cienciaesaudecoletiva.com.br ISSN 1413-8123. v.29, n.5 DOI: 10.1590/1413-81232024295.05032023EN

Serophobia related to HIV and AIDS: what is debated in digital social networks in Brazil?

Jhonata de Souza Joaquim (https://orcid.org/0000-0001-5180-965X) ¹ Anderson Reis de Sousa (https://orcid.org/0000-0001-8534-1960) ² José Luís Guedes dos Santos (https://orcid.org/0000-0003-3186-8286) ¹ Evandro Alves Barbosa Filho (https://orcid.org/0000-0002-2944-3388) ³ Alvaro Francisco Lopes de Sousa (https://orcid.org/0000-0003-2710-2122) ⁴ Greice Lessa Baldin (https://orcid.org/0000-0001-7056-3317) ⁵

Abstract The aim of this article is to analyze the serophobic content explicit in the publications published in Digital Social Networks in the context of HIV and AIDS in Brazil. This is a qualitative study of the descriptive exploratory type, based on documents. The data obtained were evaluated using the methodology of documentary analysis through Thematic Content Analysis with the aid of NVivo*12 Plus (Windows). A total of 187 codes were generated, subsequently grouped according to the semantics of the words, originating five thematic categories: #LivingWithHIV, #WeNeedtoTalkAboutIt, #WhatISSEROPHOBIA, #SerophobiaIsACrime, and #NoSerophobia. The results showed the main manifestations of HIV and AIDS-related serophobia on social networks. The shared content discussed the difficulties of living with a disease that has social dimensions; the relevance of talking and disseminating content about HIV and AIDS; the elements that make up the stigmatization process and, consequently, structure serophobia in society; the social and civil rights of people living with HIV; measures to combat serophobia in health institutions; and the implications of serophobia in the field of public

Key words HIV, AIDS, Digital social networks, Public health, Public health policies

¹ Universidade Federal de Santa Catarina. Campus Universitário Reitor João David Ferreira Lima S/N, Trindade. 88040900 Florianópolis SC Brasil. jhol_777@hotmail.com ² Escola de Enfermagem, Universidade Federal da Bahia. Salvador BA Brasil. 3 Universidade Estadual do Oeste do Paraná. Francisco Beltrão PR Brasil. ⁴ Instituto de Ensino e Pesquisa, Hospital Sírio-Libanês. São Paulo SP Brasil. ⁵ Centro Universitário Barriga Verde. Orleans SC Brasil.

Introduction

The stigma, prejudice, and discrimination against people living with HIV are referred to as serophobia. This concept is used by social movements1 and disseminated on digital social networks (DSNs), aiming to describe with more specificity the stigmatization related to the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS). Serophobia is mechanically linked to populations commonly associated with HIV, such as individuals with non-normative sexual orientations and gender identities, as they are involuntarily marginalized in society when it comes to AIDS².

Individuals outside the binary norms of gender and sex, living with HIV, experience excessive stigmatizing processes that affect various aspects of their quality of life. In the healthcare field, it is essential to establish the National Policy for Comprehensive Health Care for Lesbians, Gays, Bisexuals, Transvestites, Transsexuals, Transgenders, Queer individuals, Intersex people, Asexuals, Pansexuals, Non-binary individuals, and the diversity of sexual orientations and gender variations (LGBTQIAPN+). This policy aims to create a collective and supportive environment that is welcoming, humanized, and free from discrimination^{1,3,4}. Therefore, it is crucial to involve healthcare professionals in providing care focused on mitigating serophobia3, which hinders the improvement of care practices.

The first step in eradicating serophobia from public health is to understand that the stigmatization that permeates the lives of people living with HIV, key populations, and those in vulnerability constitutes a serious social problem. It leads to users avoiding healthcare services and creates distance between public policies aimed at combating the HIV epidemic^{2,4}. Key populations in relation to HIV - homosexuals and other men who have sex with men (MSM), sex workers and their clients, transgender individuals, and people who use injectable drugs - still lack social support when facing serophobic situations⁵. This justifies the study, especially in terms of the imagery and media construction surrounding the phenomenon of serophobia, with a focus on health promotion and prevention actions, legal protection, assertive communication, guaranteeing social rights, and comprehensive healthcare practices6.

Given the need to address the gaps in scientific knowledge of this theme in the media landscape, this study was guided by the research question: How is the content produced about HIV and AIDS organized on digital social networks? The objective of this study is to analyze the serophobic content presented in publications posted on digital social networks in the context of HIV and AIDS in Brazil.

Method

A qualitative study, supported by documentary data sources and structured in materials formulated a priori, which did not undergo analytical treatment^{7,8}, is employed in this study with the purpose of analyzing the phenomenon of serophobia related to HIV and AIDS as a public discourse expressed on DSN. Research on digital social networks was chosen due to their significant usage in society, enabling global real-time communication and generating creative and promising communication resources9. The documentary database comprised posts shared at the national level (Brazilian) on three DSN: Instagram, Facebook®, and Twitter.

