

LGBTQIA+ health: a rapid scoping review of the literature in Brazil

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Abstract *The National Policy of Comprehensive Health of Lesbians, Gays, Bisexuals, Transvestites and Transsexuals (LGBT) was an important step in the search for equity. The lack of specific research can be an obstacle for the design of strategies that address LGBT health needs. The objective of this study is to map and characterize the Brazilian scientific production on the LGBT population health. We used the rapid scoping review methodology to perform a thematic and bibliometric analysis. We included Brazilian researchers' studies published in scientific journals. Searches were carried out in four databases, with inclusion of 381 articles in the analysis. The results indicate that Brazilian production about the health of LGBT has increased over time, particularly from 2016, but there are some gaps in specific needs and vulnerabilities within the subgroups of people covered by the acronyms LGBTQIA+. Despite the advances launched from the National Policy of Health Integral LGBT, there are still many gaps in Brazilian scientific production, which could be included in the agenda of priorities for promoting research.*

Key words *Sexual and gender minorities, Gender and health, Health policy, Brazil, Review*

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Introduction

Brazil's Organic Health Law, which governs the creation and functioning of the country's public health care system, the Unified Health System (SUS, acronym in Portuguese), established the principal of equality in health care without discrimination of any kind¹. The National Policy on Comprehensive Healthcare for Lesbians, Gays, Bisexuals, Transvestites, Transvestites and Transsexuals (hereafter the national LGBT health policy) was created by Ministerial Order 2836 (1 December 2011) with the general aim of "promoting comprehensive health care for the LGBT population, eliminating institutional discrimination and prejudice, and contributing to reduce inequalities and consolidate the Unified Health System as a universal, comprehensive and equitable system"² (p. 20).

The lesbian, gay, bisexual, transgender, queer, intersex, and asexual population, and other sexualities and gender identities (LGBTQIA+) are victims of discrimination, violence and social exclusion, which is reproduced within institutional relations and in the field of health. Lack of information and protection of patient privacy can compromise care and strength of affiliation of members of the LGBTQIA+ community to health services³. The Covid-19 pandemic has compounded a number of important problems, with 41.53% of households with LGBT+ people and 56.82% with trans persons currently experiencing food insecurity. Other issues such as period poverty and financial dependency were also highlighted in a survey conducted by the advocacy group #VoteLGBT⁴.

The national LGBT health policy² made some important advances, including a broad set of programs and policies⁵: the Integrated Plan to Combat the Feminization of the AIDS Epidemic and other STDs⁶; the National Plan to Combat the AIDS and STD Epidemic among Gays, Men who Have Sex with Men and Transvestites⁷; and the National Plan for the Promotion of the Citizenship and Rights of Lesbians, Gays, Bisexuals, Transvestites and Transsexuals⁸.

According to the 2021 Atlas of Violence⁹, the national human rights violation and abuse hotline, *Disque 100* (2011 to 2019), recorded the lowest number of reports of violence and bodily harm in 2019, with numbers dropping by 50% and almost 50% respectively. Despite this reduction, data from the national notifiable diseases information system (SINAN) show that overall notifications of violence against the LGBTQIA+

community in 2019 did not follow the same trend. In fact, there was a 5% and 37.1% rise in cases of violence against homosexuals and bisexuals, respectively, with 4,855 cases in 2018 and 5,330 in 2019. The data also shows that notifications of physical violence and other types of violence against trans people increased 5.6% and 30%, respectively, between 2018 and 2019. According to the Atlas, these discrepancies may indicate underreporting of cases to *Disque 100*⁹.

However, it is important to note that the literature highlights the scarcity of policy evaluation studies that produce epidemiological data and contribute to the body of knowledge on these issues and the development of new LGBTQIA+ care technologies⁵.

With regard to the development of health innovations and technologies, one of the specific objectives of the national LGBT health policy is to "carry out studies and surveys addressing the development of services and technologies tailored to the health needs of the LGBT population"² (p. 22). Oliveira¹⁰ highlights the need to broaden our knowledge about this heterogeneous group of people who constitute the acronym LGBTQIA+. Research aimed at this population is accordant with the principle of equity embodied by the SUS and enables the production of indicators, definition of parameters, and monitoring and analysis of LGBTQIA+ health status¹⁰. Research focusing on this population is particularly important given the complexity of illness among these groups, which in turn warrants special attention from the SUS through the formulation of specific policies, "including incentives for studies in various areas of knowledge"¹¹ (p. 488).

Few studies have analyzed the literatures on this population¹². This rapid scoping review therefore aimed to map and characterize public health literature in Brazil addressing the LGBTQIA+ population.

