saúde EM DEBATE

ORIGINAL ARTICLE

Discrimination experienced by LGBTQIAPN+ individuals and access to dental services: A cross-sectional study

Discriminação experienciada por pessoas LGBTQIAPN+ e acesso aos serviços odontológicos: estudo transversal

Igor Campos Guimarães[1], Ana Carla Batista Domiciano[1], Isabel Cristina Gonçalves Leite[1]

DOI: 10.1590/2358-2898202614911103I

ABSTRACT Sexual and gender minority individuals experience discrimination daily, including when seeking health care. This cross-sectional study aimed to investigate the association between discrimination and the seeking of, difficulty in accessing, and recent use of dental services. A total of 762 Brazilian LGBTQIAPN+ individuals completed an online questionnaire on sociodemographic characteristics, experiences of discrimination, and access to dental services. Binary logistic regression analyses were used to estimate the association between independent variables, organized into five blocks, and outcomes related to access to dental services. Results are presented as Odds Ratios (OR) and 95% confidence intervals (95% CI). Overall, 16.8% of participants reported hesitation in attending dental services due to a perceived lack of acceptance regarding their gender identity and sexual orientation; 30.4% had not sought dental services in the past year; and 5.4% reported difficulty accessing them. Discrimination was not associated with the outcomes, but hesitation in attending services remained associated with seeking dental care (OR = 0.55; 95% CI: 0.33–0.91) and with difficulty in accessing services (OR = 4.35; 95% CI: 1.40–13.54). Therefore, although discrimination was not directly associated with access to dental services, this population remains vigilant about the possibility of experiencing discrimination in these settings.

KEYWORDS Sexual and gender minorities. Oral health. Equity in access to health services. Perceived discrimination.

RESUMO *Pessoas de minorias sexuais e de gênero são discriminadas cotidianamente, inclusive ao procurar cuidados de saúde. Este estudo transversal objetivou investigar a associação entre discriminação e procura, dificuldade no acesso e uso recente dos serviços odontológicos. 762 indivíduos LGBTQIAPN+ brasileiros responderam a um questionário online sobre suas características sociodemográficas, experiências discriminatórias sofridas e acesso a serviços odontológicos. Análises de regressão logística binária estimaram a associação entre variáveis independentes, organizadas em cinco blocos, e desfechos relativos ao acesso aos serviços odontológicos. Os resultados são apresentados em razão de chances (Odds Ratio – OR) e Intervalos de Confiança de 95% (IC 95%). Dos participantes, 16,8% relataram hesitação em frequentar serviços odontológicos por não se sentirem aceitos, 30,4% não os procuraram no último ano e 5,4% tiveram dificuldade em acessá-los. A discriminação não manteve associação à procura, uso recente e dificuldade no acesso aos serviços odontológicos, mas a hesitação em frequentá-los manteve-se associada à sua procura (OR = 0,55; IC 95%:0,33-0,91) e à dificuldade em acessá-los (OR = 4,35; IC 95%:1,40-13,54). Portanto, indica-se que, apesar da ausência de associação entre discriminação e acesso aos serviços odontológicos, essa população se mantém vigilante em relação à possibilidade de sofrerem discriminação nesses serviços.*

PALAVRAS-CHAVE *Minorias sexuais e de gênero. Saúde bucal. Equidade no acesso aos serviços de saúde. Discriminação percebida.*

[1] Universidade Federal de Juiz de Fora (UFJF) – Juiz de Fora (MG), Brasil.
isabel.leite@ufjf.br

Introduction

The LGBTQIAPN+ population encompasses sexual and gender minorities, including individuals who are homosexual, bisexual, pansexual, asexual, heterosexual (when intersex or not cisgender), transvestite, transgender, intersex, and those with other gender identities and/or sexual orientations[1,2].

This population faces numerous forms of discrimination and violence on a daily basis[3], occurring in various settings such as family, school, and public institutions[3,4]. Previous studies have reported discrimination motivated by sexual orientation and/or gender identity during care in health services[5-10] and dental services[11], both in Brazil[5-11] and in other countries[12]. This highlights a contradiction in these environments, which are expected to address health needs rather than exacerbate them[10].

Furthermore, discrimination is a social and structural factor that creates an environment detrimental to mental health. These processes are conceptualized in the Minority Stress Model, which distinguishes between distal stressors (objective events, such as discrimination or violence) and proximal stressors (subjective processes, such as expectations of discriminatory events, concealment of one's identity, and internalization of stigma)[13]. A study conducted in Sweden indicated that stressful events are more prevalent among young people belonging to sexual minorities[14].

Although minority identity may increase vulnerability to stress[13,14], it can also serve as a source of resilience by fostering social connections and coping strategies[13].

Discrimination and stress among minority groups are associated with disparities in physical[14] and mental health[8,15], and also point to greater health disparities among young people from sexual minorities compared to cisgender heterosexual individuals[14].

The aim of this study was to investigate the association between discrimination experienced by LGBTQIAPN+ individuals in daily life, in health services, and specifically in dental services, and other variables related to outcomes concerning the demand for, difficulty in accessing, and recent use of dental services.

Material and methods

This is a cross-sectional study conducted online (e-survey) with a convenience sample. The inclusion criteria were volunteers aged 18 years or older, residing in Brazil, who self-identified as lesbian, gay, bisexual, asexual, transgender, intersex, or as having another sexual orientation or gender identity included in the LGBTQIAPN+ community. Intersex and transgender individuals were included regardless of their declared sexual orientation.

The exclusion criteria included selecting 'heterosexual' as sexual orientation without also selecting 'transgender' or 'non-binary' as gender identity, or 'intersex' as biological sex; that is, cisgender heterosexual individuals or those who were not intersex. Participants who did not complete the questionnaire in its entirety were considered losses to the sample, as their responses were not recorded.

The study was approved by the Research Ethics Committee of the Federal University of Juiz de Fora (UFJF), the institution to which the authors are affiliated, under the Certificate of Presentation for Ethical Review (CAAE) No. 81386324.8.0000.5147 and Opinion No. 7,032,189. The study was guided by the recommendations of the STROBE Statement (Strengthening the Reporting of Observational Studies in Epidemiology)[16] and the CHERRIES Statement (Improving the Quality of Web Surveys: The Checklist for Reporting Results of Internet E-Surveys)[17].

Due to the technical difficulty of obtaining a representative sample of the Brazilian LGBTQIAPN+ population, data collection was conducted using a structured questionnaire in an online form built on the Google Forms® platform (Mountain View, California, United States). The form could be accessed and

completed by anyone with the link, characterizing it as an open survey. Data collection took place in Brazil between November 17, 2024, and May 1, 2025.

The survey was disseminated through a web link shared via direct contact with associations, organizations, groups, community centers, and cultural and activist events, among others, that target the LGBTQIAPN+ population. Dissemination occurred through social networks and physical spaces to reach a nationally representative convenience sample. These institutions shared standardized images with phrases designed to attract volunteers' interest, such as: 'Do you identify as an LGBTQIAPN+ person? Could you help us obtain an overview of access to dental services and oral health in Brazil?'. Additionally, each participant was asked to forward the survey link to five friends, and no incentives were offered.

