


BMJ Open Quality of life of transgender people under the lens of social determinants of health: a scoping review protocol

Kaio Henrique Cesconetto Coswosck,¹ Jose Luiz Marques-Rocha,¹ Juliana Almeida Moreira,¹ Valdete Regina Guandalini,¹ Luís Carlos Lopes-Júnior ²

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¹Graduate Program in Nutrition and Health, Health Sciences Center, Federal University of Espírito Santo, Vitória, Brazil

²Department of Nursing, Federal University of Espírito Santo, Vitória, Brazil

Correspondence to

Dr Jose Luiz Marques-Rocha;
jose.l.rocha@ufes.br

ABSTRACT

Introduction There is an urgent need for knowledge about the transgender population to inform the development of clinical protocols and training of health professionals on the unique issues affecting this population. Discussing transgender quality of life (QoL) through the lens of social determinants of health (SDOHs) would enable gender-specific health interventions. Here, we aimed to review the evidence on the QoL of transgender people from an SDOH perspective.

Methods and analysis A scoping review (ScR) protocol following the Preferred Reporting Items for Systematic Review and Meta-Analyses extension for Scoping Reviews statement and guided by the Joanna Briggs Institute was used. MEDLINE/PubMed, Cochrane Library, Embase, PsycINFO, Web of Science, Scopus and registry sites such as ClinicalTrials.gov and WHO ICTRP will be searched. Additional sources to be searched include ProQuest Dissertations/Theses Global, British Library, Google Scholar and Preprints for Health Sciences-medRxiv. Two independent researchers will carry out the selection, data charting and data synthesis. No date restriction will be applied in this ScR. The search will be restricted to articles published in English, Spanish and Portuguese. The results will be presented in tables, narrative summaries and graphs and will be graded on the type of data presented and the results. The search strategy will be updated in April 2023. The expected completion date of this ScR is July 2023.

Ethics and dissemination This ScR protocol does not require ethical approval. Dissemination plans include peer-reviewed publications, conference presentations to be shared with experts in the field, and advisory groups to inform discussions on future research. It is hoped that our findings will be of interest to practitioners, researchers, stakeholders, public and private managers, and the general population concerned with this emerging public health issue.

Trial registration number osf.io/9ukz6.

INTRODUCTION

Transgender, or trans, is an umbrella term used to describe people whose gender expressions or gender identities are different from those expected for the sex they were assigned at birth.¹ This definition encompasses many

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ To the best of our knowledge, this will be the first scoping review to synthesise qualitative and quantitative data to specifically examine transgender quality of life under the lens of social determinants of health.
- ⇒ The review will adopt a rigorous approach, following Preferred Reporting Items for Systematic Review and Meta-Analyses extension for Scoping Reviews guidelines and a comprehensive and systematic search strategy, including all study designs, grey literature and preprints, with no time limit.
- ⇒ The lack of a standardised classification of the nomenclature for the wide variety of genders may limit our findings.

communities worldwide of people with gender identities or expressions that differ from the socially designated sex. This includes people with culturally or linguistically specific experiences, identities or expressions that are not based on or encompassed by current conceptualisations of gender.¹ In addition, some transgender people identify outside the gender binary as neither, one, or somewhere in between.²

The lives of transgender people are fraught with unique vulnerabilities, including a history of negative healthcare experiences, difficulty obtaining legal gender recognition and lack of social support.³ This group experiences higher rates of harassment and bullying, homelessness, sexual and physical violence, parental rejection, and social isolation compared with cisgender people.^{1 4 5}

Transgender people may also seek medical services beyond gender-affirming healthcare. Some transgender people begin hormone therapy to better identify with their gender, using estrogens for transgender women and testosterone for transgender men to induce feminine and masculine physical characteristics, respectively. In some cases, the surgical

alternative may provide results consistent with the individual's gender, which may modulate the level of quality of life (QoL).^{6 7} QoL is a broad and multidimensional concept that includes subjective assessments of the positive and negative aspects of life.⁸ Some studies have shown that the QoL of the transgender population is lower than that of cisgender individuals.^{9–11} The transition process is surrounded by physiological (development of sexual characteristics), social (lack of social support, discrimination, rejection, transphobia) and psychological (anxiety, depression and suicidal ideation) challenges¹² that can negatively affect the QoL of these individuals. The most affected dimensions of QoL are vitality, social support, and physical functioning.^{9 10}

