator Iorfa University of Nigeria, Nsukka Nigeria
REVIEW RETURNED	19-Oct-2020

GENERAL COMMENTS	I thank the author(s) for their good efforts in responding to the reviewer comments. The manuscript has greatly improved. I recommend it for publication after they effect these few corrections. Title Please change to: Knowledge level and factors influencing prevention of COVID-19 pandemic among residents of Dessie and Kombolcha city administrations, northeast Ethiopia: A population-based cross-sectional study Abstract
-------------------------	--

	<p>Line 24: Change the sentence to; ... knowledge level and factors influencing the prevention of COVID-19....</p> <p>Line 29: Change to: Participants were household heads or members (n=828, >18years) who have lived in the study area for at least two months preceding the survey.</p> <p>Line 34: Change "software are used" to "software were used"</p> <p>Line 40: You omitted "were" between associations and reported</p> <p>Line 50: Please check again to see if "influencing factors" is a necessary keyword. This is in line with the suggestions made earlier.</p> <p>Strengths and limitations of the study: Your point three is unclear. Please consider rephrasing. Do you mean "The quantitative study is not supported by a qualitative study? It is not clear at all and I don't consider this a weakness.</p> <p>Additional information</p> <p>Line 379: Change "was available" to "is available"</p> <p>Please for the sake of the quality of the article, ensure to pass it through English language editing one more time. I believe it can still be improved.</p>
--	--

REVIEWER	Dorcas Serwaa Pan African University of Life and Earth Sciences Institute, Nigeria
REVIEW RETURNED	13-Oct-2020

GENERAL COMMENTS	This is to commend the authors for the improvements they have undertaken on the document. The revisions have been made and your article is acceptable.
-------------------------	--

VERSION 2 – AUTHOR RESPONSE

Reviewer: 1 / Steven Kator Iorfa

Please leave your comments for the authors below

C4. I thank the author(s) for their good efforts in responding to the reviewer comments. The manuscript has greatly improved. I recommend it for publication after they effect these few corrections.

R4. Corrections made

Title

C5. Please change to: Knowledge level and factors influencing prevention of COVID-19 pandemic among residents of Dessie and Kombolcha city administrations, northeast Ethiopia: A population-based cross-sectional study

R5. Corrected

Abstract

C6. Line 24: Change the sentence to; ... knowledge level and factors influencing the prevention of COVID-19....

R6. Corrected

C7. Line 29: Change to: Participants were household heads or members (n=828, >18years) who have lived in the study area for at least two months preceding the survey.

R7. Changed as per the comment

C8. Line 34: Change "software are used" to "software were used"

R8. Corrected

C9. Line 40: You omitted "were" between associations and reported

R9. Corrected

C10. Line 50: Please check again to see if "influencing factors" is a necessary keyword. This is in line with the suggestions made earlier.

R10. Corrected as 'factors'

C11. Strengths and limitations of the study: Your point three is unclear. Please consider rephrasing. Do you mean "The quantitative study is not supported by a qualitative study? It is not clear at all and I don't consider this a weakness.

R11. It is removed

C12. Additional information Line 379: Change "was available" to "is available"

R12. Corrected

C13. Please for the sake of the quality of the article, ensure to pass it through English language editing one more time. I believe it can still be improved.

R13. Edited and corrected again

VERSION 3 – REVIEW

REVIEWER	Steven Kator Iorfa University of Nigeria Nsukka, Nigeria
REVIEW RETURNED	27-Oct-2020
GENERAL COMMENTS	I thank the Author(s) for their diligence and perseverance. I recommend the article for publication. Congratulations.