

Gender and eye health: protocol for an overview of systematic reviews  
*Jacqueline Ramke, Nyawira Mwangi, Solange Salomão, Lizette Mowatt, Joanna Black, Anthea Burnett, Fatima Kyari, Sumrana Yasmin, Jennifer Evans*

### Citation

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### Review question

What is the nature and extent of the evidence in published systematic reviews on:

- i) gender inequality in eye health (e.g. from prevalence surveys); and
- ii) interventions to reduce gender inequality.

### Searches

An information specialist conducted searches on OVID MEDLINE, Embase and Global Health using no language restrictions and a date limit of 1990. Field experts will be contacted to identify additional reviews, and reference lists of included reviews will be searched. We will also consider all reviews generated by the GBD Vision Loss Group.

### Search strategy

[https://www.crd.york.ac.uk/PROSPEROFILES/139017\\_STRATEGY\\_20190724.pdf](https://www.crd.york.ac.uk/PROSPEROFILES/139017_STRATEGY_20190724.pdf)

### Types of study to be included

We will include published systematic reviews that report our outcomes of interest. Only studies where the full text is available will be included. A systematic review will be defined as “a scientific investigation that focuses on a specific question and uses explicit, pre-specified scientific methods to identify, select, assess, and summarize similar but separate studies”.

### Condition or domain being studied

In most regions of the world, women access eye care services less frequently than men and subsequently experience disproportionate levels of blindness and visual impairment. Inequity of blindness prevalence was reported in a systematic review and meta-analysis of gender and blindness published in 2001 (including studies published up until 1999). Since then, many more cross-sectional surveys have been undertaken and a series of systematic reviews with modelling and projections (disaggregated by sex/gender) have been published. These reviews cover a range of prevalence outcomes—such as prevalence of vision impairment due to any cause, due to cataract, due to uncorrected refractive error—and also report outcomes at the global and regional level (e.g. sub-Saharan Africa, Latin America, high-income countries in Europe etc). A consequence of these publications is that eye health knowledge users with an interest in gender equity have been overwhelmed with possible data to draw on to inform their work. In contrast, there is much less evidence available on how to reduce inequality in eye health.

### Participants/population

We will include any population group.

### Intervention(s), exposure(s)

We will include systematic reviews of any eye health intervention that reports the uptake of eye health interventions in women and men separately (e.g. uptake of cataract surgery, spectacle compliance). We will also include systematic reviews that report prevalence of problems (as outlined in outcomes below).

### Comparator(s)/control

Not applicable (Outcomes will be compared between women/girls and men/boys).

## Context

We will include systematic reviews from any context that report our outcomes.

## Main outcome(s)

i) the prevalence of eye problems in women and men (or female/male children) separately (e.g. prevalence of visual impairment, barriers to uptake of services); or

ii) an estimate of the relative prevalence of eye problems in women and men (e.g. prevalence ratio or odds ratio of likelihood of blindness in women compared to men); or

iii) the uptake of eye health interventions in women and men separately (e.g. uptake of cataract surgery, spectacle compliance).

## Timing and effect measures

Not applicable.

## Additional outcome(s)

None.

## Timing and effect measures

Not applicable.

## Data extraction (selection and coding)

Screening will be conducted in Covidence. Two reviewers will independently screen each title and abstract of identified studies. The full text article will be retrieved for all reviews where the citation seems potentially relevant. Two of the reviewers (following the same allocation above) will independently assess each article against the inclusion and exclusion criteria. Any discrepancies between the reviewers will be resolved by discussion, and a third reviewer will be consulted if necessary. In the event of overlapping reviews the most updated review will be included.

A PRISMA flow diagram will be completed to summarise the study selection process.

A custom form will be developed in Excel for data extraction. The form will be piloted on two reviews, and required amendments agreed by consensus. Two reviewers will independently extract data from each included systematic review. Any discrepancies between the reviewers will be resolved by discussion, and a third reviewer will be consulted if necessary. We anticipate heterogenous outcomes, so data extraction will be an iterative process throughout the review. Any required data extraction amendments will be discussed by the reviewers and the extraction form amended where necessary.

For each included systematic review, we will extract information on:

- the characteristics of included reviews (e.g. proportion of authors who are female / who are affiliated with LMIC institutions; date of most recent search; funder; number of included studies and participants; study design of included studies, risk of bias, quality assessment);
- characteristics of included primary studies location [LMIC vs HIC], year). We will not independently scrutinise the primary studies;
- all equity-relevant outcomes reported in the review (e.g. prevalence of blindness in women and men; relative risk of blindness in women compared to men; uptake of eye health interventions in women and men separately);
- comments on limitations provided by the authors.

## Risk of bias (quality) assessment

We will use AMSTAR 2 to critically appraise each review on interventions (randomised and non-randomised). We are not aware of a critical appraisal of tool for systematic reviews of prevalence surveys, so we will use GATHER to assess completeness of reporting. These appraisals will be conducted by two

reviewers independently and discrepancies resolved by discussion.

### Strategy for data synthesis

We anticipate heterogeneity between reviews, so will use summary tables and narrative synthesis to summarise findings. We will report any outcomes identified in the included reviews that are disaggregated by sex/gender. We anticipate these will include:

- prevalence of blindness and visual impairment
- prevalence of blindness and visual impairment due to cataract
- prevalence of trachoma
- uptake of eye care services

### Analysis of subgroups or subsets

We will not undertake subgroup analysis.

### Contact details for further information

Jacqueline Ramke  
jacqueline.ramke@lshtm.ac.uk

### Organisational affiliation of the review

London School of Hygiene and Tropical Medicine  
<https://www.lshtm.ac.uk/>

### Review team members and their organisational affiliations

Assistant/Associate Professor Jacqueline Ramke. London School of Hygiene & Tropical Medicine, London, UK

Dr Nyawira Mwangi. Kenya Medical Training College, Nairobi, Kenya

Professor Solange Salomão. Federal University of São Paulo, São Paulo, Brazil

Dr Lizette Mowatt. University of the West Indies, Mona, Jamaica

Dr Joanna Black. University of Auckland, Auckland, New Zealand

Dr Anthea Burnett. University of New South Wales, Sydney, Australia

Dr Fatima Kyari. Baze University, Abuja, Nigeria

Ms Sumrana Yasmin. Brien Holden Vision Institute, Rawalpindi, Pakistan

Assistant/Associate Professor Jennifer Evans. London School of Hygiene & Tropical Medicine, London, UK

### Type and method of review

Review of reviews, Systematic review

### Anticipated or actual start date

17 June 2019

### Anticipated completion date

30 September 2020

### Funding sources/sponsors

None.

### Conflicts of interest

### Language

English

### Country

Australia, Brazil, England, Jamaica, Kenya, New Zealand, Nigeria, Pakistan

### Stage of review

**PROSPERO**  
International prospective register of systematic reviews

Review Ongoing

**Subject index terms status**

Subject indexing assigned by CRD

**Subject index terms**

Cataract; Humans; Prevalence; Refractive Errors; Socioeconomic Factors; Vision, Low

**Date of registration in PROSPERO**

06 August 2019

**Date of publication of this version**

06 August 2019

**Details of any existing review of the same topic by the same authors**

**Stage of review at time of this submission**

Stage	Started	Completed
Preliminary searches	Yes	No
Piloting of the study selection process	No	No
Formal screening of search results against eligibility criteria	No	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

**Versions**

06 August 2019

**PROSPERO**

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