Data collection was conducted using the magnifying glass tool within the networks themselves, employing a predefined key hashtag (#) titled "#Serophobia". The search for publications was executed using the following search strategies: a) Instagram - the most recent topic was searched; b) Facebook - the explore topic was accessed; c) Twitter - an advanced search was performed, followed by accessing the most recent topic. The established time frame spanned from October 1, 2020, to October 31, 2021. The data available online amounted to 750 publications, with 679 (90.5%) from Instagram®, 44 (5.9%) from Facebook, and 27 (3.6%) from Twitter. The collected data were analyzed using Thematic Content Analysis, which involved the following steps: a) pre-analysis (data organization); b) material exploration; and c) treatment of results (inference and interpretation of content)¹⁰.

In this study, pre-analysis involved the application of exclusion criteria, which entailed removing repeated posts and those outside the defined time frame, as well as publications that did not relate serophobia to HIV and AIDS. Additionally, posts deviating from the study theme (using the key hashtag solely to link content), publications lacking textual content or descriptions (rendering them unprocessable by the software), and posts consisting solely of images or video content (preventing transcription) were excluded. Consequently, 525 posts were excluded.

A total of 179 (79.5%) publications were selected from Instagram*, 28 (12.5%) from Facebook, and 18 (8%) from Twitter, resulting in a total of 225 posts containing content related to serophobia. The transcription of the content was done manually, with 58.7% transcribed through Microsoft Office Word 2013, and 41.3% imported using the NCapture extension in Google Chrome, made available by the NVivo 12 Plus software (Windows). During manual transcription, a textual refinement process was implemented, which involved eliminating incomprehensible words, abbreviations, and emoticons.

In the material exploration phase, the text editing file containing the posts was imported into the NVivo 12 Plus software (Windows). This phase involved selecting excerpts and creating codes represented by single words or sets of words that summarized the content of each post11. During the treatment of results and interpretation of content, codes were grouped according to semantic similarities, resulting in 12 code groups associated with 5 thematic categories: #LivingWithHIV; #WeNeedtoTalkAboutIt; #WhatISSEROPHOBIA; #SerophobiaIsACrime; and #NOSerophobia. The categorization in the software enabled the analysis of 1,087 excerpts from the posts, comprising 1,805 references linked to 187 codes. It's worth noting that some publications fell into multiple categories due to the presence of multiple codes within certain excerpts.

The entire dataset supporting the results of this study has been made available on Sci-ELO Data and can be accessed at https://doi. org/10.48331/scielodata.M1OA0T. This study, which collected data from freely accessible social network publications, did not require approval from the Research Ethics Committee (CEP). However, the anonymity of all authors of the publications was guaranteed through the use of acronyms^{12,13}: "FP" (Facebook post), "TP" (Twitter post), and "IP" (Instagram post).

Results

The data content configured the profiles of users who published on the theme within Digital Social Networks, falling into four main groups: People living with HIV – users with public serology; Health content profiles – including accounts of health professionals, institutions, and services; LGBTQIAPN+ content profiles – encompassing individuals from the community such as influ-

encers, activists, and the general population; and the Other profiles group – consisting of various other users of DSN.

Among the 225 publications used in the analysis, 89 belong to the LGBTQIAPN+ Content Profiles group, and 76 are from the Health Content Profiles group. Members of these groups were responsible for creating the largest amount of content (65.8%) related to serophobia on digital social networks. Additionally, 27 publications (12%) are related to the People living with HIV group, and the remaining 50 (22.2%) make up the other profiles group. Notably, there were 17 profiles that used the key hashtag of the research, placing them within two concomitant user groups (LGBTQIAPN+ content profiles and health content profiles). The categorization of the data followed the number of posts in descending order and is presented below:

Thematic category 1: #LivingWithHIV

The thematic axis #LivingWithHIV presented 87 (46.5%) codes, a significant number, justified by the fact that the category covers the largest number of posts used in the analysis (73 publications). Users expressed through the content shared on their networks the impact of living with a socially stigmatized disease and the need to understand that people living with HIV "are by our side":

[...] fears, guilt and insecurities begin to haunt you even though you already know that it is scientifically proven that by treating yourself with care, you will have a quality of life equal to or better than anyone not living with HIV (PI55).

[...] I have heard absurd statements about HIV in circles of friends, and in the same circle there were people living with HIV who surely heard that and were shaken. [...] you need to start seeing HIV as something close to you [...] they are people who are on your side, in your home, in your bed, at work, and who often live in chains of fear and stigma that we ourselves have helped to nurture (PF8).

It is worth noting that 20 (23%) of the codes within the axis directly or indirectly addressed issues related to the LGBTQIAPN+ community. This is justified by the fact that this population is regularly affected by serophobia and, as a result, produces the largest amount of content on this theme in Digital Social Networks. Photos and videos (Figure 1) were very frequently circulated in these networks, conveying the message that HIV and AIDS are not exclusive to LGBTQIAPN+ individuals.



Figure 1. "HIV is not a gay disease". Florianópolis, Santa Catarina, Brazil, 2021.

Source: PI64 (2021).