Before accessing and completing the questionnaire, participants were presented with the Free and Informed Consent Form (ICF/TCLE), which provided information about the responsible researcher, study objectives, potential risks and mitigation strategies, expected benefits, and the average time required to complete the questionnaire. This estimated time was based on a pilot study conducted with ten LGBTQIAPN+ individuals, who were not included in the final sample, and which also served to test the usability and technical functionality of the data collection instrument.

Consent was required to access the questionnaire. If they declined, candidates were informed that they could close the form without any harm or penalty. No personally identifiable information was collected or recorded; therefore, it was not possible to determine whether responses were limited to a single entry per participant or to calculate visit, participation, or completion rates, nor the time taken to complete the questionnaire.

The data collection instrument was divided into four sections, totaling 59 self-administered questions, derived from previously validated and published studies[18–22]. It also included an initial page with the informed consent form and a final thank-you page. The order of questions and items was not randomized, and the questionnaire was not adaptive to participants' responses. Completion of each section was required to proceed to the next and to allow final submission of responses. Participants were able to return to previous pages and modify their answers at any time prior to final submission.

Part I included eight questions on participants' sociodemographic characteristics, such as age, race/skin color, sex assigned at birth, gender identity, sexual orientation, income, education, and current state of residence[18,19]. Part II comprised 33 questions on experiences of discrimination in daily life and in health services, including the Everyday Discrimination Scale (EDS)[20], as well as items adapted from the 2013 National Health Survey[21] and the 'Mapping of Trans People in the City of São Paulo' survey[22]. Part III included six questions on access to and characteristics of oral health services, derived from the National Oral Health Survey (SBBrasil Project), conducted in 2020[19]. Part IV comprised 12 questions on subjective oral health outcomes[19], which were not used in the present study. For all questions, a 'I don't know/I prefer not to answer' option was available.

The study outcomes were: seeking dental services in the past year, difficulty in accessing dental services in the past year, and recent use of dental services. The first two dependent variables were based on the question: 'In the last year, did you seek treatment at a dental office, oral health service, or with a dentist/oral health team?'. This question was operationalized into two dependent variables because the categories 'difficulty in accessing dental services' and 'not seeking dental services' are not mutually exclusive.

Responses were dichotomized as follows. For seeking dental services in the past year, participants were classified as those who sought services during this period and those who sought them more than one year ago,

regardless of whether care was received. Only responses of 'I don't know/prefer not to answer' were considered missing data for this outcome.

Regarding difficulty in accessing dental services in the past year, responses were dichotomized into individuals who experienced difficulties ('yes'), in cases such as 'I sought services and was not attended', and those who did not experience difficulties ('no'), in cases such as 'I sought services and was scheduled for another day/location' or 'I sought services and was attended'. For this outcome, in addition to 'I don't know/prefer not to answer', individuals who did not seek services were treated as missing data and excluded from the analyses.

Recent use of dental services was assessed with the question: 'When was the last time you visited the dentist?' Responses were dichotomized as 'yes' (within the past year) and 'no' (more than 1 year ago, including 1–2, 2–3, or over 3 years). Responses of 'Never been to the dentist' and 'I don't know/prefer not to answer' were treated as missing data and excluded from the analyses.

The independent variables, selected based on their potential explanatory effects in relation to the outcomes[5–7,9–11], were organized into five blocks, defined according to the Minority Stress Model[13] and another study that incorporated an intersectional approach to understanding access to services and health outcomes among LGBTQIAPN+ individuals[23].

Block 1 included age group, race/skin color, biological sex (used only for sample description, as gender identity was preferred as an analytical category), gender identity, sexual orientation, and region of residence. Block 2 comprised education level and monthly family income. Block 3 included the EDS, with coding based on frequency of reported experiences, as commonly adopted in the literature and in the validation of the scale for the Brazilian context[18]. Block 4 covered experiences of discrimination in health and dental services. Block 5 included variables related to hesitation in attending dental services due to lack of acceptance based on sexual orientation and/or gender identity, type of dental service sought, possession of a dental plan, reason for the last dental visit, evaluation of the last dental visit, and self-perceived need for dental treatment.

To estimate an adequate sample size for this study, the Brazilian population reported in the most recent demographic census of the Brazilian Institute of Geography and Statistics (IBGE)[24] was considered, along with an estimated proportion of 3.8% of individuals belonging to this community in Brazil[1,2,25].

Due to variations in methods used to measure experiences of discrimination, as well as differences in such experiences among populations within the same community, leading to variability in prevalence estimates[3,8,22], the lowest prevalence identified in the consulted studies (11%)[25] was adopted. Thus, assuming a significance level of 5% ($\alpha = 0.05$) and a statistical power of 80% ($\beta = 0.20$), the minimum sample size calculated for this study was 455 participants.

The collected data were organized into a database using the Statistical Package for the Social Sciences (SPSS), version 20.0 for Windows®[26], in which all statistical analyses were performed. Descriptive analyses included absolute and relative frequencies for categorical variables, and minimum and maximum values, confidence intervals, mean, median, and standard deviation for numerical variables.

The Kolmogorov-Smirnov test was used to assess normality. The Mann-Whitney U test, chi-square test, and t-test were applied for group comparisons, and binary logistic regression analysis was used to examine associations between dependent and independent variables. Associations were expressed as Odds Ratios (OR) with 95% confidence intervals (95% CI). The significance level adopted was 5% ($p < 0.05$). No statistical method was applied to adjust for the non-representative nature of the sample.

In the hierarchical multivariate model, independent variables from each block that

showed an association with the outcomes ($p \leq 0.05$) were included to obtain block-adjusted models. This restriction was adopted due to the strong association of a considerable number of variables in the bivariate analyses; including variables with $p \leq 0.10$ did not result in substantial changes in the direction or magnitude of the associations. Finally, only independent variables that remained statistically significant in the previous step were included in the final multivariate model, with those presenting $p < 0.05$ retained.

Results

The initial sample consisted of 787 participants; however, after applying the exclusion criteria, it was reduced to 762 (10 cisgender heterosexual and/or non-intersex individuals and 15 individuals who reported a date of birth indicating an age under 18 years). *Table 1* presents the distribution of independent variables in relation to the outcomes, while *tables 2, 3, and 4* present the crude and adjusted measures of association for each outcome.

Cisgender individuals (549; 73.3%) and homosexual individuals (433; 57%) comprised the majority of the sample. Among gender identities, cisgender men were the largest group (339; 46.1%), followed by cisgender women (210; 28.5%), non-binary individuals or those with other gender identities (75; 10.2%), transgender men (60; 8.2%), transgender women (50; 6.8%), and transgender intersex individuals (2; 0.3%). Regarding sexual orientation, bisexual individuals accounted for 25.2% of the sample (191), heterosexual individuals 7.6% (58), asexual individuals 3.3% (25), and individuals with other sexual orientations 6.9% (52).

