

### Citation

Sylvia Walby, Heidi Stoeckl, Elizabeth Cook, Alexandria Innes, Sally McManus, Jessica Corsi, Riikka Kotanen, Estela Capelas Barbosa. Sex/gender-disaggregated fatal violence: a systematic review. PROSPERO 2021 CRD42021268712 Available from:

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### Review question

What is the estimated sex/gender disaggregated prevalence of fatal violence nationally, regionally, and globally?

## Searches

This review will utilize a four-step search strategy:

#### 1. Electronic database searches:

The following databases will be searched: MEDLINE, Global Health, EMBASE, Social Policy and Practice, and Web of Science. These databases will be searched to identify sources up to the search date that report prevalence estimates of sex/gender-disaggregations of homicide (for example, intimate partner homicide).

Search terms may include some of the following: 'homicide', 'femicide', 'killing', 'murder', 'wrongful death', in combination with 'partner', 'husband', 'wife', 'spouse', 'girlfriend', 'boyfriend', etc.

Search dates: 1 January 1990 – Current (inclusive)

Re-runs: searches will be re-run prior to final analyses to ensure any further sources are identified (using the previous upper date late limit as the lower date limit).

2. Review of national and international working papers, reports, and information from statistical offices

This will include a review of 194 WHO-listed country homepages to identify further country-level data i.e., national statistics offices, ministries of justice, home offices, and police headquarters (who collect and report data on homicide). These offices will be contacted by email if no relevant information can be found on homepages.

3. Consultations with external networks and advisory boards

This review will be supplemented with additional resources identified with guidance from the advisory board and members of the UKPRP/MRC Violence, Health and Society Consortium (see S12) who have expertise in this area. In addition, recommendations will be sought from key experts in the field of homicide research (e.g., Jacqueline Campbell, Claudia Garcia-Moreno) who will be asked to nominate references for inclusion.

## 4. Screening reference lists

This will include reference list screening and forward citation tracking of references (via Google Scholar and Web of Science) of i) included sources and ii) key references (sources which have been highly cited within the field and/or any previous systematic reviews pertaining to the review question).

## Types of study to be included

Inclusion criteria:

- Source type: peer-reviewed journal articles, national and international working reports/paper, or data from statistical offices; sources do not need to be published (i.e., available within the public domain) to be eligible

### for inclusion;

- Source data: presents quantitative data based on general population;
- Full-text available in: Spanish, Portuguese, Italian, French, Estonian, Finnish, Swedish, English (sources in other languages will be translated);
- Outcome measures: reports sex/gender disaggregated data on incidents or victims of completed homicide (separately for extraction, by victim/perpetrator relationship, and/or sexual aspects, and/or sex/gender motivation).

#### Exclusion criteria:

- Publication type: book review, conference paper, comment piece, letter;
- Study design type: qualitative, theoretical/historical perspective, case study;
- Full-text is not available;
- Outcomes measures: do not differentiate between completed and attempted homicide; or do not disaggregate by any of the following three dimensions of sex/gender: by victim/perpetrator relationship, or sexual aspects, or sex/gender motivation.

## Condition or domain being studied

The aim of this review is to update and expand Stoeckl et. al's (2013) systematic review on Intimate Partner Homicide (IPH) by estimating the prevalence of sex/gender disaggregated homicide at a global, regional, and country level.

Stoeckl et. al.'s (2013) review provided a disaggregation of IPH by sex of victim and victim/perpetrator intimate relationship. Applying Walby et. al. (2017), this review will expand this by including homicides between non-intimates as well as intimates (i.e., beyond IPH) and two additional dimensions: sexual aspects and sex/gender motivation.

Data on three dimensions (victim/perpetrator relationship, sexual aspects, and sex/gender motivation) will be identified through the systematic review strategy (including review of national statistics offices/organisations) detailed above. Additionally, data on a further two dimensions (sex of the victim and sex of the perpetrator) will be extracted from the United Nations Office of Drugs and Crime (UNODC) (as part of the UKPRP/MRC project, within which this review is nested, to create a global dataset on violence). Since 2013, UNODC homicide data have been collected according to the International Classification on Crime for Statistical Purposes (ICCS, 2015). This means that data exist on the sex of victim (and, often, sex of perpetrator) in many countries.

### Participants/population

The source will be eligible for inclusion in the review if sex/gender disaggregated data are reported on:

- Incidents or victims of homicide (any age and gender)

The source will be excluded from the review if:

- It only presents an analysis of sub-populations (e.g., victims of homicide where the perpetrator has a serious mental illness);
- Includes incidents of domestic abuse/violence-related suicides and does not report them separately from homicide incidents.

Intervention(s), exposure(s)



Sources will be eligible for inclusion if they present the prevalence of sex/gender disaggregated homicide (where the denominator represents total homicides and/or total for the relevant subtypes) or data from which this prevalence can be derived.

# Comparator(s)/control

Not applicable

#### Context

No restrictions will be placed on study setting.

## Main outcome(s)

The main outcome of this review is to estimate the prevalence of sex/gender disaggregated homicide as a proportion of overall homicides.

Estimates will be produced a national level for country-by-country comparability and at regional and global level by producing a median average of country estimates. The denominator is overall homicides. The numerator is the sex/gender disaggregation of homicide (e.g., intimate partner homicide).

