

Perception of discrimination due to sexual orientation and associated factors among men who have sex with men in 12 Brazilian cities

Percepção de discriminação com base na orientação sexual e fatores associados entre homens que fazem sexo com homens em 12 cidades brasileiras

Percepción de discriminación debido a la orientación sexual y factores asociados entre hombres que tienen sexo con hombres en 12 ciudades brasileñas

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Abstract

Discrimination due to sexual orientation (DDSO) has an important association with health outcomes among men who have sex with men (MSM). This study aimed to analyze factors associated with DDSO among MSM in 12 Brazilian cities. This is a cross-sectional study with 4,176 MSM participants recruited in 2016 which used a respondent-driven sampling method in 12 Brazilian cities. DDSO levels were previously identified by a latent class analysis based on 13 variables from the discrimination section. An ordinal logistic regression was used to assess associations with these DDSO levels, and weighted ordinal odds ratios (OR) and their respective 95% confidence intervals (95%CI) were estimated using Gile's estimator. Most participants were young (< 25 years old) black or of mixed-race (pardo), single individuals who had a religious affiliation, primary or incomplete secondary education, and a high and average socioeconomic status. More than half (65%) reported DDSO in the 12 months prior to this study. We observed an independent association among the four latent DDSO classes and the following variables: age < 25 years old (OR = 1.66; 95%CI: 1.21-2.27), white skin color (OR = 1.43; 95%CI: 1.02-2.01), history of sexual (OR = 2.33; 95%CI: 1.58-3.43) and physical violence (OR = 3.08; 95%CI: 2.11-4.49), disclosure of their sexual orientation as MSM to their fathers (OR = 2.00; 95%CI: 1.47-2.72), experienced suicidal ideation in the two weeks prior to this study (OR = 2.09; 95%CI: 1.46-2.98), and use of any illicit drugs in the last six months (OR = 1.61; 95%CI: 1.19-2.18). Our results indicate that contextual factors may contribute to high DDSO levels among MSM in Brazil. Public health policies toward human rights surveillance and protection among MSM must be urgently addressed.

Sexual and Gender Minorities; Men Who Have Sex With Men; Social Discrimination; Social Determinants of Health; Brazil

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Introduction

Men who have sex with men (MSM) suffer discrimination due to their sexual orientation (DDSO), defined as the manifestation of heteronormativity and homophobia against MSM¹. DDSO plays an important role in maintaining a high prevalence of HIV infection among MSM in several countries^{1,2,3}. Studies conducted among MSM also show a greater likelihood of illnesses and risk behaviors among those who suffer DDSO, such as anal sex without a condom⁴, experiences of violence^{5,6}, mental distress^{4,7,8,9,10}, and abusive use of alcohol and other drugs^{4,8,11,12}. Furthermore, discrimination is one of the main barriers MSM face when seeking health services^{13,14,15,16,17,18}.

In the last decade, studies indicate a high proportion of DDSO among MSM in different countries¹⁹, including Brazil^{20,21}. Sexual and affective practices among MSM remain illegal in many countries and are punishable by death in some¹⁹. Although homosexuality is legal in Latin America, the patriarchal, religious, and sexist context of countries in the region adds to the impact of DDSO on the physical, mental, social, and cultural well-being of MSM^{22,23,24}.

The Brazilian judicial system has protective human right measures for MSM, including recognizing same sex marriage (since 2011)²⁵, and making discrimination against LGBTIQI+ liable to legal prosecution, although specific legislation related to this issue is still pending in the Brazilian National Congress²⁶. Nevertheless, in 2018, 420 LGBT individuals were targeted for their identities and murdered in Brazil, out of which 191 (45%) were MSM²⁷. An alarming increase in the prevalence of self-reported DDSO among MSM has been observed in two behavioral and biological surveillance surveys using respondent-driven sampling (RDS), from 27.7% in 2009 to 65% in 2016^{20,21}. We were able to explore the 2016 data in a previous study using latent class analysis (LCA)²¹. In that analysis, 13 variables (e.g., perception of discrimination by institutions, family, and services, among others) were used to construct a DDSO variable which indicated very high, high, average or low discrimination levels (2.2%, 16.4%, 35.1%, and 46.2%, respectively). In this study, we aim to assess factors associated with the identified levels of this latent DDSO construct among MSM in Brazil.