The sample consisted predominantly of individuals aged 25 to 39 years (58.8%; mean age = 30.64 ± 0.64; median = 29; IQR = 10), with white skin color (51%), residing in the Southeast region (37.1%), with a monthly income of up to R$ 2,400 (28.6%), and with completed higher education (55.6%). Most participants did not report discriminatory experiences in dental services (61.5%; 95% CI: 58–65%), did not hesitate to seek dental care due to lack of acceptance related to their sexual orientation and/or gender identity (82.6%), and sought private dental services (77.2%). The majority did not have a dental plan (73.7%), reported preventive or reassessment reasons for their last dental visit (50.3%), and positively evaluated this visit (76.4%). Most participants perceived a need for dental treatment (80.2%) and reported discriminatory experiences in health services (74.4%; 95% CI: 71.2–77.4%).

The EDS showed a non-parametric distribution (mean = 26.57 ± 11.77; median = 25.00; IQR = 15), with scores ranging from 6 to 60.

Most participants reported seeking dental services in the past year (69.6%; 95% CI: 66.3%–72.8%), did not report difficulty accessing these services in the same period (64.2%; 95% CI: 60.7%–67.6%), and had used dental services within the past year (66.7%; 95% CI: 63.2%–70%).

Table 1. Distribution of independent variables by absolute and relative frequency by seeking, difficulty in accessing, and recent use of dental services by LGBTQIAPN+ people. Brazil, 2025

	Seeking dental services		Difficulty in accessing		Recent use	
Variables	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Age range						
18-24 years old	126 (24)	68 (29.7)	10 (24.4)	116 (24)	115 (23.1)	70 (28.11)
25-39 years old	308 (58.7)	136 (59.4)	21 (51.2)	287 (59.3)	298 (59.8)	147(59.04)
40-59 years old	86 (16.4)	23 (10)	10 (24.4)	76 (15.7)	79 (15.9)	31 (12.45)
60 years and older	5 (1)	2 (0.9)	0 (0)	5 (1)	6 (1.2)	1 (0.4)

Table 1. Distribution of independent variables by absolute and relative frequency by seeking, difficulty in accessing, and recent use of dental services by LGBTQIAPN+ people. Brazil, 2025

	Seeking dental services		Difficulty in accessing		Recent use	
Variables	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Color/race*		§				
White	282 (54.2)	103 (45.6)	19 (46.3)	263 (54.91)	264 (53.55)	121 (49)
Yellow	5 (1)	6 (2.7)	0 (0)	5 (1.05)	6 (1.22)	5 (2)
Indigenous	12 (2.3)	2 (0.9)	0 (0)	12 (12.5)	9 (1.82)	3 (1.2)
Black/brown	221 (42.5)	115 (50.9)	22 (53.7)	199 (41.54)	214 (43.41)	118 (47.8)
Biological sex*				§		§
Male	299 (57.9)	121 (53.5)	15 (38.5)	284 (59.5)	294 (59.9)	123 (50.4)
Female	217 (42.1)	104 (46)	24 (61.5)	193 (40.5)	196 (39.9)	120 (49.2)
Intersex	0 (0)	1 (0.5)	0 (0)	0 (0)	1 (0.2)	1 (0.4)
Gender identity*		§		§		§
Cisgender man	252 (49.41)	84 (38)	9 (23.68)	243 (51.5)	247 (50.9)	88 (36.7)
Cisgender woman	147 (28.82)	63 (28.5)	9 (23.68)	138 (29.2)	138 (28.5)	71 (29.6)
Transgender man	40 (7.84)	20 (9)	9 (23.68)	31 (6.6)	33 (6.8)	25 (10.4)
Transgender woman	29 (5.7)	21 (9.5)	5 (13.16)	24 (5.1)	28 (5.8)	20 (8.3)
Non-binary or other	42 (8.23)	32 (14.5)	6 (15.8)	36 (7.6)	38 (7.8)	35 (14.6)
Intersex transgender	0 (0)	1 (0.5)	-a	-a	1 (0.2)	1 (0.4)
Sexual orientation*		§		§		§
Heterosexual	39 (7.45)	18 (7.9)	9 (22)	30 (6.2)	36 (7.2)	20 (8.1)
Homosexual	315 (60.1)	113 (49.8)	16 (39)	299 (61.9)	306 (61.6)	119 (48.2)
Bisexual/ asexual /other	170 (32.45)	96 (42.3)	16 (39)	154 (31.9)	155 (31.2)	108 (43.7)
Region of residence*						
North	59 (11.25)	25 (10.9)	5 (12.2)	54 (11.2)	54 (10.9)	30 (12.05)
North East	125 (23.85)	59 (25.8)	13 (31.71)	112 (23.2)	118 (23.7)	64 (25.7)
Central-West	60 (11.5)	22 (9.6)	6 (14.63)	54 (11.2)	58 (11.7)	25 (10)
Southeast	198 (37.8)	80 (34.9)	11 (26.83)	187 (38.7)	189 (38)	91 (36.55)
South	82 (15.6)	43 (18.8)	6 (14.63)	76 (15.7)	78 (15.7)	39 (15.7)
Family income*		§		§		§
Up to R$ 2,400	125 (24.4)	84 (38.2)	25 (61)	100 (21.2)	110 (22.7)	93 (38.75)
R$ 2,401-R$ 4,000	115 (22.4)	57 (25.9)	11 (26.8)	104 (22)	107 (22.1)	63 (26.25)
R$ 4,001-R$ 7,000	122 (23.8)	42 (19.1)	4 (9.8)	118 (25)	121 (25)	42 (17.5)
Above R$7,001	151 (29.4)	37 (16.8)	1 (2.4)	150 (31.8)	146 (30.2)	42 (17.5)
Education*		§		§		§
Up to complete elementary school.	2 (0.4)	10 (4.4)	1 (2.44)	1 (0.2)	6 (1.2)	5 (1.2)
Up to complete high school.	70 (13.3)	40 (17.5)	12 (29.26)	58 (12)	63 (12.7)	44 (17.7)
Incomplete higher education	141 (26.9)	68 (29.82)	14 (34.15)	127 (26.2)	129 (25.9)	80 (32.3)
Bachelor's degree	312 (59.4)	110 (48.24)	14 (34.15)	298 (61.6)	300 (60.2)	119 (48)
Discrimination in healthcare services*		§		§		§
No experience	143 (27.2)	49 (21.4)	2 (4.9)	141 (29.1)	141 (28.3)	48 (19.3)
Experienced	382 (72.8)	180 (78.6)	39 (95.1)	343 (70.9)	357 (71.7)	201 (80.7)
Discrimination in dental services*				§		
No experience	327 (62.5)	134 (60.1)	11 (26.8)	316 (65.6)	312 (62.9)	139 (57.2)
Experienced	196 (26.3)	89 (39.9)	30 (73.2)	166 (34.4)	184 (37.1)	104 (42.8)

