

BMJ Open Abortion stigma among abortion seekers, healthcare professionals and the public in high-income countries: A mixed-methods systematic review protocol

Marie Bernard ¹, Jana Niemann ¹, Laura Weinhold,¹ Dennis Jepsen,¹ Celine Miani ², Claudia Luck-Sikorski^{3,4}

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MB and JN contributed equally.

MB and JN are joint first authors.

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For numbered affiliations see end of article.

Correspondence to

Jana Niemann;
jana.niemann@medizin.uni-halle.de

ABSTRACT

Introduction Abortion is a crucial sexual and reproductive right. However, the legal situation of pregnancy termination is rather heterogeneous across countries and regions. The political climate and cultural perception may result in abortion-related stigma. This mixed-methods systematic review protocol aims to detail the proposed methods for assessing the current state of research on abortion stigma in high-income countries from an abortion seeker, healthcare provider and public perspective.

Methods and analysis Following the Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols guideline, we conducted a systematic literature search of peer-reviewed studies from high-income countries in relevant electronic databases: PubMed, CINAHL, PsycINFO, LIVIVO and Cochrane Library. Qualitative, quantitative and mixed-method studies that measured or examined abortion-related stigma in abortion seekers, healthcare professionals and the general public will be included. Assessment of risk of bias, data synthesis and qualitative meta-aggregation will be carried out.

Ethics and dissemination The results of the systematic review will be submitted to peer-reviewed journals and presented at relevant conferences.

INTRODUCTION

Abortion is a central sexual and reproductive health right.¹ Worldwide, 60% of all unintended pregnancies, and 29% of all pregnancies worldwide, end in abortion.² The WHO guideline² details recommendations and best practices for safe abortions. However, due to heterogeneous legal situations, not everyone can access a safe abortion. In low-income and middle-income countries (LMICs), only 29% of women have access to legal abortion with no restrictions on their reason for abortion, compared with 81% in high-income countries (HICs).³ Due to this restrictive abortion laws and policies,⁴ 97% of unsafe abortions occur in LMICs. Overall, women living in HIC

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This study will review current research on the enacted and felt stigma of abortion from a variety of perspectives.
- ⇒ The included studies will be critically evaluated in terms of their underlying concepts and/or definitions of abortion stigma.
- ⇒ These results will provide research, policy and practice with information on how abortion stigma is conceptualised in high-income countries, how it is measured and experienced and where potential research gaps exist.
- ⇒ Reporting bias within the literature included in this review might be a potential weakness.
- ⇒ This paper's scope is limited to high-income countries.
- ⇒ Only peer-reviewed publications will be included in the systematic review.

have better access to sexual and reproductive healthcare (including abortion care) than those living in LMICs.⁵ Based on this evidence, we argue that the stark discrepancies in legal context and access to abortion care between HIC and LMICs are important factors when setting the context for researching abortion stigma. Hence, we decided to limit the scope of this systematic review to HIC.⁶

Worldwide, there are only a few countries, for example, Canada⁷ that follow the WHO's abortion care guidelines to fully decriminalise abortion services.² In most HICs, abortion is allowed but barriers such as waiting periods and mandatory counselling limit the access to abortion care. Although abortion laws have globally moved towards liberalisation, some HICs are moving in the opposite direction, passing laws that would restrict or prohibit abortion care. This is the case of Poland, for example, where access to abortion is now so

limited that it is in practice illegal.^{8,9} Similarly, in the USA, many states are taking actions to ban abortion altogether or at least limit access to abortion services: in June 2022, the US Supreme Court revoked the general right for abortion (*Roe v. Wade*) that had been in place for over 50 years, resulting in clinics closing and the prohibition of abortion in, so far, 60% of the US states.^{10,11} Ironically, on the same day, the German government withdrew the law that had hitherto prohibited healthcare professionals to advertise or rather advise of the possibilities to terminate a pregnancy, which had complicated abortion care substantially in the past. Still, access to abortion services remains in Germany more difficult than in other European Union countries. And while the COVID-19 pandemic represented an opportunity for expanding abortion access through telehealth, only a few countries enacted long-term changes in their abortion policies.^{8,9} The political climate, the question of legality and the predominant idea of morality may shape (anti)abortion attitudes, which in turn can manifest in abortion stigma.¹²

