

## 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

<b>TITLE (PROVISIONAL)</b>	Assessing the impact of screening, early identification, and intervention programs for Chronic Kidney Disease: Protocol for a scoping review.
<b>AUTHORS</b>	Okpechi, Ikechi G; Caskey, Fergus; Gaipov, Abduzhappar; Tannor, Elliot; Hamonic, Laura; Ashuntantang, Gloria; Donner, Jo-Ann; Figueiredo, Ana; Inagi, Reiko; Madero, Magdalena; Malik, Charu; Moorthy, Monica; Pecoits-Filho, Roberto; Tesar, Vladimir; Levin, Adeera; Jha, Vivekanand

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Venuthurupalli, Sree Toowoomba Hospital, Medicine
<b>REVIEW RETURNED</b>	19-Jul-2021

<b>GENERAL COMMENTS</b>	<p>I agree with the fundamental concept of the study. This study may provide answers to important questions asked in kidney circles : 1. to screen or not to screen for early CKD 2. if yes which cohort of population should be screened and most importantly 3 What should be done after early detection of CKD. And finally would it matter to detect early.</p> <p>The methodology outlined is sound and scientific.</p> <p>I Wish the authors made a specific reference to ethnic/race ( although it's one of the variables studied) as an important component of the study. Although the emphasis is on low-income and lower-middle-income countries (LLMICs) CKD is a disproportionately more common and complex in developed countries as well in populations like Indigenous Australians.</p>
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<b>REVIEWER</b>	Lambert, Kelly University of Wollongong Faculty of Business, Centre for Health Research Illawarra Shoalhaven Population
<b>REVIEW RETURNED</b>	21-Sep-2021

<b>GENERAL COMMENTS</b>	<p>Thanks for the opportunity to review this scoping review protocol of screening programs for CKD in LLMIC. The paper is well written overall. There are a number of areas for improvement however.</p> <p>1. Abstract.</p> <ul style="list-style-type: none"><li>• Introduction. The detail on why this review is needed is too brief. Please expand this to provide some more information on why the review is needed. For example, expand the sentence about the aims and be more explicit if this includes all screening programs in LMIC or LIC or both. I think it is also unclear what is meant by advance screening toolkits</li></ul> <p>2. Introduction</p>
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	<ul style="list-style-type: none"> <li>• Page 5 line 42 – is this US dollars for the cost of HD in Nepal</li> <li>• Suggest the aim is to synthesise available evidence regarding screening in LLMIC rather than the term 'assess all attempts made' as i am not clear what this means. The aim should also be more explicit eg 'construct a toolkit of recommendations regarding screening for CKD in LLMIC'</li> </ul> <p>3. Method:</p> <ul style="list-style-type: none"> <li>• The scoping review process has been updated since the original process outlined by Arksey and O Malley and this as in response to known problems with the original process. Please clarify which process you will follow and reference accordingly.</li> <li>• Are there are sources in the grey literature that may be informative eg policy documents pr position papers or local nephrology society webpages ?</li> <li>• The consultation process is important but not enough detail is provided on who, how or when people will be contacted. Will these be facilitated by the ISN given the funding ?</li> <li>• Will you be searching in multiple languages given the nature of the search in LLMIC ?</li> </ul>
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<b>REVIEWER</b>	Hurst, Helen Manchester University NHS Foundation Trust, Elderly Health
<b>REVIEW RETURNED</b>	24-Sep-2021

<b>GENERAL COMMENTS</b>	<p>Thank you for a very clearly written protocol</p> <p>I have a couple of comments : the consultation section is very brief and yet it maybe very important in this review as it aims to target LMIC I would have thought specific strategies may need to be explored</p> <p>Identifying barriers will be an important part of this review and possible answered in question 4 which is another reason to have some stakeholder involvement with clear strategies</p> <p>This also then raises a question of why no PPI if one of the questions relates to intervention programs however I understand at this stage why it may not be appropriate I think its always worth considering and stating why no PPI rather than just stating there is no PPI</p>
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### VERSION 1 – AUTHOR RESPONSE

#### Reviewer: 1

Dr. Sree Venuthurupalli, Toowoomba Hospital  
Comments to the Author:

1. I agree with the fundamental concept of the study. This study may provide answers to important questions asked in kidney circles: 1. to screen or not to screen for early CKD 2. if yes which cohort of population should be screened and most importantly 3 What should be done after early detection of CKD. And finally, would it matter to detect early. The methodology outlined is sound and scientific.