Methods

Study design and inclusion and exclusion criteria

We conducted a rapid scoping review¹³ of public health literature in Brazil addressing the LGBTQIA+ population. The protocol of the review was registered on the Open Science Framework platform¹⁴.

The guiding question was "What is the profile of the public health literature in Brazil addressing

the LGBTQIA+ population?”, based on the following PCC framework: population: LGBTQIA+ people; concept: literature in Brazil; context: public health.

The inclusion criteria were as follows: primary research, secondary research, experience reports, and theoretical essays on LGBTQIA+ health produced by Brazilian researchers as either first or co-authors published in science journals and written in Portuguese, Spanish or English. No restrictions were imposed as to date of publication.

The following publications were excluded: institutional or other documents not published by scientific journals; studies not involving Brazilian researchers; studies not addressing the topic of interest; and studies not published in the languages mentioned above.

Search and selection strategy

Searches were performed of the following databases in April 2022: the regional portal of the Virtual Health Library (VHL), PubMed, Web of Science, and Scopus. We performed structured searches using the following basic descriptors from the Health Sciences Descriptors (DeCS/VHL) and MeSH (PubMed): “*Sexual and Gender Minorities*”, “*Health Policy*”, and “*Brazil*”. Other descriptors and keywords were used based on these terms. The detailed search, descriptors, and keywords are presented in the supplementary material (Appendix 1, available from: <https://doi.org/10.48331/scielodata.MVLPDP>).

The search strategies were developed and performed by a librarian with experience in the area. The articles were selected independently by two of the authors using the predefined inclusion and exclusion criteria and a third reviewer subsequently checked the selection. After removing duplicate publications, the abstracts and titles were screened using the Rayyan QCRI reference management tool¹⁵. Any disagreements were resolved through discussion between the reviewers.

Data extraction and analysis

The following information from the eligible studies was entered into a spreadsheet: title, abstract, year of publication, journal, first author/co-authors. The following information was extracted from the abstracts: i) study design, ii) study location, iii) study population, iv) central theme and approach, v) first author affiliation, and vi) financial support. When this information

was not mentioned in the abstract or the abstract was not available, the full-text version of the article was read. When the study design was not clearly defined, the reviewers assigned a category based on the information given on methodology. Data extraction was performed by three reviewers, but not in duplicate.

The findings were synthesized including the following characteristics of the selected studies: year of publication, study design, journal, study region, study population, main theme, affiliation of the first author, and financial support. Considering the vast range of nomenclature used in the studies to refer to LGBTQIA+ people, terms were categorized based on the following publications: Ministry of Human Rights Diversity Guidance Manual¹⁶ (2018); LGBT Communication Manual¹⁷ (2010), produced by the Brazilian Association of Lesbians, Gays, Bisexuals, Transvestites and Transsexuals; and LGBT+ Communication Manual¹⁸ (2021), produced by the GayLatino Network and the National LGBTI+ Alliance. The results were reported in accordance with the PRISMA Extension for Scoping Reviews guidelines¹⁹.

The methodological quality of the selected studies was not evaluated because quality was not one of the selection criteria. This stage of the scoping review is considered optional²⁰.

Analysis of authorship and the association between terms used in the titles

A complementary analysis of the study references was performed to identify co-authorship networks and recurring terms in the article titles. To visualize the co-authorship networks, we used the free software VOSviewer²¹, creating maps based on the strength of association between the two units of analysis (authors and terms used in the titles). The following inclusion criteria were adopted for the co-authorship network: i) authors with more than one article; ii) authors with co-authorship; and iii) authors who showed a strength of association of greater than zero. For the lexical network of recurring terms used in the titles of the selected articles, the inclusion criteria were: i) terms with more than five occurrences; and ii) terms with a strength of association of greater than zero. Strength of association was calculated automatically by VOSviewer²¹ following the methods described by Van Eck and Waltman²¹ (2010).

The results were presented in the form of network maps, enabling the visualization and iden-

tification of characteristics of collaboration and associations throughout the networks. The maps show the following types of visual information: i) nodes (individual authors and terms); ii) connections (co-authorship and co-occurrence); and iii) metrics of association (proximity, represented by the location of the nodes within the network, and strength of association, represented by the size of the circles and thickness of the connecting lines).

Results

After duplicates were removed, 749 citations were identified by the searches. Of these, 403 were considered eligible and screened to see whether they met the inclusion and exclusion criteria by performing a second reading of the abstracts or full-text version of the article. Twenty-two articles were excluded because they did not meet the inclusion criteria, in particular: did not involve the population of interest; full-text article not available online; not published in a scientific journal; study not carried out in Brazil; did not involve Brazilian researchers. In the end, 381 publications were included in this scoping review (Figure 1). The article list is presented in the complementary material (Appendix 2, available from: <https://doi.org/10.48331/scielodata.MVLPDP>).