The posts in the thematic category #Living-WithHIV also raised reflections on the importance of discussing HIV and AIDS as a political problem, amounting to 16.1% of the codes of this axis, since serophobia is present in the Brazilian political structure and triggers setbacks in the comprehensive health care of people living with HIV. The prevalent subjects in the publications were the advances and regression of the Brazilian National HIV and AIDS Policy; the performance of the federal government in facing the HIV epidemic; and the serophobia suffered in health institutions:

[...] understand HIV as a political agenda, not a biological one [...] no more physical death, but also no more social death (PT18).

Brazil was once a reference in the construction of public policies on HIV and AIDS. Today there is a lack of funding for policies and increased political pressure to include it in the privatization agenda. Another challenge is the advance of conservatism, which reinforces discrimination by serophobia and contributes to silencing the stigma of the discussion on sexuality and prevention in the education of young people and in affective and conjugal relationships in all generations (PI113).

[...] the medical record is a DOCUMENT. Agreeing to breach of confidentiality and irresponsible gossip is agreeing to death and suffering. YES! (PF11).

Thematic category 2: #WeNeedtoTalkAboutIt

Based on the content shared on Digital Social Networks, the second category is #WeNeedto Talk-AboutIt (54 publications), this axis contained 32 (17.1%) codes. The profiles/accounts expressed the relevance of discussing and disseminating information related to HIV and AIDS, aiming to break social taboos. The shared posts (Figure 2) sought to make other users aware of the importance of "normalizing" talk about HIV and AIDS:

The publications in this category sought to convey information that was not widely disseminated by public health agencies and highlighted the clear evolution in the HIV therapeutic regimen. The contents disclosed addressed self-care; serodifferent relationships; combined prevention, mainly Pre-Exposure Prophylaxis (PrEP) and HIV Post-Exposure Prophylaxis (PEP); and viral suppression. As a strong point, the posts explained the need to disseminate the concept "Undetectable = Untransmittable" (U = U):

[...] I am tired of so much serophobia, even from infectologists who do not assume the scientific consensus that "U = U" is ZERO HIV TRANS-MISSION! [...] some health care providers still avoid correcting this misinformation to prevent people with HIV from engaging in more condomless sex or having more sexual partners upon learning that "U = U" [...] health care providers and the public health community at large have an



Figure 2. "The fight is for everyone". Florianópolis, Santa Catarina, Brazil, 2021.

Source: PF26 (2021).

ethical responsibility to actively address misinformation about HIV transmission and disseminate the "U = U" message to all people [...] (PF17).

Thematic category 3: #WhatISSEROPHOBIA

The thematic category #WhatISSEROPHO-BIA had 50 publications that originated 27 (14.4%) codes. Among the posts that used the study hashtag, few presented visual material properly focused on conceptualizing the term serophobia, representing only 4.8% of the codes generated. The content disclosed, as shown in Figure 3, sought to define and impose the relevance of the term; expose how serophobia is harmful to people living with HIV; and highlight serophobic expressions:

Among the contents propagated through the posts, the debates around intersectionality stand out, that is, the articulations between machismo, gender discrimination, LGBTphobia, ethnophobia and racism, common oppressions in the context of serophobia. The publications analyzed also built dialogues about serophobic expressions, showing that serophobic speeches are produced and reproduced with the intention of stigmatizing people living with HIV; and/or due to lack of information, veiled serophobia and the use of outdated terminologies:

[...] SEROPHOBIA AND RACISM, WHAT CAN THESE OPPRESSIONS HAVE IN COM-

MON? [...] it is necessary to state that many black people are forgotten in this debate and are still silenced. Therefore, it is not surprising that the fight against HIV and AIDS among the black population is one of the demands of the black movement that often works in the health area [...] (PI178).

[...] I am not serophobic, but: [...] do you really trust this undetectable thing?; I'm not going to get tested for HIV because I only have sex with my boyfriend; you got it, now hold on, right? [...] who told you not to take care of yourself!; this girl looks like an AIDS patient; old people don't have these things; I had sex without a condom because she looked clean; it's a gay disease, right? [...] (PI155).

Another topic discussed was: the effects of serophobia on public health, corresponding to five (18.5%) codes of the thematic axis #WhatISSER-OPHOBIA. It is possible to identify in the published content that serophobia implies facing the HIV epidemic, as it constitutes barriers to access to combined prevention technologies and HIV testing services; and delays in adherence and linkage to the HIV treatment regimen:

[...] serophobia [...] is one of the main factors for late diagnosis, since the violence related to stigma is so great that it ends up making many people avoid HIV testing for fear of seeking [...] the test, being seen in referral services or finding acquaintances working there, suffering gossip, among others; which prevents diagnosis and treatment, discovering the disease [...] at an advanced stage already [...] (PI160).

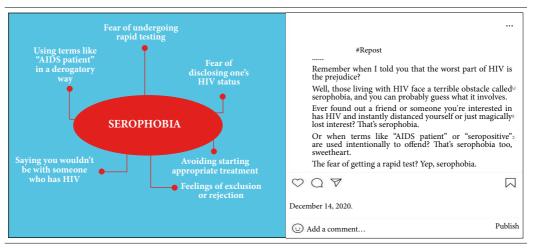


Figure 3. "We need to talk about... SEROPHOBIA". Florianópolis, Santa Catarina, Brazil, 2021.