Table 1. Distribution of independent variables by absolute and relative frequency by seeking, difficulty in accessing, and recent use of dental services by LGBTQIAPN+ people. Brazil, 2025

	Seeking dental services		Difficulty in accessing		Recent use	
Variables	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Hesitation in seeking dental services*		§		§		§
No	438 (86.6)	164 (73.9)	18 (45)	420 (90.1)	422 (87.9)	176 (72.7)
Yes	68 (13.4)	58 (26.1)	22 (55)	46 (9.9)	58 (12.1)	66 (27.3)
Type of dental service sought*		[b]		§		§
Public	119 (22.7)	0 (0)	31 (75.6)	88 (18.2)	92 (18.97)	27 (67.5)
Private/Health plan/Other	406 (77.3)	0 (0)	10 (24.4)	396 (97.5)	393 (81.03)	13 (32.5)
Has a dental plan?*		§		§		§
No	367 (70)	186 (81.9)	37 (90.2)	330 (68.3)	340 (68.4)	208 (83.9)
Yes	157 (30)	41 (18.1)	4 (9.8)	153 (31.7)	157 (31.6)	40 (16.1)
Main reason for last consultation*		§		§		§
Check-up and/or prevention	269 (51.4)	105 (48.2)	11 (26.8)	258 (53,5)	258 (52.12)	115 (47.1)
Toothache	25 (4.8)	18 (8.3)	4 (9.8)	21 (4.4)	21 (4.24)	22 (9)
Extraction	39 (7.5)	26 (11.9)	5 (12.2)	34 (7.1)	37 (7.48)	29 (11.9)
Treatment	170 (32.5)	60 (27.5)	18 (43.9)	152 (31.5)	163 (32.93)	67 (27.5)
Others	20 (3.8)	9 (4.1)	3 (7.3)	17 (3.5)	16 (3.23)	11 (4.5)
Evaluation of the last dental appointment*		§		§		§
Negative	20 (3.82)	18 (8.3)	7 (17.95)	13 (2.7)	13 (2.6)	26 (10.83)
Regular	88 (46.83)	47 (21.8)	22 (56.41)	66 (13.6)	79 (15.9)	56 (23.33)
Positive	415 (79.35)	151 (69.9)	10 (25.64)	405 (83.7)	405 (81.5)	158 (65.84)
Everyday Discrimination Scale*		§		§		§
No	126 (24.3)	21 (9.5)	0 (0)	126 (26.4)	128 (26.1)	19 (7.8)
Yes	392 (75.7)	201 (90.5)	40 (100)	352 (73.6)	363 (73.9)	224 (92.2)
	Average (95% CI) §	**Average (95% CI) §**	**Average (95% CI) §**	**Average (95% CI) §**	**Average (95% CI) §**	**Average (95% CI) §**
Discrimination in daily life scale* [c]	25.96 (24.96-26.97)	27.89 (26.47-29.36)	34.68 (31.00-38.66)	25.22 (24.3-26.25)	25.93 (24.88-26.98)	27.66 (26.33-29.09)

Source: Prepared by the authors.

*Omitted cases were excluded from the analysis; § $p \leq 0.05$; [a] Omitted cases; [b] No statistics were calculated because the outcome was constant; [c] Mann-Whitney U test.

As shown in *table 2*, in the final adjusted binary logistic regression model, the outcome 'seeking dental services in the past year' was associated with: non-binary or other gender identity (OR = 0.48; 95% CI: 0.26–0.87; p = 0.015); family income up to R$ 2,400 (OR = 0.45; 95% CI: 0.26–0.77; p = 0.004) and between R$ 2,401 and R$ 4,000 (OR = 0.57; 95% CI: 0.34–0.97; p = 0.04); education up to complete elementary school (OR = 0.19; 95% CI: 0.04–0.99; p = 0.049); hesitation in seeking dental services due to feeling unaccepted because of sexual orientation and/or gender identity (OR = 0.55; 95% CI: 0.33–0.91; p = 0.02); not having dental insurance (OR = 0.59; 95% CI: 0.38–0.91; p = 0.018); and self-perceived need for dental treatment (OR = 0.35; 95% CI: 0.20–0.62; p < 0.001).

Table 2. Crude and adjusted measures of association for seeking dental services by LGBTQIAPN+ people. Brazil, 2025

Demand for dental services in the last year						
Variables	**Crude OR (95% CI)**	**p***	**Adjusted OR in block (95% CI)**	**pa**	**Adjusted OR in final model (95% CI)**	**pa**
Block 1						
Color/race						
Yellow	0.30 (0.09-1.02)	0.054	0.24 (0.06-0.88)	0.031c		
Indigenous	2.19 (0.48-9.96)	0.31	2.25 (0.49-10.43)	0.298		
Black/brown	0.70 (0.51-0.97)	0.03	0.72 (0.51-1.00)	0.051		
White	1		1			
Gender identity						
Cisgender woman	0.78 (0.53-1.14)	0.201	0.83 (0.55-1.25)	0.375	0.85 (0.56-1.30)	0.457
Transgender man	0.67 (0.37-1.20)	0.179	0.72 (0.33-1.56)	0.405	1.22 (0.61-2.46)	0.569
Transgender woman	0.46 (0.25-0.85)	0.013	0.49 (0.23-1.06)	0.07	1.00 (0.48-2.10)	0.992
Non-binary / other	0.44 (0.26-0.74)	0.002	0.47 (0.27-0.84)	0.011	0.48 (0.26-0.87)	0.015
Cisgender man	1		1		1	
Sexual orientation						
Heterosexual	0.77 (0.43-1.41)	0.409				
Bisexual/ asexual / other	0.63 (0.46-0.88)	0.007				
Homosexual	1					
Block 2						
Family income						
Up to R$ 2,400	0.36 (0.23-0.57)	< 0.001	0.43 (0.26-0.70)	< 0.001	0.45 (0.26-0.77)	0.004
R$ 2,401-R$ 4,000	0.49 (0.30-0.80)	0.004	0.53 (0.32-0.87)	0.011	0.57 (0.34-0.97)	0.04
R$ 4,001-R$ 7,000	0.71 (0.43-1.17)	0.185	0.74 (0.45-1.23)	0.246	0.79 (0.46-1.35)	0.456
Above R$7,001	1		1		1	
Education						
Up to complete elementary school.	0.07 (0.01-0.33)	< 0.001	0.11 (0.02-0.55)	0.007	0.19 (0.04-0.99)	0.049
Up to complete high school.	0.62 (0.39-0.96)	0.033	0.83 (0.51-1.36)	0.461	1.07 (0.62-1.42)	0.577
Incomplete higher education	0.73 (0.51-1.05)	0.09	0.87 (0.59-1.27)	0.47	0.95 (0.62-1.45)	0.803
Completed higher education	1		1		1	
Block 3						
Everyday Discrimination Scale	**0.99 (0.97-0.99)b**	**0.039**	**0.99 (0.97-0.99)b**	**0.06**		
Block 5						
Hesitation in using dental services		**< 0.001**		**0.004**		**0.02**
Yes	0.74 (0.63-0.88)		0.53 (0.34-0.82)		0.55 (0.33-0.91)	
No	1		1		1	
Has dental plan?		**< 0.001**		**0.007**		**0.018**
No	0.84 (0.76-0.92)		0.56 (0.37-0.85)		0.59 (0.38-0.91)	
Yes	1		1		1	
Evaluation of the last dental appointment						
Negative	0.40 (0.21-0.78)	0.007				
Regular	0.68 (0.46-1.02)	0.06				
Positive	1					

