Author’s response to reviews

Title: Uncontrolled hypertension among patients with comorbidities in sub-Saharan Africa: protocol for a systematic review and meta-analysis

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Author’s response to reviews:

The Editor,

Systematic Reviews

31st October 2019

Dear Editor,

Re: Cover letter for revisions on manuscript titled: Uncontrolled hypertension among patients with comorbidities in sub-Saharan Africa: protocol for a systematic review and meta-analysis.

Thank you for the comments. The authors have considered all the comments and have provided a point-by-point response to all the issues raised as detailed below. The responses are below the comments and they are italicized for ease of following.

Response:
Reviewer reports:

Reviewer #1: Thanks for inviting me to review this manuscript. Authors of this protocol plan to conduct a systematic review of the prevalence of uncontrolled hypertension among patients with comorbidities in sub-Saharan Africa. Authors adequately followed the PRISMA-P recommendations for reporting protocols of systematic reviews.

Response: We are grateful to the reviewer for reporting that our protocol used good guidelines (PRISMA-P) for reporting systematic reviews.

Few comments:

- Did authors considered searching unpublished literature such as thesis or report from health organisations?

Response: Authors agree that we need to also consider searching for unpublished literature thus we have included grey literature in our searches. See lines 43, 46-47, 99, 141-143.

- Authors should carefully consider the potential clinical heterogeneity among included studies (especially that they are including both community and hospital settings).

Response: Thank you for pointing this out. Heterogeneity will be explored and if observed, subgroup analysis will be conducted. We have added text including sub-group analyses by study setting among other variables. See lines 221-226.

- Authors should justify the importance of this review given the 2013 review on the prevalence of uncontrolled HTN generally.

Response: This review is important as it addresses uncontrolled hypertension among patients with comorbidities, which was not addressed by the 2013 review. This review aims to estimate uncontrolled hypertension among patients with comorbidities which are increasing in many developing countries. In addition, many studies have been published since the 2013 review and the status of uncontrolled hypertension may have changed since 2013. We have added some text to clarify this in the background section of the manuscript. See lines 85-88.
Authors should be consistent regarding objectives: "This review aims to estimate the prevalence of uncontrolled hypertension among patients with comorbidities in sub-Saharan Africa." or "This study aims to conduct a systematic review and meta-analysis on the burden of uncontrolled hypertension among patients with comorbidities in SSA". As the later might be understood as more than the prevalence.

Response: Thank you for pointing this out. We have revised the aim in the background of the manuscript to be clearer. See page 88-90.

Reviewer #2: -One of my major concerns is there have been changing in definitions and staging for hypertension, controlled and uncontrolled hypertension especially for the past decade, such as the new 2017 ACC/AHA guideline for classification of hypertension. Therefore, different studies in different timelines likely had different and incomparable prevalence of hypertension due to different used definitions of hypertension in each study. This current protocol mentioned the criteria of the Joint National Committee (JNC), but different studies surely used different definitions, and there are newly studies using the new 2017 ACC/AHA guideline. So, there surely will be difference in the prevalence due to the difference in definition. There is no mention on how will the investigators perform subgroup analysis or take the timeline of study into consideration. My concern is even this protocol is published, it will be difficult that the study itself will show validity and provide impact without taking this important point of definition of hypertension into consideration.

Response: We agree with the reviewer in regards to the changing definition for hypertension but it is unlikely we will find studies in SSA using the newer ACC/AHA guidelines. However, if we find studies using the newer guidelines, we will discuss them but we will not add these studies to get the pooled estimate for uncontrolled hypertension. However, the frequently used hypertension cut-offs in the included studies will be chosen for sub-group analysis. See line 224.

Definitions of comorbidities also need to be taken into consideration. The investigators need to clearly state that they will gather definitions of comorbidities from included studies. E.g. CKD and DM diagnoses.

Response: We have added text in the manuscript to address the above comment under the data synthesis section. See lines 226-227.
-Age should be taken into consideration and planned analysis in different age group. Study participants should be at least 15 years of age; this is very wide range. Older patients have higher prevalence of hypertension.

Response: Thank you for the comment. We will conduct sub-group analysis using different age categories and during analysis if we find small numbers in some of the age categories, we will then collapse some age groups. We have added the age-categories in the sub-group analysis we will conduct. See lines 221-222.

-The aim of this study in introduction is very vague and unclear "to fill the evidence gap in sub-Saharan Africa. This study aims to conduct a systematic review and meta-analysis on the burden of uncontrolled hypertension among patients with comorbidities in sub-Saharan Africa" is not specific and unclear. Need to be rewritten.

Response: We have revised this statement to make the study aim clearer. See lines 88-90.

-Literature Searches and Search terms are incomplete. Search terms in Ovid MEDLINE and Embase are different. The investigators have attached OVID MEDLINE syntax. Please also attach search terms for Embase and other databases as well.

Response: Thank you for this comment. We are aware that the search syntax in the different databases can be different and that is why in the search strategy section we have suggested to adapt and match the search syntax as per the specification of the database used. See Search strategy section lines 151-153. We have attached the search syntax for Ovid MEDLINE, Embase and Web of Science as additional file 2 in this submission.

-Some revision of the English language is needed, there are misspells and incorrect grammars, to mention as several as below:

"leading cause for cardiovascular diseases" It appears that the preposition "for" is incorrect.

"meta-anlysis review protocol" "meta-anlys" is misspelled.

"reported according Preferred Reporting Items for Systematic reviews and Meta-Analysis protocol (PRISMA-P) guidelines" "according" should be "according to"

Response: Thank you for pointing this out we have made the necessary corrections. We have also read through the manuscript and made further corrections to improve the manuscript.
Reviewer #3: I appreciate being asked to make this open peer review report.

I believe that reporting and presentation of methods and results can be improved before the manuscript can be accepted and published.

Response: We have added text to the methods section to improve the manuscript.

We have taken on board all the three reviewers’ comments and we thank the reviewers again for their thoughtful comments on the protocol.

Shukri F. Mohamed – corresponding Author.