Materials and methods

Study design and location

This study uses data from the behavioral and biological surveillance survey entitled *The 12 City HIV Surveillance Survey among MSM in Brazil 2016 Using Respondent-Driven Sampling: A Description of Methods and RDS Diagnostics*²⁸, conducted in 2016 in 12 Brazilian capitals from states of all five regions in Brazil: Manaus (Amazonas) and Belém (Pará) in the North; Fortaleza (Ceará), Recife (Pernambuco), and Salvador (Bahia) in the Northeast; Brasília (Federal District) and Campo Grande (Mato Grosso do Sul) in the Central-West; Belo Horizonte (Minas Gerais), Rio de Janeiro and São Paulo in the Southeast; and Curitiba (Paraná) and Porto Alegre (Rio Grande do Sul) in the South. Cities were defined, a priori, by the Department of Chronic Conditions and Sexually Transmitted Infections of the Brazilian Ministry of Health.

Participants and recruitment

The survey sample consisted of 4,176 MSM who reported at least one sexual experience in the 12 months prior to the study; aged 18 years or older; did not identify as transsexual or as transgender women; resided, studied or worked in the selected cities; and signed an informed consent form. To recruit participants, RDS was used as recommended for hard-to-reach populations²⁹. Formative research using semi-structured interviews and focus groups was conducted in each city to prepare for the main study. Five to seven MSM were purposefully selected to serve as “seeds” throughout the formative research. They were independently selected in each city. These were individuals of different ages and socioeconomic status who had relatively large social contact networks. Each seed was asked to recruit three other MSM from their social network by offering a voucher to each possible recruit. These vouchers provided information about the site and contained a number linking the recruiter

and the recruit. This procedure was repeated with each eligible participant until reaching the desired sample size. Participants received a primary and secondary incentive of BRL 25.00 (USD 7.40) for each recruited participant to reimburse expenses such as transport and food.

Data collection

Data were collected by computer-assisted personal interviews (CAPI) in study offices in each city, in which blood samples were drawn for HIV and syphilis testing. Upon completion of the interviews, data were immediately sent via internet to a central server. The research project was approved by the Research Ethics Committee of the Federal University of Ceará (n. 1,024,053 – June 23, 2015). Further details about the methodology can be found in Kendall et al. ²⁸.

Study variables

The outcome variable, DDSO, was defined by LCA, as previously described ²¹, and based on 13 questions divided in four DDSO dimensions: (i) discrimination in the work sphere (i.e., not selected for a job or fired from a job); (ii) educational sphere (i.e., mistreated or marginalized by teachers and classmates at school/college); (iii) private sphere (i.e., excluded or marginalized from groups of friends, neighbors, family or religious environment); and (iv) the public sphere (i.e., blackmailed or had money extorted, poorly cared for in health services, prevented from donating blood, mistreated in public services, mistreated by police officers, and prevented from entering markets). LCA is a useful method for identifying underlying groups of individuals with similar profiles ³⁰.

The explanatory variables included in this analysis were: (a) sociodemographic: age (< 25 and ≥ 25 years old), self-reported race/skin color (white, black, or mixed-race – *pardo*), educational attainment (primary or incomplete secondary, post-secondary education), religious affiliation (yes, no), and marital status (single, divorced, widowed, and married or living together); (b) economic: three economic categories were created: A-B, high income; C, average income; and D-E, low income, based on the Brazilian Economic Classification Criteria ³¹; (c) self-reported sexual identity (heterosexual or gay); (d) experienced violence due to sexual orientation (lifetime): physical violence (yes, no) or sexual violence (yes, no); (e) fear of visiting public places (at some point in life or never); (f) family approval of sexual orientation (approves; disapproves or indifferent; or family does not know); (g) disclosure of sexual orientation: told friends (yes, no), told mother (yes, no), told father (yes, no); (h) participation in LGBTIQI+ nongovernmental organizations (NGOs) (yes, no); (i) previous HIV testing (lifetime) (yes, no); (j) suicidal ideation in the previous two weeks (yes, no); (k) alcohol use, classified by the *Alcohol Use Disorders Identification Test* (AUDIT) score (low risk and abstemious; risky and high risk; or dependent); and use of illicit drug in the previous six months (yes, no).

Data analysis

Gile's successive sampling estimator ³² was used to estimate the weighted ratio estimators via RDS Analyst (<http://hpmrg.org>). Data from the 12 cities were merged into a single database in which each city was treated as its own stratum. The previously defined latent variable DDSO ²¹ and RDS weights were transferred to the current database for descriptive, bivariate, and multivariate analyses. Stata 15.0 (<https://www.stata.com>) was used with complex survey data analysis tools.

