

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Protocol for a Scoping Review of Measures and Definitions of Gender-Based Discrimination Linked to Health Outcomes in Low and Middle-Income Countries
AUTHORS	Petitfour, Laurène; Srivastava, Swati; Shah-Rohlf, Rupal; Orduhan, Clara; Quentin, Wilm; De Allegri, Manuela

VERSION 1 – REVIEW

REVIEWER	Wright, Talen University College London, Division of Psychiatry
REVIEW RETURNED	04-Apr-2022

GENERAL COMMENTS	<p>Thank you to the editor for asking me to review this interesting protocol on gender-based discrimination in the health literature as it pertains to LMIC.</p> <p>Having taken the time to read the authors work I have a couple of comments which may need to be addressed before publication:</p> <p>I am slightly concerned as to the lack of public and patient involvement with this study. There does not seem to be a strong justification for not using PPI, especially as expert stakeholders are involved.</p> <p>I am also concerned about the lack of representation in the "subcategory of women". A more exhaustive list may be needed, i.e. gender minority women (trans women, gender diverse women) and minority ethnic women seem to be missing (although I am aware that migrant women are included). are there reasons for these to be missing? in the case of trans women who have undergone gender affirmation surgery they would need to access healthcare associated with some cisgender women.</p> <p>Overall, the study looks promising and an important contribution to the literature. If these comments are suitably addressed, I would recommend publication.</p>
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REVIEWER	Tang, Kun Tsinghua University School of Medicine
REVIEW RETURNED	06-Apr-2022

GENERAL COMMENTS	This study is valuable as it shows concerns on the periphery by focusing on gender-based discrimination (GBD) and the Low and Middle-Income Countries and setting the scene in global health. Scoping the definitions and measurement of GBD will contribute to future studies linking GBD and health outcomes. The research
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	<p>questions and objectives are explicit. The overall study design is appropriate to answer the research question. The consultation exercise has involved key stakeholders to refine the study design and ensure the study is adapted to real-world situations.</p> <p>However, the limitations listed below have to be addressed by the authors.</p> <ol style="list-style-type: none"> 1. The title is misleading in three ways. <ol style="list-style-type: none"> (1) "Gender-Based Discrimination Measures" can be understood as the measures to discriminate based on gender. (2) "Definition", another objective of this scoping review, is not incorporated in this title. The audience will assume that the measurement of GBD will be more important than the definition of that in this review. (3) "Linked to health" is broader than "linked to health outcome". Nevertheless, it seems that the authors mixed them in the texts. 2. In the Abstract, the session on "methods and analysis" is not informative and specific to the topic of this study. Below are two main flaws: <ol style="list-style-type: none"> (1) "Arskey" was misspelt. Also, in the article "Scoping studies: towards a methodological framework" published in 2005, Arskey and O'Malley only proposed five stages and an optional consultation exercise. It is not appropriate to make the consultation phase one of the stages. However, the major problem of this session is to copy and paste Arskey and O'Malley's stages, which are well-versed by researchers who conduct scoping reviews. (2) The elaboration of eligibility criteria or eligible literature is missed in this session. 3. The rationale of this scoping review is not well elaborated. Below are the points that might be missed: <ol style="list-style-type: none"> (1) The reason why the authors excluded qualitative measures. (2) The reason why the authors limited their scoping work to studies linking GBD and health outcomes. In other words, to what extent does the linkage to health outcomes influences the measurement and conceptions of GBD, making it distinguished compared with other settings? (3) The claim that the authors have identified no existing or ongoing reviews are doing the same research. (4) Potential eligible literature to ensure that the scoping review will yield some results. The Gender Inequality Index (GII) documents introduced by the United Nations Development Programme (UNDP) and Afrobarometer seem to be grey literature, which is not an information source in this scoping review protocol. 4. Transparency of the search strategy is low. Leaving the librarian to search might make the search imprecise or irrelevant to the research questions. Even so, the authors did not acknowledge the contribution of the librarian. <ol style="list-style-type: none"> (1) The use of MeSH terms is vague in Table 2. If not noticing the bold words (presumably, these are MeSH terms), the audience will find that the authors only use text words in their search strategy, which is not comprehensive. (2) There are no "LMICs" in the MeSH database. Only including single LMICs' names is risky because it might miss the literature that generally centres on all LMICs while not displaying a list of LMICs' names in the search fields.
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	<p>(3) There is no full search strategy in each database, making reproducing the research impossible.</p> <p>(4) How the authors link the terms in "GENDER" and "DISCRIMINATION" is vague, so as "health" and "mortality" or "morbidity". Please explain whether a proximity operator or "AND" or "OR" will be used.</p> <p>5. Econlit is the American Economic Association's electronic bibliography of the economics literature. As GBD is more of a sociological concept, it would be better if the authors illustrate the inclusion of Econlit and consider sociology databases.</p> <p>6. Six out of 17 references are websites, and some of them are only portals, not the actual information source cited (e.g., in "Questionnaires Afrobaromete", there is a long list of questionnaires, and it will be hard for the audience to check whether the authors' citation is precise). Again, the relevant works on this topic are not well explored and cited by the authors.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1, Ms Talen Wright, University College London

