

Scientific production on LGBTQIA+ health: a critical analysis of the literature

Produção científica em saúde da população LGBTQIA+: uma análise crítica do conteúdo da literatura

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Abstract

This study analyzes the stigmatizing potential of studies on the LGBTQIA+ population indexed on the PubMed database. By a broad and systematic bibliographic search, 821 publications were found and 334 (40.68%) were included in this study. From these, 1838 keywords were extracted. Data analysis showed that the keywords “men who have sex with man” (192 repetitions) and “HIV” (98 repetitions) had the highest prevalence. Thus, according to the analysis, the LGBTQIA+ population is essentially described as “men who have sex with other men” and “HIV positive.” This study unveils the presence of stigmatizing characteristics in studies on the LGBTQIA+ population. However, such findings can help strengthen the critical perspective of a more humanized scientific practice, actually concerned with the specificities and needs of the LGBTQIA+ population.

Keywords: Sexual and Gender Minorities. Prejudice. Social Stigma. Scientific Publication Indicators. Subject Headings.

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Resumo

Esta pesquisa traz em seu escopo a análise do potencial estigmatizador do conteúdo de estudos direcionados à população LGBTQIA+ indexados na plataforma PubMed. Por meio de uma ampla e sistemática pesquisa bibliográfica foram identificados e incluídos, respectivamente, 821 e 334 (40,68%) artigos, dos quais foram extraídos 1838 descritores. Da análise dos dados coletados foram identificados as maiores prevalências dos descritores “*men having sex with men*” (192 repetições) e “HIV” (98 repetições). Sendo assim, o percurso analítico das informações levantadas refletiu que a população LGBTQIA+ é essencialmente designada como “homens que fazem sexo com outros homens e soropositivos”. Este estudo traz, portanto, a presença de características estigmatizantes nos estudos direcionados à população LGBTQIA+. Contudo, cabe destacar que o resultado encontrado é subsídio para o fortalecimento de uma perspectiva crítica de um fazer científico mais humanizado e direcionado às especificidades e necessidades da população LGBTQIA+.

Palavras-chave: Minorias Sexuais e de Gênero. Preconceito. Estigma Social. Indicadores de Produção Científica. Descritores.

Introduction

In 2013, the World Health Organization (WHO) and the Pan American Health Organization (PAHO) developed the *Addressing the Causes of Disparities in Health Service Access and Utilization for Lesbian, Gay, Bisexual and Trans (LGBT) Persons* document (WHO, 2013). It highlights the important work of the Americas in providing public policies aimed at the health needs of the vulnerable LGBTQIA+ population (Lesbian, Gay, Bisexual, Transvestite/Transsexual/Transgender, Queer/Non-binary, Intersex, Asexual people, +/Other gender and/or sexual orientations), showing that optimizing access to health care and improving the general indicators of these individuals is essential (WHO, 2013).

In Brazil, after intense struggles based on the fundamental principles of the Federal Constitution of 1988, the National Policy on Comprehensive Health of Lesbians, Gays, Bisexuals and Transsexuals (PNSI-LGBT) was implemented by Ordinance No. 2,836, of December 1, 2011 (Brasil, 2013).

In general, among its guidelines and objectives, the PNSI-LGBT presents the topic of sexual and gender diversity in the daily work processes of the Brazilian National Health System (SUS) (Brasil, 2013). It stands out the implementation of some advances, such as the inclusion of the fields “social name,” “sexual orientation,” and “gender identity” in the e-SUS individual registration form, as well as in the violence reporting form in the Notifiable Diseases Information System (SINAN) (Brasil, 2013).