Multivariate analysis included ordinal logistic regression modelling as the outcome variable was ordinal. Estimators were adjusted with the simultaneous generation of a constant association measure across the categories of the outcome variable ³³.

The construction of weighted odds ratio (OR) in the logistic model began with a bivariate analysis to assess the factors associated with the outcome variable. Variables associated with DDSO in the bivariate analysis at a p-value of 0.20 were included in the multivariate analysis. Only those with p-value < 0.05 remained in the final model. The selection of these factors was based on the previous literature about DDSO. Weighted OR with 95% confidence intervals (95%CI) were used as measures of association between explanatory factors and DDSO.

Results

We recruited 4,176 MSM in 12 Brazilian cities. Overall, 56.1% of MSM were aged under 25 years; 86.3% were single; 53.1% claimed a religious affiliation; 70.3% reported primary or incomplete secondary education level; 41.8% were mixed-race (*pardo*), 31.5%, white, and 22.7%, black; 42.4% percent of MSM reported high income levels (A-B). The overwhelming majority of participants (92.4%) reported a gay sexual orientation (Table 1).

Table 1

Characteristics of men who have sex with men in 12 Brazilian cities, 2016.

Characteristics	n/N *	% **	95%CI
Age (years)			
< 25	2,503/4,129	56.1	52.4-59.7
≥ 25	1,626/4,129	43.9	40.3-47.6
Race/Skin color			
White	1,285/4,106	31.5	28.2-35.0
Black	903/4,106	22.7	19.7-26.1
Mixed race	1,768/4,106	41.8	38.3-45.3
Indigenous	64/4,106	1.9	1.0-3.3
Asian	86/4,106	2.2	1.5-3.3
Schooling level			
Primary or incomplete secondary	3,115/4,132	70.3	67.1-73.3
Post-secondary education	1,017/4,132	29.7	26.8-32.9
Religious affiliation			
Yes	2,176/4,096	53.1	49.5-56.7
No	1,920/4,096	46.9	43.3-50.6
Marital status			
Single/Separated/Widowed	3,578/4,115	86.3	83.6-88.6
Married or living together	537/4,115	13.7	11.4-16.4
Socioeconomic status			
A-B	1,889/4,127	42.4	38.9-46.0
C	1,664/4,127	41.7	38.1-45.3
D-E	574/4,127	15.9	13.5-18.6
Sexual identity			
Heterosexual	137/2,784	7.6	5.5-10.3
Gay	2,647/2,784	92.4	89.7-94.5
Physical violence due to sexual orientation			
No	3,150/4,078	76.5	73.1-79.6
Yes	928/4,078	23.5	20.4-26.9
Sexual violence due to sexual orientation			
No	3,207/4,085	79.1	75.7-82.1
Yes	878/4,085	21.0	18.0-24.3
Fear of circulating in public places			
Never	1,068/2,848	39.7	35.2-44.3
At some point in life	1,780/2,848	60.3	55.7-64.8
Told friends about sexual orientation			
No	332/3,826	9.9	7.7-12.6
Yes	3,494/3,826	90.1	87.4-92.3

(continues)

Table 1 (continued)

Characteristics	n/N *	% **	95%CI
Told mother about sexual orientation			
No	1,345/3,826	37.2	33.7-40.9
Yes	2,481/3,826	62.8	59.1-66.3
Told father about sexual orientation			
No	2,170/3,826	57.0	53.2-60.8
Yes	1,656/3,826	43.0	39.2-46.8
Family approval of sexual orientation			
Approves	1,975/4,037	45.4	41.7-49.1
Disapproves/Indifferent	1,391/4,037	33.4	30.2-36.7
Family does not know	671/4,037	21.3	18.3-24.6
Participates in an LGBTQI+ NGO			
No	3,335/4,076	82.1	79.2-84.7
Yes	741/4,076	17.9	15.3-20.8
Ever tested for HIV (lifetime)			
No	1,226/4,122	33.8	30.5-37.2
Yes	2,896/4,122	66.2	62.8-69.6
Suicidal ideation in the previous two weeks			
No	3,358/4,119	82.0	79.2-84.4
Yes	761/4,119	18.0	15.6-20.8
Alcohol use			
Low risk/Abstemious	2,047/3,938	54.6	51.0-58.2
Risky/High risk	1,541/3,938	35.7	32.4-39.2
Dependent	350/3,938	9.7	7.8-11.9
Illicit drug use in previous six months			
No	2,055/4,062	51.6	48.0-55.3
Yes	2,007/4,062	48.4	44.7-52.0

95%CI: 95% confidence interval; NGO: nongovernmental organizations.

