

## 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>	Barriers and Facilitators to Recruitment of South Asians to Health Research: A Scoping Review
<b>AUTHORS</b>	Quay, Teo; Frimer, Leora; Janssen, Patricia; Lamers, Yvonne

### VERSION 1 - REVIEW

<b>REVIEWER</b>	Iris Lesser Simon Fraser University
<b>REVIEW RETURNED</b>	14-Nov-2016

<b>GENERAL COMMENTS</b>	<p>This is a very interesting and necessary scoping review of the barriers and facilitators of including South Asians and clinical trials and provides interested readers some key ideas for improving recruitment in this community.</p> <p><b>Introduction</b></p> <p>It would be helpful to identify what the definition of South Asian is rather than simply stating 'including people identifying as Pakistani and Indian'.</p> <p>What is meant by 'alternate ethnicity'? It would be helpful to state who the comparison group is i.e. Europeans?</p> <p>The second paragraph starts by discussing self report data and then moves into objective data. It would be more informative to discuss objective data separately as it is more informative than self reported data and there is a large amount of research surrounding the health disparities within the South Asian population.</p> <p>The third paragraph of the introduction is very informative regarding</p>
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the importance of this scoping review.

### **Methods**

It would be helpful to briefly describe the methods of Arksey and O'Malley for the reader.

### **Results**

Given some of the unique cultural barriers in the female South Asian population were you able to assess sex differences within your literature?

Very interesting themes were pulled out of your literature search that are helpful in conducting research studies within the South Asian population.

Can any of the categories within your table 3 and 4 be collapsed down to more effectively illustrate the key barriers and recruitment strategies for the reader? It is difficult to pull out where the most common themes are given the vast number of categories.

### **Discussion**

Very interesting discussion regarding some of the key issues regarding South Asian patient recruitment. Given the scope of the literature search these are excellent summative ideas. As a researcher who has conducted a clinical trial in South Asian women it is a shame that some of the effective recruitment strategies used within the research are not mentioned. However, it is understandable that the key words used in this search would only pull up articles that directly assessed the feasibility of conducting research in this community.

<b>REVIEWER</b>	Dr Maria Horne University of Leeds, UK  Undertaking research/reviews re South Asian people but not around recruitment.
<b>REVIEW RETURNED</b>	24-Nov-2016

<b>GENERAL COMMENTS</b>	<p>Relevance and originality of the study The study aims are clear and relevant. Few reviews have addressed this important area. Therefore, these findings have national importance.</p> <p>General comments: The paper is fairly well written and structured, but there are some punctuation and syntax errors. The title is clear and demonstrates focus on subject area. The article is within the scope and remit of the BMJ Open.</p> <p>Abstract Reflects the content of the paper and is relatively succinct. The take home message is clear.</p> <p>Introduction You have used the term South Asian, but not specified what you mean by this. South Asians are a heterogeneous group of people – do you only just mean those people from Pakistan and India. Please define what you mean by South Asian. The review aims were clearly outlined.</p> <p>Method The method and search strategy is adequately described, but the databases searched could have been expanded to ensure that a thorough search has been conducted on the appropriate databases – why just PubMed and Cochrane? Page 9 para 1: Justify why no formal data synthesis or assessment of intervention effectiveness was undertaken for clarity. Page 9 para 1: Why was quality appraisal not undertaken and out of the scope of the review? Again, clarify for the reader. It is not clear from the method if the quality of assessment and data extraction was validated by a second author.</p> <p>Results Page 9: Which papers and the reasons for exclusion of papers needs to be discussed in more depth. Page 11 para 2 lines 20/21: Reference which were qualitative studies and which were survey based. Page 11 para 2 line 25: You say 'limited empirical evidence on the effectiveness of the various recruitment strategies discussed was available' which suggest there was some? Reference these accordingly. Page 11 para 2 lines 27-29: You state that 'most studies were conducted in the UK and dealt with recruitment of clinical populations to clinical trials'. Which ones? Reference appropriately. Page 11 para 3 lines 45-49: You state that it '...was reported that higher social class.....etc' Which studies? Support with appropriate references.</p>
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	<p>Page 14 para 1 lines 4-45: This section needs to be supported with references as to which studies you are referring to.</p> <p>Discussion The discussion provides an impartial summary of the results and appears to be supported by the data presented. Comparison with the existing literature has been undertaken.</p> <p>Page 18 para 1 line16: This should read '...minority group in health research'</p> <p>Page 18 para 2 line 30: You state that as a result of strategies that aim to capitalise on altruism and awareness may systematically exclude South Asians of lower socioeconomic status. Is this not the case for other all groups of low SES? Some further critical discussion is required here to provide a more nuanced account supported by the literature.</p> <p>Page 19 lines 8-12: Support statement with reference to the literature/research.</p> <p>Page 19 lines 38-56: Support statements with reference to the literature/research.</p> <p>Page 21 para 1: This section could do with some punctuation for greater clarity.</p> <p>Page 21 para 2: Strengths and limitations have been discussed. However, why just recruitment strategies in a Canadian settings? Is there not some international relevance here?</p> <p>Page 23 lines 31-36: Please clarify/explain how you would quantitatively evaluate to determine the relative effectiveness and value.</p> <p>Conclusions The conclusions appear to be supported by the data. Implications for practice and future research have been briefly discussed.</p> <p>Page 23 lines 42-45: some syntax errors.</p> <p>Page 23 line 47: As well as reducing healthcare spending, would it not reduce inequalities in health?</p> <p>Tables The tables do not appear to be missing data and are easy enough to follow.</p>
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<b>REVIEWER</b>	Veronica Ranieri PhD University College London, Gower Street, London WC1E 6BT UK
<b>REVIEW RETURNED</b>	19-Dec-2016