Source: PI114 (2020)

Thematic category 4: #SerophobiaIsACrime

This fourth thematic category resulted in 30 (16%) codes, extracted from excerpts of 47 publications. The posts referring to the #SerophobiaIsACrime axis addressed the violation of civil rights in the experience of HIV, highlighting the crime of discrimination based on serophobic discourses (Figure 4), including those verbalized by political subjects, and, therefore, contextualizing serophobia as a criminal practice:

[...] the statement was given [...] in 2016, but gained great repercussion in September this year after the video was published and spread on the networks. THIS IS NOT NORMAL, she said, referring to the homosexual union [...] the Bible calls any option contrary to what God has determined a sin. And sin has a consequence which is DEATH. AIDS is there to show that the sexual union between two men causes a disease that leads to death and contaminates women [...] (PF13).

Most of the content published was intended to inform other users about current legislation in order to promote interventions to combat serophobia. The profiles/accounts of the digital social networks also expressed the urgency of society to understand the human rights guaranteed by the federal constitution in the experience of HIV, such as serological confidentiality, disability retirement and guaranteed access to treatment:

[...] RIGHTS OF PEOPLE LIVING WITH HIV: confidentiality at work and medical confi-

dentiality [...] sickness benefit and disability retirement [...] all people living with HIV have the right to free treatment according to Law No. 9.313, in case of restricted access, it is recommended to seek the Municipal Health Councils and, in the last case, to file a lawsuit [...] Law No. 12.984, defines the crime of discrimination of people living with HIV [...] (PI108).

[...] no person living with HIV [...] has an obligation to tell their serology. It is a right that we have (PI89).

Thematic category 5: #NOSerophobia

The #NOSerophobia category had the lowest number of posts, 41 publications, and, consequently, codes (6%), a fact that the axis addresses only one central theme. The publications of this axis sought to highlight the interventions to combat stigmatizing attitudes in Digital Social Networks; and the importance of social movements and health institutions in the fight against serophobia:

[...] to close the June actions, the Pride+ affinity group took a ride on the theme of the LGBTI+ Parade 2021 of São Paulo/SP and we will learn more about people living with HIV and how not to perpetuate serophobia. We will eliminate taboos, doubts, stigmas and prejudices about the agenda. The theme has been gaining ground, in favor of an inclusive society (PI53).

It is observed among the posts that five (45.5%) codes that composed this axis men-

tioned health services, justified by the fact that they constitute indispensable elements in the experience of HIV, such as health promotion actions and prevention measures. In contrast, the publications showed the need to combat serophobia present in institutions (Figure 5).

Discussion

Living with HIV affects physiological and psychological aspects that are characteristic of the health-disease process, influenced by the historical and social context of AIDS. Quality of life, adaptation to the therapeutic regimen, development of interpersonal relationships, and prejudice in the family and work environment can pose significant challenges for people living with HIV. These challenges have become a global public health concern¹⁴. The central data uncovered in our study confirm these aspects and contribute to the advancement of scientific knowledge on the subject, especially by exploring the media's interest in serophobia on Digital Social Networks, which is a valuable aspect for collective health analysis.



Figure 4. "We've got everything here". Florianópolis, Santa Catarina, Brazil, 2021.

Source: PT9 (2021).

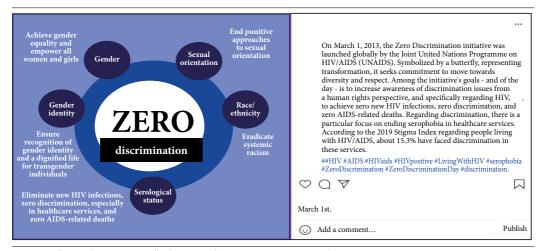


Figure 5. "Zero discrimination". Florianópolis, Santa Catarina, Brazil, 2021.

Source: PI126 (2021).

Serophobia related to HIV and AIDS presents daily challenges, causing numerous negative emotions and detrimental effects that directly impact the quality of life of affected individuals. This circumstance triggers feelings of suffering, fear, sadness, anguish, oppression, guilt, and invisibility, ultimately resulting in social isolation and concealment of serological status¹⁵⁻¹⁷. These challenges also shape the strategy for defense and self-care management in an attempt to counteract negative perceptions and strengthen socio-affective relationships. This should be a focal point of professional practice in the health sector¹⁷, aimed at providing social support for coping.

Our findings underscore the significance of these propositions, particularly due to the limited number of publications on the subject by people living with HIV. This limitation reflects the enduring stigmatization and negative social perceptions surrounding this experience¹⁷. People living with HIV are still often stereotyped as "risky" and/or "dangerous" and are unfairly marked as "transmitters" 18. These stereotypes impact their ability to assert themselves, exercise autonomy, and express their identities within the context of seropositivity. Additionally, the dissemination of content on Digital Social Networks highlights the ongoing debate involving the LGBTQIAPN+ population^{19,20}, in relation to serophobia related to HIV and AIDS. It also emphasizes the persistence of stigmatizing labels, underscoring the need to reevaluate media perspectives. Discourses produced in the realms of communication often rely on primary representations, which can result in misinformation, negligence, and/or a lack of comprehensive information²⁰.

