ANNEX 1 PRISMA Check list

Section 1: Administrative information

Title

Item 1a: Identification. Identify the report as a protocol of a systematic review
Check

Scoping Review of Measures of Gender-Based Discrimination linked to health in Low and Middle-Income Countries: A protocol (see Page 1)

Item 1b: Update. If the protocol is for an update of a previous systematic review, identify as such
NA

Registration

Item 2. If registered, provide the name of the registry (such as PROSPERO) and registration number
As this is not a scoping review we could not register on Prospero, but we register on Open Science Framework with the link **https://osf.io/t97f8/, (see Section Ethics and Dissemination, line 253 page 10)**

Authors

Item 3a: Contact information. Provide name, institutional affiliation, and email address of all protocol authors; provide physical mailing address of corresponding author
See Page 1 line 4 to 15

Item 3b: Contributions. Describe contributions of protocol authors and identify the guarantor of the review
See Section Contributors, Page 11, 262 to 266:

All authors were involved in the design of the search strategy and the data extraction table building. LP, SS, RS-R and CO are the main reviewers in the screening and the data extraction. MDA will resolve conflicts during the screening phase. LP wrote a first version of the study protocol; all authors took part in its revisions. All authors approved the final submitted manuscript. LP is the guarantor of the review.

Amendments

Item 4 If the report represents an amendment of a previously completed or published protocol, identify as such and indicate what changes were made; otherwise state plan for documenting important protocol amendments
NA

Support

Item 5a: Sources. Indicate sources of financial or other support for the review
See Section Funding, Page 11 lines 270 to 272:

This research is supported by the German Alliance for Global Health Research (GLOHRA) with funds from the Federal Ministry of Education and Research (BMBF).

Item 5b: Sponsor. Provide name of the review funder and/or sponsor
See Section Funding, Page 11 lines 270 to 272:

The funder is the Federal Ministry of Education and Research (BMBF).

Item 5c: Role of sponsor and/or funder. Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol
See Section Funding, Page 11 lines 270 to 272:

The funder had no role in the development of the current protocol.

Section 2: Introduction

Rationale

Item 6. Describe the rationale for the review in the context of what is already known
See Section Background and General Definitions, Page 4 lines 79 to 99

Objectives

Item 7. Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)
See Section Methods and Analysis, Stage 1 Identifying the research questions, Page 5 lines 123 to 130.

Nevertheless, as we are not conducting a systematic review, there are no PICO elements as such, because we are not studying an intervention.

Section 3: Methods

Eligibility criteria

Item 8. Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review
See Section Methods and Analysis, Stage 2 Identifying Relevant Studies (Page 6) lines 132 to 134

From the research questions we developed a search strategy, and inclusion and exclusion criteria. We agreed that only peer-reviewed articles published in English between 1985 and 2021 would be considered.

And also Section Methods and Analysis, Stage 3 Study selection (Page 7) line 181

Table 3 gathers the inclusion and exclusion criteria

Information sources

Item 9. Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage
See Section Methods and Analysis, Stage 2 Identifying Relevant Studies (Page 6 line 1418/149)

Four databases (Pubmed, Web of Science, Cinahl and Econlit) were searched with those conditions, by a librarian to match the formal requirements of each database.

Search strategy

Item 10. Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated

See Section Methods and Analysis, Stage 2 (Page 7 line 157) for the structure of the search strategy

Table 2 provides the structure of search strategy for PubMed

See Annex 1 for entire Search Strategy

Study records

Item 11a: Data management. Describe the mechanism(s) that will be used to manage records and data throughout the review

See Section Methods and Analysis, Stage 3 Study selection (Page 8 lines 178 to 180)

The hits were then imported into Covidence software(15), to remove duplicates before the screening phase. A two-reviewer approval is needed per article in order for it to be selected for full-text screening. Conflicts will be resolved by a fifth reviewer.

See Section Methods and Analysis, Stage 4 Charting the data (Page 9 lines 214/215)

Data will be analyzed with Microsoft Excel software with the perspective of developing a global view of how GBD is considered, defined and measured in the health literature.

Item 11b: Selection process. State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (screening, eligibility, and inclusion in meta-analysis).

See Section Methods and Analysis, Stage 3 Study selection (Page 7 and 8 lines 161/162, lines 179/180 and lines 187 to 191)

A preliminary screening of titles and abstracts of 500 hits by four reviewers allowed us to expand and refine the inclusion and exclusion criteria, for the screening process to be as systematic as possible.

A two-reviewer approval is needed per article in order for it to be selected for full-text screening. Conflicts will be resolved by a fifth reviewer.

Two approvals are needed for a study to be included in the data extraction phase. All differences in screening will be resolved in consultation with a fifth reviewer if needed.

Item 11c: Data collection process. Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators

See Section Methods and Analysis, Stage 4 Charting the data (Page 9 lines 202 to 211)

Data will be extracted by three reviewers; in a first random sample of selected studies (whose size will represent 10% of the number of selected studies) data will first be extracted independently by the three reviewers. Results will be compared between the three, in order to refine the data extraction items if needed, and to ensure the systematicity of the data extraction across reviewers. After this

preliminary phase, selected studies will be shared between the two reviewers for data extraction. Data from another sample of studies will additionally be extracted independently by the two reviewers to be compared, in order to ensure the inter-reliability of the information. If some differences are noted, consensus will be reached through discussion within the team and the items will be made more explicit. Some additional items are likely to appear during the data extraction; they will be discussed and then potentially included in the framework.

Data items

Item 12. List and define all variables for which data will be sought (such as PICO items, funding sources) and any pre-planned data assumptions and simplifications

See Section Methods and Analysis, Stage 4 Charting the data (Page 9 lines 193 to 201)

A preliminary version of the data extraction framework is developed and provided in Annex 1. The extracted information is centered around the gender-based discrimination measures used in the synthesized studies: a first group of questions gather general bibliographic information about the study and its context; a second one focuses on the status of the gender-based discrimination outcome (interest or exposure, nature of the link to health outcomes) and on its nature (composite measure or not); a third one, only for quantitative studies, goes into the details of the measure, or of the components of the measure if there are several of them: definition, data source, unit of measure, and a fourth one, only for qualitative studies, goes into the details of the discrimination outcome: definition(s), characteristics of the study population.

Outcomes and prioritisation

Item 13. List and define all outcomes for which data will be sought, including prioritisation of main and additional outcomes, with rationale

Risk of bias individual studies

Item 14. Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis

NA

Data synthesis

Item 15a. Describe criteria under which study data will be quantitatively synthesised

NA

Item 15b. If data are appropriate for synthesis, describe planned summary measures, methods of handling data, and methods of combining data from studies, including any planned exploration of consistency (such as I2, Kendall's τ)

NA

Item 15c. Describe any proposed additional analyses (e.g., sensitivity or subgroup analyses, meta-regression)

NA

Item 15d. If quantitative synthesis is not appropriate, describe the type of summary planned

See Section Methods and Analysis, Stage 5 Charting the data (Page 9 lines 213 to 217)

We will follow the approach suggested by Hong et al. (2017)(17) to manage quantitative and qualitative studies: we will synthesize separately quantitative and qualitative data, and then appraise them jointly. We will not transform data (i.e., quantifying qualitative data), but join evidence emerging from the quantitative and qualitative and mixed methods.

Meta-bias(es)

Item 16. Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)

NA

Item 17. Describe how the strength of the body of evidence will be assessed (such as GRADE)

NA