Publications per year and journal

The included studies were published between September 1985 and February 2022, with 61 (16%) being published in 2021. The temporal analysis shows a sharp rise in the annual number of publications in 2016. Numbers peaked in 2019, followed by a circumstantial fall in 2020 (Graph 1).

A little over half of the studies (198) were published in national journals. Of the 61 national journals, *Cadernos de Saúde Pública* accounted for the largest number of publications (30 or 15%), followed by *Ciência & Saúde Coletiva* (23 or 12%), *Sexualidad, Salud y Sociedad* (12 or 6%), and *Revista Brasileira de Enfermagem* (10 or 5%). Of the 69 international journals, *AIDS and Behavior* was responsible for the largest number of publications (17 or 9%), followed by *PLOS ONE* (14 or 8%), *Journal of Acquired Immune Deficiency Syndromes* (12 or 7%), and *AIDS Care* (8 or 4%). Brazilian researchers were co-authors in 23 (13%) of the studies published in international journals.

Study design and location

A total of 224 (59%) studies were quantitative (cross-sectional, cohort, case-control, ecological), 116 (30%) were qualitative (qualitative, ethnography), three (1%) were mixed, and 38 (10%) were reviews (narrative, systematic, integrative). Quantitative cross-sectional studies represented 43% of the publications, followed by qualitative cross-sectional studies (19%).

Most of the studies did not specifically cite Brazil as the study location. Among the studies that mentioned the study location, the most common state was São Paulo (41 studies), followed by Rio de Janeiro (39), Rio Grande do Sul (20), Ceará (15), Bahia (14), and Minas Gerais (11). The studies generally involved state capitals. Brazil was mentioned as the study location together with other countries by 23 studies.

Affiliation and funding

The institution most cited by the first authors was the Oswaldo Cruz Foundation (FIOCRUZ), which appeared in 60 publications (16%), mainly through the Evandro Chagas National Institute of Infectious Diseases and Sergio Arouca National School of Public Health, both based in Rio de Janeiro. The most cited university was the University of São Paulo (USP), mentioned by 43 authors (11%) and represented by its campuses in the city of São Paulo and Ribeirão Preto, followed by the Federal University of Rio Grande do Sul (UFRGS), mentioned by 22 authors (6%), the Federal University of Minas Gerais (UFMG), mentioned by 17 authors (5%), and the Federal University of Bahia (UFBA), mentioned by 10 authors (3%).

The international studies involving Brazilian researchers (11%) were represented by institutions in the United States (the University of California, the Cancer Center and Research Institute, Gladstone Institute of Virology and Immunology, and the San Francisco Department of Public Health) and Australia (the University of New South Wales).

A little over a third of the publications (130) did not present information on sources of funding, while 22 studies mentioned that they did not receive any type of financial support. Of the 194 studies that received financial support from national sources, the most commonly cited funding agencies were the *National Council for Scientific and Technological Development* (CNPq), cited in 80 publications (41%), Coordination for the