Indeed, therapeutic intervention is one of the factors that may influence QoL in the transgender population.¹⁰ A recent systematic review that sought to understand the effect of gender-affirming hormone therapy on psychological outcomes in transgender people found that transgender people who were prescribed cross-sex hormones had statistically significant improvements on validated scales measuring QoL, anxiety and depression compared with transgender people who were enrolled in a gender reassignment clinic but had not yet begun taking cross-sex hormones.¹⁰ These findings are consistent with other studies on this topic.^{13 14} Conversely, other studies have found no difference in quality of life or psychological functioning between transgender people and the general population.^{5 15 16}

Another relevant issue is the cost of gender-affirming treatments, especially multiple gender-affirming surgeries. Gender-affirming surgeries and the impact of the financial burden on transgender people's mental health and quality of life are often overlooked.¹⁷ Financial and insurance issues, lack of services, and fears or concerns may be raised during trans-sexuality.¹⁸ Therefore, there is an urgent need to better understand gender identity-based differences in social determinants of health (SDOHs), particularly in this population characterised by social inequality.

Given the range of healthcare needs, primary healthcare providers and others need to be trained in transgender healthcare (including protocols for referral to specialists, where available). In addition, knowledge of the association between socioeconomic and health variables of transgender people is needed to inform the development of public health policies and clinical protocols for the unique issues affecting this population.

Background: the SDOHs

The health-disease balance is influenced by multiple economic, cultural, social, environmental and genetic/biological factors.¹⁹ However, the multiplicity of determinants has not always been taken into account in the development of health-related policies. Therefore, a broad understanding of these determinants enables the development of appropriate interventions at different levels to minimise their impact on health outcomes.^{19–21}

It should be emphasised that the term 'SDOHs' has received considerable attention as a foundational concept in the field of population and public health.^{22 23} The WHO defines SDOH as the conditions or circumstances in which people are born, grow, live, work and age,²⁴ shaped by political, social and economic forces.²⁵ Indeed, the importance of SDOH has led to increased research on the relationship between health determinants and the organisation of society.^{22 23} In addition, research on health inequalities has been conducted to understand the disparities between different populations.^{19 24}

Some of the most important SDOHs in the literature are education,²⁵ housing and living environment,²⁶ income and its distribution,²⁷ stress, early life, social exclusion, work, unemployment, social support, addiction, food and transportation.²⁸ In more recent literature, SDOHs have also been identified as health systems, gender, sexual orientation, social safety nets,²⁷ culture or social norms,²⁹ media, stigma and discrimination,³⁰ social capital,³¹ conflict, rule of law, racism, racialised legal status,³² immigration,³³ family, religion,³⁴ colonialism and marginalisation.³⁵ In addition, researchers have identified 'time' as an SDOH because healthy behaviours, access to health services, rest and caregiving all require time.³⁶ Indeed, the amount of time available for health-related activities is socially structured and may be a source of health inequalities.²³

Some models in the literature describe the complex relationship between different factors influencing SDOHs. One of the most cited and endorsed models by the WHO^{24 37} is the Dahlgren and Whitehead model,³⁸ which justifies the choice of this framework in the present article. In this model, the SDOHs are arranged in different concentric layers, with the individual (with individual characteristics of age, gender and genetic factors) at the centre. The first layer is related to lifestyle (with the potential to be changed through action based on information). Next are the social and community support networks that are essential to the health of society. At the most distal level are the macro-level determinants, which are related to general economic, environmental and cultural aspects of society (figure 1). These have a great capacity to influence lower-level factors.^{24 37}

Overall, the logic of SDOHs aims to reduce health inequities, improve health and well-being, promote development and achieve the Sustainable Development Goals.³⁹ However, implementation of approaches related to these determinants has been slow, which may indicate that local or global governance is still struggling to solve current health problems.⁴⁰

Ideally, social, political, economic and health conditions should be distributed and used by citizens fairly and equitably. Moreover, it is not difficult to see that all these social resources are shaped by public policies. The economy, politics in general and social policies in particular play an important role in shaping such actions in society.^{19 41} In addition, the long list of SDOHs has implications for clinical practice and policy-making.²³