<b>GENERAL COMMENTS</b>	<p>This is a well-written scoping review outlining the facilitators and barriers to recruiting South-Asian individuals to a health research study. It may be useful to researchers who are looking to recruit South-Asian participants as it details both what is known to work or not work, as well as highlight what is missing within the literature. I think the paper should be accepted subject to the changes below:</p> <p>Introduction</p>
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	<p>P2S2: In what way was geography a barrier? Was it distance from medical centres?</p> <p>P3S3: Please change 'it has been reported' to an active tense. Please do this throughout the document.</p> <p>P4S2: However, South Asians are underrepresented in research...and therefore excluded from decisions pertaining to the delivery of healthcare?</p> <p>P4S6: In what way are these studies not representative of a heterogenous population?</p> <p><b>Methods</b>  Please describe why a scoping review was more justified than a systematic review.  Data Sources: Where did the authors go to search for the grey literature? Why were Pubmed and the CL chosen? Were these sufficient databases to source literature from?  Please include a search strategy as a supplementary document.  Study selection: Why were commentaries and narrative reviews excluded?  Data abstraction: Why was a quality appraisal not conducted? Why was it outside the scope of the review?</p> <p><b>Results</b>  Study characteristics: P3S2: Patients in hospital: Does this refer to a general hospital cohort with unspecified diagnosis?  Barriers: P1S1: Perception of risk of adverse effects...such as?  P1S4: researcher antipathy...in what way?  P1S5: Which were the narrow entry criteria?</p> <p><b>Discussion</b>  P1S2: strategies mentioned twice. Perhaps change word in on instance.  P2S2: Is lower SES linked with lower altruism? References?  P4S3: Please include references.  P5S2: What do the authors mean by unintended outcomes?  P5S5: What do the authors mean by legacy?  P6S16: Why did the authors not complete a quality assessment of the data?</p> <p><b>Supplementary</b>  Please include a completed PRISMA checklist.</p>
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<b>REVIEWER</b>	Anne-Le Morville Metropolitan University College Denmark
<b>REVIEW RETURNED</b>	22-Dec-2016

<b>GENERAL COMMENTS</b>	<p>Review – BMJ Open  Barriers and facilitators to recruitment of South Asians to Health Research: A Scoping review</p> <p>Dear authors  Thank you for your contribution to start this important discussion. I am so pleased that the discussion is starting to move beyond very</p>
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narrow and few journals.

That said, I also find some issues and amongst those are a lack of definitions, which makes the manuscript unclear. I am aware that it is hard as definitions of ethnic groups differ, but it is worth to reflect on this as it has a bearing on your results.

You have chosen to focus on recruiting for research, but what about drop-outs, which is another well-known problem? Please state why or make it clear that drop-outs are (not?) part of the study.

#### Abstract and summary

p4, line 14: You use the term several countries, but given your results I would write 'few' as it is only UK, and then one from US, Australia and India each.

p4, line 17: I find that your results and the barriers show that there is a general problem.

#### Introduction

p5, line 5: I need to know what the term South Asians cover, so please define.

p5, line 10: You give some interesting statistics, but I would also like to know how large a group South Asians cover in the UK, and is there comparable numbers on how the population has grown in Canada, and how large were the increase in the UK? You mention this on the next page, but why not here?

You also write that Pakistani and Indian were part of this group, but what about the Canadian group? Which groups are pre-dominant in the UK and Canada?

p5, line 32: Conventional medicine? Please define the term, as conventional medicine within Canada and the UK are quite different from mainland China.

p5, line 47: Please define who you refer to as 'alternate ethnicity'.

p6, line 49: Please define 'other countries'.

#### Methods

The Methods section is the weak link in your manuscript and needs a serious revision.

p7, line 6: I need more information on your method, why you have chosen this method and its aim as opposed to a systematic review. Also which parts you have used from respectively Arksey & O'Malley and Levac et al., as they differ. Also explain why you have chosen two specific research questions, as a scoping review are not guided by focused questions as in a systematic review, but by a requirement to identify relevant literature.

p7, line 29: I do not understand why you did not search data-bases such as Cinahl and Psychinfo, as they often provide relevant studies for topics like yours. So please explain and elaborate a bit more on

this discussion in the limitations section.

p7, line 38: This part about your search is rather confusing. You write when your original search was executed (Jan 2004 to April 2016), but later (p9, line34) you write that you made an up-date in April 2016. Is it a typo and did you search for articles published between 2004 to 2016? And if so, when was the original search performed?

You also write that the up-date revealed 199 articles of which you chose three for full-text review, but were they included? How is this illustrated in your flow-chart?

p8, line 14: Even thinking about using Google translate as a translation tool regarding scientific literature raises a red flag that this search and study may lack an understanding of the thoroughness that is needed, regarding including and using literature.

p8, line 47: You reached agreement about inclusion through discussion, but how many of the authors took part in this discussion?

p8, line 56: Please describe this data extraction form and how it was piloted. You need to describe your analytic process in more detail and provide some references on the chosen method.

#### Results

Your results section needs a major revision too.

Your text repeats more or less what I can read in table 3 and 4. Tables are meant to provide information that supports the text, not repeat the information.

Given your topic I think that you can provide a more meaningful text by locating the important structures and information from the literature and then categorize this into themes. Both the content of barriers and strategies could be structured into some interesting sub-themes, which could be basis for at more substantial discussion.

#### Discussion

You have very few references, so please link your statements to the articles in question.

Despite the above, your discussion is ok, but needs some attention too.

I wonder why you do not discuss the problem of even developing adequate research tools. I know that you focus is on recruitment, but a major problem here is also the drop-outs as I have mentioned before.

p18, line 10: you only present that you have found facilitators, but most of your results is about barriers.

p19, line 5: you present that the researcher is a physician, but did your literature only include physicians as main investigators? If so this should be presented earlier on, as not all research include physicians.

p20, line 25: You mention the acts that support the inclusion of

	<p>minority groups in the US, and its lack in Canada, but how is this in the UK? Most of your literature comes from the UK.</p> <p>p21, line 52: As this is a scoping review, I would not use the term 'generalizability', which is mostly used in statistical contexts. I know that this can be discussed, but I find that whether the results can be transferred would be a more correct term.</p> <p>P23, line 8: I think that it would be good idea to unfold your part on community based participatory research, as this seems to be one of the methods that really holds a promise to not only recruit, but also prevent drop-outs. Furthermore, I think that you in this context should discuss the aim of the research, which might not be felt as relevant for the South Asians.</p>
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## VERSION 1 – AUTHOR RESPONSE

### REVIEWER 1

**Reviewer Name: Iris Lesser**

**Institution and Country: Simon Fraser University**

**Please state any competing interests: None declared**

This is a very interesting and necessary scoping review of the barriers and facilitators of including South Asians into clinical trials and provides interested readers some key ideas for improving recruitment in this community.

*Thank you for the positive feedback.*

#### Introduction

It would be helpful to identify what the definition of South Asian is rather than simply stating 'including people identifying as Pakistani and Indian'.

*The definition for South Asian ethnicity introduction has been specified in the introduction (Page 9 – Line 14-15) and includes Sri Lankan, Bangladeshi, Pakistani, Nepalese, Bhutanese, Maldivian, and Indian as indicated in the Methods section and Table 1.*

What is meant by 'alternate ethnicity'? It would be helpful to state who the comparison group is i.e. Europeans?