However, in order not to transform it into an instrument of weak effectiveness, assuring its application along with human resources in health that believe in, implement, and consolidate this policy by practices directed to the multiple realities of individuals is as or more important than the policy itself (Brasil, 2013). A virtuous circle is the result of professionals properly trained and able to fully meet the LGBTQIA+ health demands (Brasil, 2013). The PNSI-LGBT suggests some paths:

Including the topics of sexual orientation and gender identity in the training and continuing education processes of health workers and in the exercise of social control (Brasil, 2013, p. 28)

Including LGBT themes in distance learning courses (EAD), for training courses aimed at health professionals and UNA-SUS. (Brasil, 2013, p. 30)

Articulation to ensure that strategies such as the Reorientation National Program in Health Professional Formation - *Pró-Saúde* (Interministerial MS/MEC Ordinance No. 3,019, of November 26, 2007), the Brazilian National Telehealth Program (Ordinance No. 2,546, of October 27, 2011), and the Education for Work Program for Health (*PET-Saúde*) (Interministerial MS/MEC Ordinance No. 421, of March 3, 2010) consider the issues of this policy. (Brasil, 2013, p. 30)

Thus, sensitizing and training health professionals aligned to comprehensive care is essential, after all

Without specific education on LGBTQIA+ health issues, health professionals graduate without the appropriate skills to meet the LGBTQIA+ health needs, from welcoming, anamnesis, and physical examination to treatment and guidance related to their demands. (Ciasca et al., 2021, p. 513)

However, the health educational process is fundamentally related to the role of scientific production in biomedical sciences, which are essentially guided—even if this influence is denied by utopic hygienist and “apolitical” discourses—by the interests and dictates of the hegemonic sociopolitical and economic context in which they are inserted (Canguilhem, 2020; Ciasca et al., 2021; Rosa, 2020).

More recent studies—integrative and systematic reviews—showed the emergence of a

medical and scientific discourse that endorses and reinforces the segmentation of the LGBTQIA+ population (Bueno et al., 2020; Bezerra et al., 2019; Morris et al., 2019).

By a predominantly positivist and, therefore, “biologist,” “a-historical,” and “asocial” perspective, essentially pathologizing measurements and/or interventions were developed in the face of any conditions of sex, gender, and sexuality that are not in line with the cis-heteronormative hegemony (Bueno et al., 2020; Ciasca et al., 2021; Bezerra et al., 2019; Canguilhem, 2020; Morris et al., 2019; Rosa, 2020).

According to Abade et al. (2020) and Bezerra et al. (2019), the result of this logic fundamentally based on hypothetical inferences about the LGBTQIA+ population materialized into a scientific production of insufficient quality and quantity.

This fragility is in line with a systematic review by Abade et al. (2020). According to the authors, although a recent trend of increasing scientific production on LGBTQIA+ health arose—higher in the international scenario in comparison with Brazil and Latin America—the verticalization of its content is seen by the “existence of three phases: that of studies on homosexuality as a disease until 1972; the phase of homophobia studies and its individual consequences; and from the 1990s on, a focus on school, health, and military institutions” (Abade et al., 2020, p. 2).

Thus, following the hypothesis of the existence of a stigmatizing content in the scientific literature on LGBTQIA+ health, this study aimed to critically analyze a possible ideologically “LGBTQIA+phobic” bias in the most recent health-related studies available in “one of the most important and well-known bibliographic databases in the world:” PubMed/Medline (Honório and Santiago-Júnior, 2021, p. 49). We based our study under this presupposition, on both the capability of the bias to come from cis-heteronormativity and the absence of contents in the scientific literature that addressed the topic studied.

Methodology

An active search was performed in PubMed, a database developed by the National Center for Biotechnology Information (NCBI), by the advanced method. This database was chosen because it is one of the main sources of health scientific production in English and has a wide indexing and high quality control (Honório and Santiago-Júnior, 2021).

For the search strategy, the keywords “Sexual and Gender Minorities” and its “Alternative Terms/Entry Terms,” “Previous Indexing,” and “See Also,” which were interconnected by the Boolean operator “OR” (Appendix I), were used (VHL, 2009).

For the search strategy, which was understood as a programming language, a “notepad” (Notepad/Windows®) was used, since some characters, when coming from other word processors, may not be correctly interpreted in the search platforms, impairing the process of identification and data collection (VHL, 2009).

Thus, on September 12, 2021, the search was performed in the PubMed database. Initially, 25,984 studies were found. Using the most frequent and efficient search strategy, which prioritizes the search for fully available studies of greater scientific rigor, the filters “Text Availability (Free full text)” and “Article Type (Clinical Trial; Meta-Analysis; Randomized Controlled Trial; Review; Systematic Review)” were applied (Honório and Santiago-Júnior, 2021). In total, 821 studies were exported under the “PubMed” format (Honório and Santiago-Júnior, 2021).