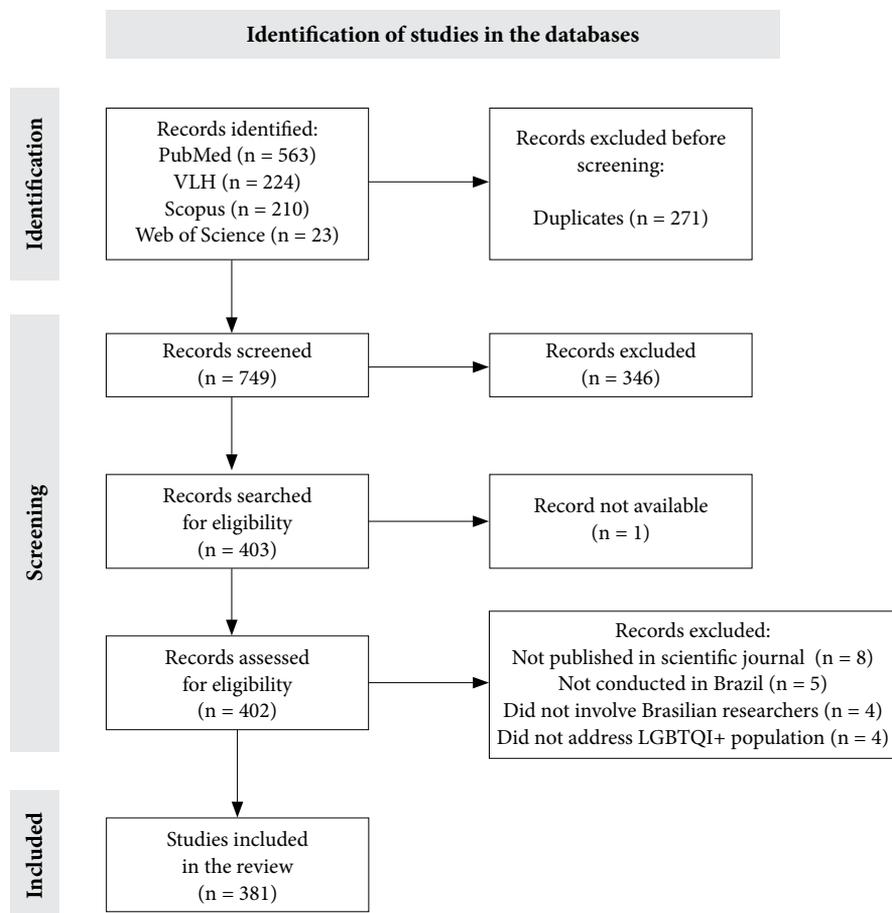


Figure 1. Flow diagram of the study selection process.

Source: Authors' elaboration based on PRISMA²².

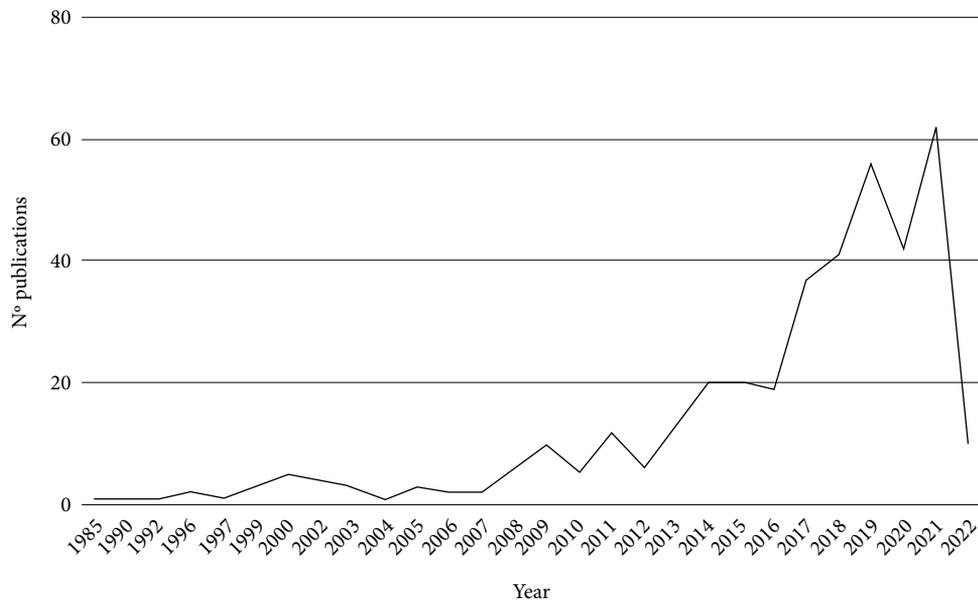
Improvement of Higher Education Personnel (CAPES), mentioned in 50 publications (26%), and departments of the Ministry of Health, which appeared in 42 articles (22%). State research foundations, especially the São Paulo state research foundation (FAPESP), were also mentioned in 48 publications (25%).

Of the 43 studies that only received financial support from international sources, the most commonly cited organization was the National Institute of Allergy and Infectious Diseases (NI-AID) from the United States, which appeared in 18 studies (42%), followed by the biopharmaceutical company Gilead Sciences, mentioned in nine studies (21%), the United Nations Programme on HIV/AIDS (UNAIDS), appearing in eight studies (18%), and the United Nations

Office on Drugs and Crime (UNODC), also cited by eight studies (18%). In addition, of the 225 studies that mentioned some type of funding, 30 (13%) received support from national and international research foundations.

LGBTQIA+ categories and study themes

The studies used a wide range of terms when referring to the LGBTQIA+ population, presented here in 17 subgroups: lesbians (98 publications), gays (116 publications), bisexual women (76 publications), bisexual men (85 publications), transsexual women (103 publications), transsexual men (83 publications), transgender women (72 publications), transgender men (34 publications), transvestites (93 publications), queers (9