Conceptualisation of (abortion-related) stigma

The concept of stigma in the scientific context was brought to the surface by Goffman in 1963.¹³ His definition of stigma as an ‘attribute that is deeply discrediting’¹³ is the most prominent and the foundation for stigma research.^{13,14} Since Goffman’s impactful work, the concept of stigma has been evolving. Link and Phelan¹⁵ refined the concept of stigma as a social process of labelling, stereotyping, separating and discriminating against people with a stigmatised condition. Further, there is a growing body of literature that suggests conceptualising stigma as a form of power.^{16,17} One commonly used concept for breaking down the various forms of stigma is the differentiation between enacted stigma and felt stigma.¹⁸ Enacted stigma can take place on an interpersonal or structural level and refers to ‘what the public actually does to the person with stigmatised condition’.¹⁹ The umbrella term felt stigma¹⁹ refers to how individuals with a stigmatised condition may experience (a) a fear of encountering stigmatising attitudes (ie, anticipated stigma), (b) take on stereotypes (ie, internalised stigma) and (c) apply these stereotypes to themselves (ie, perceived stigma).¹⁸ The terms internalised and perceived stigma are often used synonymously.²⁰

The concept of stigma can be applied to abortion. Kumar *et al*²¹ presented the first explicit definition of abortion stigma. They defined it as ‘a negative attribute ascribed to women who seek to terminate a pregnancy that marks them, internally or externally, as inferior to ideals of womanhood’. Based on Herek’s²² concept of sexual stigma, abortion-related stigma was then categorised into internalised, felt and enacted abortion stigma.²³ According to Cockrill and Nack,²⁴ ‘internalised stigma often takes a toll on a woman’s ability to feel like she is a good woman, both internally and in the eyes of others’.^(p. 983) The concept of womanhood’s role and ideals, therefore, represent a crucial aspect of individual abortion stigma. However, caution has been advised by

some authors (see, Kumar²⁵ and Millar²⁶) regarding the tendency to label any negative reactions or attitudes towards abortion as ‘stigma’.²⁵ They further contend that social inequality and inequity, rather than specifically stigma, should be tackled as impediments to reproductive health services. As such, structural concerns should be regarded as primary drivers of unequal abortion care.²⁵ Millar argues for a conceptualisation of abortion stigma as a manifestation of structural power and social processes, rather than as an individual attribute, as proposed by Goffman.^{13,26}

The current state of research on abortion-related stigma

In 2015, Hanschmidt *et al* conducted a systematic review on abortion stigma.¹² The study found that stigma, in various forms, had negative impacts on the mental health and well-being of individuals involved in abortion. They included seven quantitative and seven qualitative research articles that examine perceived and internalised stigma (as parts of felt stigma) as well as enacted stigma among abortion-seekers, healthcare professionals or the general public. They found that (a) most studies investigating abortion seekers’ experiences reported some form of stigma, (b) abortion providers are confronted with stigmatising attitudes and (c) some studies reported public stigma.⁸ More recent work suggests that enacted stigma is less frequently reported than felt stigma, indicating that abortion-seekers may anticipate and internalise stigmatising attitudes and stereotypes more often than they actually encounter them.²⁷

Considering abortion-related stigma as a social process, it is plausible that it is closely linked to social, cultural and ethnic realities at the microlevels, mesolevels and macrolevels within and across countries.^{28,29} Moreover, the social process becomes clear, when taking into consideration that abortion stigma is not equally distributed but depends on intersectional factors such as race and social class.^{23,26,30} These factors also can impact the quality of abortion-related healthcare. Sorhaindo and Lavelanet, for instance, found intersections of abortion stigma and quality of abortion-related healthcare with dimensions such as religion.³¹

Considering the recent increase of published studies on this topic and the justified criticism, we aim to review the current state of research on abortion stigma in HIC and the underlying concept of abortion stigma that was used.