Later, the previously exported files were selected by the Rayyan selection platform (Rayyan®/QCRI/web app) (Ouzzani et al., 2016). Having a title, abstract, and/or keywords that referred to the LGBTQIA+ population and a time frame that proved the contemporaneity of the scientific content—more precisely, the last fifteen

years of the 21st century (2006–2021)—were the inclusion criteria. Having not even one keyword in English and a format other than article (editorials, reviews, journalistic texts, technical notes, or other) were the exclusion criteria.

The eligibility process was developed independently by two of the authors of this study in two phases: reading titles and abstracts and extracting keywords (Honório and Santiago-Júnior, 2021). In case of discrepancy, reviewers could solve it by two consensus meetings, in which studies were read in full; the presence of a third evaluator was not necessary (Honório and Santiago-Júnior, 2021).

Besides these processes, data were collected from the 334 included studies (about 40.7% of all studies found). The established publication interval was from 2006 to 2021. Results were structured in a spreadsheet (Excel/Windows®) under three aspects: title, year of publication, and keyword(s) used.

Then, the analytical process of this study started (Honório and Santiago-Júnior, 2021). Data were statistically treated in the IRAMUTEQ (*Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires*®) software, in which the descriptive and inferential analyses were performed (Camargo and Justo, 2018). In the descriptive analysis, the number of different keywords found was measured, as well as the frequency (absolute and relative) of their repetitions (Camargo and Justo, 2018). In the inferential analysis, three tests (Zipf diagram, similitude analysis, and word cloud) were performed to measure the powers (behavior of the frequencies of words) and possible interconnections between keywords (Camargo and Justo, 2018).

By the argumentative approach, during the period of discussion of this study, all carefully raised information was analyzed (Honório and Santiago-Júnior, 2021).

As this study did not involve human beings, its development was not subjected to approval by a human research ethics committee.

Results

In total, we extracted 1,838 keywords from the 334 included studies. However, before analyzing the collected data, we performed a textual standardization, since some words (Appendix II) had the same meaning, but were written in similar and/or abbreviated ways, which could compromise the quality of the analytical process (Camargo and Justo, 2018).

In the descriptive analysis, of the 1,838 words found (“Number of occurrences”), 859 (46.74%) were different from each other (“Number of forms”) and 662 (36.02%) appeared once (“Number of hapax”). Each study had an average of 5.5 keywords (“Average occurrences per text”) (Camargo and Justo, 2018) (Figure 1).

Figure 1 – Summary (IRAMUTEQ)

| |
|---|
| Summary |
| Number of texts : 334 |
| Number of occurrences : 1838 |
| Number of forms : 859 |
| Number of hapax : 662 (36.02% of occurrences - 77.07% of forms) |
| Average occurrences per text : 5,50 |

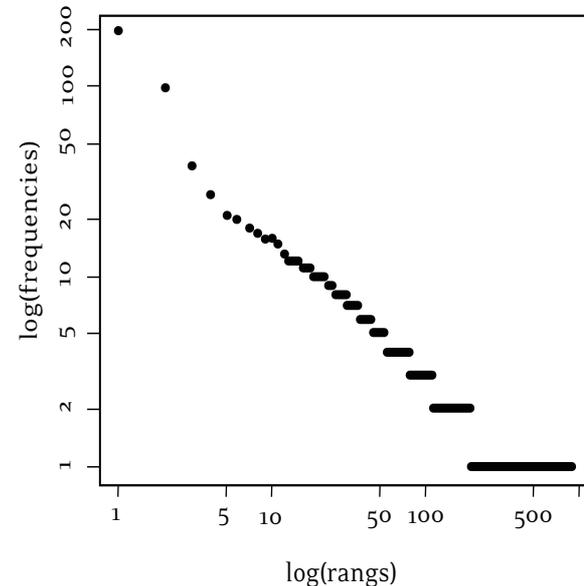
The most used forms (“Actives forms”) were “men having sex with men” (MSM) and “HIV” (human immunodeficiency virus), which appeared 192 and 98 times, respectively. The frequency of the third most prevalent keyword (“prep;” frequency of 38 times) was respectively and approximately 5.0 and 2.6 times higher in comparison with the aforementioned keywords (Figure 2).