* Crude estimate;

** Estimate weighted by Gile's successive sampling estimator.

More than half of the participants reported fear of visiting public spaces (60.3%), whereas about a quarter of them had experienced physical (23.5%) or sexual (21%) violence. Regarding disclosure of sexual orientation, most participants disclosed to their friends (90.1%) and their mothers (62.8%), whereas fewer disclosed it to their fathers (43%). In total, 45.4% of respondents reported family approval of their sexual orientation; 33.4%, family disapproval or indifference to their sexual orientation, and 21.3%, their families' unawareness of their sexual orientation. A small percentage (17.9%) reported participating in LGBTQI+ NGOs. A third (33.8%) had never taken an HIV test and almost a fifth (18%) experienced suicidal ideation in the two weeks before our survey. Regarding alcohol use, 35.7% were classified as risky or in high risk, and 9.7% as dependent; and almost half participants reported using illicit drugs in the six months before the survey (48.4%) (Table 1).

Among those who reported any DDSO (65%), a high proportion of MSM (73.1%) did not share this with anyone. Among those who did, 19.7% shared with their family, 6.1%, with their partners/spouses, 0.9%, with friends, 0.1%, with health professionals and another 0.1%, with the police (Table 2).

Table 3 shows the association between explanatory variables and the DDSO categories. Bivariate analysis indicated increased odds of DDSO among MSM aged under 25 years (OR = 2.13; 95%CI: 1.60-2.83) who were white (OR = 1.58; 95%CI: 1.13-2.21) and had post-secondary education (OR = 2.00; 95%CI: 1.42-2.83) and higher socio-economic status: A-B (OR = 2.35; 95%CI: 1.52-3.63) and C (OR = 1.67; 95%CI: 1.06-2.63), when compared with those in D-E socioeconomic status. Moreover, gay sexual identity (OR = 5.15; 95%CI: 2.30-11.50), physical (OR = 4.26; 95%CI: 3.00-6.06) and sexual

Table 2

Self-reported discrimination due to sexual orientation among men who have sex with men in 12 Brazilian cities, 2016.

Variables	n/N *	% **	95%CI
Self-reported discrimination			
No	1,234/4,097	35.0	31.7-38.4
Yes	2,863/4,097	65.0	61.6-68.3
Reported discrimination to			
Nobody	2,011/2,797	73.1	69.0-76.8
Family	537/2,797	19.7	16.3-23.6
Partner/Spouse	184/2,797	6.1	4.6-8.1
Friend	48/2,797	0.9	0.5-1.7
Health professional	13/2,797	0.1	0.0-0.4
Police	4/2,797	0.1	0.0-0.5

95%CI: 95% confidence interval.

* Crude estimate;

** Estimate weighted by Gile's successive sampling estimator.

Table 3

Bivariate analysis of the association between discrimination due to sexual orientation (DDSO) and predictor variables among men who have sex with men in 12 Brazilian cities, 2016.

Variables	DDSO (%) *				p-value	OR (95%CI)
	Low (n = 1,890; 46.19% **)	Average (n = 1,437; 35.1% **)	High (n = 673; 16.4% **)	Very high (n = 92; 2.2% **)		
Age (years)					0.00	
≥ 25	64.3	24.8	9.7	1.2		1.00
< 25	44.9	36.6	17.0	1.5		2.13 (1.60-2.83)
Race/Skin color					0.04	
Black	58.5	30.0	9.9	1.6		1.00
Mixed race	52.7	31.2	14.9	1.2		1.29 (0.92-1.82)
White	48.4	31.4	18.9	1.3		1.58 (1.13-2.21)
Schooling level					0.00	
Primary or incomplete secondary	66.4	21.1	10.8	1.7		1.00
Post-secondary education	47.6	35.9	15.3	1.2		2.00 (1.42-2.83)
Religious affiliation					0.25	
No	50.7	31.9	15.7	1.7		1.00
Yes	56.2	30.6	12.2	1.1		0.78 (0.59-1.03)
Marital status					0.14	
Single	54.2	31.0	13.8	1.0		1.00
Married/Together/Civil union	48.5	33.8	14.1	3.6		1.27 (0.83-1.92)
Socioeconomic level					0.00	
D-E	67.9	21.4	9.1	1.5		1.00
C	56.0	28.0	15.0	1.1		1.67 (1.06-2.63)
A-B	45.0	38.8	14.5	1.7		2.35 (1.52-3.63)
Sexual identity					0.00	
Heterosexual	80.2	17.8	1.6	0.4		1.00
Gay	44.9	36.1	17.4	1.6		5.15 (2.30-11.50)