*The sentence has been updated for clarity to reflect the ethnic groups addressed by the cited study. (Page 5 – Line 13)*

The second paragraph starts by discussing self-report data and then moves into objective data. It would be more informative to discuss objective data separately as it is more informative than self-reported data and there is a large amount of research surrounding the health disparities within the South Asian population.

*Thank you for this suggestion. We have moved the discussion about health disparities ahead of the discussion about health access and self-reported health. (Pages 5-6)*

The third paragraph of the introduction is very informative regarding the importance of this scoping review.



*We thank the reviewer for this comment.*

#### Methods

It would be helpful to briefly describe the methods of Arksey and O'Malley for the reader.

*We included a description of the methods by Arksey and O'Malley in the Methods section (Page 8 – Lines 3 to 9)*

#### Results

Given some of the unique cultural barriers in the female South Asian population were you able to assess sex differences within your literature?

*Unfortunately, as we could not directly compare studies due to the study design of our review, heterogeneity across included studies, and the absence of objective outcomes, sex (biological construct) differences were not formally explored. Further, there was insufficient information within the reports to comment on gender (social construct).*

Very interesting themes were pulled out of your literature search that are helpful in conducting research studies within the South Asian population.

*Thank you for this feedback.*

Can any of the categories within your table 3 and 4 be collapsed down to more effectively illustrate the key barriers and recruitment strategies for the reader? It is difficult to pull out where the most common themes are given the vast number of categories.

*Thank you for this suggestion. We have created high-level categories to group the barriers and strategies into more digestible themes (highlighted in yellow) (see Tables 3 and 4). These themes are also discussed in the Barriers (Page 13-14) and Recruitment Strategies sections. (Page 17-18)*

#### Discussion

Very interesting discussion regarding some of the key issues regarding South Asian patient recruitment. Given the scope of the literature search these are excellent summative ideas. As a researcher who has conducted a clinical trial in South Asian women it is a shame that some of the effective recruitment strategies used within the research are not mentioned. However, it is understandable that the key words used in this search would only pull up articles that directly assessed the feasibility of conducting research in this community.

*Thank you for bringing up this limitation and for your positive feedback on our discussion. We acknowledge that this scoping review may have left out certain recruitment strategies that were not captured within the type of research we evaluated.*

## REVIEWER 2

**Reviewer Name: Dr Maria Horne**

**Institution and Country: University of Leeds, UK**

**Please state any competing interests: Undertaking research/reviews re South Asian people but not around recruitment.**

Relevance and originality of the study

The study aims are clear and relevant. Few reviews have addressed this important area. Therefore, these findings have national importance.

*We thank the reviewer for this comment.*

General comments: The paper is fairly well written and structured, but there are some punctuation and syntax errors. The title is clear and demonstrates focus on subject area. The article is within the scope and remit of the BMJ Open.

*We thank the reviewer for this comment.*

Abstract

Reflects the content of the paper and is relatively succinct. The take home message is clear.

*Thank you.*

Introduction

You have used the term South Asian, but not specified what you mean by this. South Asians are a heterogeneous group of people – do you only just mean those people from Pakistan and India. Please define what you mean by South Asian. The review aims were clearly outlined.

*The definition for South Asian ethnicity in the introduction has been specified (Page 9 – Lines 14-15) and includes Sri Lankan, Bangladeshi, Pakistani, Nepalese, Bhutanese, Maldivian, and Indian as indicated in the Methods section and Table 1.*

Method

The method and search strategy is adequately described, but the databases searched could have been expanded to ensure that a thorough search has been conducted on the appropriate databases – why just PubMed and Cochrane?

### Additional Databases

*We thank the reviewers for their constructive feedback. While revising our manuscript, we expanded our search to CINAHL and PsycINFO and found 645 potentially relevant titles and abstracts, 15 potentially relevant full-texts and included 2 further studies.; we included additional text in the Methods and Results sections to describe the augmented methods and to incorporate the two new studies into the content of the report.*

Page 9 para 1: Justify why no formal data synthesis or assessment of intervention effectiveness was undertaken for clarity.

*As noted by Levac et al.[4] regarding the purpose of scoping reviews, "In these situations, scoping studies are ideal because researchers can incorporate a range of*

*study designs in both published and grey literature, **address questions beyond those related to intervention effectiveness...***

*An evaluation of intervention effectiveness or the impact of barriers was outside of the scope of our review, also owing to the wide spectrum of study designs we included and the resultant lack of objective outcome measures and methodological heterogeneity, which prevent a formal synthesis.*

Page 9 para 1: Why was quality appraisal not undertaken and out of the scope of the review? Again, clarify for the reader.

See [statement on quality assessment](#) presented in response to an earlier comment provided in response to the Editorial Requirements.

#### Statement on Quality Assessment

As noted by Peters et al.[1] via Tricco et al.[2]

*“Scoping reviews are used to present a broad overview of the evidence pertaining to a topic, **irrespective of study quality**, and are useful when examining areas that are emerging, to clarify key concepts and identify gaps...”*

Further, Arksey and O'Malley[3] state:

*“First, a systematic review might typically focus on a well-defined question where appropriate study designs can be identified in advance, whilst a scoping study tends to address broader topics where many different study designs might be applicable. Second, the systematic review aims to provide answers to questions from a relatively narrow range of quality- assessed studies, **whilst a scoping study is less likely to seek to address very specific research questions nor, consequently, to assess the quality of included studies**”.*

*Consistent with current guidance for scoping reviews, we did not conduct quality appraisal. The reason for foregoing quality appraisal in scoping reviews has been attributed to the wide spectrum of evidence that scoping reviews aim to identify, which often includes types of studies that do not have validated quality appraisal tools or that sit lower on the hierarchy of evidence. Further, as scoping reviews don't aim to quantify the effect of an intervention, the context provided by a quality assessment as required of systematic reviews to frame the effect estimate is not necessary.*

It is not clear from the method if the quality of assessment and data extraction was validated by a second author.

*No quality assessment was completed. Data extraction was conducted in duplicate. We have clarified this in text (Page 10, Line 10)*

#### Results

Page 9: Which papers and the reasons for exclusion of papers needs to be discussed in more depth.

*Reasons for exclusion are now discussed in text (Page 11 – Lines 8 and 9). They are also noted in Figure 1.*

Page 11 para 2 lines 20/21: Reference which were qualitative studies and which were survey based.

*The study designs are noted in Table 2. We have included a mention of this in the text in the Study Characteristics section (Page 11, Lines 15-16).*

Page 11 para 2 line 25: You say 'Limited empirical evidence on the effectiveness of the various recruitment strategies discussed was available' which suggest there was some? Reference these accordingly.