Figure 2 – “Actives forms” (IRAMUTEQ)

| Form | Freq. ↓ |
|------------------------|---------|
| men_having_sex_with... | 192 |
| hiv | 98 |
| prep | 38 |

The inferential analysis started with the Zipf diagram, a lexicographic analysis that presents the behavior of the frequencies of words in a graph that shows in its vertical axis (y) the position of the frequencies of words in descending order and in its horizontal axis (x) the frequencies of the forms (both in logarithmic scales) (Camargo and Justo, 2018). Thus, this visual resource showed the power of some keywords along with the database (Figure 3).

Figure 3 – Zipf diagram (IRAMUTEQ)



zipf

In order to find the degree of potential of the most prevalent words, we performed the similitude analysis (Camargo and Justo, 2018). The keywords “men having sex with men” and “HIV” created a strong interconnection of two critical nodes, which hierarchically led to other keywords (Figure 4).

The word cloud test showed that the keyword “men having sex with men” presented the highest latency of the critical node due to the greater complexity of its internal interconnections (Camargo and Justo, 2018) (Figure 5).

Therefore, the analysis of the keywords used by the included studies showed that the LGBTQIA+ population is essentially described by the scientific literature as “men who have sex with other men” and “HIV-positive.”

Discussion

This study showed the existence of a stigmatizing bias in the scientific production on LGBTQIA+ health.

We used keywords in the analytical process of this study because they are the main indexing components for scientific publications (Brandau, Monteiro, and Braile, 2005; Honório and Santiago-Júnior, 2021). Moreover, using a well-structured vocabulary increases the chances of finding quality scientific information (Brandau, Monteiro, and Braile, 2005; Honório and Santiago-Júnior, 2021). Brandau, Monteiro, and Braile (2005, p. 9) also state that

The application of these keywords is not limited only to the search for articles that can support the writing of scientific articles or can be used to support opinions. Quite the contrary, they have a much wider application and should be incorporated into daily clinical practice. The process of finding appropriated answers to doubts that arise during patient consultations depends on how questions are structured. Some groups adopted the methodology proposed by the University of Oxford, where the whole question is structured based on keywords. This methodology can be summarized by the acronym P.I.C.O., where “P” is for patient or population, “I” is for intervention, “C” is for comparison or control, and “O” is for (clinical) outcome.

Therefore, regarding the keyword used in our search for bibliographic content—“Sexual and Gender Minorities,” which was located in the category “Persons category” and subcategory “Persons”—some questions are worthy of discussion.

First, the emergence of the term “Sexual and Gender Minorities” was not spontaneous and/or unilateral; on the contrary, it was the result of the meeting of interests between science and the historical background of the LGBTQIA+ fight, which gained strength and prominence from the 1980s, in favor of civil rights, including the right to health—after all, the outbreak of the HIV/AIDS epidemic was part of the background of that time (Bezerra et al., 2019; Brasil, 2002).

Ayres, Castellanos, and Baptista (2018, p. 52) corroborate this idea:

At the same time AIDS was a public health problem, a part of the population that was being initially affected by that problem, the organized gay community, very mobilized, could have an interaction with the relatively unprecedented technical and scientific area of health, as it had been a long time since we had such a close interaction between a population group affected by a health problem and technicians trying to seek a solution for it.

Thus, the aforementioned keyword, according to the “scope note of the Health Sciences Descriptors (DeCS/MeSH),” “was coined in the 1990s by some epidemiologists who studied the spread of sexually transmitted infections [STIs] in men who, regardless of their sexual identity, had sex with men” (VHL, 2017).

However, the comparison with its historical background establishes the paradox of the term “Sexual and Gender Minorities.” Initially, an important achievement materialized in the leading role of a vast and important scientific production on the HIV/AIDS epidemic—which directly affected, and continues to affect, the provision of public health policies aimed to tackle and control this epidemic (Abade et al., 2020; Brasil, 2002; Ciasca et al., 2021).