HIV and AIDS are not exclusive to key or vulnerable populations; they affect society broadly, like any other Sexually Transmitted Infection (STI). This fact has been validated in the UN-AIDS Global AIDS Update 2022 report²¹. Analyzing the profile of people living with HIV in Brazil in 2021, we find that individuals of brown color accounted for 48.1% of cases, with the majority falling in the age group of 25 to 29 years old (20.7%). Additionally, 25.9% had completed high school, and 73.9% were male. Of the male cases, 26.7% identified as heterosexual, while 48.7% identified as homosexual. Among females, 86.6% identified as heterosexual²². Therefore, it is evident that disinformation related to HIV and AIDS can lead to serious social problems. Such misinformation contributes to stigmatization and creates barriers to accessing HIV prevention, diagnosis, and treatment. It also contributes to the deterioration of the image and identity of individuals living with HIV within society^{17,23}.

Emphasizing the consequences of misinformation and/or a lack of information, there are debates surrounding the concept of an undetectable viral load. This aspect remains relatively obscure, confusing, and not widely disseminated on the networks investigated in our study. The "U = U" concept faces challenges and controversy within the country's digital social networks. This is despite the fact that approximately 990 thousand Brazilians live with HIV, with 81% of them receiving treatment, and among those in treatment, 95% have achieved viral load suppression²⁴. This concept is also affirmed in health services, which generates significant communication and ethical challenges in the lives of those with HIV¹⁸, often leading to a lack of credibility. The Ministry of Health, through clinical/therapeutic protocols/ guidelines, confirms the veracity of the "U = U" concept, stating that individuals living with HIV with an undetectable and sustained viral load do not transmit HIV through sexual intercourse²⁵.

The motivations behind serophobic practices are rooted in a complex and intersectional concept, transcending or denying scientific knowledge and sociopolitical aspects due to derogatory conspiracy theories. Such practices are characterized by manifestations of stigma²⁶, which hinder the diagnosis of HIV infection¹⁵ and generate erroneous and outdated social judgments. These judgments are based on conservatism and heteronormativity, reinforcing media conceptions and serophobic discourses in the virtual environment. In this context, the literature highlights the existence of irrational, discriminatory beliefs, and unfounded fears about HIV that can lead to violent actions, even within institutions²⁷. Intersectionality identifies the difficulties present in society due to its own prejudiced structural construction²⁸.

Hence, it is essential to pay attention to public figures with digital influence, as they can perpetuate serophobic discourses in the media, leading to irreparable harm. Disseminating false information on digital social networks can have a detrimental impact. In recent serophobic discourses, our study highlighted the association of HIV with COVID-19 vaccination in the second half of 2021, even by political figures. This strengthened the anti-vaccine movement, which was detrimental to Brazilian public health²⁹.

Serophobia has been cultivated within the discursive arsenal of neoliberal and conservative responses to HIV and AIDS. It became promi-

nent in Brazil around 201227, coinciding with a conservative shift in the federal government's political discourse^{27,30}. This shift resulted in the dismantling of strategies to combat HIV and AIDS and the censorship of prevention-based campaigns and programs^{27,30-32}. It has since been amplified by far-right political actors, relying on discourses and power mechanisms that involve control, segregation, punishment, and surveillance of HIV-positive individuals. It even reduces human lives to mere costs to be minimized by the State²⁷. This situation is exacerbated by the delay in the Brazilian response to HIV and AIDS, which is connected to limitations in healthcare and education spending²⁴. It is further complicated by the proliferation of bills seeking to criminalize people living with HIV³²⁻³⁴.

Therefore, it is imperative to uphold the civil and human rights related to HIV and AIDS. Law No. 12.984, enacted on June 2, 2014, legitimizes the civil rights of people living with HIV. It defines discrimination as a punishable crime, carrying a penalty of one to four years in prison and a fine^{35,36}. The following serophobic behaviors are considered offenses under this law: refusing, delaying, canceling, or segregating enrollment or preventing a student from remaining in a daycare or educational establishment, whether public or private; denying employment or work; terminating or dismissing from a position or job; segregating in the workplace or school environment; disclosing serological status with the intent to offend dignity; and refusing or delaying healthcare35.

Within the realm of human rights concerning people living with HIV, it is essential to underscore the existing challenges that are deeply intertwined with the daily experience of serophobia. These challenges significantly impact the psychosocial well-being of the affected population. Key issues include difficulties in adhering to the therapeutic regimen, shortages of medications and prevention supplies, and limited access to specialized healthcare professionals. These challenges represent a violation of fundamental human rights³⁷.

Furthermore, the rise of the extreme ultra-liberal right in Brazil, which often adopts anti-democratic, irrationalist, and anti-scientific stances^{27,31}, exacerbates the dismantling of public policies^{27,30-32}. Consequently, this contributes to a decline in actions related to promotion, prevention, diagnosis (offering tests)^{24,38}, treatment (antiretrovirals – ARV)³⁸, and rehabilitation for individuals living with HIV and AIDS. This sit-

uation creates uncertainties for those living with this chronic health condition.