*These studies have been cited (Page 13 – Lines 12-13)*

Page 11 para 2 lines 27-29: You state that 'most studies were conducted in the UK and dealt with recruitment of clinical populations to clinical trials'. Which ones? Reference appropriately.

*These references have been added (Page 13 – Lines 14-15)*

Page 11 para 3 lines 45 -49: You state that it '...was reported that higher social class.....etc' Which studies? Support with appropriate references.

*Reference has been added (Page 13 – Line 24)*

Page 14 para 1 lines 4-45: This section needs to be supported with references as to which studies you are referring to.

*References have been added throughout the paragraph and are also noted in Table 3 (Page 17)*

#### Discussion

The discussion provides an impartial summary of the results and appears to be supported by the data presented. Comparison with the existing literature has been undertaken.

*We thank the reviewer for this comment.*

Page 18 para 1 line16: This should read '....minority group in health research'

*Change has been made. Page 21 Line 7.*

Page 18 para 2 line 30: You state that as a result of strategies that aim to capitalise on altruism and awareness may systematically exclude South Asians of lower socioeconomic status. Is this not the case for other all groups of low SES? Some further critical discussion is required here to provide a more nuanced account supported by the literature.

*Thank you for your comment. We have added further information regarding the influence of socioeconomic status on recruitment strategies and willingness to participate (Page 21, Line 13-16)*

Page 19 lines 8-12: Support statement with reference to the literature/research.

*We appreciate this suggestion. Given the number of references, we have referred to Table 3 which contains all the details and references to support these statements. (Page 22, Line 9)*

Page 19 lines 38-56: Support statements with reference to the literature/research.

*References have been added (Pages 22-23).*

Page 21 para 1: This section could do with some punctuation for greater clarity.

*Thank you for this suggestion. The paragraph has been revised accordingly. Page 24.*

Page 21 para 2: Strengths and limitations have been discussed. However, why just recruitment strategies in a Canadian settings? Is there not some international relevance here?

*Thank you for this feedback. While we are representing the Canadian perspective, we agree that there is definitely international relevance. The content has been updated to reflect this line of thought (Page 25, Lines 6-7).*

Page 23 lines 31-36: Please clarify/explain how you would quantitatively evaluate to determine the relative effectiveness and value.

*Thank you for this suggestion. We have added an elaboration. (Page 27, Line 3)*

#### Conclusions

The conclusions appear to be supported by the data. Implications for practice and future research have been briefly discussed.

*Thank you for this acknowledgement.*

Page 23 lines 42-45: some syntax errors.

*Minor corrections have been made. (Page 27, Lines 10 to 13)*

Page 23 line 47: As well as reducing healthcare spending, would it not reduce inequalities in health?

*We agree with the reviewer. Reducing health equity issues would definitely be a goal of employing these strategies. The content has been updated to reflect this. (Page 27, Line 13)*

#### Tables

The tables do not appear to be missing data and are easy enough to follow.

*Okay. Thank you.*

### REVIEWER 3

**Reviewer Name: Veronica Ranieri PhD**

**Institution and Country: University College London, Gower Street, London WC1E 6BT, UK**

**Please state any competing interests: None declared**

This is a well-written scoping review outlining the facilitators and barriers to recruiting South-Asian individuals to a health research study. It may be useful to researchers who are looking to recruit South-Asian participants as it details both what is known to work or not work, as well as highlight what is missing within the literature. I think the paper should be accepted subject to the changes below:

*Thank you for the positive feedback as well as the helpful suggestions for improving the paper. We appreciate your expertise and insight.*

#### Introduction

P2S2: In what way was geography a barrier? Was it distance from medical centres?

*Yes, distance from research centres or healthcare facilities is often noted as a barrier to receiving healthcare and participating in research. This is common for South Asians living in rural areas or who do not have access to transportation. We have added examples in text (Page 5, Lines 22 and 23) for clarity.*

P3S3: Please change 'it has been reported' to an active tense. Please do this throughout the document.

*Thank you for this feedback. We have updated all specific instances of 'it has been reported' and have attempted to revise passive to active tense throughout the manuscript.*

P4S2: However, South Asians are underrepresented in research...and therefore excluded from decisions pertaining to the delivery of healthcare?

*Thank you for noting this lack of clarity. The sentence has been revised to more accurately reflect our thought process. (Page 6, Lines 10-12).*

P4S6: In what way are these studies not representative of a heterogenous population?

*What we intended to convey, is that if studies do not have adequate representation from all individual ethnic groups under the South Asian umbrella, then they may not be truly representative. As we have noted in the expanded text (Page 6, Lines 20-22), diets, lifestyles, and baseline health risk may be different based on religion, country of origin, and region within the South Asian ethnic minority.*

#### Methods

Please describe why a scoping review was more justified than a systematic review.

*A scoping review was justified in this case as our objective was to assess the quantity and breadth of the literature in this area, and to identify themes and areas of inquiry that could be further explored using a more focused approach such as a systematic review.*

*Our investigation was exploratory rather than intending to answer a specific focused question, so we felt a scoping review was more appropriate.*

Data Sources: Where did the authors go to search for the grey literature? Why were Pubmed and the CL chosen? Were these sufficient databases to source literature from?

*Please see earlier comment on [additional databases in response to Reviewer 2](#).*

#### Additional Databases

*We thank the reviewers for their constructive feedback. While revising our manuscript, we expanded our search to CINAHL and PsycINFO and found 645 potentially relevant titles and abstracts, 15 potentially relevant full-texts and included 2 further studies.; we included additional text in the Methods and Results sections to describe the augmented methods and to incorporate the two new studies into the content of the report.*

*Grey literature sources including clinicaltrials.gov and PROSPERO (for ongoing studies and reviews), as well as a review of reference lists of included studies and studies of interest identified during full-text review, and a focused google search were conducted in addition to database searches.*

Please include a search strategy as a supplementary document.

*The search strategy has been added as Appendix 1.*

Study selection: Why were commentaries and narrative reviews excluded?

*While we acknowledge that many of the qualitative study designs included in our review of literature include some level of subjectivity, we excluded commentaries and narrative reviews so as to avoid pulling themes from reports that were drafted from a single or few perspective(s).*

Data abstraction: Why was a quality appraisal not conducted? Why was it outside the scope of the review?