Objectives

In this protocol, we outline the process for a mixed-methods systematic review (MMSR), which aims to provide a comprehensive summary of research on enacted and felt stigma surrounding abortion in HIC.⁶ Our main objectives are to extract and synthesise the

- ▶ Definitions of abortion stigma used in the studies.
- ▶ The prevalence of abortion stigma.
- ▶ Associated factors (eg, mental health) with abortion stigma.

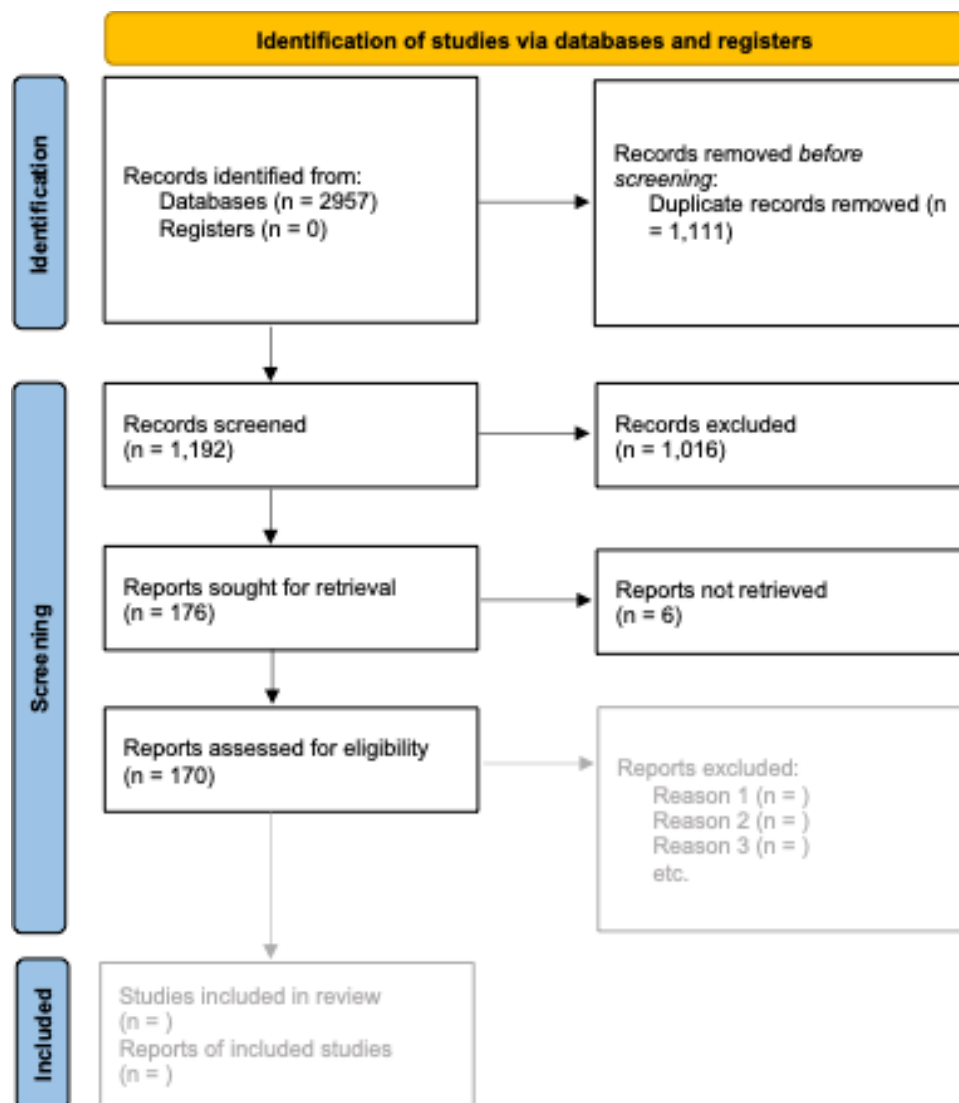


Figure 1 PRISMA flow chart. PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

- The manifestation of the enacted and felt abortion stigma among abortion seekers, health professionals (HPs) and the general public in HIC.

METHODS

We followed the methodological steps of the Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols (PRISMA-P) checklist (online supplemental file 1) for this protocol.^{23,24} To ensure rigour and comprehensibility, we will adhere to the PRISMA guidelines³² and Joanna Briggs Institute (JBI) guidelines for MMSR.³³ By the time of submitting this protocol (2 May 2023), we have completed the full search and screening of titles and abstracts.