In the context of the erosion of Brazilian public health policies, the impacts of serophobia significantly affect healthcare services, particularly in terms of access, personalized care, and the provision of healthcare 23,30. Problems such as differential or conditional assistance, breaches of confidentiality, neglectful behavior, and service refusal26 are increasingly observed within institutional settings and require urgent attention. Our findings underscore the imperative need for awareness and training among healthcare professionals to combat serophobia, as services often lack adequate strategies to address institutional serophobia^{26,39}.

It is essential to promote public and private engagement and investment in the development of intersectoral actions to combat serophobia in social spaces, including virtual environments, to ensure the protection of human life⁴⁰. Recommendations from the literature for mitigating serophobic practices include: a) integrating legal professionals to inform users about their rights and quality standards in accessing services; b) conducting reviews and analysis of health policies; c) advocating for non-discriminatory public policies; d) establishing systems to monitor discrimination, stigma, and rights violations within institutions; e) incorporating sensitivity and education regarding living with HIV into health training programs^{23,26,39}. Additionally, urgent efforts are needed in educational measures and addressing the impacts stemming from serophobia, especially among populations historically marginalized in healthcare, such as the LGBTQIAPN+ community¹⁸⁻²⁰, migrants⁴¹, prisoners⁴², and homeless individuals⁴³.

This study has certain limitations, including the choice of Digital Social Networks, which may have limited the scope of locating instances of the investigated phenomenon, and the use of search criteria and strategies, which might have constrained the identification of publications on the subject. Nonetheless, it provides valuable contributions as it explores the digital world and widely accessed communication platforms among the Brazilian population. It sheds light on the dimensions of social determinants in the health-disease process and delves into the context of living with HIV. In this regard, the study contributes to advancing knowledge about stigmatization and the manifestation of serophobia on digital social networks. It also offers insights into the profile of content production in the virtual sphere and strategies to confront serophobia.

Final considerations

The manifestations related to HIV and AIDS-related serophobia on Digital Social Networks reaffirm the importance of exploring the posts disseminated in the online environment. Digital Social Networks provide users with greater freedom of expression, enabling the explanation of concepts, concerns, and phenomena related to the concept within society. The shared content highlights or discusses the challenges of living with a disease that has social dimensions, emphasizes the significance of discussing and disseminating content about HIV and AIDS, identifies the elements contributing to the stigmatization

process and the structure of serophobia, addresses the social and civil rights of people living with HIV, proposes measures to combat serophobia within healthcare institutions, and examines the implications of serophobia on public health.

We recommend the development of new research that addresses the issues stemming from serophobia within the context of public health, as well as its broader impact on society. This research can contribute to the enhancement of public policies and the establishment of a theoretical framework concerning HIV and AIDS, ultimately leading to the generation of new knowledge in the field of healthcare.

Collaborations

JS Joaquim contributed to the research design, ensuring itsmethodological and scientific coherence, collecting, organizing, analyzing and interpreting data, depositing it in a multidisciplinary repository; as well as writing all the sections of the manuscript, reviewing the literature and carrying out the final revision of the text for submission. AR Sousa critically reviewed the manuscript, contributing important theoretical ideas, offering suggestions for the writing and actively participating in the preparation of the text. EA Barbosa Filho also critically reviewed the manuscript, contributed theoretically to the study; and participated in the writing of the manuscript, especially in the introductory and discussion sections. AFL Sousa suggested improvements to the text and helped with the literature review. JLG Santos participated in the research design, provided methodological guidance and contributed to the methodological and scientific coherence of the work. GL Baldin collaborated in the research design, provided methodological guidance, carried out a critical analysis of the results and proposed suggestions for writing the manuscript. All the authors also took part in the process of submitting the article, as well as reading and approving the final version of the text.