*Please see [statement on quality assessment](#) presented in response to an earlier comment.*

#### Statement on Quality Assessment

*As noted by Peters et al.[1] via Tricco et al.[2]*

*“Scoping reviews are used to present a broad overview of the evidence pertaining to a topic, **irrespective of study quality**, and are useful when examining areas that are emerging, to clarify key concepts and identify gaps...”*

*Further, Arksey and O’Malley[3] state:*

*“First, a systematic review might typically focus on a well-defined question where appropriate study designs can be identified in advance, whilst a scoping study tends to address broader topics where many different study designs might be applicable. Second, the systematic review aims to provide answers to questions from a relatively narrow range of quality- assessed studies, **whilst a scoping study is less likely to seek to address very specific research questions nor, consequently, to assess the quality of included studies**”.*



*Consistent with current guidance for scoping reviews, we did not conduct quality appraisal. The reason for foregoing quality appraisal in scoping reviews has been attributed to the wide spectrum of evidence that scoping reviews aim to identify, which often includes types of studies that do not have validated quality appraisal tools or that sit lower on the hierarchy of evidence. Further, as scoping reviews don't aim to quantify the effect of an intervention, the context provided by a quality assessment as required of systematic reviews to frame the effect estimate is not necessary.*

## Results

Study characteristics: P3S2: Patients in hospital: Does this refer to a general hospital cohort with unspecified diagnosis?

*Yes, a "large adult tertiary institution". Have provided detail in text for clarity (Page 13, Line 4)*

Barriers: P1S1: Perception of risk of adverse effects...such as?

*This would refer to perceived adverse effects of study interventions (e.g., drug-related side effects) or study participation, which would differ depending on context. Have added an example in text to aid the reader in interpretation (Page 17, Line 2).*

P1S4: researcher antipathy...in what way?

*We have changed the wording here to better reflect the sentiment of the study. Rather than antipathy, researchers were apathetic or indifferent to recruiting sufficient numbers (Page 17, Line 19)*

P1S5: Which were the narrow entry criteria?

*The authors gave the example of criteria like waist size or age, implying that some South Asians interested in participating were unable to qualify based on restrictions to the study population. Examples have been added in text for clarity (Page 17, Lines 22 and 23).*

## Discussion

P1S2: strategies mentioned twice. Perhaps change word in on instance.

*Thank you for noting this. Recruitment 'strategies' has been changed to recruitment 'efforts'. (Page 21, Line 5).*

P2S2: Is lower SES linked with lower altruism? References?

*More detail and references have been added to this section (Page 21, Lines 13-16)*

P4S3: Please include references.

*References have been added (Page 23)*

P5S2: What do the authors mean by unintended outcomes?

*Unintended outcomes refers to potential unwanted side-effects or consequences of participating. The authors of the study cited give the example of short and long term side effects of the intervention, uncertain benefit, interference with current treatment, and lack of access to healthcare should injury or diagnosis of disease arise. We have added an example in text for clarity (Page 24, Lines 5 and 6).*

P5S5: What do the authors mean by legacy?

*The Tuskegee Syphilis Study is a noted research study conducted in the US that has been recognized for unethical abuse against African Americans in the research setting. Katz et al.[5] note "The phrase, legacy of the Tuskegee Syphilis Study, is sometimes used to denote the belief that Blacks are more reluctant than Whites to participate in biomedical research studies because of the infamous study of syphilis in men run by the U.S. Public Health Service from 1932-72". We have changed the wording of this sentence slightly for clarity. (Page 24, Lines 11-12).*

P6S16: Why did the authors not complete a quality assessment of the data?

*Please see the earlier [statement on quality assessment](#).*

*Statement on Quality Assessment*

*As noted by Peters et al.[1] via Tricco et al.[2]*

*"Scoping reviews are used to present a broad overview of the evidence pertaining to a topic, **irrespective of study quality**, and are useful when examining areas that are emerging, to clarify key concepts and identify gaps..."*

*Further, Arksey and O'Malley[3] state:*

*"First, a systematic review might typically focus on a well-defined question where appropriate study designs can be identified in advance, whilst a scoping study tends to address broader topics where many different study designs might be applicable. Second, the systematic review aims to provide answers to questions from a relatively narrow range of quality- assessed studies, **whilst a scoping study is less likely to seek to address very specific research questions nor, consequently, to assess the quality of included studies**".*

*Consistent with current guidance for scoping reviews, we did not conduct quality appraisal. The reason for foregoing quality appraisal in scoping reviews has been attributed to the wide spectrum of evidence that scoping reviews aim to identify, which often includes types of studies that do not have validated quality appraisal tools or that sit lower on the hierarchy of evidence. Further, as scoping reviews don't aim to quantify the effect of an intervention, the context provided by a quality assessment as required of systematic reviews to frame the effect estimate is not necessary.*

Supplementary

Please include a completed PRISMA checklist.

*Since this is a scoping review, a PRISMA check-list was not included in the manuscript as latter is required for systematic reviews and meta- analysis. There is currently not a PRISMA extension for scoping reviews and no other reporting guidelines available for scoping reviews on the EQUATOR network.*

## REVIEWER 4

**Reviewer Name: Anne-Le Morville**

**Institution and Country: Metropolitan University College, Denmark**

**Please state any competing interests: None declared**

Dear authors

Thank you for your contribution to start this important discussion. I am so pleased that the discussion is starting to move beyond very narrow and few journals.

*We thank the reviewer for the supporting and positive comment in line with our goal to increase awareness of this vulnerable ethnic group and their underrepresentation in health research.*

That said, I also find some issues and amongst those are a lack of definitions, which makes the manuscript unclear. I am aware that it is hard as definitions of ethnic groups differ, but it is worth to reflect on this as it has a bearing on your results.

*We appreciate your comments and have addressed them accordingly. Please find underneath our point-by-point response.*

You have chosen to focus on recruiting for research, but what about drop-outs, which is another well-known problem? Please state why or make it clear that drop-outs are (not?) part of the study.

*Thank you for drawing attention to this important research area. We have added a statement within the discussion of the report (Page 22, Lines 20-21) to note that while retention is related to recruitment it is out of the scope of this review. We have also mentioned the issue of retention in the discussion as a high priority for future research initiative (Page 27, Lines 4 to 8).*

Abstract and summary

p4, line 14: You use the term several countries, but given your results I would write 'few' as it is only UK, and then one from US, Australia and India each.

*"Several countries" was revised to "a few countries" (Page 4, Line 9)*

p4, line 17: I find that your results and the barriers show that there is a general problem.

*In response to your comment, we have combined the 3<sup>rd</sup> and 4<sup>th</sup> point in the article summary so as not to detract from the findings of the study. (Page 4, Line 10)*

Introduction

p5, line 5: I need to know what the term South Asians cover, so please define.