Eligibility criteria

We included qualitative, quantitative and mixed methods peer-reviewed articles investigating the enacted and felt stigma (ie, perceived, internalised, anticipated and

self-stigma) towards abortion, including, but not limited to, medication abortion and abortion following a diagnosis of fetal abnormality. Literature reviews, commentaries, dissertations, as well as letters to the editor and editorials were excluded. The reference lists of these articles were screened by hand. Persons of interest for this systematic review were (1) individuals who have sought for abortion and/or had an abortion, (2) HPs who provide abortion care and/or work in the field of gynaecology and (3) the general public, which can be divided into the public opinion on abortion care and media platforms that (can) influence public opinion.

We included only studies conducted in HIC. As Hanschmidt *et al*¹² published a systematic review on this topic in 2016, we will only include articles that were published after March 2015 until now. Given the political and legal changes in recent years, it seems beneficial to update the results of previous research.

Information sources and search strategy

We searched the electronic databases for peer-reviewed studies reporting abortion stigma: Medline (EBSCOhost), CINHAL (EBSCOhost), PsycINFO (EBSCOhost), LIVIVO and Cochrane Library. The search was conducted from 20 January 2023 to 28 February 2023 by two researchers (MB and JN), with previous experience in the literature review (online supplemental file 2). The search strategy was first developed and completed in PubMed and then transferred to the other databases. We used Medical Subject Headings (MeSH) and previous research¹² to generate appropriate keywords: [abortion OR pregnancy termination OR voluntary pregnancy interruption] AND [stigma* OR discriminat*]. We restricted the search to titles and abstracts.

Study records

Data management and selection process

Hereinafter, we imported all results into the software Rayyan (Qatar Computing Research Institute, Doha, Qatar).³⁴ Rayyan is a software developed for the screening and management of (systematic) literature reviews. We screened all included articles for titles and abstracts. To increase rigour and consistency, two reviewers (MB and JN) independently screened all articles. The articles were then categorised into three groups: included, excluded and potential for inclusion. Articles excluded by both reviewers were eliminated. Disagreements about eligibility were discussed and resolved. We were able to include 170 in the full-text screening (date: 2 May). We have summarised the screening process to date in [figure 1](#).

All subsequent steps of the systematic review must still be performed

Data collection process

During the full-text screening process, articles are categorised into studies that focused on:

1. Individuals who sought and/or had an abortion (referred to as abortion seekers).
2. Healthcare professionals who provide abortion and/or work in the field of gynaecology and obstetrics.
3. The general public.

After the full-text screening, we will extract data from the articles into Excel. We will use MAXQDA to code and extract data from the articles and transfer them into data extraction sheets developed by the research team and in accordance with the JBI guidelines for MMSR.³⁵ At least two researchers will extract the data independently and discuss discrepancies with the research team.

Data items

For each article, we will extract the following information: author(s), year of publication, journal title, study objective, type of participants (ie, abortion seekers, HCP, general public), sample demographics, sample size, the definition of stigma, study design, study setting, geographical location, measurement of stigma, reported abortion stigma in the results. For research articles investigating

the experience of individuals seeking abortion, their pregnancy status during the study will be extracted.

Risk of bias in individual study

The included studies will be assessed for their potential risk of bias. For the quantitative studies, we will use the ROBINS-E³⁶ critical appraisal. For qualitative studies, we will use both the CASP checklist³⁷ and the JBI Critical Appraisal Checklist for Qualitative Research,³⁸ as both checklists have different focuses in their approach to assessing the risk of bias in qualitative studies. MMR studies will be critically appraised using both approaches. We will exclude quantitative studies that do not meet the primary considerations of the ROBINS-E tool.³⁶ Qualitative studies will be excluded if they fail to represent their participants' voices in order to support their findings.