On the other hand, this term also carries, as well as instrumentalizes, a decontextualized view of health sciences on the LGBTQIA+ population, a reflection that becomes irrefutable with the scope of the keyword—which was revised in 2017, by the DeCS/MeSH platform.

Sexual and Gender Minorities: 1. Individuals including lesbian, gay, bisexual, transgender, queer, intersex, gender nonconforming, and other people whose sexual orientation or GENDER IDENTITY and reproductive development are considered outside cultural, social, or physiological norms. 2. MSM [...] Currently, the use of the acronym MSM is frequent in the medical literature and in social

research to describe these cases, with a research group that does not consider sexual orientation issues. (VHL, 2017, p. 1)

This term is essentially guided by the normal-pathological dichotomy and points to a possible way to pathologize being LGBTQIA+, a reality weakened by Canguilhem (2020), after all, the frequent positivity adopted by health sciences of what is “normal” or “pathological” would be a minimalist analysis before the multitude of physiological and contextual possibilities of experiencing life. The author, under the precepts of Max Weber, states that establishing a standard to affirm the existence of health or disease only transforms these concepts into an ideal and, therefore, vague and unreachable type that is unrelated to the life process of people, besides statically contemplating the extremes of the health-disease process and, thus, disregarding the continuity of its numerous intermediate stages (Canguilhem, 2020).

Moreover, Louro (2001) and Sodr  (2005) state the need to replace the term “sexual minorities” by “silenced majorities.” According to them, this logic would strain the contradiction between the questionable numerical limitation and the necessary empowering of demands in the spectrum of political institutions, since the “minoritization” of LGBTQIA+ people is not related to its quantitative aspect, but to the qualitative aspect of the biopower of their existence in the social scenario (Louro, 2001; Sodr , 2005).

Another limitation of the keyword “Sexual and Gender Minorities” is that it does not address the vulnerability of the LGBTQIA+ population, including in health (Ciasca et al., 2021; WHO, 2013; Brasil, 2013).

The understanding of the state of vulnerability of the LGBTQIA+ population—a socially created and/or imposed condition—is in accordance with Ayres, Castellanos, and Baptista (2018, p. 54):

one of the constitutive characteristics of the conceptual framework of vulnerability is precisely being dynamic, not a conceptual structure that crystallizes reality, but being based on the

assumption that science and technique can only be understood as part of health work processes that are concretely operated and, as such, part of the social and political movement, with all its forces also acting, often, [in] contradictory [ways].

Moreover, the use of this term generalizes LGBTQIA+ identities and, thus, disregards the dynamicity of their respective existential journeys. This idea is in line with Albernaz and Kauss (2015, p. 552):

This population currently includes several identities that can not be limited to a group, since after each dialogue, they reinvent and transform themselves and the very heterogeneity of their groups.

The historical and social background of this population is very different from others, since its members—essentially cisgender—focus much of its efforts on criminalizing prejudice and, mainly, legitimizing their family compositions, besides the recognition of homosexual relationships (marriage) and the conception and/or adoption of children (Ciasca et al., 2021). On the other hand, individuals in transition (TQI+) still fight for basic rights related to their existentiality, especially for the depathologization and collective acceptability of their identities (Ciasca et al., 2021).

Considering this, LGBTQIA+ health care must be in accordance with Cardoso and Ferro (2012, p. 557): “the discussion on the disease process of the LGBT population also requires the specification of the concepts of sexual identity and gender identity. Although everyone goes through a disease process, the journey is different in each case.” Therefore, these same authors show “the imminent need for professional training of health agents for actions in view of the specificities of the LGBT population” (Cardoso and Ferro, 2012, p. 554).

In the context of public health policies, Bezerra et al. (2019, p. 306) address key points to transform them into effective instruments, highlighting:

the recognition of sexual orientation and gender identity as a social determinant of health; the

right to use the social name; and access to the Transexualizing Process (PrTr) in the public health service, which became strategies to increase the access of the LGBT population to health services.