*South Asian ethnicity in the introduction has been specified (Page 9, Lines 14- 15) and includes Sri Lankan, Bangladeshi, Pakistani, Nepalese, Bhutanese, Maldivian, and Indian as indicated in the Methods section and Table 1.*

p5, line 10: You give some interesting statistics, but I would also like to know how large a group South Asians cover in the UK, and is there comparable numbers on how the population has

grown in Canada, and how large were the increase in the UK? You mention this on the next page, but why not here?

*We appreciate this comment. The population statistics are now noted in the Introduction (Page 6 – Lines ~1-11). We were not able to find a direct comparison of South Asian population growth in the UK versus Canada, but have presented the respective statistics.*

You also write that Pakistani and Indian were part of this group, but what about the Canadian group? Which groups are pre-dominant in the UK and Canada?

*We have made note of the most prevalent groups within the South Asian populations in the UK and Canada. (Page 5 – Lines ~1-11)*

p5, line 32: Conventional medicine? Please define the term, as conventional medicine within Canada and the UK are quite different from Mainland China.

*Thank you for noting this lack of clarity. We have updated (Page 6, Lines 1-2) to indicate “modern western or allopathic medicine” as opposed to “conventional medicine”.*

p5, line 47: Please define who you refer to as ‘alternate ethnicity’.

*This has been updated to reflect what ‘alternate ethnicity’ represents in the cited trial (Page 5, Lines 12-13).*

p6, line 49: Please define ‘other countries’.

*This statement was meant as a segue into the UK analysis. We have updated “other countries” to “elsewhere” so that it doesn’t imply multiple locations (Page 6, Line 14).*

## Methods

The Methods section is the weak link in your manuscript and needs a serious revision.

p7, line 6: I need more information on your method, why you have chosen this method and its aim as opposed to a systematic review. Also which parts you have used from respectively Arksey & O’Malley and Levac et al., as they differ. Also explain why you have chosen two specific research questions, as a scoping review are not guided by focused questions as in a systematic review, but by a requirement to identify relevant literature.

*We appreciate your suggestions for improvement of the methods section. In response, we have added an elaboration on the methodology employed. The method of Levac et al is aligned with the Arksey and O’Malley method, but provides more explicit recommendations on how to execute parts of the framework. We have employed some of these recommendations, such as conducting a thematic synthesis (more detail provided in text), and excluded some recommendations, such as the stakeholder consultation process. (Page 8 – Lines 3 to 9)*

*As for why we chose a scoping review as opposed to a systematic review, we would like to refer to our response to another reviewer’s similar comment: “A scoping review was justified in this case as our objective was to assess the quantity and breadth of the literature in this area, and to identify themes and areas of inquiry that could be further*

explored using a more focused approach such as a systematic review. Our investigation was exploratory rather than intending to answer a specific focused question, so we felt a scoping review was more appropriate. “

*Regarding the research questions we posed - the methods that we have followed explicitly state that a research question should be formulated (see Table 3).[4] While the research question is not stated in the typical 'PICOS' format, it still aided us in identifying relevant literature and framing the content of the review.*

p7, line 29: I do not understand why you did not search data-bases such as Cinahl and Psychinfo, as they often provide relevant studies for topics like yours. So please explain and elaborate a bit more on this discussion in the limitations section.

*Thank you for this observation. We agree with your suggestion that these databases would be relevant in the context of this review. In response, we have conducted searches on both databases (consistent with the date ranges of our original search) to ensure that we were not overlooking relevant data published within our review timeframe due to their exclusion. Changes have been made to detail these supplementary searches in the Methods and Results sections.*

p7, line 38: This part about your search is rather confusing. You write when your original search was executed (Jan 2004 to April 2016), but later (p9, line34) you write that you made an up-date in April 2016. Is it a typo and did you search for articles published between 2004 to 2016? And if so, when was the original search performed?

*Thank you for pointing out this lack of clarity. We have updated the methods and results sections (Page 8 Line 21 to Page 9 Line 2; Page 11 Lines 1-11) to reflect the search methodology in more detail. The original search was conducted in October 2014, and then updated in April 2016.*

You also write that the up-date revealed 199 articles of which you chose three for full-text review, but were they included? How is this illustrated in your flow-chart?

*The study selection flowchart (Figure 1) has been updated to reflect the search and screening process with more clarity. In addition, further detail has been added to the Literature Search section of the results (Page 11, Paragraph 1), including the original database source of the final included studies (i.e., PubMed original, update, or CINAHL/PsycINFO).*

p8, line 14: Even thinking about using Google translate as a translation tool regarding scientific literature raises a red flag that this search and study may lack an understanding of the thoroughness that is needed, regarding including and using literature.

*Thank you for this feedback. We appreciate your perspective and are aware of the serious limitations of Google translate (e.g., Balk et al.[6]). It turns out that none of the screened or selected articles required any translation. However, as noted by Balk et al., translation of non-English articles may reduce language bias and may be appropriate if important considerations about potential inaccuracies in the data are addressed, either through sensitivity analysis or through other routes such as contacting authors or having native speakers verify the results. Given that we were addressing a broad issue of ethnic representation in research, we wanted to be inclusive in our study selection and not*

*exclude based on language. That said, all efforts to verify the accuracy of the results would have been undertaken if we encountered any non-English studies. Within our research team we had access to German, French, Spanish, Mandarin, Cantonese, and South Asian-language proficient researchers, who may have assisted with translation of some non-English language studies. We would have sought out further input across our networks if necessary.*

p8, line 47: You reached agreement about inclusion through discussion, but how many of the authors took part in this discussion?

*Detail has been added about the consensus process. (Page 10, Lines 6-8).*

p8, line 56: Please describe this data extraction form and how it was piloted. You need to describe your analytic process in more detail and provide some references on the chosen method.

*Details about the contents of the data extraction forms is presented in the data abstraction section. Several minor changes have been made in this section for clarity (Page 10, Lines ~9-16).*

## Results

Your results section needs a major revision too.

Your text repeats more or less what I can read in table 3 and 4. Tables are meant to provide information that supports the text, not repeat the information.

*We have provided more context to the information in the table, e.g., “perception of risk of adverse health effects” (Page 17, Line 2) and “narrow entry criteria” (Page 17, Line 23) . We believe the text for Table 4 is critical as it highlights the most frequent findings and provides some more context than the table alone. The results have been thoroughly evaluated in the discussion.*

Given your topic I think that you can provide a more meaningful text by locating the important structures and information from the literature and then categorize this into themes. Both the content of barriers and strategies could be structured into some interesting sub-themes, which could be basis for at more substantial discussion.

