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)	A Scoping Review Protocol on Maternal, Newborn, and Child Health Research in Ethiopia
AUTHORS	Chan, Grace; Getnet, Misrak; Olowojesiku, Ronke; Min-Swe, Thein; Hunegnaw, Bezawit; Bekele, Delayehu

VERSION 1 – REVIEW

REVIEWER	Ann-Beth Moller WHO, Switzerland
REVIEW RETURNED	23-Oct-2019

GENERAL COMMENTS	Many thanks for the opportunity to review this research protocol.
	In the letter to the editor it reads that the study will be completed in November 2019. Normally a protocol is published so the authors can get feedback on the their protocol to improve methodology, search strategy or other aspect of the study protocol. As we are in October 2019 it does not make sense to published a protocol as the study is most likely already completed, and the literature search was conducted in January 2019.
	Why did the authors not register the protocol in PROSPORO? (https://www.crd.york.ac.uk/prospero/).

REVIEWER	Bernt Lindtjørn
	University of Bergen, Norway
REVIEW RETURNED	17-Jan-2020
GENERAL COMMENTS	This research protocol represents an important work to define the knowledge gaps in paediatric care in Ethiopia.
	It is praiseworthy that they will use the PRISMA guidelines.
	Unfortunately, many systematic reviews are flawed, and the authors need to clarify some issues. There are some limitations in their research protocol that they should consider:
	 1 Often, and because it is difficult to get full-text copies of previous published papers from Ethiopia, some meta-studies that I have seen limit their analysis to papers they have access to. The authors need to be transparent about this issue. 2 They say that they will review scientific papers, also written in the Amharic language? After having worked in Ethiopia for over 40 years, I am not aware of any peer-reviewed scientific papers in the Amharic language. I doubt that they exist.

 3 The authors also give the impression that they will include reports found in different ministries and non-published reports. They even cite two such reports. Ethiopia is known to produce many reports, and some of them are available online. I have never come across any peer-reviewed reports among the so-called grey-literature. Unfortunately, there are numerous examples of official reports that would suit a political or policy purpose, and I would advise against including such reports. 4 They authors also write about a broad participation of Ethiopian institutions and persons. This is a good statement. Unfortunately, and what we often observe when non-Ethiopian institutions collaborate with Ethiopian institutions, is that this collaboration is very narrow, and seldomly includes a broad spectrum of relevant national institutions. Sadly, American institutions are among those who are least inclusive in such participatory research. The authors need to provide additional details on how they would guarantee a sound collaboration. 5 The review should be limited to properly peer-reviewed papers. Nowadays, there are many Ethiopian researchers who publish in predatory journals.
It seems as if this literature review was completed in November 2019. That means that there is little the authors can do to improve the protocol now, and I therefore question if this is more suitable for an online posting in for example protocols.io

REVIEWER	Mary Kinney
	University of the Western Cape, South Africa
	Save the Children US, South Africa
REVIEW RETURNED	20-Jan-2020

	Company company
GENERAL COMMENTS	General comments:
	Thank you for the opportunity to review this protocol. A scoping
	review on MNCH research in Ethiopia will be useful for future
	research planning and prioritization both for researchers and policy
	makers in Ethiopia as well as for donors and implementing
	partners. The authors clearly describe the need for this review and
	their planned approach for the review process. I have a few
	recommendations for the authors to consider that would
	strengthen the review as well as the protocol paper.
	1. Please add a proposed timeline. You provide the timeframe in
	the letter to the editor but not in the actual text. The journal
	guidelines strictly state that the timeline should be included in the
	manuscript. They also state "if data collection is complete, we will
	not consider the manuscript". Your letter to the editor indicates that
	the review is well underway with anticipation of completion by
	November 2019; thus please ensure that data collection is not yet
	complete for consideration.
	INTRODUCTION
	2. You focus mostly on the maternal and newborn mortality burden
	with little mention of under-5 mortality and no mention of stillbirth
	and mortality for children aged above 5 to 10 years. Please
	expand the framing of the introduction to include the full burden of
	mortality as well as identify where progress has been made (if
	any). For example, you might find more literature on post-neonatal
	under-5 mortality interventions given more investments and
	progress in addressing main causes of death for this age range
	(e.g. vaccines, ORS, iCCM, etc)
	3. Please identify and reference any scoping reviews for MNCH
	that have been undertaken for other countries or settings (eg

