

Supplementary materials

PRISMA-SCR CHECKLIST

Table S1: Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

Section	Item	PRISMA-ScR checklist item	Reported on page #
Title	1	Identify the report as a scoping review.	1
Abstract	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	1
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	2-3
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	3
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	1
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	5
Information sources	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	4
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Supp.1
Selection of sources of evidence	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	5
Data charting process	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	5-6
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	5-6

Section	Item	PRISMA-ScR checklist item	Reported on page #
Critical appraisal of individual sources of evidence	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	NA
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	6
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	NA
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	NA
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	NA
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	NA
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	NA
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	NA
Limitations	20	Discuss the limitations of the scoping review process.	2
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	NA
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	7

DATA MANAGEMENT PLAN

Data Collection

What data will you collect or create?

The data will be created through a scoping review done according to the PRISMA extension for Scoping Review (PRISMA-Scr). Since this is the first scoping review addressing this research question, no preexisting data will be used.

The results of the database search will be exported to one .RIS file per database consulted.

Screening and data charting will be completed using DistillerSR (Evidence Partners, Ottawa, Canada) after uploading of the RIS files. Every forms used for screening and data charting will be exported to .PDF files. Raw data generated through those forms will be exported to .CSV files and imported in R Statistics for further analysis and to generate charts and tables for the final report. Every script used for data gathering, cleaning, arranging and processing will be made available alongside the raw data.

Given the nature of the data created, the total size of the data is expected to be quite low, not exceeding a few megabytes.

Documentation and Metadata

What documentation and metadata will accompany the data?

The data will be accompanied by a README file for the main directory and for each subdirectory. The main README file will describe the directory and subdirectories organization. Subdirectories README files will describe the files contained in the subdirectory and will be updated whenever files are added. README files concerning the data subdirectory will contain explanations regarding the variables in order to make the data readable for independent researchers. In addition, detailed explanations will be included in every script used in the report to ensure a fully reproducible scoping review.

Ethics and Legal Compliance

How will you manage any ethical issues?

No ethical concerns are applicable given the nature of the research and of the data generated.

How will you manage copyright and Intellectual Property Rights (IP/IPR) issues?

Data will be licensed under Creative Commons Licensing CC-BY. As such, the data will be fully reusable without any restriction other than attribution.

Storage and Backup

How will the data be stored and backed up during the research?

Data will be stored on the OneDrive account of the main investigator. In addition, a GitHub repository will be created for backup and collaboration inside the research team. This GitHub repository will be linked to an Open Science Framework project for registration of data, scripts and metadata after research completion.

How will you manage access and security?

OneDrive, GitHub and Open Science Framework are secured platform. Given that our data are neither confidential nor related to human beings, additional security measures are not deemed necessary.

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

Given that our ambition is to produce a fully reproducible paper and the limited size of the data generated, every data will be preserved and shared on the Open Science Framework. Our data may be reused to reproduce our research, validate our findings or to conduct new studies.

Data Sharing

How will you share the data?

The data will be registered publicly on the Open Science Framework upon manuscript submission without any end of availability. A unique Digital Object Identifier (DOI) will be generated for the whole project, including data (.RIS files, .csv files), forms (.PDF files), scripts (.R files) as well as for the RMarkdown document which will be used to generate the final paper. As stated earlier, our goal is to produce a fully reproducible paper with every component publicly available and reusable with attribution condition. The created DOI will have the benefit to perpetually reference our data and allow for our data to be cited and accessed by the public.

Responsibilities and Resources

Who will be responsible for data management?

The main investigator, Maxence Ouafik ([ID https://orcid.org/0000-0002-9795-5721](https://orcid.org/0000-0002-9795-5721)), is responsible for implementing the DMP and for every data management activity. Review of the DMP was performed by Laetitia Buret ([ID https://orcid.org/0000-0001-6039-9824](https://orcid.org/0000-0001-6039-9824)), Jean-Luc Belche ([ID https://orcid.org/0000-0001-8807-0473](https://orcid.org/0000-0001-8807-0473)) and Beatrice Scholtes ([ID https://orcid.org/0000-0001-5274-822X](https://orcid.org/0000-0001-5274-822X)), co-authors of the Scoping Review Protocol.

This Data Management Plan was created using DMPTool

SUMMARY OF ELECTRONIC RESEARCH

Table S2: Summary of electronic search

Database	Keywords used	No of publications identified
Medline	1# Syndemic/ 2# syndemic*.ti,ab,kf. 3# 1 or 2 4# bisexual*.ti,ab,kf. 5# (gay or gays).ti,ab,kf. 6# homosexual*.ti,ab,kf. 7# men who have sex with men.ti,ab,kf. 8# men having sex with men.ti,ab,kf. 9# (sexual adj3 minorit*).ti,ab,kf. 10# non heterosexual*.ti,ab,kf. 11# MSMW.ti,ab,kf. 12# MSM.ti,ab,kf. 13# "Sexual and Gender Minorities"/ 14# Homosexuality, Male/ 15# Homosexuality/ 16# Bisexuality/ 17# Same Sex 19# Intercourse*.ti,ab,kf. 18# 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 19# 3 and 18	184
PsyInfo	1# syndemic*.ti,ab,id. 2# homosexuality/ 3# male homosexuality/ 4# sexual minority groups/ 5# bisexuality/ 6# Same Sex Intercourse/ 7# bisexual*.ti,ab,id. 8# (gay or gays).ti,ab,id. 9# homosexual*.ti,ab,id. 10# men who have sex with men.ti,ab,id. 11# men having sex with men.ti,ab,id. 12# (sexual adj3 minorit*).ti,ab,id. 13# non heterosexual*.ti,ab,id. 14# MSMW.ti,ab,id. 15# MSM.ti,ab,id. 16# Same Sex Intercourse*.ti,ab,id. 17# 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 18# 1 and 17	155
Scopus	((TITLE-ABS-KEY (bisexual*)) OR (TITLE-ABS-KEY (gay)) OR (TITLE-ABS-KEY (homosexual*)) OR (TITLE-ABS-KEY ("men who have sex with men")) OR (TITLE-ABS-KEY ("men having sex with men")) OR (TITLE-ABS-KEY (sexual W/3 minorit*)) OR (TITLE-ABS-KEY ("non heterosexual*")) OR (TITLE-ABS-KEY (msmw)) OR (TITLE-ABS-KEY (msm)) OR (TITLE-ABS-KEY ("same sex intercourse*"))) AND (TITLE-ABS-KEY (syndemic*))	209

Database	Keywords used	No of publications identified
Cochrane Central Register of Controlled Trials	1# "syndemic*".ti,hw,ab. 2# "bisexual*".ti,hw,ab. 3# "gay*".ti,hw,ab. 4# "homosexual*".ti,hw,ab. 5# "men having sex with men".ti,hw,ab. 6# "men who have sex with men".ti,hw,ab. 7# (sexual adj3 minorit*).ti,hw,ab. 8# "non heterosexual* ".ti,hw,ab. 9# MSMW.ti,hw,ab. 10# MSM.ti,hw,ab. 11# "same sex intercourse* ".ti,hw,ab. 12# 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 13# 1 and 12	14
ProQuest Sociological Abstracts	noft(syndemic*) AND (noft(bisexual*) OR noft(gay*) OR noft(homosexual*) OR noft("men having sex with men") OR noft("men who have sex with men") OR noft("sexual N/3 minorit*") OR noft(("non heterosexual")) OR noft(MSMW) OR noft(MSM) OR noft("same sex intercourse*"))	66