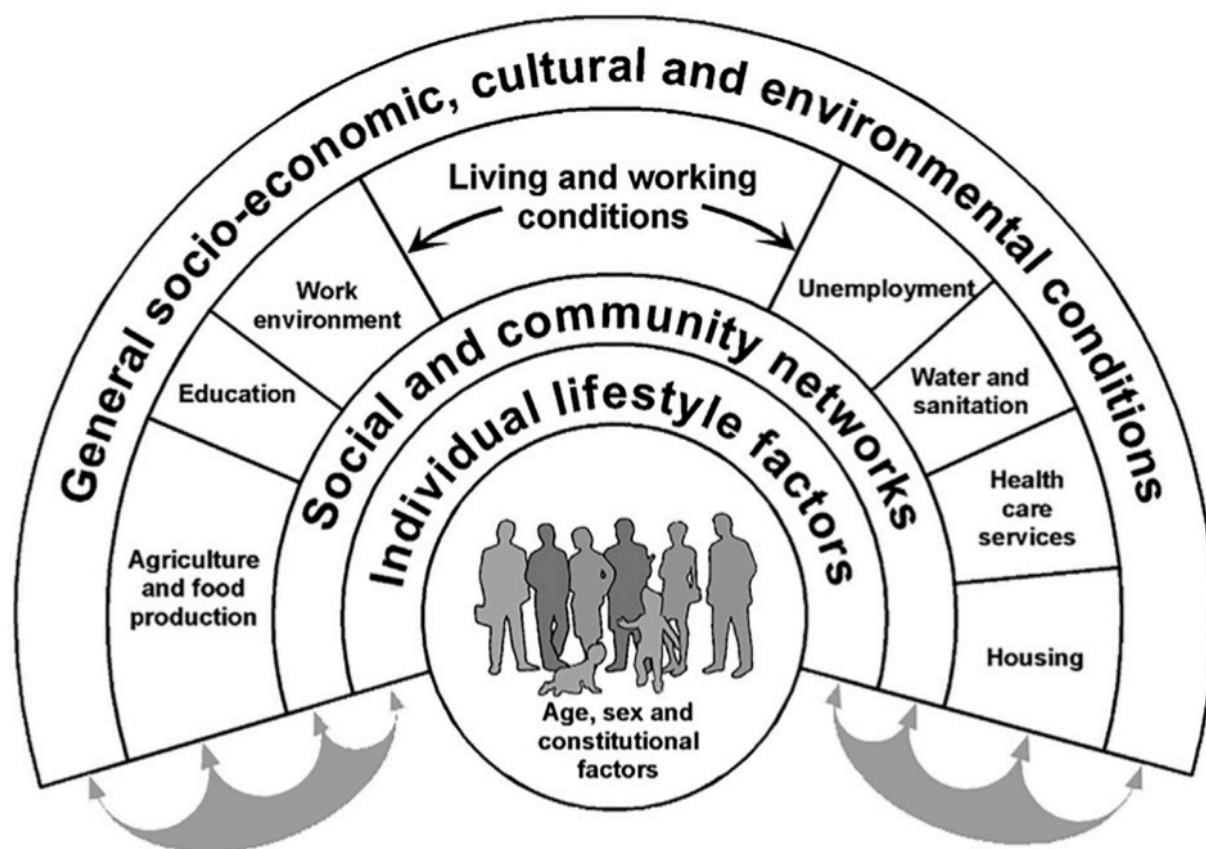


Figure 1 The main determinants of health. Source: adapted from Dahlgren and Whitehead,³⁸ Whitehead and Dahlgren (p22).⁶¹

For example, an overwhelming list may discourage clinicians from considering screening for SDOHs. There are concerns about the requirements and approaches for screening, as well as the benefits and unintended harms.^{42 43} Policymakers may be less willing to proceed with such a long and growing list. In most governmental settings, there are inherent barriers to adopting a social determinants approach to policymaking.^{43 44} These barriers include: the invisibility of this population in the global context, particularly in middle-income countries; stigma and prejudice among health managers that lead to a failure to prioritise policies for this population; ideologies and religious issues that remain relevant to policymakers' decision-making; and a lack of training among health professionals that limits their ability to address SDOHs. In addition, public understanding of the determinants of health is largely dominated by biomedical and behavioural approaches, as reflected in mainstream media coverage. Policymakers rarely use this approach to formulate public policy.^{23 43 44}

Although some studies have examined QoL in transgender people, none have analysed the findings from the perspective of SDOHs. There are specific inequalities in access to healthcare that need to be better understood by managers and multiprofessional healthcare teams. Furthermore, there is still no consensus on the relationship between QoL and social, hormonal and

surgical gender affirmation procedures and psychological outcomes.