regions). If this is the first MNCH scoping review for a specific country that is planning to be published, the review itself becomes more novel and this then should be noted. METHODS AND ANALYSIS
4. Under step 2, you have included three search platforms: PubMed/MEDLINE, EMBASE, and the African Index Medicus. You may want to consider expanding to include others, e.g. SCOPUS, CINAHL, JSTOR, and Web of Science. If you decide to not add others, please explain why you feel the selected search platforms are sufficient.
5. Under step 2, you indicate that the search will not be restricted by time; however there is a start year (1946) and I would recommend you give an end date since more papers will be published during the time of the review. For how long will you add more literature during the review process? Having a clear timeframe (even if expansive range) will strengthen the protocol and process.
 6. Under step 2, you indicate that the review of gray literature is out of the scope of this review. Please provide an explanation or reconsider this approach. Many research studies undertaken and submitted to government and donors as reports are not translated into peer-review journal articles. In some cases, the reports that have the most policy influence do not get published in academia as they served the purpose of translating research into policy without the need to also publish in a journal. 7. Under step 4, consider adding "organization type" to your data extraction. It would be interesting to know if the affiliations of the authors are from academia, development partners, government, or a mix (that includes government or not).
ETHIDS AND DISSEMINATION 8. Page 9, lines 5-12: I commend you for trying to expand the review to include policy relevance of the identified papers. However, you will need to better describe how you plan to systematically assess which papers had policy influence as the current approach described is rather vague. For example, how do you define translation of research into policy and to what degree of influence does there need to be for inclusion? Also how will you determine/validate the influence of the research into policy. The current approach described would like result in highly biased results given only a select few will inform this element of the research.
9. Please add limitations of your review to this section.

VERSION 1 – AUTHOR RESPONSE

Reviewer(s)' Comments to Author:

Reviewer: 1

Reviewer Name: Ann-Beth Moller Institution and Country: WHO, Switzerland. Please state any competing interests or state 'None declared': "None declared".

Please leave your comments for the authors below Many thanks for the opportunity to review this research protocol.

In the letter to the editor it reads that the study will be completed in November 2019. Normally a protocol is published so the authors can get feedback on the their protocol to improve methodology, search strategy or other aspect of the study protocol. As we are in October 2019 it does not make sense to published a protocol as the study is most likely already completed, and the literature search was conducted in January 2019.

[Response] Thank you, our search has yielded 8149 articles. Data collection is ongoing due to the large volume of articles. We added the study dates to the methods section from January 2019 – May 2020.

Why did the authors not register the protocol in PROSPORO? (https://www.crd.york.ac.uk/prospero/). [Response] Thank you for letting us know about PROSPORO. We were not aware PROSPORO would take scoping review protocols. In the future we will register scoping and systematic reviews in PROSPORO prior to starting data abstraction.

Reviewer: 2

Reviewer Name: Bernt Lindtjørn

Institution and Country: University of Bergen, Norway Please state any competing interests or state 'None declared': None

Please leave your comments for the authors below This research protocol represents an important work to define the knowledge gaps in paediatric care in Ethiopia.

It is praiseworthy that they will use the PRISMA guidelines. [Response] Thank you.

Unfortunately, many systematic reviews are flawed, and the authors need to clarify some issues. There are some limitations in their research protocol that they should consider:

1 Often, and because it is difficult to get full-text copies of previous published papers from Ethiopia, some meta-studies that I have seen limit their analysis to papers they have access to. The authors need to be transparent about this issue.

[Response] Thank you, it is challenging to obtained published papers in Ethiopia especially if they are not available online or in international peer-reviewed journals. We revised on page 4 that we will include articles "in peer-reviewed published literature that are accessible online and through interlibrary requests." When we publish the manuscript, we will include in the PRISMA the number of articles indexed and found through our search strategy but unable to be accessed.

2 They say that they will review scientific papers, also written in the Amharic language? After having worked in Ethiopia for over 40 years, I am not aware of any peer-reviewed scientific papers in the Amharic language. I doubt that they exist.