**Response: We thank Dr Venuthurupalli for their very generous comments about our proposed study. Yes, the items you identified are the core aspects of what we hope that our study will be able to provide answers to, including whether it matters to early detect CKD in some populations or not.**

2. I Wish the authors made a specific reference to ethnic/race (although it's one of the variables studied) as an important component of the study.

Response: Thank you for this comment and we agree that race / ethnicity would be an important variable to assess in this study. Although race / ethnicity is not often well described in such studies, we will make all attempts to collect data on race and have entered the following comments to represent information that will be captured on race / ethnicity. (page 13)

*“We will also extract data on race / ethnicity of the population screened. Although, race is not often well defined in numerous studies, we will capture data using the following races (if reported): Arabs / Middle Easterners, Asians, Black Africans / African Americans, Caucasians, Hispanics, Indigenous groups, Latin Americans, others,”*

3. Although the emphasis is on low-income and lower-middle-income countries (LLMICs) CKD is a disproportionately more common and complex in developed countries as well in populations like Indigenous Australians.

Response: Thank you for this comment. Although we frequently referred to LLMICs, it was to highlight the burden of CKD in these regions that have low access to care. This study, however, will assess studies on early CKD identification from all world regions and income groups. We have therefore now updated the last sentence of the first paragraph in the introduction to read as follows: (page 5)

*“Even more alarmingly, although increase in CKD is occurring globally, most of this growth is projected to be in low-income and lower-middle-income countries (LLMICs) and amongst disadvantaged and indigenous communities in high income countries (HICs) where access to care is significantly limited.”*

## Reviewer: 2

Dr. Kelly Lambert, University of Wollongong Faculty of Business, Illawarra Shoalhaven Local Health District

Comments to the Author:

Thanks for the opportunity to review this scoping review protocol of screening programs for CKD in LLMIC. The paper is well written overall.

Response: We thank Dr Lambert for this comment.

### 1. Abstract.

• Introduction. The detail on why this review is needed is too brief. Please expand this to provide some more information on why the review is needed. For example, expand the sentence about the aims and be more explicit if this includes all screening programs in LMIC or LIC or both. I think it is also unclear what is meant by advance screening toolkits

Response: Thank you. We have updated the relevant sections of the abstract to expand the aims of the study and to clarify that the study will not be limited to low-income or lower-middle income countries but will include all countries. We also believe we have provided more details about the study in the Introduction section of the manuscript. Please see updated sentence in the abstract section on the study aims below: (page 3)

*“The aim of this scoping review is to synthesize available evidence on early CKD identification programs in all world regions and income groups. The study will also identify efforts that have been made to utilize interventions and implementation of early identification programs for CKD across countries and income groups.”*

## 2. Introduction

- Page 5 line 42 – is this US dollars for the cost of HD in Nepal

Response: Yes, the cost is in US dollars and we have updated it statement to reflect this: (page 5)

*“The annual cost of HD in Nepal is about USD\$2,500, far higher than the minimum wage.”*

- Suggest the aim is to synthesise available evidence regarding screening in LLMIC rather than the term ‘assess all attempts made’ as i am not clear what this means. The aim should also be more explicit eg ‘construct a toolkit of recommendations regarding screening for CKD in LLMIC’

Response: Thanks for this comment. As we have clarified, in the comment you provided in the abstract, the study is not limited to LLMICs. We have further expanded the aim of the study in the relevant section in the Introduction as shown below: (page 9)

*“Our aim is to synthesize available evidence on early CKD identification programs in all world regions and income groups and to use the strengths and weaknesses of such programs into developing a toolkit that can be used by nephrologists across all income groups for early identification and intervention programs in CKD.”*

## 3. Method:

- The scoping review process has been updated since the original process outlined by Arksey and O Malley and this as in response to known problems with the original process. Please clarify which process you will follow and reference accordingly.