RESEARCH AIM

The aim of this study is to review the evidence on the quality of life of transgender people from an SDOH perspective.

METHODS AND ANALYSIS

Study design

This scoping review (ScR) will be reported in accordance with the Preferred Reporting Items for Systematic Review and Meta-Analyses extension for Scoping Reviews⁴⁵ and with high adherence to the Joanna Briggs Institute (JBI) Manual for Evidence Synthesis.⁴⁶

One of the main reasons for conducting ScRs is that, unlike other reviews that tend to address relatively precise questions (eg, a systematic review of interventions using a predefined set of outcomes), ScRs can be used to map the key concepts that underlie a field of research and to clarify working definitions or the conceptual boundaries of a topic.⁴⁷ In addition, one study indicated that the three most common reasons for conducting an ScR were to explore the breadth or scope of the literature, to map and synthesise the evidence and to inform future

research.⁴⁸ According to Munn *et al*,⁴⁹ indications for ScRs include (a) as a precursor to a systematic review, (b) to identify the types of evidence available in a particular area, (c) to identify and analyse knowledge gaps, (d) to clarify key concepts/definitions in the literature, (e) to assess how research is conducted on a particular topic or area and (f) to identify key characteristics or factors associated with a concept.⁴⁹

The nine steps of the ScR include: (a) defining and aligning the objective(s) and question(s); (b) developing and aligning the inclusion criteria with the objective(s) and question(s); (c) describing the planned approaches to evidence searching, selection, data extraction and presentation of evidence; (d) searching for evidence; (e) selecting evidence; (f) extracting evidence; (g) analysing evidence; (h) presenting results and (i) summarising the evidence in relation to the purpose of the review, drawing conclusions, and noting any implications of the findings.⁴⁵

In addition, this protocol has been registered with the Open Science Framework.

Research question

To formulate the research question, we used the PCC acronym (Population, Concept and Context)⁴⁵ to identify the key concepts, which are described in detail below.

Population

The target population for this ScR is transgender people. The definition adopted includes people who do not conform to the general expectations of gender reassignment to varying degrees and in different ways.¹

Concept

This ScR will include studies that use quality of life as a primary outcome. For the purposes of this review, QoL is defined by the WHO as ‘an individual’s perception of his or her position in life in the context of the culture and value systems in which he or she lives, and in terms of his or her goals, expectations, standards, and concerns’.⁵⁰ QoL is a broad, multidimensional concept that typically includes subjective assessments of both positive and negative aspects of life.⁸

Context

The context analysed in this ScR is the SDOHs. SDOHs are defined as ‘the conditions in which people are born, grow, work, live and age, and the broader set of forces and systems that shape the conditions of daily life’.³ These forces and systems include economic policies, systems, development agendas, social norms and policies, and political systems.^{42 44 50}

The PCC acronym facilitated structured critical thinking and the formulation of the following review question: ‘What is the evidence on the quality of life of transgender people from the perspective of SDOHs?’.

Search strategy

The search for evidence will include the following databases: Medical Literature Analysis and Retrieval System

Online (MEDLINE) via PubMed, Cochrane Library, Excerpta Medica database (Embase), Psychology Information (PsycINFO), Web of Science and Scopus, as well as registered sites such as ClinicalTrials.gov and the WHO International Clinical Trials Registry Platform. Additional sources will also be searched, including ProQuest Dissertations and Theses Global, the British Library (UK), Google Scholar, and Preprints for Health Sciences (medRxiv). The search strategy will include a combination of subject headings, such as Medical Subject Headings (MeSH), Emtree terms and Thesaurus, using the Boolean terms AND and OR.^{51 52} The reference lists of all included studies will be screened for additional relevant studies. No date restrictions will be applied in this review. In terms of language, this ScR is limited to retrieving studies in English, Spanish and Portuguese.

A search was conducted in MEDLINE/PubMed to find the best combination of MeSH terms, synonyms and free text words, which will later be adjusted for each electronic database. The search strategy, which combines the controlled descriptors and keywords used in each database, is presented in online supplemental file 1.

Eligibility

- *Inclusion criteria:* all primary studies, case reports, dissertations and theses related to transgender QoL from an SDOH perspective will be included. In particular, no date restrictions will be applied in the selection of studies. Articles written in English, Spanish and Portuguese idioms will be included.