*Thank you for this suggestion. Themes for barriers and recruitment strategies have been identified based on the individual categories noted in the tables (Tables 3 and 4).*

## Discussion

You have very few references, so please link your statements to the articles in question.

*We have added references where they were not included.*

Despite the above, your discussion is ok, but needs some attention too.

I wonder why you do not discuss the problem of even developing adequate research tools. I know that you focus is on recruitment, but a major problem here is also the drop-outs as I have mentioned before.

*We appreciate your interest in the issue of drop-outs and appropriate research tools for South Asian populations and its relevance to the topic of our review. We have added a recommendation for future research in this area. (Page 27, Lines 4-8)*

p18, line 10: you only present that you have found facilitators, but most of your results is about barriers.

*We have included a broad discussion about the barriers identified by our scoping review starting in paragraph 3 of the discussion section.*

p19, line 5: you present that the researcher is a physician, but did your literature only include physicians as main investigators? If so this should be presented earlier on, as not all research include physicians.

*The discussion surrounding physician recruitment was in regards to one of the themes identified regarding the perceived reverence of physicians in South Asian culture and potential effectiveness of physician recruitment. We felt it valuable to discuss the issue of medical paternalism in South Asian culture from the perspective that physician recruitment may not always be feasible or the most appropriate method depending on the research context. We have provided further text to clarify that we were not implying physician involvement is necessary (Page 23 – Lines 5-6).*

p20, line 25: You mention the acts that support the inclusion of minority groups in the US, and its lack in Canada, but how is this in the UK? Most of your literature comes from the UK.

*Thank you for your suggestion. We have added mention of the Research Governance Framework on (Page 23, Lines 20-23).*

p21, line 52: As this is a scoping review, I would not use the term 'generalizability', which is mostly used in statistical contexts. I know that this can be discussed, but I find that whether the results can be transferred would be a more correct term.

*We have followed your suggestion and changed the use of generalizability to transferability (Page 25, Line 9). We have also updated the similar statement in the strengths and limitations of the study (Page 4, Line 11).*

P23, line 8: I think that it would be good idea to unfold your part on community based participatory research, as this seems to be one of the methods that really holds a promise to not only recruit, but also prevent drop-outs. Furthermore, I think that you in this context should discuss the aim of the research, which might not be felt as relevant for the South Asians.

*We have added a further high- level description of the CBPR method on your suggestion and an elaboration on the use of this method in South Asian women – though the study did not comment on recruitment. (Page 26 Lines 13-21)*



## REFERENCES

- 1 Peters MDJ, Godfrey CM, Khalil H, *et al.* Guidance for conducting systematic scoping reviews. *Int J Evid Based Healthc* 2015;**13**:141–6. doi:10.1097/XEB.0000000000000050
- 2 Tricco AC, Lillie E, Zarin W, *et al.* A scoping review on the conduct and reporting of scoping reviews. *BMC Med Res Methodol* 2016;**16**. doi:10.1186/s12874-016-0116-4
- 3 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;**8**:19–32. doi:10.1080/1364557032000119616
- 4 Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci* 2010;**5**:69. doi:10.1186/1748-5908-5-69
- 5 Katz RV, Green BL, Kressin NR, *et al.* The Legacy of the Tuskegee Syphilis Study: Assessing its Impact on Willingness to Participate in Biomedical Studies. *J Health Care Poor Underserved* 2008;**19**:1168–80. doi:10.1353/hpu.0.0067
- 6 Balk EM, Chung M, Hadar N, *et al.* *Accuracy of Data Extraction of Non-English Language Trials with Google Translate*. Rockville (MD): : Agency for Healthcare Research and Quality (US) 2012. <http://www.ncbi.nlm.nih.gov/books/NBK95238/> (accessed 2 Feb2017).

### VERSION 2 – REVIEW

<b>REVIEWER</b>	Dr Maria Horne University of Leeds, UK
<b>REVIEW RETURNED</b>	24-Feb-2017

<b>GENERAL COMMENTS</b>	Thank you for the opportunity to review this manuscript again. The revisions made have enhanced the paper. The reviewer's comments have been addressed.
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<b>REVIEWER</b>	Veronica Ranieri University College London London, United Kingdom
<b>REVIEW RETURNED</b>	13-Feb-2017

<b>GENERAL COMMENTS</b>	<p>I would like to thank the authors for reviewing this paper and allowing me the opportunity to re-read it prior to publication. There are no major changes I would like to address. The authors explained their reasoning for not including narrative reviews/commentaries, quality assessment and legacy (and Tuskegee Syphilis Study) in their submission. However, they did not include these explanations in the manuscript. I would kindly ask that the authors kindly do so and not assume that the reader is well-versed on these. I would also kindly ask that the reader completes a PRISMA checklist. Although initially designed for systematic reviews, these are useful also for scoping reviews.</p> <p>Some very minor points:</p>
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	<p>Abstract: Understanding of these approaches and implementation. What approaches and implementation?  The article summary reads like bullet-point notes rather than descriptions. Was this intended?  Introduction: What is meant by visible minority population? Women who have been demonstrated to have a higher risk of...perhaps revise?  Discussion: Areas of lower SES rather than people with lower SES?</p>
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<b>REVIEWER</b>	Anne-Le Morville Metropolitan University College Copenhagen, Denmark
<b>REVIEW RETURNED</b>	13-Feb-2017

<b>GENERAL COMMENTS</b>	<p>Thank you for all the hard work you have done.  The manuscript is much better, easier to read and gives an impression of a thorough process and clarity this time. The process and goal of a scoping review is clearly presented this time.</p> <p>However, as I am your reviewer I still have a few comments.</p> <p>Introduction  Page 6, line 43:  You refer to diet, lifestyle and baseline health risk as varying across South Asians of different origin, but is it different from a normal white population?  Recruitment bias may be more of a problem, as those who partake in research mostly are educated middle class citizens.</p> <p>Methods  As I have stated above this part of your manuscript has improved drastically, however there are some points that need further clarification.</p> <p>Page 8, line 16:  Please explain why you do not include the consultation stage.</p> <p>Page 9, line 34:  I will repeat my objection to use Google translate. In your answer to our comments you refer to Balk et al, but as I read Balk et al, they propose that Google translate is a promising tool, but not for use as it is now, as the percentage of correct translation is low at the present. So, you have to be critical of your choice to do so, either in the methods or discussion section.  However, in your answer you write that you have access to a range of languages in your group, so please state this in the manuscript, as it is important knowledge and qualifies your study further.</p> <p>Page 10, line 21: you describe that you use the thematic analysis as proposed by Levac et al, but I would like if you could expand this.  You have been very thorough in your data collection and extraction, but it is hard to follow your analysis. A thematic analysis is often based on the themes emerging from the data, whereas you seem to have pre-defined your themes, so please clarify what you have done.</p>
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	Tables: The layout of tables 3 and 4 could be better, as it is hard to read without any lines in the table.  I'm looking forward to see your article in print
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## VERSION 2 – AUTHOR RESPONSE

### Reviewer: 4

Dear authors Thank you for all the hard work you have done. The manuscript is much better, easier to read and gives an impression of a thorough process and clarity this time. The process and goal of a scoping review is clearly presented this time. However, as I am your reviewer I still have a few comments.