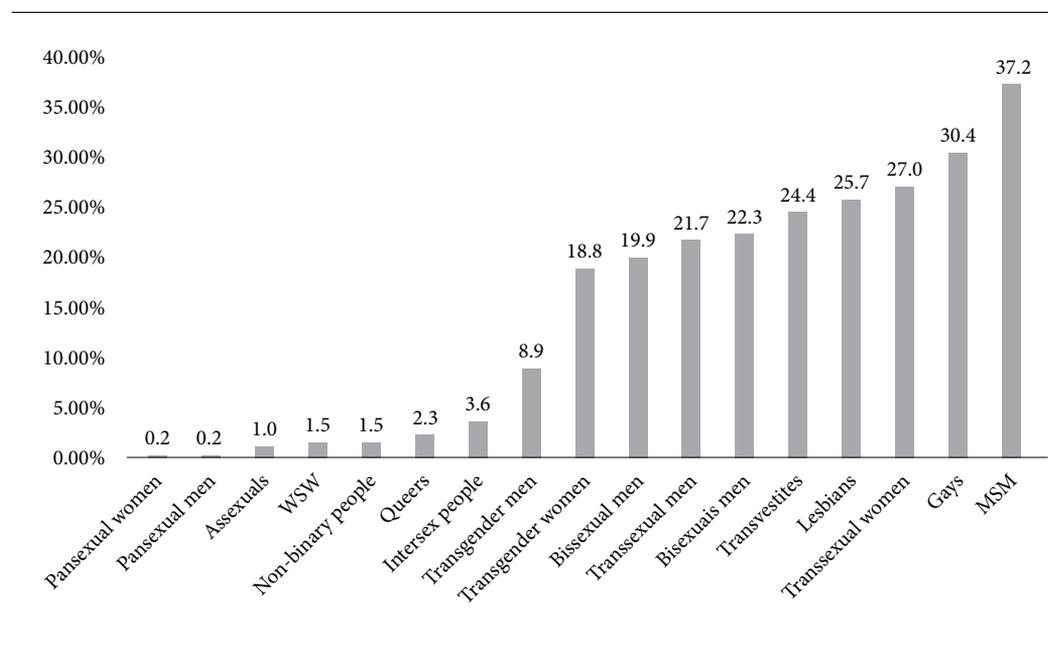
Graph 1. Distribution of publications per year.

Source: Authors.

publications), intersex people (14 publications), asexuals (4 publications), women who have sex with women (WSW) (6 publications), men who have sex with men (MSM) (142 publications), pansexual women (1 publication), pansexual men (1 publication), and non-binary people (6 publications). It is worth mentioning that some studies investigated more than one population (Graph 2).

The studies addressed a diverse range of themes, which we grouped as follows: 1) HIV, HIV and AIDS, HIV and syphilis, HIV and STD, HIV and *Entamoeba histolytica*, HIV and Tuberculosis, HIV, syphilis and hepatitis B and C, ART or HAART (antiretroviral therapy and highly active antiretroviral therapy, respectively), PrEP (Pre-Exposure Prophylaxis), comprising 145 publications; 2) access to health services or health care (35 publications); 3) STD, STI and HPV (human papillomavirus), HSV (herpes simplex virus, *Chlamydia trachomatis*, *Neisseria gonorrhoeae* and syphilis, HTLV-1 (Human T cell lymphotropic virus type 1), syphilis, bacterial vaginosis (18 publications); 4) Covid-19 (14 publications); 5) health policy (14 publications); 6) violence, sexual violence, symbolic

violence, discrimination, homophobia, stigma (14 publications); 7) mental health, suicide, suicidal behavior (13 publications); 8) unprotected receptive anal sex, sexual behavior, intentional unsafe sex, paid sex, protected sex (12 publications); 9) sex reassignment process (11 publications); 10) attitude scale, Multidimensional Scale of Sexual Prejudice, Knowledge about Homosexuality Questionnaire, Reactions to Homosexuality Scale, Transsexual Voice Questionnaire, Attitudes Toward Lesbians and Gay Men Scale (seven publications); 11) hormone use, use of industrial liquid silicone (seven publications); 12) drug use, chemsex, alcohol abuse (seven publications); 13) hepatitis B, hepatitis A, hepatitis C, hepatitis (six publications); 14) research, knowledge production (six publications); 15) health training (five publications); 16) Family (four publications); 17) gender identity (four publications); 18) social representation (four publications); 19) blood donation (three publications); 20) health vulnerability, female vulnerability, social vulnerability (three publications); 21) LGBT movements (three publications); 22) assisted conception services, reproductive technologies (two publications); 23) brain morphology (two publica-



Graph 2. LGBTQIA+ subgroups and percentage of publications.

Note: some studies investigated more than one population.