Response: As we noted, we used the Arksey and O’Malley framework to develop this review. We also note that the framework has been updated by others and referenced such updates including one from the JBI committee (Peters et al. 2021). This has enabled us to update sections of the manuscript, including how we will collate and analyze the data: (page 9)

*“We will be guided by the methodological framework for conducting scoping studies developed by Arksey and O’Malley in 2005.<sup>47</sup> This framework has been further enhanced by work done by others including the JBI International Committee.<sup>48-51</sup>”*

- Are there are sources in the grey literature that may be informative eg policy documents pr position papers or local nephrology society webpages?

Response: We believe there could be sources in grey literature that will be informative for identifying policy documents or position papers. As we stated in the methods section on identifying relevant studies, *“We will also search grey literature (including ProQuest Dissertations & Theses Global, and Conference Proceedings Citation Index [Clarivate Analytics]) using recommended resources in consultation with our medical librarian (LH).”* We have, however, entered the comment below in the section on identifying relevant studies: (page 11)

*“However, we will specifically hand-search for information (e.g., policy documents or position papers) on guidelines for CKD early identification / screening for countries and regions that will be represented in our study.”*

- The consultation process is important but not enough detail is provided on who, how or when people will be contacted. Will these be facilitated by the ISN given the funding?

Response: We agree that the process of consultation is very important in this exercise. We have updated the section to show how and when consultation will need to be carried out and included the comment below: (page 14)

*“Consultation will be necessary after selecting studies to be included and only if we are unable to identify online policy documents on early CKD identification for countries represented in selected studies. This process will be facilitated by members of the ISN Regional Board (<https://www.theisn.org/about-isn/governance/regional-boards/>) for countries represented in selected studies.”*

- Will you be searching in multiple languages given the nature of the search in LLMIC?

Response: Yes, we mentioned that there would be no language restrictions and again as previously clarified, the study will not be limited to LLMICs (page 12)

### Reviewer: 3

Dr. Helen Hurst, Manchester University NHS Foundation Trust  
Comments to the Author:  
Thank you for a very clearly written protocol

Response: We thank Dr Hurst for this comment

1. The consultation section is very brief and yet it may be very important in this review as it aims to target LMIC I would have thought specific strategies may need to be explored

Response: We have updated the consultation process.

2. Identifying barriers will be an important part of this review and possible answered in question 4 which is another reason to have some stakeholder involvement with clear strategies

Response: We agree that this study is important, however, identifying barriers to early CKD identification is not one of the aims of this scoping review. It is possible that efforts to integrate such programs into policy may identify some barriers, however, we will not be assessing barriers in this study. Further, once we have identified all early detection studies through this scoping review, subsequent work will explore more specific questions such as barriers.

3. This also then raises a question of why no PPI if one of the questions relates to intervention programs however, I understand at this stage why it may not be appropriate I think it's always worth considering and stating why no PPI rather than just stating there is no PPI

Response: Thank you for this comment. Yes, at this stage, we do not feel it is appropriate to involve patients and the public. However, this scoping review will likely be a precursor to systematic reviews that will build upon such themes and generate specific questions that will allow us to engage patients and the public. We have, however, expanded on this in the manuscript, as you suggest. (page 14)

*“Patients and the public will not be involved in this scoping review; however, the ISN is seeking to establish a globally representative patient advisory group. It would be appropriate for such a group to make input into subsequent, more specific research questions that are generated from studies identified in this scoping review.”*

## VERSION 2 – REVIEW

<b>REVIEWER</b>	Venuthurupalli, Sree Toowoomba Hospital, Medicine
<b>REVIEW RETURNED</b>	08-Nov-2021

<b>GENERAL COMMENTS</b>	Thank you very much for addressing my concerns and feedback. I have no other comments. Looking forward to the study.
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<b>REVIEWER</b>	Hurst, Helen Manchester University NHS Foundation Trust, Elderly Health
<b>REVIEW RETURNED</b>	31-Oct-2021

<b>GENERAL COMMENTS</b>	Thank you for taking on board the recommendations I have no further comments
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