Far from the conception of a possible ideal and/or final design of the term “Sexual and Gender Minorities,” studies show the potential of the “queer theory” to be an inducing and directing agent to reach it (Butler, 2019; Louro, 2001). After all, the queer movement, based on the continuous organization of social and cultural life, includes in its dialectical approach the need to provide the passage (“passability”) of living practices that question the unisonance of cis-heteronormativity, consecutively considering the understanding and belonging of the diversity of resistant LGBTQIA+ identities and, thus, breaking with any perspectives of naturalness, normality, and pathologization (Butler, 2019; Louro, 2001).

Considering particularly the interconnection between the most prevalent and powerful keywords found in this study—“men having sex with men” and “HIV”—Lima et al. (2014, p. 887) described a clear context for its application:

the MSM category has been widely used to designate homosexual, bisexual, and other men who take over such practice, but may find it difficult to define themselves as homosexual. This terminology has been adopted by most collective health studies, which focus efforts to understand the dynamics of the AIDS epidemic in this population.

However, according to Knauth et al. (2020), who made inferences about the last 2018 HIV/AIDS Epidemiological Bulletin, this stigmatizing direction (still guided by the experience from the beginning of the HIV epidemic) lost its meaning. Regarding exposure categories, for example, heterosexual men are the majority (49% of cases), followed by homosexual (38%) and bisexual (9.1%) men (Knauth et al., 2020).

According to the authors, prejudice against some individuals and invisibility in favor of others may be the main explanation for the current scenario.

Thus, as they were not perceived as a group at risk for HIV infection, heterosexual men were subjected to the “general population” category in epidemiological surveillance analyses and did not receive prominence in prevention policies or actions. (Knauth et al., 2020, p. 2)

In practice, this almost symbiotic relationship between the terms “men having sex with men” and “HIV” can affect LGBTQIA+ health care. The needs, specificities, and demands of this population are predominantly predefined by research objects and, consequently, in their reproduction—otherwise, the critical reflection on the relationship between cause and consequence and the encounter between individual and health professional precede (Bezerra et al., 2019; Brasil, 2002; Cardoso and Ferro, 2012; Ciasca et al., 2021; Luiz and Struchiner, 2002).

Rios and Adrião (2022, p. 4) define this perspective as “*a priori*,” breaking with the objective of scientific knowledge, which “comes from the action of analytically facing the obstacles that arise along the process of knowing.” The authors (Rios and Adrião, 2022, p. 4) also describe the scientific experience “as an exercise of rectification of errors of the process itself, a reflection on the way, a properly methodological discussion, where the simple presentation of the research procedures is insufficient to ensure scientificity.”

Thus, undergoing a process of resignification and extension of the scientific production on LGBTQIA+ health beyond HIV/AIDS is essential—without dispensing this important public health problem, but considering other scientific demands (Bezerra et al., 2019; Brasil, 2002; Ciasca et al., 2021).

And this change, according to Bezerra et al. (2019, p. 320), is related to the “urge to instigate the construction of a new paradigm in the teaching process in health courses, which contemplates an academic training capable of discussing gender diversity as a social issue related to the health care process.” For the conception of this movement, the authors raise intriguing questions:

[...] some questions that may raise future reflections and productions: what determines the hierarchy

of themes? Why do certain themes have greater adherence in this or that area of concentration of collective health? Why do certain journals do not discuss issues related to the LGBT population beyond STIs and HIV/AIDS? What are the possible barriers or impediments to the entry of this scientific production? (Bezerra et al., 2019, p. 320)

Moreover, we must reinforce that the keywords found in this study were not chosen at random, since they are products of a science consciously or unconsciously guided by the interests and dictates of their sociopolitical and economic context (Canguilhem, 2020; Ciasca et al., 2021; Rosa, 2020).

Keywords, according to Foucault (2016), not only designate, but also confer and even impose the ways how human beings may follow their own existence.

At the moment when language, as spoken and scattered words, becomes an object of knowledge, we see it reappearing in a strictly opposite modality: a silent, cautious deposition of the word upon the whiteness of a piece of paper, where it can possess neither sound nor interlocutor, where it has nothing to say but itself, nothing to do but shine in the brightness of its being. (Foucault, 2016, p. 416)

This study shows the need to discuss possible ways to curb the essentiality of the stigmas existing in the scientific literature on LGBTQIA+ health.