Source: Authors.

tions). The following themes were addressed by a single publication: deprivation of liberty, stable union, access to work, food and nutrition, gynecological care, physical activity, self-esteem, voice assessment, anal cancer, prostate cancer, behavior, health behavior, rights, rights and access to health care, gender dysphoria, cis-heteronormativity, sexual diversity, aging, stigma, legislation and health, brain-derived neurotrophic factor, gay parenting, rectal microbicide, social name, coupling patterns, public policy, sport preferences, prevalence of viral load in LGB people, criminalization process, School without Homophobia project, quality of life, social media, services network, religion, political representation, drug resistance, sex/gender system, tuberculosis, conversion therapies, transgenderism.

With regard to the main themes in relation to the most studied LGBTQIA+ subgroups, MSM and gays accounted for the largest share of publications on HIV/AIDS (57% and 21%, respectively) and STD/STI (44% and 28%, respectively). Articles dealing with access to services and health care focused mainly on transsexual women (57%), transvestites (49%), and lesbians

(46%). Those addressing COVID-19 investigated predominantly lesbians (50%) and gays (43%). With regard to health policy, most publications looked at transsexual women (79%) and gays and lesbians (71%), with none of the articles on this topic involving MSM. Studies on violence concentrated on transvestites (71%) and transsexual women (43%). Although mental health was a theme explored by the publications, the findings show that the most frequently studied groups accounted for only a small share of these articles, which focused more on transsexual women (39%) and MSM, gays and transvestites (23% each group). The articles on sexual behavior concentrated more on MSM (58%), while 55% of the publications addressing sex reassignment involved transsexual women (Table 1).

We analyzed the thematic categories mentioned above by study design. The most common core themes addressed by the 224 quantitative studies were HIV and AIDS (111 publications) and COVID-19 (eight publications), while the most frequent themes of the 116 qualitative studies were access to services and health care (22 publications) and HIV and AIDS (21 publica-

tions). The most common themes addressed by the 38 reviews were HIV and AIDS (12 publications), access to services and health care (six publications) and health policy (six publications). Two of the three mixed studies were on mental health and one was on HIV and AIDS.

Co-authorship network and recurring words in the titles

An analysis of the study references was performed to identify co-authorship networks and characterize research collaborations. The analysis included all the included articles and author name was the unit of analysis used to determine the strength of association between each component of the network.

The selected articles involved 1,749 authors: 1,378 (78.8%) appeared in only one publication and were therefore excluded from the analysis; and 362 (20.7%) appeared in two or more publications. Of these 362 authors, 280 (77.3%) were co-authors and 82 (22.7%) were sole authors. For the purpose of this analysis, we included only authors with at least two published articles, co-authorship, and strength of association greater than zero, resulting in the exclusion of nine authors.

Figure 2 shows the co-authorship network maps. The findings reveal two groups of collaboration that stand out due to the concentration of connections. There are also several groups of authors lying on the “periphery” of the collaboration network with fewer connections than the larger central groups. This may reflect a relatively

common situation in research networks, which are generally concentrated around certain researchers who act as hubs, connecting other individuals or groups of researchers.

The analysis of recurring terms is presented in Figure 3. This analysis adopted the same stages and criteria as the co-authorship analysis, except that the unit of analysis was terms occurring at least five times. Sixty-four of the 1,259 terms found in the titles met the inclusion criteria.

A number of terms appeared more frequently and showed a higher strength of association, including Brazil, man and sex, which had the highest number of occurrences and connections. The occurrence of terms describing the LGBTQIA+ population (e.g. transgender, bisexual, lesbian) and health or epidemiological aspects (e.g. HIV/AIDS, mental health, infection, prevalence) was also observed. Words referring to social aspects and equity (e.g. discrimination, willingness, knowledge, acceptability) and locations (e.g. Brazil, Rio, Belo Horizonte, São Paulo, Salvador) were also a constant.

Discussion

This rapid scoping review identified 381 articles, enabling us to map the research on LGBTQIA+ health in Brazil. The results show that a little over half the studies were published in national journals. Most of the studies were quantitative (cross-sectional, cohort, case-control, ecological), with quantitative cross-sectional studies

Table 1. Most frequent themes in the publications by LGBTQIA+ subgroup.

Most frequent themes	Subgrupos da população LGBTQIA+					Total for each theme
	MSM n (%)	Gays n (%)	Transsexual women n (%)	Lesbians n (%)	Transvestites n (%)	
HIV/AIDS	82 (57)	31 (21)	21 (14)	16 (11)	19 (13)	145
Access to services and health care	3 (9)	15 (43)	20 (57)	16 (46)	17 (49)	35
STD/STI	8 (44)	5 (28)	2 (11)	4 (22)	4 (22)	18
COVID-19	5 (36)	6 (43)	4 (29)	7 (50)	3 (21)	14
Health policy	0 (0)	10 (71)	11 (79)	10 (71)	8 (57)	14
Violence	4 (29)	4 (29)	6 (43)	4 (29)	10 (71)	14
Mental health	3 (23)	3 (23)	5 (39)	2 (15)	3 (23)	13
Sexual behavior	7 (58)	2 (17)	2 (17)	1 (8)	0 (0)	12
Sex reassignment process	2 (18)	1 (9)	6 (55)	1 (9)	1 (9)	11

Note: some studies investigated more than one population.