Data synthesis

We will summarise the descriptive results of the quantitative data and do a meta-aggregation of the qualitative results. We plan to conduct three subanalyses with focusing on (1) the abortion seekers, (2) healthcare professionals who provide abortion care and/or work in obstetrics and gynaecology and (3) the general public. If a publication includes results from more than one group of interest, we will extract the relevant portion separately (eg, analysing the experiences of abortion seekers separately from the experiences of healthcare providers). In addition, the stated definitions of stigma and abortion stigma will be recorded in tables of results. We will then thematically analyse these definitions and findings concerning abortion stigma.

We aim to summarise and publish all findings in a synthesis that presents the reported findings on abortion stigma in HIC. In addition, we will summarise the abortion definitions used in all included studies.

Ethics and dissemination

As no primary research was conducted, no ethical approval was necessary to conduct this study.

Patient and public involvement

No patients were involved in the design of the study.

DISCUSSION

Abortion stigma is a widely researched topic. This mixed-methods systematic review aims to examine the evidence surrounding abortion stigma in HICs. The results of this review will provide valuable updated insights into an important component of abortion-related healthcare and policy. By including both quantitative and qualitative studies, we will offer a comprehensive overview of peer-reviewed publications. The findings will be useful in assisting healthcare researchers, professionals and policy-makers in their work with abortion stigma.

Author affiliations

¹Institute of Medical Sociology, Martin-Luther-Universität Halle-Wittenberg, Halle, Germany

²Department of Social Epidemiology and International Public Health, School of Public Health, Bielefeld University, Bielefeld, Germany

³SRH Hochschule für Gesundheit GmbH, Gera, Germany

⁴Integrated Research and Treatment Center (IFB) Adiposity Diseases, Leipzig University, Leipzig, Germany

Twitter Jana Niemann @niemann_jana

Contributors The manuscript protocol was drafted by MB and JN, and was revised by CL-S, CM, DJ and LW. The search strategy was developed by all of the authors and will be performed by MB, JN, MB, JN, DJ and LW will also independently screen the potential studies, extract data of included studies, assess the risk of bias and complete the data synthesis. CL-S and CM will arbitrate the disagreements and ensure that no errors are introduced during the study. All authors approved the publication of the protocol.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