Table 2. Crude and adjusted measures of association for seeking dental services by LGBTQIAPN+ people. Brazil, 2025

Demand for dental services in the last year						
Variables	**Crude OR (95% CI)**	**p***	**Adjusted OR in block (95% CI)**	**pa**	**Adjusted OR in final model (95% CI)**	**pa**
Self-perception of the need for dental treatment.		**< 0.001**		**< 0.001**		**< 0.001**
Yes	0.77 (0.70-0.84)		0.39 (0.23-0.66)		0.35 (0.20-0.62)	
No	1		1		1	

Source: Prepared by the authors.

OR: Odds Ratio; 95% CI: Confidence interval; *Pearson's chi-square test; [a] Binary logistic regression; [b] Exp (B) and 95% CI: Represents the change in outcome status from a one-point increase on the Everyday Discrimination Scale; [c] Since this category (yellow) did not show an association in the crude OR, but only in the block-adjusted OR, and the only category that showed an association in the crude OR (black/brown) lost this association after block adjustment, this variable was not included in the final logistic regression model.

Regarding the outcome 'difficulty in accessing dental services in the past year' (*table 3*), the following variables remained associated in the final adjusted model: hesitation in seeking dental services due to feeling unaccepted because of sexual orientation and/or gender identity (OR = 4.35; 95% CI: 1.40–13.54; p = 0.011); seeking public dental services (OR = 5.97; 95% CI: 2.32–15.33; p < 0.001); and evaluating the last dental visit as negative (OR = 5.49; 95% CI: 1.31–22.89; p = 0.019) or average (OR = 6.43; 95% CI: 2.40–17.21; p < 0.001).

Table 3. Crude and adjusted odds ratios for difficulty in accessing dental services in the past year for LGBTQIAPN+ people. Brazil, 2025

Difficulty accessing dental services in the past year						
Variables	**Crude OR (95% CI)**	**p***	**Adjusted OR in block (95% CI)**	**pa**	**Adjusted OR in final model (95% CI)**	**pa**
Block 1						
Gender identity						
Cisgender woman	1.76 (0.68-4.54)	0.242	1.85 (0.69-4.99)	0.222		
Transgender man	7.84 (2.89-21.23)	< 0.001	6.36 (1.54-26.15)	0.01		
Transgender woman	5.62 (1.74-18.14)	0.004	4.60 (1.01-20.90)	0.048		
Non-binary / other	4.50 (1.51-13.39)	0.007	4.85 (1.50-15.72)	0.008		
Cisgender man	1		1			
Sexual orientation						
Heterosexual	5.60 (2.28-13.77)	< 0.001				
Bisexual/ asexual /other	1.94 (0.94-3.98)	0.07				
Homosexual	1					
Block 2						
Family income				**< 0.001**		
Up to R$ 2,400	37.50 (5.00-281.2)	< 0.001	29.24 (3.75-228.03)	0.001		
R$ 2,401-R$ 4,000	15.86 (2.01-124.77)	0.009	14.53 (1.83-115.27)	0.011		
R$ 4,001-R$ 7,000	5.08 (0.56-46.09)	0.148	4.51 (0.49-41.49)	0.183		
Above R$7,001	1		1			

Table 3. Crude and adjusted odds ratios for difficulty in accessing dental services in the past year for LGBTQIAPN+ people. Brazil, 2025

Difficulty accessing dental services in the past year						
Variables	**Crude OR (95% CI)**	**p***	**Adjusted OR in block (95% CI)**	**pa**	**Adjusted OR in final model (95% CI)**	**pa**
Education						
Up to complete elementary school.	21.28 (1.26-358.23)	0.034				
Up to complete high school.	4.04 (1.93-10.00)	< 0.001				
Incomplete higher education	2.34 (1.08-5.06)	0.03				
Completed higher education	1					
Block 3						
Everyday Discrimination Scale	**1.06 (1.03-1.09)b**	**< 0.001**	**1.06 (1.03-1.09)b**	**< 0.001**		
Block 4						
Discrimination in healthcare services		**< 0.001**				
Experienced	7.30 (1.78-29.83)					
No experience	1					
Discrimination in dental services		**< 0.001**		**0.001**		
Experienced	4.55 (2.33-8.87)		3.58 (1.67-7.68)			
No experience	1		1			
Block 5						
Hesitation in using dental services		**< 0.001**		**< 0.001**		**0.011**
Yes	7.87 (4.46-13.89)		7.98 (3.18-20.04)		4.35 (1.40-13.54)	
No	1		1		1	
Type of dental service sought		**< 0.001**		**< 0.001**		**< 0.001**
Public service	10.57 (5.34-20.93)		6.81 (2.68-17.28)		5.97 (2.32-15.33)	
Private service/health plan/other	1		1		1	
Has a dental plan?		**0.003**				
No	3.95 (1.43-10.91)					
Yes	1					
Main reason for the last consultation						
Toothache	4.46 (1.30-15.25)	0.017				
Extraction	3.44 (1.13-10.52)	0.03				
Treatment	2.77 (1.27-6.03)	0.01				
Others	4.13 (1.05-16.25)	0.042				
Check-up and/or prevention	1					
Evaluation of the last dental appointment						
Negative	21.80 (7.16-66.34)	< 0.001	8.48 (2.18-32.94)	0.002	5.49 (1.31-22.89)	0.019
Regular	13.50 (6.11-29.79)	< 0.001	8.98 (3.46-23.32)	< 0.001	6.43 (2.40-17.21)	< 0.001
Positive	1		1		1	
Self-perception of the need for dental treatment						
No	0.00 (0.00-)	0.996				
Yes	1					

Source: Prepared by the authors.

OR: Odds Ratio; 95%CI: Confidence interval; *Pearson's chi-square test; [a] Poisson regression with robust variance; [b] Exp (B) and 95%CI: Represents the change in outcome status from a one-point increase on the Everyday Discrimination Scale.

In turn, 'recent use of dental services' (*table 4*) remained associated in the final adjusted model only with seeking public dental services (OR = 0.17; 95% CI: 0.07–0.41; p < 0.001) and with a negative assessment of the last dental visit (OR = 0.13; 95% CI: 0.04–0.44; p = 0.001).