Source: Authors.

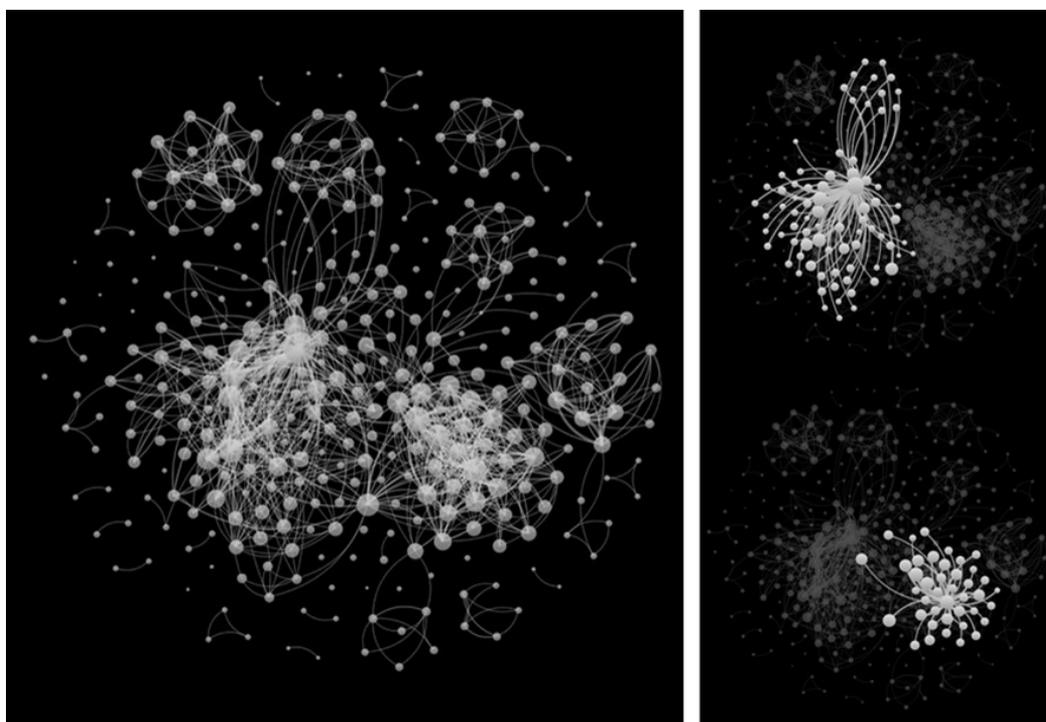


Figure 2. Co-authorship network of the selected articles: general and focusing on the main groups of co-authorship.

Source: Authors using VOSviewer.

representing 43% of the publications. In addition, a little over a third of the publications did not provide information regarding research funding.

The most frequently mentioned LGBTQIA+ groups were lesbians, gays, bisexual women, bisexual men, transsexual women, transsexual men, transgender women, and transvestites. Common themes were advances in research on HIV/AIDS and STD/STI. Articles addressing access to services and health care focused mainly on transsexual women, transvestites and lesbians. Thus, despite the increasing volume of research output concerning LGBTQIA+ health, these findings pose challenges and barriers that need to be addressed, focusing on the specific demands and needs of this population.

The national LGBT health policy reinforces the right to health of LGBTQIA+ people and recognizes that discrimination and the exclusion of this population have negative health impacts. The policy therefore aims to improve access to SUS services, guarantee respect for and specific attention to the demands and needs of this popula-

tion, and address determinants of health in order to reduce LGBTQIA+ health disparities².

Mandarino et al.¹¹ (2019) investigated the visibility of LGBT people in public health research through the identification of research projects addressing the national LGBT health policy in calls for proposals of the SUS Research Program (PPSUS). They found that the LGBT population is not a priority theme on the National Agenda of Health Research Priorities, which underpins the PPSUS' calls for proposals. An analysis of records of the sites of the country's state research foundations for the period 2009 to 2018 revealed a small number of LGBT health research projects in the PPSUS call for proposals. The map of research output in Brazil produced by the present study is consistent with the findings of Mandarino et al. We identified 381 articles related to LGBTQIA+ health. Over half (52%) did not disclose their funding sources or did not receive financial support from national sources (22 articles without funding; 43 with funding from international sources).

transvestism-transsexuality-health has shifted over the last 20 years from a diseased-centered approach to understanding the social, organizational, and political factors that influence access to health services. However, the study warns that, despite the growing availability of publications, there is still a lack of research on the specific health needs of this population that can help the implementation of actions to promote health equity for LGBTQIA+ people.