Obviously, no precise solution to overcome this obstacle exist, however, the starting point is promoting a necessary epistemological change: removing LGBTQIA+ individuals from the condition of “thing” and placing them as “citizens” in the study design (Turato, 2013).

Moreover, along with this new process of constructing scientific knowledge, the idea of representativeness is another *sine qua non* point—after all, according to Rosa (2020), cis-heteronormativity is present in all institutions. In her study, among a diversity of places, the author distinguished spaces of scientific research, which are fundamentally occupied by heterosexual, white, and cisgender researchers, a system that produces inherently discriminatory scientific contents. Its

[...] “truth” (the one spoken and researched by cisgender, white men in privileged positions) also improved in the discourse of body conformation and standardization, resulting in a scenario in which control structures did not regress significantly until the beginning of the 21st century. (Rosa, 2020, p. 63)

[...] science, by dichotomizing human anatomy and pathologizing different biological forms; the law, by ensuring civil registration in a sex determined to the newborn based on the same scientific dichotomy; religion, by categorizing as natural (due to a supposed divine origin) cisgender identity, heterosexuality, and monogamy; and the law once more, ensuring that these naturalized forms are legally accepted, are instruments that marginalize the bodies and experiences that question them, creating an environment conducive to the global reproduction of heteronormative and cisnormative discourses, which, cyclically, reaffirm themselves, as they already have a well-developed discourse and language to, from then on, create more truths that continue to support this system. (Rosa, 2020, p. 65-66)

Ciasca et al. (2021, p. 509-510) confirm this fragility:

Increasing the participation of LGBTQIA+ people in the research team during all stages of the research process, as agents and not only objects of study, are some strategies to change this situation. For researchers, the language and values of the segment in question must be familiar and appropriate. Moreover, scientific rigor is essentially important for those who wish to do research, including the cultural competence necessary to the study design, permission to develop research instruments to access, identify, and manage participants, and the ability to adapt to the peculiarities of the LGBTQIA+ population.

This study had limitations. First, we did not fully analyze the content of the studies found. However, as aforementioned, keywords present the essentiality of their scientific research, distinguishing

fundamental points, such as population and outcomes (Brandau, Monteiro, and Braile, 2005; Honório and Santiago-Júnior, 2021).

Secondly, regarding the process of selecting sources of information, we searched studies indexed on the PubMed database. Thus, as the selection process followed an analytical approach of studies that were performed in developed countries and/or regions, the phenomenology studied in interface with other cultural socioeconomic contexts was not contextualized.

However, despite their feasibility in future studies, the results found by simply accessing studies published on other databases and/or platforms, such as the Latin American and Caribbean Health Sciences Literature (LILACS), the Scientific Electronic Library Online (SciELO), and the Virtual Health Library (VHL), would not be other than those mentioned in this study, since, despite its increasing production, research in underdeveloped or developing countries is strongly influenced by the guidelines of the scientific production of centers of excellence, which are mostly located in more developed and rich regions (SciELO, 2014).

Finally, the authors experienced a paradox regarding the study methodology. On the one hand, rejecting the complex and valued methodological design, which would probably reinforce the “LGBTQIA+phobic” bias of health studies. On the other hand, designing a study that seeks to honor the subjectivities related to the production of knowledge and, therefore, a more humanized study aimed at the real needs of LGBTQIA+ people. This conflict is in accordance with Turato (2013, p. 25):

[...] researchers will have to be involved, emotionally as well, with their object of study. They will have to blend in with it, identify with it, “be it.” The subjectivity of researchers will have a paramount importance, contrary to what is postulated by the so-called hard sciences.

Final Considerations

By comparing the objective of this study with the data collected and analyzed, we confirmed the

existence of an ideologically “LGBTIA+phobic” bias in studies produced and indexed on the PubMed/Medline database.

This study does not aim to deny or renounce science; on the contrary, it yearns for quality and humanized research aimed at the specificities and needs of the LGBTQIA+ population, embodied in public policies that optimize access to care and improve the general health indicators of these individuals.

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