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ORCID iDs

Marie Bernard <http://orcid.org/0000-0003-4208-4057>

Jana Niemann <http://orcid.org/0000-0001-6094-5143>

Celine Miani <http://orcid.org/0000-0003-3835-0287>

REFERENCES

- Ross LJ. Reproductive justice as Intersectional feminist activism. *Souls* 2017;19:286–314.
- WHO. Abortion care guideline. 2022. Available: <https://www.who.int/publications/i/item/9789240039483>
- Singh S, Remez L, Sedgh G, et al. Abortion Worldwide 2017: uneven progress and unequal access. New York. 2018. Available: https://www.guttmacher.org/sites/default/files/report_pdf/abortion-worldwide-2017.pdf
- Footman K, Dessalegn B, Hayes G, et al. Can universal health coverage eliminate unsafe abortion? *Sex Reprod Health Matters* 2020;28:1848398.
- Bearak J, Popinchalk A, Ganatra B, et al. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990–2019. *Lancet Glob Health* 2020;8:e1152–61.
- The World Bank. World Bank country and lending groups 2023. 2023. Available: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups#:~:text=For the current 2024 fiscal,those with a GNI per>
- Shaw D, Norman WV. When there are no abortion laws: A case study of Canada. *Best Pract Res Clin Obstet Gynaecol* 2020;62:49–62.
- Cioffi A, Cecannecchia C, Cioffi F, et al. Abortion in Europe: recent legislative changes and risk of inequality. *Int J Risk Saf Med* 2022;33:281–6.
- Gissler M, Fronteira I, Jahn A, et al. Terminations of pregnancy in the European Union. *BJOG* 2012;119:324–32.
- Gostin LO, Reingold RB. Ending the constitutional right to abortion in the United States. *BMJ* 2022;378:1897.
- Gostin LO. The US turns its back on women's reproductive rights. *BMJ* 2022;377:1206.
- Hanschmidt F, Linde K, Hilbert A, et al. Abortion stigma: A systematic review. *Perspect Sex Reprod Health* 2016;48:169–77.
- Goffman E. *Stigma Notes on the Management of Spoiled Identity*. New York: Simon & Schuster, 1963.
- Aranda AM, Helms WS, Patterson KDW, et al. Standing on the shoulders of Goffman: advancing a relational research agenda on stigma. *Business & Society* 2023;62:1339–77.
- Link BG, Phelan JC. Conceptualizing stigma. *Annu Rev Sociol* 2001;27:363–85.
- Tyler I, Slater T. Rethinking the sociology of stigma. *The Sociological Review* 2018;66:721–43.
- Parker R, Aggleton P. HIV and AIDS-related stigma and discrimination: a conceptual framework and implications for action. *Soc Sci Med* 2003;57:13–24.
- Rai SS, Syurina EV, Peters RMH, et al. Non-communicable diseases-related stigma: A mixed-methods systematic review. *Int J Environ Res Public Health* 2020;17:6657.
- Boyle MP. Enacted stigma and felt stigma experienced by adults who stutter. *J Commun Disord* 2018;73:50–61.
- Gärtner L, Asbrock F, Euteneuer F, et al. Self-stigma among people with mental health problems in terms of warmth and competence. *Front Psychol* 2022;13:877491.
- Kumar A, Hessini L, Mitchell EMH. Conceptualising abortion stigma. *Cult Health Sex* 2009;11:625–39.
- Herek GM. Sexual stigma and sexual prejudice in the United States: A conceptual framework. *Nebr Symp Motiv* 2009;54:65–111.
- Cockrill K, Upadhyay UD, Turan J, et al. The stigma of having an abortion: development of a scale and characteristics of women experiencing abortion stigma. *Perspect Sex Reprod Health* 2013;45:79–88.
- Cockrill K, Nack A. 'I'm not that type of person': managing the stigma of having an abortion. *Deviant Behavior* 2013;34:973–90.
- Kumar A. Everything is not abortion stigma. *Women's Health Issues* 2013;23:e329–31.
- Millar E. Abortion stigma as a social process. *Women's Studies International Forum* 2020;78:102328.
- Cowan SK. Enacted abortion stigma in the United States. *Soc Sci Med* 2017;177:259–68.
- Link BG, Yang LH, Phelan JC, et al. Measuring mental illness stigma. *Schizophr Bull* 2004;30:511–41.
- Strong J, Coast E, Nandagiri R. Abortion stigma, and Intersectionality. In: *Handbook of Social Sciences and Global Public Health*. Cham: Springer International Publishing, 2023: 1–22.
- Foster DG, Biggs MA, Raifman S, et al. Comparison of health, development, maternal bonding, and poverty among children born after denial of abortion vs after pregnancies subsequent to an abortion. *JAMA Pediatr* 2018;172:1053–60.
- Sorhaindo AM, Lavelanet AF. Why does abortion stigma matter? A Scoping review and hybrid analysis of qualitative evidence illustrating the role of stigma in the quality of abortion care. *Social Science & Medicine* 2022;311:115271.
- Page MJ, Moher D, Bossuyt PM, et al. PRISMA 2020 explanation and elaboration: updated guidance and Exemplars for reporting systematic reviews. *BMJ* 2021;372:n160.
- Lizarondo L, Stern C, Carrier J, et al. Chapter 8: mixed methods systematic reviews. *JBIMan Evid Synth* 2020.
- Ouzzani M, Hammady H, Fedorowicz Z, et al. Rayyan—a web and mobile App for systematic reviews. *Syst Rev* 2016;5:210.
- Stern C, Lizarondo L, Carrier J, et al. Methodological guidance for the conduct of mixed methods systematic reviews. *JBIMan Evid Synth* 2020;18:2108–18.
- Group R-ED. Risk of bias in non-randomized studies - of exposure (ROBINS-E). n.d. Available: <https://www.riskofbias.info/welcome/robins-e-tool>
- Critical Appraisal Skills Programme. CASP checklist: 10 questions to help you make sense of a qualitative research. 2023. Available: https://casp-uk.net/images/checklist/documents/CASP-Qualitative-Studies-Checklist/CASP-Qualitative-Checklist-2018_fillable_form.pdf
- Lockwood C, Munn Z, Porritt K. Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. *Int J Evid Based Healthc* 2015;13:179–87.