References

- Lopes Junior A, Amorim APA, Stelet B, Teixeira DS, Antoniacomi G, Barbosa Junior M, Sarno MM, Vieira RC, Borret RH, Padilha W. Cartilha Mitos e Verdades sobre saúde da população LGBTIA+ [Internet]. 2020. [acessado 2021 nov 30]. Disponível em: https://www. sbmfc.org.br/wp-content/uploads/2020/07/Cartilha--LGBTIA.pdf
- Ramos LS, Almeida MG, Ramos MVS, Machado EMC, Santos VO, Contarini MRF, Ramos GBF, Mantiolhe TSO, Ferreira TFS, Valim EN. A humanização da atenção básica a saúde brasileira no atendimento de travestis e transsexuais: uma revisão narrativa. Rev Eletr Acervo Saude 2020; 44:e2770.
- Cruz MLS, Darmont MQR, Monteiro SS. Estigma relacionado ao HIV entre jovens em transição para a clínica de adultos num hospital público no Rio de Janeiro, Brasil. Cien Saude Colet 2021; 26(7):2653-2662.
- Francisco MTR, Fonte VRF, Spindola T, Pinheiro CDP, Costa CMA, Rocha FCS. Testagem para o HIV e profilaxia pós-exposição entre homens que fazem/ não fazem sexo com homens. Esc Anna Nery 2021; 25(3):e20200236.
- Programa Conjunto das Nações Unidas sobre HIV/ Aids (UNAIDS). Guia de Terminologia do UNAIDS [Internet]. 2017. [acessado 2021 nov 25]. Disponível em: https://unaids.org.br/wp-content/uploads/2015/06/WEB_2018_01_18_GuiaTerminologia_ UNAIDS.pdf
- Werle JE, Teston EF, Marcon SS, Cunha GH, Mandu JBS, Ferreira Junior MA. HIV/Aids em região de tríplice fronteira: subsídios para reflexões sobre políticas públicas. Esc Anna Nery 2021; 25(3):e20200320.
- Gil AC. Como elaborar projetos de pesquisa. São Paulo: Atlas; 2018.
- Lima Junior EB, Oliveira GS, Santos ACO, Schnekenberg GF. Análise documental como percurso metodológico na pesquisa qualitativa. *Cad FUCAMP* 2021; 20(44):36-51.
- Forte ECN, Pires DEP. Os apelos da enfermagem nos meios de comunicação em tempos de coronavírus. Rev Bras Enferm 2020; 73(Supl. 2):e20200225.
- Bardin L. Análise de conteúdo. São Paulo: Edições 70; 2016.
- 11. Edhlund B, Mcdougall A. *NVivo 12 Essentials*. Carolina do Norte: Lulu Press; 2019.
- 12. Brasil. Ministério da Saúde (MS). Resolução nº 466, de 12 de dezembro de 2012. Institui as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Diário Oficial da União 2013; 13 jun.
- 13. Brasil. Secretaria Geral. Subchefia para Assuntos Jurídicos (SAJ). Lei nº 13.709, de 14 de agosto de 2018. Dispõe sobre a proteção de dados pessoais e altera a Lei nº 12.965, de 23 de abril de 2014 (Marco Civil da Internet). Diário Oficial da União 2018; 15 ago.
- Primeira MR, Santos WM, Paula CC, Padoin SMM. Qualidade de vida, adesão e indicadores clínicos em pessoas vivendo com HIV. Acta Paul Enferm 2020; 33:eAPE20190141.
- Brandão BMG, Angelim RCM, Marques SC, Oliveira DC, Oliveira RC, Abrão FMS. Representações sociais de idosos soropositivos acerca do HIV/Aids. Rev Bras Enferm 2019; 72(5):1349-1355.

- Gomes MP, Barbosa D, Gomes AMT, Silva G, Souza FA, Silva ALB. A vivência do preconceito após a revelação da soropositividade para o HIV. Rev Rede Cuid Saude 2021; 15(1):47-56.
- Fonseca LKS, Santos JVO, Araújo LF, Sampaio AVFC. Análise da estigmatização no contexto do HIV/Aids: concepções de pessoas que vivem com HIV/Aids. Gerais 2020; 13(2):e14757.
- Silva LAV, Duarte FM, Lima M. "Eu acho que a química entrou em reprovação": relações afetivo-sexuais de homens jovens vivendo com HIV/Aids e com carga viral indetectável. Sex Salud Soc (Rio J.) 2020; 1(34):25-45.
- Sousa AR, Cerqueira CFC, Porcino C, Simões KJF. Pessoas LGBTI+ e a COVID-19: para pensarmos questões sobre saúde. Rev Baiana Enferm 2021; 35:e36952.
- Silva PDR, Gomes IM. Disputas pela significação no discurso do HIV/Aids: um percurso na ciência, na literatura, na militância LGBTI e nos canais do YouTube. Rev Electron Comun Inf Inov Saude 2020; 14(4):857-869.
- Programa Conjunto das Nações Unidas sobre HIV/ Aids (UNAIDS). UNAIDS Global Aids Update 2022 [Internet]. 2022. [acessado 2023 jul 13]. Disponível em: https://www.unaids.org/sites/default/files/media_asset/2022-global-aids-update_en.pdf
- Brasil. Ministério da Saúde (MS). Departamento de HIV/Aids, Tuberculose, Hepatites Virais e Infecções Sexualmente Transmissíveis (DATHI). Boletim Epidemiológico HIV/Aids 2022 [Internet]. 2022. [acessado 2023 jul 13]. Disponível em: https://www.gov.br/ aids/pt-br/centrais-de-conteudo/boletins-epidemiologicos/2022/hiv-aids/boletim_hiv_aids_-2022_internet_31-01-23.pdf/view
- Cota VL, Cruz MM. Barreiras de acesso para homens que fazem sexo com homens à testagem e tratamento do HIV no município de Curitiba (PR). Saude Debate 2021; 45(129):393-405.
- 24. Programa Conjunto das Nações Unidas sobre HIV/ Aids (UNAIDS). Relatórios e publicações [Internet]. 2023. [acessado 2023 jul 15]. Disponível em: https:// unaids.org.br/wp-content/uploads/2023/07/JC3082_ GAU2023-ExecSumm_v2_embargoed_PT_VF_Revisada-EA.pdf
- 25. Brasil. Ministério da Saúde (MS). Secretaria de Vigilância em Saúde (SVS). Departamento de Condições Crônicas e Infecções Sexualmente Transmissíveis (DCCI). Protocolo clínico e diretrizes terapêuticas para atenção integral às pessoas com Infecções Sexualmente Transmissíveis (IST) [Internet]. 2020. [acessado 2021 out 15]. Disponível em: http://www.saude. gov.br/bvs
- 26. Programa Conjunto das Nações Unidas sobre HIV/ Aids (UNAIDS). Evidências para eliminar estigma e discriminação relacionados ao HIV [Internet]. 2020. [acessado 2021 nov 22]. Disponível em: https://www. unaids.org/sites/default/files/media/documents/eliminating-discrimination-guidance_pt.pdf
- Barbosa Filho EA, Vieira ACS. A expansão da sorofobia no discurso político brasileiro. *Argumentum* 2021; 13(3):134-147.