[Response] You're right, we wish to be inclusive and include any articles written in Amharic. We have Amharic speakers on the data abstraction team. We have not found any Amharic written papers which meet our inclusion criteria yet.

3 The authors also give the impression that they will include reports found in different ministries and non-published reports. They even cite two such reports. Ethiopia is known to produce many reports, and some of them are available online. I have never come across any peer-reviewed reports among the so-called grey-literature. Unfortunately, there are numerous examples of official reports that would suit a political or policy purpose, and I would advise against including such reports. [Response] We agree not to include such reports. We do not plan to include any reports or non-published materials in our scoping review. In case there was any confusion, we removed the

paragraph on page 7 "Furthermore, MNCH experts and researchers at Ethiopian academic institutions, research institutions, and NGOs will be actively involved in identifying which published studies have been translated into national policy. References selected for inclusion into the scoping review will be shared with experts, who will identify pertinent MNCH policy documents and the studies used to inform these policy decisions. Based on consultation with experts, the proportion of references in the scoping review that resulted in policy development will be quantified."

4 They authors also write about a broad participation of Ethiopian institutions and persons. This is a good statement. Unfortunately, and what we often observe when non-Ethiopian institutions collaborate with Ethiopian institutions, is that this collaboration is very narrow, and seldomly includes a broad spectrum of relevant national institutions. Sadly, American institutions are among those who are least inclusive in such participatory research. The authors need to provide additional details on how they would guarantee a sound collaboration.

[Response].We agree, we wrote on page 7, "Throughout the process of this review, we intend to involve key stakeholders in-country such that the final conclusions are reflective of the MNCH work being done in Ethiopia. The scoping review is conducted with the Ethiopian Public Health Institute, Federal Ministry of Health and St. Paul's Hospital Millennium Medical College. All authors have an established long-term working relationship on completed and ongoing maternal and child health studies. Data from the review will be summarized and presented during stakeholder meetings with collaborators in Ethiopia to prioritize MNCH research questions. A final report will be developed and disseminated through a peer-reviewed journal." We included the sentence, "The scoping review is conducted with the Ethiopian Public Health Institute (the research arm of the Ministry of Health) and St. Paul's Hospital Millennium Medical College (a hospital and medical college under the Ministry of Health). All authors have an established long-term working relationship on completed and ongoing maternal and child health studies.". This protocol is written as part of a maternal and child health research program in Ethiopia with EPHI and St. Paul's Hospital.

5 The review should be limited to properly peer-reviewed papers. Nowadays, there are many Ethiopian researchers who publish in predatory journals. [Response], we agree we have limited the review to peer-reviewed papers.

[Response], we agree we have inflited the review to peer-reviewed papers.

It seems as if this literature review was completed in November 2019. That means that there is little the authors can do to improve the protocol now, and I therefore question if this is more suitable for an online posting in for example protocols.io

[Response], the review is ongoing with a planned completion in April of 2020.

Reviewer: 3

Reviewer Name: Mary Kinney Institution and Country: University of the Western Cape, South Africa Save the Children US, South Africa Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below General comments:

Thank you for the opportunity to review this protocol. A scoping review on MNCH research in Ethiopia will be useful for future research planning and prioritization both for researchers and policy makers in Ethiopia as well as for donors and implementing partners. The authors clearly describe the need for this review and their planned approach for the review process. I have a few recommendations for the authors to consider that would strengthen the review as well as the protocol paper.

1. Please add a proposed timeline. You provide the timeframe in the letter to the editor but not in the actual text. The journal guidelines strictly state that the timeline should be included in the manuscript.

They also state "if data collection is complete, we will not consider the manuscript". Your letter to the editor indicates that the review is well underway with anticipation of completion by November 2019; thus please ensure that data collection is not yet complete for consideration.

[Response] Thank you, our search has yielded 8149 articles. Data collection is ongoing due to the large volume of articles. We added the study dates to the methods section from January 2019 – May 2020.

INTRODUCTION

2. You focus mostly on the maternal and newborn mortality burden with little mention of under-5 mortality and no mention of stillbirth and mortality for children aged above 5 to 10 years. Please expand the framing of the introduction to include the full burden of mortality as well as identify where progress has been made (if any). For example, you might find more literature on post-neonatal under-5 mortality interventions given more investments and progress in addressing main causes of death for this age range (e.g. vaccines, ORS, iCCM, etc...)