*Thank you for the positive feedback. We appreciate the thorough review and will do our best to address your present comments.*

#### Introduction

Page 6, line 43:

You refer to diet, lifestyle and baseline health risk as varying across South Asians of different origin, but is it different from a normal white population?

*The intention of this statement is to describe how within the South Asian populations, diet, lifestyle, and baseline health risk may vary substantially between South Asians of different origin, including geographic region, cultural background, and religious belief. The statement is to emphasize that in addition to adequate representation of South Asians in health research, adequate representation of the diversity of South Asian ethnic groups is equally critical. We revised the sentence (Page 6; Lines 51 to 56) to more clearly present our statement. Differences between South Asians and white ethnic groups are discussed earlier on (Page 5).*

Recruitment bias may be more of a problem, as those who partake in research mostly are educated middle class citizens.

*We thank the reviewer for raising this topic. The term recruitment bias is now included to better describe the issue discussed (Page 21; Lines 29 to 32).*

#### Methods

As I have stated above this part of your manuscript has improved drastically, however there are some points that need further clarification. Page 8, line 16:

Please explain why you do not include the consultation stage.

*We have noted that the consultation stage was excluded due to lack of resources and general feasibility issues (Page 8; Line 16).*

Page 9, line 34:

I will repeat my objection to use Google translate. In your answer to our comments you refer to Balk et al, but as I read Balk et al, they propose that Google translate is a promising tool, but not for use as it is now, as the percentage of correct translation is low at the present. So, you have to be critical of your choice to do so, either in the methods or discussion section. However, in your answer you write that you have access to a range of languages in your group, so please state this in the manuscript, as it is important knowledge and qualifies your study further.

*We appreciate your hesitation with this approach and will consider your feedback in future work. We have provided more information about the availability of translation and content verification by research staff and the limitations of Google Translate (Page 9; Lines 31 to 38), and noted that English was the exclusive language of publication in the results (Page 11; Lines 21 to 22).*

Page 10, line 21: you describe that you use the thematic analysis as proposed by Levac et al, but I would like if you could expand this. You have been very thorough in your data collection and extraction, but it is hard to follow your analysis. A thematic analysis is often based on the themes emerging from the data, whereas you seem to have pre-defined your themes, so please clarify what you have done.

*Thank you for your question of clarification. We elaborated the description of our analysis on (Page 10; Line 47). In brief, themes were not pre-defined. While there was some previous knowledge of themes that may have emerged based on experience of the research group, articles were reviewed thoroughly and content was coded and grouped by themes that were present in the literature.*

Tables: The layout of tables 3 and 4 could be better, as it is hard to read without any lines in the table.

*We appreciate this feedback. Assuming the publishing team with the journal may reformat the tables to fit BMJ Open style, we will defer to their formatting approach.*

I'm looking forward to see your article in print

*Thank you! We appreciate your support of the publication of this review.*

### Reviewer: 3

I would like to thank the authors for reviewing this paper and allowing me the opportunity to re-read it prior to publication. There are no major changes I would like to address.

*Thank you for your efforts in reviewing the changes and for providing further helpful suggestions.*

The authors explained their reasoning for not including narrative reviews/commentaries, quality assessment and legacy (and Tuskegee Syphilis Study) in their submission. However, they did not include these explanations in the manuscript. I would kindly ask that the authors kindly do so and not assume that the reader is well-versed on these.

*Thank you for this suggestion. A further description for the Tuskegee Syphilis Study is now provided on (Page 24; Lines 29 to 32). Rationale for exclusion of narrative review/commentaries is provided on (Page 9; Lines 49 to 51). Cited rationale for excluding quality appraisal is included on (Page 10; Lines 51 to 53).*

I would also kindly ask that the reader completes a PRISMA checklist. Although initially designed for systematic reviews, these are useful also for scoping reviews.

*As noted in response to editorial requirements a PRISMA checklist has been completed and items not relevant to scoping reviews having been assigned as not applicable (N/A).*

Some very minor points:

Abstract: Understanding of these approaches and implementation. What approaches and implementation?

*Thank you for noting this confusion. The text has been updated for clarity. (Page 3; Lines 51 to 53)*

The article summary reads like bullet-point notes rather than descriptions. Was this intended?

*For the writing of the article summary, we followed the instructions put forth by BMJ Open, which state: “An ‘Article summary’ section consisting of the heading: ‘Strengths and limitations of this study’, and containing up to five short bullet points, no longer than one sentence each, that relate specifically to the methods of the study reported. They should not include the results of the study and should be placed after the abstract.”*

Introduction: What is meant by visible minority population?

*Thank you for noting this lack of clarity. The definition for visible minority in the Canadian context is given as: “Visible minority - this category includes persons who are non-Caucasian in race or non-white in colour and who do not report being Aboriginal”, see: <http://www.statcan.gc.ca/eng/concepts/definitions/minority01a>. We have added this definition as well as the reference (Page 5 Lines 12 to 16)*

Women who have been demonstrated to have a higher risk of...perhaps revise?

*This has been revised for clarity (Page 5; Lines 47-49)*

Discussion: Areas of lower SES rather than people with lower SES?

*Thank you for this comment. In an effort to not generalize (i.e., not all South Asian individuals or neighborhoods are of low socioeconomic status) we refer to the individual and not an area.*

**Reviewer: 2**

Thank you for the opportunity to review this manuscript again. The revisions made have enhanced the paper. The reviewer's comments have been addressed.

*Thank you for your positive feedback. We appreciate the time you took to review our updates.*

**VERSION 3 – REVIEW**

<b>REVIEWER</b>	Anne-Le Morville, Ph.D., Senior Lecturer Metropolitan University College Denmark
<b>REVIEW RETURNED</b>	23-Mar-2017

<b>GENERAL COMMENTS</b>	I find your manuscript ready for publication and look forward to more on this interesting and important topic.
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