Table 1 Levels of evidence by study design for therapeutic trials and preventive programmes

Level	Type of evidence
1A	Systematic review (with homogeneity) of RCTs
1B	Individual RCT (with narrow CIs)
1C	All or none study
2A	Systematic review (with homogeneity) of cohort studies
2B	Individual cohort study (including low-quality RCT, eg, <80% follow-up)
2C	‘Outcomes’ research; ecological studies
3A	Systematic review (with homogeneity) of case-control studies
3B	Individual case-control study
4	Case series (and poor quality cohort and case-control study)
5	Expert opinion without explicit critical appraisal or based on physiology bench research or ‘first principles’

From the Centre for Evidence-Based Medicine (<https://www.cebm.net/>).
RCT, randomised controlled trial.

- **Exclusion criteria:** review studies, such as systematic reviews, ScRs, integrative reviews and meta-syntheses, will be excluded.

After searching for studies, articles are downloaded into Endnote Web bibliographic software to store, organise, and manage all references and identify duplicates. Studies are exported to the Rayyan application, which assists in the screening and selection of studies. At this stage, titles and abstracts are read for an initial assessment of the evidence. This will be done independently by two researchers (KHCC and LCL-J) who will search and screen the records by title and abstract using the Rayyan application. After the initial screening, the same two researchers (KHCC and LCL-J) will review the full text of the retrieved studies for inclusion/exclusion using the Rayyan app. A third reviewer (JLM-R) will resolve disagreements regarding the selected studies.

Data collection

Three reviewers (KHCC, JAM and LCL-J) will separately record the data for each included study using previously published forms.^{51–59} The expected completion date of this ScR is July 2023. The information to be extracted includes (a) study identification and objectives, (b) study population and baseline characteristics, (c) type of exposure, (d) study method, (e) recruitment methods, (f) measurement times, (g) follow-up, (h) outcomes, (i) main findings, (j) clinical and epidemiological significance and (k) conclusions.^{43 44 49–57}

Data analysis, presenting and summarising the evidence

For the classification of selected studies, we will use the hierarchy of evidence of the Centre for Evidence-Based Medicine.⁶⁰ This classification is divided into five hierarchical levels, as shown in table 1.

A flowchart (figure 2) describes the study selection process.⁵⁸

Our findings will be presented through tables, graphs and narrative summaries and will be evaluated based on the type of data charted and the findings. The information to be extracted depends on the data presented and the outcomes. For example, studies with a quantitative approach will be presented by the mean or median and total quality of life scores of transgender people reported in the studies. Qualitative studies will be summarised and grouped into common thematic units. In order to outline the networks of relationships between keywords and references, a graphical map will be generated using the VOSviewer tool, a useful software for visualising bibliometric networks.

In addition, the significance of these findings will be considered in terms of how they relate to the guiding question, characterising and measuring the impact of SDOHs on transgender people's quality of life, and implications for practice and further research.

Strengths and limitations

Our study has significant strengths: (a) to the best of our knowledge, this will be the first ScR to synthesise