[Response] Thank you for highlighting tis important point. The review captured stillbirths, children under 5 and children aged 5 to 10 years. In the introduction we highlight the improvements in under-5 mortality, "Under-five mortality improved from 166/1000 live births in 2000 to 55/1000 live births in 2019." We also noted there are limited data on stillbirths.

3. Please identify and reference any scoping reviews for MNCH that have been undertaken for other countries or settings (eg regions). If this is the first MNCH scoping review for a specific country that is planning to be published, the review itself becomes more novel and this then should be noted. [Response], thank you for flagging the novelty of our review. In a pubmed search for "scoping review "maternal, newborn, and child health"" we did not find any results. It seems there are no other scoping reviews undertaken in other countries or settings. Much appreciate if you are aware of any we could cite here. We added to the introduction, "this will be the first scoping review in Ethiopia describing the broad, heterogeneous, and complex nature of MNCH research." We mentioned in our strengths section "To our knowledge, this will be the first scoping review describing the landscape of MNCH research in Ethiopia."

METHODS AND ANALYSIS

4. Under step 2, you have included three search platforms: PubMed/MEDLINE, EMBASE, and the African Index Medicus. You may want to consider expanding to include others, e.g. SCOPUS, CINAHL, JSTOR, and Web of Science. If you decide to not add others, please explain why you feel the selected search platforms are sufficient.

[Response] Great point, we used the three most comprehensive search engines.

5. Under step 2, you indicate that the search will not be restricted by time; however there is a start year (1946) and I would recommend you give an end date since more papers will be published during the time of the review. For how long will you add more literature during the review process? Having a clear timeframe (even if expansive range) will strengthen the protocol and process. [Response]. Thank you, we added, "the search will not be restricted by time (e.g. starting in 1946 when articles were indexed) to describe the volume of literature published on MNCH in Ethiopia over

time through January 2019."

6. Under step 2, you indicate that the review of gray literature is out of the scope of this review. Please provide an explanation or reconsider this approach. Many research studies undertaken and submitted to government and donors as reports are not translated into peer-review journal articles. In some cases, the reports that have the most policy influence do not get published in academia as they served the purpose of translating research into policy without the need to also publish in a journal. [Response] We considered including gray literature for the very reasons you mentioned. Gray literature in Ethiopia is largely inaccessible. We are not including reports or non-peer reviewed journals (see reviewer 2, question 3). We decided to exclude gray literature due to feasibility and constraints on resources. By searching the three search platforms, we generated a return of over 8000 articles.

7. Under step 4, consider adding "organization type" to your data extraction. It would be interesting to know if the affiliations of the authors are from academia, development partners, government, or a mix (that includes government or not).

[Response] this is a great point, we needed to balance the various amount of data abstracted with the yield. While we do not include organization type, we have included funding source (federal agency (domestic or international), regional/state agency, academic institution (domestic or international), international agency), country of author, and setting of study (e.g. academic, community-based, laboratory-based).

ETHIDS AND DISSEMINATION

8. Page 9, lines 5-12: I commend you for trying to expand the review to include policy relevance of the identified papers. However, you will need to better describe how you plan to systematically assess which papers had policy influence as the current approach described is rather vague. For example, how do you define translation of research into policy and to what degree of influence does there need to be for inclusion? Also how will you determine/validate the influence of the research into policy. The current approach described would like result in highly biased results given only a select few will inform this element of the research.

[Response] These are all great points. We will develop our approach to systematically address the points raised in the future. This is outside the scope of our review and we have removed this section from the protocol.

9. Please add limitations of your review to this section.

[Response] Thank you, see page two under the limitations section.

REVIEWER	Bernt Lindtjorn
	Centre for International Health, University of Bergen, Bergen,
	Norway
REVIEW RETURNED	28-Mar-2020
GENERAL COMMENTS	The authors have addressed the concerns I had.
REVIEWER	Mary Kinney
	University of the Western Cape; Save the Children US
REVIEW RETURNED	19-Mar-2020
GENERAL COMMENTS	Thank you for addressing the previous comments by the
	reviewers.

VERSION 2 – REVIEW