Table 4. Crude and adjusted odds ratios for recent use of dental services by LGBTQIAPN+ people. Brazil, 2025

Recent use of dental services						
Variables	**Crude OR (95% CI)**	**p***	**Adjusted OR in block (95% CI)**	**pa**	**Adjusted OR in final model (95% CI)**	**pa**
Block 1						
Gender identity						
Cisgender woman	0.69 (0.48-1.00)	0.55	0.76 (0.51-1.13)	0.176		
Transgender man	0.47 (0.26-0.83)	0.01	0.48 (0.23-1.02)	0.056		
Transgender woman	0.50 (0.27-0.93)	0.029	0.48 (0.22-1.03)	0.058		
Non-binary or other gender identity	0.39 (0.23-0.65)	< 0.001	0.44 (0.25-0.77)	0.004		
Intersex transgender	0.36 (0.02-5.76)	0.467	0.35 (0.02-6.08)	0.474		
Cisgender man	1		1			
Sexual orientation		**0.002**				
Heterosexual	0.89 (0.72-1.09)					
Bisexual/ asexual /other	0.81 (0.72-0.91)					
Homosexual	1					
Block 2						
Family income		**< 0.001**		**< 0.001**		
Up to R$ 2,400	0.69 (0.60-0.80)		0.38 (0.23-0.61)	< 0.001		
R$ 2,401-R$ 4,000	0.81 (0.70-0.93)		0.52 (0.32-0.84)	0.008		
R$ 4,001-R$ 7,000	0.95 (0.84-1.07)		0.86 (0.52-1.41)	0.55		
Above R$7,001	1		1			
Education		**0.014**				
Up to complete elementary school.	0.76 (0.44-1.31)					
Up to complete high school.	0.82 (0.69-0.97)					
Incomplete higher education	0.86 (0.76-0.97)					
Completed higher education	1					
Block 3						
Everyday Discrimination Scale	**0.99 (0.97-1.00)[b]**	**0.06**				
Block 4						
Discrimination in healthcare services		**0.007**		**0.008**		
No experience	1.16 (1.05-1.29)		1.65 (1.14-2.39)			
Experienced	1		1			
Block 5						
Hesitation in using dental services		**< 0.001**				
No	1.50 (1.24-1.83)					
Yes	1					
Type of dental service sought		**< 0.001**				
Public service	0.79 (0.72-0.88)		0.18 (0.08-0.40)	< 0.001	0.17 (0.07-0.41)	< 0.001
Private service/health plan/other	1		1		1	

Table 4. Crude and adjusted odds ratios for recent use of dental services by LGBTQIAPN+ people. Brazil, 2025

Recent use of dental services						
Variables	Crude OR (95% CI)	p*	Adjusted OR in block (95% CI)	pa	Adjusted OR in final model (95% CI)	pa
Has a dental plan?		**< 0.001**				
No	0.77 (0.70-0.85)					
Yes	1					
Main reason for last consultation		**0.011**				
Toothache	0.70 (0.51-0.96)					
Extraction	0.81 (0.64-1.01)					
Treatment	1.02 (0.92-1.14)					
Others	0.85 (0.62-1.17)					
Check-up and/or prevention	1					
Evaluation of the last dental appointment		**< 0.001**				
Negative	0.46 (0.29-0.72)		0.21 (0.07-0.69)	0.01	0.13 (0.04-0.44)	0.001
Regular	0.81 (0.69-0.94)		0.76 (0.30-1.93)	0.567	0.70 (0.27-1.80)	0.462
Positive	1		1		1	
Self-perception of the need for dental treatment.		**< 0.001**				
No	1.40 (1.28-1.53)					
Yes	1					

Source: Prepared by the authors.

OR: Odds Ratio; 95%CI: Confidence interval; *Pearson's chi-square test; [a] Poisson regression with robust variance; [b] Exp (B) and 95%CI: Represents the change in outcome status from a one-point increase on the Everyday Discrimination Scale.

Discussion

This study contributes to a better understanding of access to dental services among LGBTQIAPN+ individuals in Brazil, an area that remains relatively underexplored[11,27,28], by incorporating variables related to discrimination experienced in different contexts to assess their influence on outcomes related to seeking, difficulty in accessing, and recent use of dental services. Among the findings, the associations between hesitation in seeking dental services due to not feeling accepted because of sexual orientation and/or gender identity and the outcomes of seeking and difficulty in accessing these services stand out, as does the association between gender identity and seeking dental services.

However, although variables related to discrimination were associated with the outcomes in the bivariate and block-adjusted analyses, they did not remain significant in the final logistic regression model. A Brazilian qualitative study reported similar findings, indicating that discrimination experienced for being transgender, such as the misuse of one's birth name, does not necessarily prevent access to health services, as individuals adopt coping strategies, including asserting the right to use their chosen name and seeking care accompanied by a trusted person[29]. In contrast, another qualitative study presents a different perspective, identifying narratives suggesting that, when faced with discrimination directed at sexual and gender minorities, individuals may distance themselves from primary health care services[6].

Other quantitative studies also challenge these findings[5,7]. In a cross-sectional study conducted in the state of Rio Grande do Sul,

the prevalence of avoidance of health services was 6.7 times higher among individuals who experienced discrimination in these settings[5]. Additionally, a study using data from the 2013 National Health Survey found an association between discrimination in health services and lower use of dental services for preventive care. However, this comparison should be interpreted with caution, as that study examined the general Brazilian population and did not specifically focus on the LGBTQIAPN+ population[7]. Protective factors, such as family support and other coping, adaptation, and resilience mechanisms[15], may help explain the lack of association observed in the final model.

Conversely, hesitation in using these services due to perceived stigma related to LGBTQIAPN+ identity, a variable that remained associated with both seeking and difficulty in accessing dental services, can be interpreted as an anticipation of such experiences. Both hesitancy[5,6,10] and discomfort in using health services[5,12] have been reported in other studies involving this population.

These findings suggest that the stress of minority, particularly as expressed through the anticipation of negative events, may be more strongly associated with issues related to access to dental services than the direct experience of discrimination itself, as also indicated in previous research on access to health services[4-6,10].

The perceived lack of knowledge and preparedness of health professionals regarding the LGBTQIAPN+ population and their specific needs[6,9,10,27], as well as observations of differential treatment of LGBTQIAPN+ users by these professionals[9,10,12], may contribute to feelings of hesitation and discomfort when accessing health services.

Previous studies have shown that LGBTQIAPN+ individuals report experiencing discrimination, threats, and violence more frequently than cisgender heterosexual individuals[14,25], even in countries with high levels of acceptance, such as Sweden[14]. In Brazil, these individuals are more than twice as likely to be victims of violence compared to their cisgender heterosexual counterparts[25].

The absence of comparison with cisgender heterosexual individuals, both in this study and in previous research, represents a gap to be addressed in studies investigating the association between discrimination, sexual orientation, gender identity, and access to dental services in Brazil. A Brazilian study conducted with individuals over 50 years of age identified differences in access to health services between LGBTQIAPN+ individuals and cisgender heterosexuals, with a higher proportion of the former among those with poorer access to care[9].

In the present study, sexual orientation and gender identity did not remain associated in the block-adjusted or final logistic regression models. This suggests that, within the LGBTQIAPN+ population, these variables may not significantly influence access to health services, an observation supported by one Brazilian study[25] but contrasting with others[11,27,30]. Research conducted in the United States found that bisexual individuals had a higher prevalence of barriers to accessing dental services (30.1%) compared to homosexual and heterosexual individuals (19.2% and 19.3%, respectively)[30].