- 28. Collins PH, Bilge S. Interseccionalidade. São Paulo: Boitempo; 2021.
- 29. Brotas AMP, Costa MCR, Ortiz J, Santos CC, Massarani L. Discurso antivacina no YouTube: a mediação de influenciadores. Rev Electron Comun Inf Inov Saude 2021; 15(1):72-91.
- Chioro A, Costa AM. A reconstrução do SUS e a luta por direitos e democracia. Saude Debate 2023; 47(136):5-10.
- 31. Associação Brasileira Interdisciplinar de AIDS (ABIA). Política de morte: o fim do departamento de AIDS [Internet]. 2019. [acessado 2021 nov 20]. Disponível em: https://abiaids.org.br/politica-de-morte--o-fim-do-departamento-de-aids/32852
- 32. Programa Conjunto das Nações Unidas sobre HIV/ Aids (UNAIDS). Relatório Global do UNAIDS mostra que a pandemia de aids pode acabar até 2030 e descreve o caminho para alcançar esse objetivo [Internet]. 2023. [acessado 2023 jul 15]. Disponível em: https://unaids.org.br/2023/07/relatorio-global-do-unaids-mostra-que-a-pandemia-de-aids-pode-acabar--ate-2030-e-descreve-o-caminho-para-alcancar-esse-objetivo/
- 33. Agência de Notícias da Aids. O retorno do fantasma do clube do carimbo e a fala do presidente [Internet]. 2021. [acessado 2023 jul 15]. Disponível em: https:// agenciaaids.com.br/artigo/o-retorno-do-fantasmado-clube-do-carimbo-e-a-fala-do-presidente/
- Simões JA. Gerações, mudanças e continuidades na experiência social da homossexualidade masculina e da epidemia de HIV-Aids. Sex Salud Soc (Rio J) 2018; 29(1):313-339.
- 35. Brasil. Presidência da República. Lei nº 12.984, de 2 de junho de 2014. Define o crime de discriminação dos portadores do Vírus da Imunodeficiência Humana (HIV) e doentes de Aids. Diário Oficial da União 2014; 3 jun.
- 36. Souza D, Pereira C, Raxach, J. Relatos sobre um livro com experiências de estigma/discriminação de Pessoas Vivendo com HIV/Aids no Brasil. Saude Debate 2022; 46(Esp. 7):264-276.
- 37. Parker R. Estigmas do HIV/Aids: novas identidades e tratamentos em permanentes sistemas de exclusão. Rev Electron Comun Inf Inov Saude 2019; 13(3):618-633.

- 38. Rocha KB, Silveira ACT, Gazzola AFG, Silva DV, Eifler RP. O trabalho dos Agentes Comunitários de Saúde (ACS) na política de HIV/Aids. Psicol Conocimiento Soc 2020; 10(3):19-33.
- Leão A, Lussi IAO. Estigmatização: consequências e possibilidades de enfrentamento em Centros de Convivência e Cooperativas. Interface (Botucatu) 2021; 25:e200474.
- 40. Silva IBN, Patrício ACFAP, Leite MAP, Santos TD, Ferreira MAM, Silva RAR. Esperança de vida e depressão pessoas vivendo com HIV/Aids. Rev Fun Care Online 2020; 12(1):124-129.
- 41. Alvim, FLK, Jezus SVD, Silva AID, Leão AC, Zambonin F, Maciel ELN, Arcêncio, RA. Enfrentamento de HIV/Aids e sífilis em mulheres venezuelanas migrantes na perspectiva de gestores de saúde no Norte do Brasil. Rev Panam Salud Publica 2023; 47:e83.
- Oliveira JA, Sousa AR, Araújo IFM, Almeida LCG, Almeida MS, Borges CCL, Pereira Á. Infecções sexualmente transmissíveis em homens no sistema prisional: revisão integrativa. Rev Baiana Enferm 2022; 36:e38071.
- Gioseffi JR, Batista R, Brignol SM. Tuberculose, vulnerabilidades e HIV em pessoas em situação de rua: revisão sistemática. Rev Saude Publica 2022; 56:43.

Article submitted 05/04/2023 Approved 07/08/2023 Final version submitted 09/08/2023

Chief editors: Romeu Gomes, Antônio Augusto Moura da Silva