Comment	Response
<p>1. I am slightly concerned as to the lack of public and patient involvement with this study. There does not seem to be a strong justification for not using PPI, especially as expert stakeholders are involved.</p>	<p>Thank you for this very pertinent observation. We had not envisioned an extensive involvement of the public and patients with this part of the study, i.e., the scoping review, primarily because of we do not plan to interview any patient or women. The consultation phase of our work will consist in discussion about our results with policy makers and experts, hence our consideration that PPI was not need for this study.</p>
<p>2. I am also concerned about the lack of representation in the "subcategory of women". A more exhaustive list may be needed, i.e. gender minority women (trans women, gender diverse women) and minority ethnic women seem to be missing (although I am aware that migrant women are included). are there reasons for these to be missing? in the case of trans women who have undergone gender affirmation surgery they would need to access healthcare associated with some cisgender women.</p>	<p>We appreciate the suggestion and acknowledge that our definition of women in this review is purposely narrow. We chose to restrict the review to cisgender women (i.e., a woman whose gender identity aligns with the sex assigned to that person at birth) keeping in mind the vastness of the available literature. Given the intersectionality's between gender-based and other forms of discrimination, we sought to first limit the review to cisgender-attributable forms of discrimination for ease of analysis in disparate contextual settings.</p> <p>Further, we aim to use this review as a first step to understanding gender-based discrimination towards cisgender women, and propose to later conduct additional reviews to include other groups of women, referring back to the findings of this more tailored review to examine commonalities and differences between the experiences of differently-identifying women. We view this as a sequential exercise; hence it is not a focus of this review. [SS1]</p>

Please find below details of the responses to the comments and suggestions and all the specific locations of the amendment made in the updated manuscript (main document, version x).

Reviewer 2, Dr. Kun Tang, Tsinghua University School of Medicine

Comment	Response
<p>1. The title is misleading in three ways.</p> <p>(1) "Gender-Based Discrimination Measures" can be understood as the measures to discriminate based on gender.</p> <p>(2) "Definition", another objective of this scoping review, is not incorporated in this title. The audience will assume that the measurement of GBD will be more important than the definition of that in this review.</p> <p>(3) "Linked to health" is broader than "linked to health outcome". Nevertheless, it seems that the authors mixed them in the texts.</p>	<p>Thank you for your suggestions. We have changed the title on page x to: "Protocol for a <i>Scoping Review of Measures and Definitions of Gender-Based Discrimination Linked to Health Outcomes in Low and Middle-Income Countries</i>".</p>

<p>2. In the Abstract, the session on "methods and analysis" is not informative and specific to the topic of this study. Below are two main flaws: (1) "Arskey" was misspelt. Also, in the article "Scoping studies: towards a methodological framework" published in 2005, Arskey and O'Malley only proposed five stages and an optional consultation exercise. It is not appropriate to make the consultation phase one of the stages. However, the major problem of this session is to copy and paste Arskey and O'Malley's stages, which are well-versed by researchers who conduct scoping reviews. (2) The elaboration of eligibility criteria or eligible literature is missed in this session.</p>	<p>(1) Thank you for pointing this out. Indeed, referring to Arksey and O'Malley is misleading since this protocol was guided by the framework proposed by Levac et al (2010). Therefore, we have changed the corresponding sentences in the methods to the following, lines xxx (updated version): "<i>We will conduct this scoping review using the methodology proposed by Levac et al (13), and the Joanna Briggs Institute(14), which builds on the initial framework proposed by Arksey and O'Malley(12). As recommended by the published guidance, this scoping review will follow a six-stage process described in Table 1.</i>" (2) Thank you for this comment. Our mixed-method scoping review includes quantitative, qualitative, and mixed-methods studies and unfolds according to the six-stages proposed by Levac et al. (2010). The eligibility criteria were defined in order to reflect the three core elements of the search, namely (i) the discrimination based on the gender, (ii) the link to health outcomes, (iii) the developing countries context. Four databases (Pubmed, Web of Science, Cinahl and Econlit) are searched. We will extract and synthesize information from quantitative and qualitative studies following the framework proposed by Hong (2017) and using the PRISMA extension for Scoping Reviews (PRISMA-ScR) tool. We have amended the respective sentences on lines 33 to 37, page 2 (updated version).</p>
<p>3. The rationale of this scoping review is not well elaborated. Below are the points that might be missed: (1) The reason why the authors excluded qualitative measures.</p>	<p>Qualitative studies and conception of gender-based discrimination are included in our mixed-method scoping, there are at the core of our third research question. To make it more explicit, we rephrased the question: Previously, it was: "In qualitative studies, which dimensions of GBD are explored, why, and how?" And now: "In qualitative studies, how is GBD defined? Which dimensions and concepts of it are explored, why, and how?" on lines 127/128, page 2 (updated version).</p>
<p>Comment</p>	<p>Response</p>
<p>(2) The reason why the authors limited their scoping work to studies linking GBD and health outcomes. In other words, to what extent does the linkage to health outcomes influences the measurement and conceptions of GBD, making it distinguished compared with other settings?</p>	<p>Thank you for this observation. this scoping review aims at drawing a picture of how the scientific literature defines GBD when it comes to linking it to health outcomes. As gender-based discrimination is a very large and multidimensional concept, this constraint was also a way of keeping the analysis work feasible given the available resources.</p>