The findings related to non-binary individuals or those with other gender identities reflect the vulnerabilities of transgender populations in accessing health services, as highlighted in previous studies[11,31], even when compared to other marginalized groups, such as cisgender individuals from sexual minorities and intersex individuals[11]. Similarly, and in line with the present results, other Brazilian studies have not found an association between difficulty in accessing health[9] and dental[11] services and self-reported race/skin color among LGBTQIAPN+ individuals[9,11].

Income and education are factors commonly associated with access to dental services[32].

In the block-adjusted logistic regression analysis, education lost its association with difficulty in accessing dental services and with recent use. Thus, financial factors appear to be more determinant for this population, as higher educational attainment does not necessarily translate into better income conditions[2].

On the other hand, regarding the outcome of seeking dental services in the past year, income and education remained associated in the final logistic regression model. Lower demand for these services was observed among individuals with incomes below R$ 4,000 and those with only primary education. A Brazilian study with LGBTQIAPN+ individuals also identified an association between difficulty in accessing health services and income, but not with education level[9].

The use of public dental services, more prevalent among transgender women and men, as previously reported[11], was associated with greater difficulty in accessing dental care and with non-use of these services in the past year. This reflects a chronic issue affecting the broader Brazilian population[25] and has also been observed in association with difficulties in accessing other health services among LGBTQIAPN+ individuals[9,11].

As outlined in the CHERRIES Statement[17], the external validity of this study may be partially limited by its use of an online survey, resulting in a convenience sample that may not be representative of the overall population (e.g., due to lack of internet access or limited contact with the institutions responsible for disseminating the survey), as well as by a potential volunteer effect arising from self-selection. Additionally, there was underrepresentation of intersex individuals, certain racial/ethnic groups (Indigenous and Asian), individuals with lower levels of education, users of public dental services, and those seeking rehabilitative care. Furthermore, due to the cross-sectional design, causal inferences should not be drawn from the findings.

The dissemination of the survey by LGBTQIAPN+ rights advocacy organizations, primarily through virtual means, may have introduced selection bias toward individuals more engaged with these issues and with higher levels of education. Information bias, due to the sensitive nature of the questions, also represents a limitation of this study.

Despite these limitations, the study identified novel associations regarding access to dental services within this minority group. Non-binary individuals or those with other gender identities reported lower demand for dental services in the past year, and LGBTQIAPN+ individuals who hesitated to seek these services due to a perceived lack of acceptance related to their sexual orientation and/or gender identity both sought them less frequently and experienced greater difficulty accessing them.

Conclusions

It can be concluded that, although discrimination in daily life and in the context of access to health and dental services is a common experience for LGBTQIAPN+ individuals, it was not the main factor associated with access to dental services.

However, hesitation in seeking these services due to feeling unaccepted based on sexual orientation and/or gender identity, a variable associated with both seeking and difficulty in accessing dental services, suggests vigilant behavior among sexual and gender minorities. Therefore, the principles of the Brazilian Unified Health System (SUS) and the objectives of the National Policy for Comprehensive Health of Lesbians, Gays, Bisexuals, Transvestites, and Transsexuals should be strengthened to promote more inclusive and welcoming health services and to reduce such vigilant and hesitant behaviors in this population. In parallel, actions should be taken to address broader factors related to access to these services within the Brazilian population, including expanding the availability of dental care within the SUS.

Authorship contributions

Guimarães IC (0000-0001-7000-4443)* contributed to study design, data collection and analysis, manuscript writing, revision, and approval of the final version. Domiciano ACB (0009-0005-8563-8760)* contributed to data collection and organization, manuscript writing, revision, and approval of the final version. Leite ICG (0000-0003-1258-7331)* contributed to study design, data collection and analysis, manuscript writing, revision, and approval of the final version.■

References

1. Spizzirri G, Eufrásio R, Lima MCP, et al. Proportion of people identified as transgender and non-binary gender in Brazil. Sci Rep. 2021;11(1):2240. DOI: https://doi.org/10.1038/s41598-021-81411-4

2. Spizzirri G, Eufrásio RÁ, Abdo CHN, et al. Proportion of ALGBT adult Brazilians, sociodemographic characteristics, and self-reported violence. Sci Rep. 2022;12(1):11176. DOI: https://doi.org/10.1038/s41598-022-15103-y

3. Torres JL, Gonçalves GP, Pinho AA, et al. The Brazilian LGBT+ Health Survey: methodology and descriptive results. Cad Saúde Pública. 2021;37(9):e00069521. DOI: https://doi.org/10.1590/0102-311X00069521

4. Silva ACA, Alcântara AM, Oliveira DCD, et al. Implementação da política nacional de saúde integral de lésbicas, gays, bissexuais, travestis e transexuais (PNSI LGBT) no Paraná, Brasil. Interface (Botucatu). 2020;24:e190568. DOI: https://doi.org/10.1590/Interface.190568

5. Costa AB, Rosa Filho HT, Pase PF, et al. Healthcare needs of and access barriers for brazilian transgender and gender diverse people. J Immigr Minor Health. 2018;20(1):115-23. DOI: https://doi.org/10.1007/s10903-016-0527-7

6. Rocon PC, Rodrigues A, Zamboni J, et al. Dificuldades vividas por pessoas trans no acesso ao Sistema Único de Saúde. Ciênc saúde coletiva. 2016;21(8):2517-26. DOI: https://doi.org/10.1590/1413-81232015218.14362015

7. Junior OLDA, Menegazzo GR, Fagundes MLB, et al. Perceived discrimination in health services and preventive dental attendance in Brazilian adults. Community Dent Oral Epidemiol. 2020;48(6):533-9. DOI: https://doi.org/10.1111/cdoe.12565

8. Malta M, Jesus JG, LeGrand S, et al. 'Our life is pointless ... ': Exploring discrimination, violence and mental health challenges among sexual and gender minorities from Brazil. Glob Public Health. 2020;15(10):1463-78. DOI: https://doi.org/10.1080/17441692.2020.1767676

9. Crenitte MRF, Melo LR, Jacob-Filho W, et al. Transforming the invisible into the visible: disparities in the access to health in LGBT+ older people. Clinics. 2022;78:100149. DOI: https://doi.org/10.1016/j.clinsp.2022.100149

10. Pinheiro TF, Carvalho PGC, Nolasco G, et al. Difficulties and advances in access to and use of health services by transgender women and travestis in Brazil. Rev Bras Epidemiol. 2024;27(1):e240007. DOI: https://doi.org/10.1590/1980-549720240007.supl.1

11. Soares MO, Girianelli VR. Assistência à saúde bucal na população LGBTQIA+. Saúde Debate. 2023;47(1):8970. DOI: https://doi.org/10.1590/2358-28982023E18970P

*Orcid (Open Researcher and Contributor ID).