We identified a number of studies on STI, notably HIV/AIDS. However, there were few studies on viral hepatitis, which is one of the priorities set out by the national LGBT health policy². Similar results were found by Chaves and Silva¹² in 2020, indicating that LGBT research output focuses mainly on HIV/AIDS, despite recent interest in other health problems.

One of the specific objectives of the national LGBT health policy is gynecological cancer prevention and improving access to treatment for lesbian and bisexual women². We did not find studies that specifically address gynecological cancer, although six publications dealt with access to gynecological services, treatment or care among these groups. The policy also highlights the importance of prostate cancer prevention for gays, bisexual men, transvestites and transsexual women². One of the studies addressed this topic, while another evaluated the quality of life and sexual function among MSM diagnosed with anal cancer.

The national LGBT health policy advocates the promotion of actions to combat prejudice, stigma and discrimination against LGBTQIA+ people in the SUS². Seventeen studies addressed these issues and five investigated the training of health professionals in LGBTQIA+ care.

Only nine studies addressed mental health. These studies were undertaken between 2017 and 2021 and addressed the following issues: prevalence of disorders, violence, transsexual care, exteriority profiles, impact of gender affirmation domains (social, legal and medical/surgical), childhood abuse, gender incongruity, associated indicators and factors. According to Abade et al.²⁴ (2020), there are a significant number of reviews of research on LGBT mental health in the international literature²⁵. In contrast, there are few such studies in the national and Latin American literature. The national LGBT health policy emphasizes the need for special attention to mental health care for LGBTQIA+ people². According to Peres²⁶, transvestites can experience anxiety and panic attacks, anguish, and depression brought

on by stigma. These factors can lead to various risky behaviors, such as drinking and drug use. More research is needed on LGBTQIA+ mental health to provide inputs to inform public health actions targeting this population.

Our findings reveal another gap in the literature relating to transvestites, defined by the national LGBT health policy as a risk group for long-term hormone use, prescription drug misuse, and increased morbidity and mortality. We found few studies specifically addressing this group and these issues as a central theme.

Actions and services tailored to the specific needs of the LGBT population are vital to promoting the health and quality of life of these people. Sexual orientation, sexuality and sexual practices can be sensitive issues in health services and many LGBT often fail to seek services because there is no guarantee that they will receive treatment or that their confidentiality will be safeguarded, which has negative consequences for their health. Thus, protecting privacy, confidentiality and informed decision-making is vital for health care delivery²⁷.

This study has some limitations. First, the rapid scoping review selection process does not necessarily capture the whole depth and breadth of the literature. However, the use of structured searches and screening in duplicate double-checked by a third reviewer may have helped minimize this limitation. In addition, we did not include theses and dissertations or gray literature, limiting our data to published studies. It is plausible that a wide range of studies have not been published in article form. However, the aim of the present study was to investigate precisely this type of publication. While there is no evidence to suggest that the results of the study would have changed substantially if gray literature had been included, it is important to consider that the inclusion of such publications may have increased the depth of the review and improved the reliability of the results. Another limitation is the thematic analysis, which focused mainly on titles and abstracts, giving rise to potential inaccuracies when they did not provide sufficient information. Finally, the reference analysis was based on the data extracted from the bibliography records provided by the indexed database where the searches were performed and not checked individually, potentially giving rise to errors or prior imprecision. However, it is unlikely that this will have significantly affected the networks of association created by the analysis.

Final considerations

There was an increase in the volume of research output from Brazilian authors some years after the creation of the national LGBT health policy, with around half of the studies being published in national journals. We found that most of the studies investigated STI among various groups.

We identified gaps in research on the demands, needs and vulnerabilities set out in the national LGBT health policy and abovementioned manuals, especially the specific health needs of LGBTQIA+ groups. Gaps in key areas can hamper the development of specific actions to promote comprehensive care and health equity for the LGBTQIA+ population in Brazil.

Collaborations

FM Domene, JL Silva and TS Toma drafted the review protocol and contributed to study planning, the selection process, data extraction and analysis, and to writing this manuscript. LALB Silva and RC Melo contributed to data analysis and interpretation, the description of the results, and to writing this manuscript. JOM Barreto contributed to study planning, results analysis and to writing this manuscript. A Silva planned and prepared the search strategy. All authors reviewed the manuscript and approved the final version to be published.

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