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources

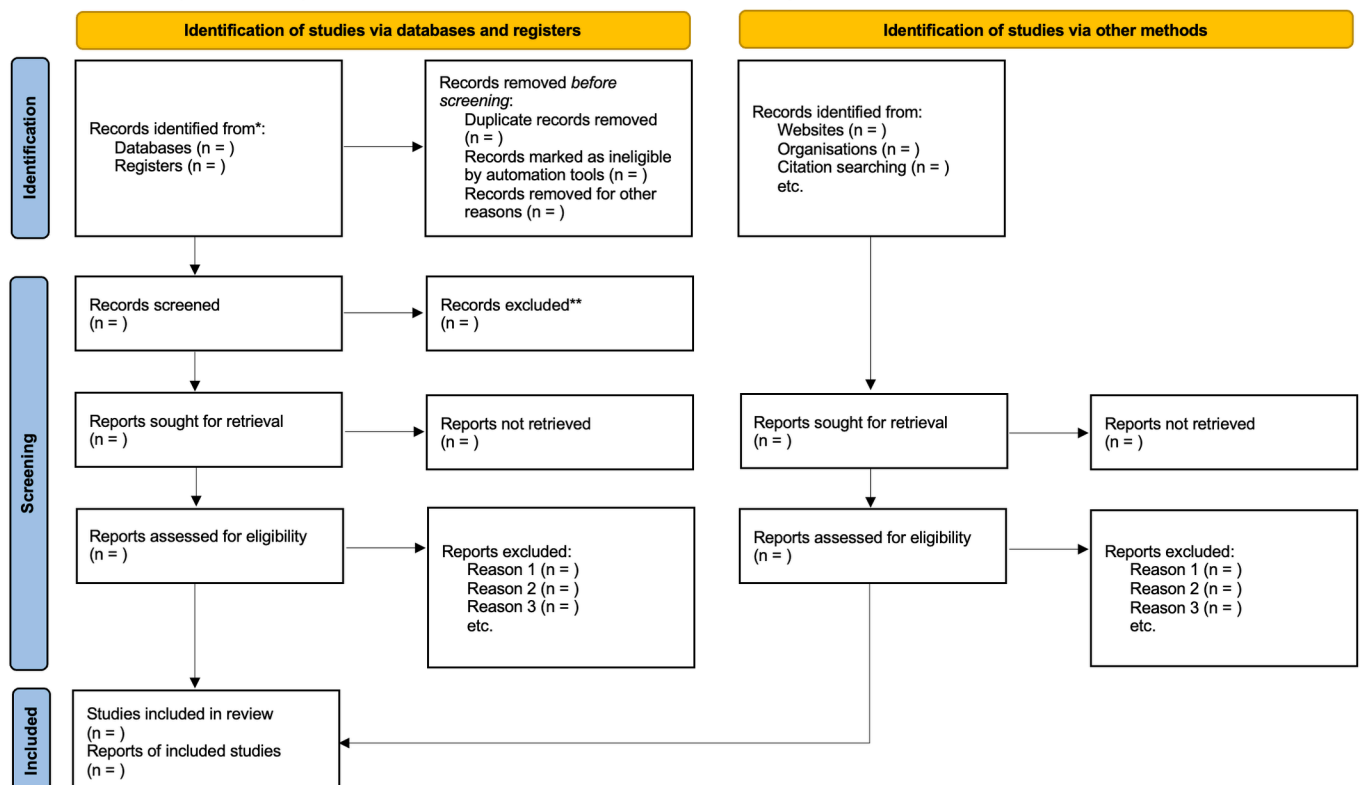


Figure 2 Preferred Reporting Items for Systematic Review and Meta-Analyses flow diagram.

qualitative and quantitative data to explore transgender quality of life through the lens of SDOHs; (b) this study will include a comprehensive literature search without restrictions on publication date; and (c) we will search multiple electronic databases and additional sources, as well as grey literature. Finally, the ScR method will be used to chart and map the findings and identify directions for future research. In addition, there are two notable ways in which the protocol of this study differs from others. First, ScR is more appropriate for our study topic than a systematic review. Our broad research question focuses on mapping the extent of available evidence. Second, we will combine qualitative and quantitative methods to report our findings using bibliometric trends to provide guidance and meaningful insights into the field.

The use of multiple methods (quantitative and qualitative) to review the evidence and to synthesise and summarise our findings is the strength of our study. We expect that our findings will be of interest to practitioners, researchers, stakeholders and the general population concerned with this emerging public health issue.

However, our study has several limitations, including the following: (a) most studies of the transgender population are prevalence studies, that is, cross-sectional studies, which can lead to biases inherent in these designs - the difficulty of establishing a cause-and-effect relationship; (b) studies of transgender people tend to have small sample sizes and a level of evidence that may fall into the low or moderate classification; (c) there is a lack of a standardised classification of the nomenclature used for the large variety of gender within the lesbian, gay, bisexual and transgender population; and (d) there is a difficulty in the lack of standardised classification of the nomenclature used for the large variety of genders within the lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, and more (LGBTQ+) community.

ETHICS AND DISSEMINATION

This study does not involve human participants or unpublished primary data. Therefore, human research ethics committee approval was not required. Plans for dissemination of this study include peer-reviewed publications and conference presentations to be shared with experts in the field and advisory groups to inform discussions on future research.

The authors are finalising/updating the search strategy and preparing to conduct this review in April 2023. The goal is to complete this review by July 2023.

Contributors JLM-R and KHCC conceived the research question for the scoping review with supervision from LCL-J who approved and refined the idea. LCL-J and KHCC conducted literature searches and drafted the entire manuscript with input from all coauthors. JAM, JLM-R and VRG provided feedback on the manuscript. All authors reviewed and approved the manuscript.

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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 iD

Luis Carlos Lopes-Júnior <http://orcid.org/0000-0002-2424-6510>

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