12. Tharp G, Wohlford M, Shukla A. Reviewing challenges in access to oral health services among the LGBTQ+ community in Indiana and Michigan: a cross-sectional, exploratory study. PLoS One. 2022;17(2):e0264271.DOI: https://doi.org/10.1371/journal.pone.0264271

13. Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. Psychol Bull. 2003;129(5):674-97. DOI: https://doi.org/10.1037/0033-2909.129.5.674

14. Bränström R, Hatzenbuehler ML, Pachankis JE. Sexual orientation disparities in physical health: age and gender effects in a population-based study. Soc Psychiatry Psychiatr Epidemiol. 2016;51(2):289-301. DOI: https://doi.org/10.1007/s00127-015-1116-0

15. Scandurra C, Amodeo AL, Valerio P, et al. Minority stress, resilience, and mental health: A study of Italian transgender people. J Soc Issues. 2017;73(3):563-85. DOI: https://doi.org/10.1111/josi.12232

16. Malta M, Cardoso LO, Bastos FI, et al. Iniciativa STROBE: subsídios para a comunicação de estudos observacionais. Rev Saúde Pública. 2010;44:559-65. DOI: https://doi.org/10.1590/S0034-89102010000300021

17. Eysenbach G. Improving the quality of web surveys: The Checklist for Reporting Results of Internet E-Surveys (CHERRIES). J Med Internet Res. 2004;6(3):e34. DOI: https://doi.org/10.2196/jmir.6.3.e34

18. Associação Brasileira de Empresas de Pesquisas. Critério Brasil 2024: critério de classificação econômica Brasil. São Paulo: ABEP; 2024.

19. Ministério da Saúde (BR), Coordenação Geral de Saúde Bucal. SB BRASIL 2020 [acesso em 2025 abr 15]. Pesquisa Nacional de Saúde Bucal): Projeto técnico [Internet]. Brasília, DF: Ministério da Saúde; 2019 [acesso em 2025 abr 15]. Disponível em: http://189.28.128.100/dab/docs/portaldab/documentos/projetosbbrasil2020CONSULTAPUBLICA.pdf

20. Griep RH, Oliveira FEG, Aguiar OB, et al. Cross-cultural adaptation of discrimination and vigilance scales in ELSA-Brasil. Rev Saúde Pública. 2023;56:110. DOI: https://doi.org/10.11606/s1518-8787.2022056004278

21. Instituto Brasileiro de Geografia e Estatística. Pesquisa Nacional de Saúde (PNS) 2013: manual de entrevista [Internet]. Rio de Janeiro: IBGE; 2013 [acesso em 2025 abr 15]. Disponível em: https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?view=detalhes&id=52963

22. Centro de Estudos de Cultura Contemporânea. Mapeamento das Pessoas Trans na Cidade de São Paulo: relatório de pesquisa [Internet]. São Paulo: CEDEC; 2021 [acesso em 2025 abr 15]. Disponível em: https://www.prefeitura.sp.gov.br/cidade/secretarias/upload/direitos_humanos/LGBT/AnexoB_Relatorio_Final_Mapeamento_Pessoas_Trans_Fase1.pdf

23. Christian LM, Cole SW, McDade T, et al. A biopsychosocial framework for understanding sexual and gender minority health: a call for action. Neurosci Biobehav Rev. 2021;129:107-16. DOI: https://doi.org/10.1016/j.neubiorev.2021.06.004

24. Panorama do Censo 2022 [Internet]. Rio de Janeiro: IBGE; 2022 [acesso em 2025 abr 15]. Disponível em: https://censo2022.ibge.gov.br/panorama/

25. Vasconcelos NMD, Alves FTA, Andrade GND, et al. Violência contra pessoas LGB+ no Brasil: análise da Pesquisa Nacional de Saúde 2019. Rev Bras Epidemiol. 2023;26:e230005. DOI: https://doi.org/10.1590/1980-549720230005.supl.1.1

26. SPSS®: Statistical Package for Social Science (SPSS) [Internet]. Versão 20.0. [Nova York]. International Business Machines Corporation. [acesso em 2023 mar 9]. Disponível em: https://www.ibm.com/br-pt/spss?utm_content=SRCWW&p1=Search&p4=43700077515785492&p5=p&gclid=CjwKCAjwgZCoBhBnEiwAz35Rwiltb7s14pOSLocnooMOQh9qAL59IHVc9WP4ixhNTVMjenRp3-aEgxoCubsQAvD_BwE&gclsrc=aw.ds

27. Almeida LE, Almeida PFS, Oliveira V, et al. Oral health-related quality of life in the LGBTIQ+ population: a cross-sectional study. Braz Oral Res. 2024;38:e041. DOI: https://doi.org/10.1590/1807-3107bor-2024.vol38.0041

28. Prates SG, Jesuino RD, Paranhos LR, et al. Oral health self-perception for transgender people: a controlled cross-sectional study. Biosci J. 2021;37(1):1-7. DOI: https://doi.org/10.14393/BJ-v37n0a2021-55794

29. Monteiro S, Brigeiro M. Experiences of transgender women/transvestites with access to health services: progress, limits, and tensions. Cad Saúde Pública. 2019;35(4):e00111318. DOI: https://doi.org/10.1590/0102-311X00111318

30. Schwartz SB, Sanders AE, Lee JY, et al. Sexual orientation-related oral health disparities in the United States. J Public Health Dent. 2019;79(1):18-24. DOI: https://doi.org/10.1111/jphd.12290

31. Downing JM, Przedworski JM. Health of transgender adults in the US, 2014-2016. Am J Prev Med. 2018;55(3):336-44. DOI: https://doi.org/10.1016/j.amepre.2018.04.045

32. Teixeira CNG, Pereira SMDS, Hilgert JB, et al. O uso dos serviços odontológicos no último ano na população brasileira: revisão sistemática com metanálise. Ciênc saúde coletiva. 2023;28(4):1087-100. DOI: https://doi.org/10.1590/1413-81232023284.11452022

Received on 09/04/2025
Approved on 01/26/2026
Conflict of interest: Non-existent
Data availability: The research data are contained within the manuscript. Additional data cannot be made available, in accordance with a request from the Research Ethics Committee of the Federal University of Juiz de Fora and due to the confidentiality clause in the Committee's approval
Financial support: Master's scholarship for author Igor Campos Guimarães, funded by the Minas Gerais State Research Support Foundation (FAPEMIG), under process number 11654; undergraduate research scholarship for author Ana Carla Batista Domiciano, funded by the Institutional Program for Undergraduate Research Scholarships of the National Council for Scientific and Technological Development (PIBIC/CNPq), under process number 174472/2024-2; Federal University of Juiz de Fora

Editor in charge: Manoelito Ferreira Silva Junior, Universidade Estadual do Sudoeste da Bahia (Uesb), Jequié (Bahia/BA), Brasil. Lattes: http://lattes.cnpq.br/1260232140260557, Orcid: https://orcid.org/0000-0001-8837-5912, e-mail: manoelito.junior@uesb.edu.br