PRISMA-P 2015 Checklist

This checklist has been adapted for use with protocol submissions to *Systematic Reviews* from Table 3 in Moher D et al: Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews* 2015 4:1

Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
ADMINISTRATIVE INFORMATION					
Title					
Identification	1a	Identify the report as a protocol of a systematic review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Title Page
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	<input checked="" type="checkbox"/>	<input type="checkbox"/>	134-136
Registration	2	If registered, provide the name of the registry (e.g., PROSPERO) and registration number in the Abstract	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Abstract
Authors					
Contact	3a	Provide name, institutional affiliation, and e-mail address of all protocol authors; provide physical mailing address of corresponding author	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Title Page
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Title Page
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Support					
Sources	5a	Indicate sources of financial or other support for the review	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sponsor	5b	Provide name for the review funder and/or sponsor	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Role of sponsor/funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
INTRODUCTION					
Rationale	6	Describe the rationale for the review in the context of what is already known	<input checked="" type="checkbox"/>	<input type="checkbox"/>	102-125
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	127-135

Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
METHODS					
Eligibility criteria	8	Specify the study characteristics (e.g., PICO, study design, setting, time frame) and report characteristics (e.g., years considered, language, publication status) to be used as criteria for eligibility for the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	144-157
Information sources	9	Describe all intended information sources (e.g., electronic databases, contact with study authors, trial registers, or other grey literature sources) with planned dates of coverage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	159-163
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	163-167 & appendix 1
STUDY RECORDS					
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	169-180
Selection process	11b	State the process that will be used for selecting studies (e.g., two independent reviewers) through each phase of the review (i.e., screening, eligibility, and inclusion in meta-analysis)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	169-180
Data collection process	11c	Describe planned method of extracting data from reports (e.g., piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	<input checked="" type="checkbox"/>	<input type="checkbox"/>	181-192
Data items	12	List and define all variables for which data will be sought (e.g., PICO items, funding sources), any pre-planned data assumptions and simplifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	193-199
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	193-199
Risk of bias in individual studies	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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	200-208
DATA					
Synthesis	15a	Describe criteria under which study data will be quantitatively synthesized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	210-221
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data, and methods of combining data from studies, including any planned exploration of consistency (e.g., I^2 , Kendall's tau)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	15c	Describe any proposed additional analyses (e.g., sensitivity or subgroup analyses, meta-regression)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	<input checked="" type="checkbox"/>	<input type="checkbox"/>	210-211

Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (e.g., publication bias across studies, selective reporting within studies)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (e.g., GRADE)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Appendix 1: Search strategy

Search	Query	Records retrieved
Medline (EBSCOhost)		
#1	[abortion[tiab] OR pregnancy termination[tiab] OR voluntary pregnancy interruption[tiab]] AND [stigma*[tiab] OR discriminat*[tiab]]*	581
CINHAL (EBSCOhost)		
#2	[abortion[tiab] OR pregnancy termination[tiab] OR voluntary pregnancy interruption[tiab]] AND [stigma*[tiab] OR discriminat*[tiab]]*	369
PsychINFO (EBSCOhost)		
#3	[abortion[tiab] OR pregnancy termination[tiab] OR voluntary pregnancy interruption[tiab]] AND [stigma*[tiab] OR discriminat*[tiab]]*	203
Cochrane		
#4	("abortion" OR "pregnancy termination" AND "discriminat*" OR "stigma*") with Cochrane Library publication date Between Jan 2015 and Jan 2023, in Cochrane Reviews, Trials with 'Public Health', 'Cochrane Germany', 'Pregnancy and Childbirth', 'Gynaecology and Fertility', 'Cochrane Nordic', 'Consumers and Communication', 'Cochrane UK', 'Cochrane Australia', 'Effective Practice and Organisation of Care', 'Cochrane Canada' in Cochrane Groups (Word variations have been searched)	878
LIVIVO		
#5	((abortion OR pregnancy termination OR voluntary pregnancy interruption) AND (discriminat* OR stigma*)) AND PY=2015:2023	926

Total 2957

*Limited to 2015 to 2023