## Additional outcome(s)

Not applicable

# Data extraction (selection and coding)

Source Selection

Sources will be reviewed using the four-step search strategy outlined above.

Databases (e.g., EMBASE) will be searched and returns will be downloaded into a reference management software (e.g., EndNote) for automatic and manual de-duplication. The remaining records will be transferred into a collaborative systematic review software (e.g., Rayyan).

The titles and the abstracts will be screened independently by two reviewers against the inclusion and exclusion criteria listed previously. If discrepancies arise, the reference will be included at this stage until further appraisal is conducted in the next stage.

The eligible sources will then be obtained for full-text screening by the two reviewers against the inclusion and exclusion criteria. Excluded sources and reasons for exclusion will be recorded. If discrepancies arise, these will be resolved through discussion, or a third reviewer will moderate.

Included sources will be supplemented by eligible sources identified in search strategy steps 2-4, which will be added.

#### **Data Extraction**

Data will be extracted from all eligible sources using a standardised extraction form. The second reviewer will double check the extracted data. If discrepancies arise, these will be resolved through discussion, or a third reviewer will moderate.

There are four main categories of data to be extracted: i) country/region; ii) study characteristics (data source, author, publication year, data type, method of measurement, population size, missing data, reference); iii) population characteristics (including sex/gender disaggregation); and iv) homicide estimates. If necessary, authors/owners of eligible sources will be contacted for additional information.

#### Risk of bias (quality) assessment

The review will apply the Joanna Briggs Institute critical appraisal tool suite to assess quality. This will be applied to appraise and make a statement about the quality of homicide data rather than to inform exclusion of sources.



However, this review will also develop a decision algorithm for quality assessment of external validity, building upon Stoeckl et. al.'s (2013) review. This quality assessment decision algorithm will need to be adapted for this review for two reasons: the previous review i) did not have access to UNODC homicide data post-ICCS (2015) implementation (only WHO mortality data); and ii) did not aim to collect data on sex/gender disaggregation beyond sex of victim and victim/perpetrator intimate relationship. This algorithm will be used to select the "best" estimate when multiple estimates are available for a single country.

To address publication bias, the review will include sources written in languages other than English and from non-peer reviewed sources. This is important as actors in Latin American countries have a significant role in measuring certain types of sex/gender-disaggregated homicide (e.g., femicide). The review will include sources written in: Spanish, Portuguese, Italian, French, Estonian, Finnish, Swedish, and English (sources in other languages will be translated).

## Strategy for data synthesis

Estimates will be produced at the level of the:

- Country
- Region
- Global

Country: For gender dimensions 1 and 2, estimates will be drawn from UNODC data. For gender dimensions 3, 4, and 5, estimates will be drawn from the systematic review and survey of national statistics offices. For each gender dimension, the approach will be to choose one estimate per country, selected based on predetermined quality assessment criteria (i.e., the decision algorithm mentioned above). The data extraction sheets will allow for coding of information that could be used to rate the validity, accuracy, and reliability of estimates, for example where estimates are based on a sample rather than a census. Information about the sample characteristics will be retained for generation of confidence intervals.

Region: the UNODC's Global Study on Homicide has found that while the disaggregation of homicide data at the country level has improved over the years, regional and global estimates are inevitably based on a limited number of countries, with Africa and Asia accounting for most of the gaps (UNODC, 2019: p7, Global study on homicide 2019). The available estimates for all countries in a designated region will be ordered, and the median estimate selected. However, the approach to generating regional level estimates will be reviewed once the number of and variation in country level estimates per region has been established.

Global: Regional estimates will be combined and weighted to be proportionate to each region's population size, to produce a global estimate. Sensitivity analyses will be conducted, for example rerunning analyses with lower quality or older estimates excluded and exploring the impact of accounting for missing data in different ways.

## Analysis of subgroups or subsets

The data will analyse homicide by sex/gender-disaggregation, where possible, including relationship between victim and perpetrator, and/or any sexual aspects to the homicide, and/or sex/gendered motivation to the homicide.

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## Organisational affiliation of the review

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## Type and method of review

Systematic review

## Anticipated or actual start date

01 August 2021

## Anticipated completion date

01 August 2022

## Funding sources/sponsors

City, University of London, UK

## UK Prevention Research Partnership (PRP) Consortium Award

Grant number(s)

State the funder, grant or award number and the date of award

### UK Prevention Research Partnership (PRP) Consortium Award MR/V049879/1

## Conflicts of interest

One member of the review team (HS) led the original review conducted in 2013 which is to be updated and expanded upon in the current review. The other reviewers declare that they have no known conflicts of interest.

Yes

### Language

**English** 

## Country

England

### Stage of review

Review Ongoing

### Subject index terms status

Subject indexing assigned by CRD

### Subject index terms

Gender Identity; Humans; Violence

## Date of registration in PROSPERO

27 July 2021

## Date of first submission

23 July 2021

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

Stöckl, H., Devries, K., Rotstein, A., Abrahams, N., Campbell, J., Watts, C. and Garcia Moreno, C. (2013) 'The global prevalence of intimate partner homicide: a systematic review', The Lancet, 382(9895): 859-865. https://doi.org/10.1016/S0140-6736(13)61030-2

# Stage of review at time of this submission

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

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions 27 July 2021