<p>(3) The claim that the authors have identified no existing or ongoing reviews are doing the same research.</p>	<p>Thank you for pointing this out. Before commencing the drafting of this review, we searched existing databases and systematic literature review registries (Prospero, OSF) to ascertain if reviews addressing research questions similar to ours had been or were being conducted. We found no reviews with research questions similar to ours and focusing on low- and middle-income countries. We have, accordingly, edited the introduction on lines 91 to 93 (page 4, updated version): <i>“However, no systematic overview is available that summarizes the different definitions and measures of GBD that have been used in existing studies and focusing on low- and middle-income countries.”</i></p>
<p>(4) Potential eligible literature to ensure that the scoping review will yield some results. The Gender Inequality Index (GII) documents introduced by the United Nations Development Programme (UNDP) and Afrobarometer seem to be grey literature, which is not an information source in this scoping review protocol.</p>	<p>You have raised an important point here. We have, accordingly, edited the introduction on lines 79 to 90 (page 4, updated version) after: <i>“Despite the evidence around the interest to define and measure GBD, and consensus around theoretical definitions of GBD (for instance “any situation where a person is denied an opportunity or misjudged solely on the basis of their sex, ... any unequal treatment based on gender and may also be referred to as sexism” (8)), there is no consensus around all the forms these discriminatory treatments can take and how they can be measured. Existing measures of GBD include various dimensions: the Gender Inequality Index (GII) introduced by the United Nations Development Programme (UNDP), assesses gender-related inequalities based on elements such as adolescent birth rates, the proportion of adult females with at least some secondary education, and the labor market participation of women (9), the Afrobarometer uses an experience-based approach (10). A global understanding of what GBD encompasses in the literature and a comprehensive measure of GBD are thus a prerequisite for a systematic assessment of GBD in different countries and contexts and for better understanding the relationship between GBD and health outcomes. However, no systematic overview is available that summarizes the different definitions and measures of GBD that have been used in existing studies.”</i></p>
<p>4. Transparency of the search strategy is low. Leaving the librarian to search might make the search imprecise or irrelevant to the research questions. Even so, the authors did not acknowledge the contribution of the librarian. (1) The use of MeSH terms is vague in Table 2. If not noticing the bold words (presumably, these are MeSH terms),</p>	<p>Thank you for pointing this out, we have added more details on the search strategy in Table 2, especially which words are MeSH and which ones are not, to make it more precise and clearer.</p>

<p>the audience will find that the authors only use text words in their search strategy, which is not comprehensive.</p>	
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Comment	Response
<p>(2) There are no "LMICs" in the MeSH database. Only including single LMICs' names is risky because it might miss the literature that generally centres on all LMICs while not displaying a list of LMICs' names in the search fields.</p>	<p>Thank you for pointing this out. We included, in addition to the single country names, many synonyms of "developing countries", and extended the component 3 column in the table. Some of the synonyms of "developing countries" or LMICs used in the search included (are also included in the Annex):</p>
<p>(3) There is no full search strategy in each database, making reproducing the research impossible.</p>	<p>We initially did not include all the search strategies to make it easier to read, but they are now provided in the Annex.</p>
<p>(4) How the authors link the terms in "GENDER" and "DISCRIMINATION" is vague, so as "health" and "mortality" or "morbidity". Please explain whether a proximity operator or "AND" or "OR" will be used.</p>	<p>For component 1, either a study has to be referred under the "sexism" MeSH, or it has to exhibit one term linked to Discrimination AND one term linked to Gender. From all the comments relating to the search strategy we edited Table 2 (page 7, updated version).</p>
<p>5. Econlit is the American Economic Association's electronic bibliography of the economics literature. As GBD is more of a sociological concept, it would be better if the authors illustrate the inclusion of Econlit and consider sociology databases.</p>	<p>Thank you for this suggestion. We conducted searches in Econlit. We initially explored the inclusion of sociology databases, but as our research questions included the linkage between GBD and health, we chose to focus on health and medical-related databases. If time permits, we would be willing to expand the searches to sociological databases.</p>
<p>6. Six out of 17 references are websites, and some of them are only portals, not the actual information source cited (e.g., in "Questionnaires Afrobaromete", there is a long list of questionnaires, and it will be hard for the audience to check whether the authors' citation is precise). Again, the relevant works on this topic are not well explored and cited by the authors.</p>	<p>Thank you for pointing out some mistakes. We corrected the bibliography to make it more precise: the reference for Afrobarometer is not a general one anymore, and we corrected the another ones as well.</p>

[SS1] I think this explanation of focusing on cisgender women has to also be incorporated into the text to address the reviewer's comment, if we all agree to this.