(continues)

Table 3 (continued)

Variables	DDSO (%) *				p-value	OR (95%CI)
	Low (n = 1,890; 46.19% **)	Average (n = 1,437; 35.1% **)	High (n = 673; 16.4% **)	Very high (n = 92; 2.2% **)		
Physical violence due to sexual orientation					0.00	
No	61.3	29.2	8.9	0.6		1.00
Yes	28.5	38.3	29.4	3.7		4.26 (3.00-6.06)
Sexual violence due to sexual orientation					0.00	
No	59.0	30.6	9.6	0.9		1.00
Yes	33.1	33.6	30.3	3.0		3.37 (2.29-4.95)
Told mother about sexual orientation					0.00	
No	61.5	25.9	11.4	1.2		1.00
Yes	42.1	39.5	17.1	1.4		2.04 (1.52-2.74)
Told father about sexual orientation					0.00	
No	57.7	29.2	11.9	1.2		1.00
Yes	38.2	41.4	18.9	1.5		2.05 (1.54-2.72)
Family approval of sexual orientation					0.00	
Approves	49.8	34.1	14.5	1.6		1.00
Disapproves/Indifferent	42.0	36.9	19.8	1.4		1.37 (1.01-1.85)
Family does not know	77.4	18.3	3.6	0.7		0.28 (0.18-0.43)
Participates in an LGBTQI+ NGO					0.00	
No	55.9	31.3	11.8	1.0		1.00
Yes	41.9	32.3	22.9	2.9		1.94 (1.33-2.83)
Ever tested for HIV (lifetime)					0.00	
No	62.7	24.5	11.6	1.2		1.00
Yes	48.7	34.8	15.0	1.5		1.67 (1.22-2.29)
Suicidal ideation in the previous two weeks					0.00	
No	56.5	31.4	11.4	0.8		1.00
Yes	37.9	32.5	25.3	4.3		2.45 (1.708-3.52)
Alcohol use					0.05	
Low risk/Abstemious	54.7	31.5	13.0	0.8		1.00
Risk/High risk	46.4	36.6	15.3	1.7		1.36 (1.02-1.82)
Dependent	62.5	21.3	14.5	1.8		0.80 (0.48-1.33)
Illicit drug use in previous six months					0.01	
No	58.1	30.0	11.0	0.9		1.00
Yes	48.0	33.4	16.8	1.9		1.54 (1.17-2.04)

95%CI: 95% confidence interval; NGO: nongovernmental organizations; OR: odds ratio.

* Estimate weighted by Gile's successive sampling estimator;

** Crude estimate.

violence (OR = 3.37; 95%CI: 2.29-4.95), family disapproval or indifference (OR = 1.37; 95%CI: 1.01-1.85), having told mother (OR = 2.04; 95%CI: 1.52-2.74) and father about sexual orientation (OR = 2.05; 95%CI: 1.54-2.72), and participating in an LGBTQI+ NGO (OR = 1.94; 95%CI: 1.33-2.83) were also associated with this outcome. Finally, ever taking an HIV test (OR = 1.67; 95%CI: 1.22-2.29), suicidal ideation (OR = 2.45; 95%CI: 1.70-3.52), risky or high risk of alcohol use (OR = 1.36; 95%CI: 1.02-1.82), and illicit drug use in the previous six months (OR = 1.54; 95%CI: 1.17-2.04) showed increased DDSO odds.

In the final multivariate analysis, the following variables were independently associated with DDSO: age under 25 years (OR = 1.66; 95%CI: 1.21-2.27), white skin color (OR = 1.43; 95%CI: 1.02-2.01), experience of sexual (OR = 2.33; 95%CI: 1.58-3.43) and physical violence (OR = 3.08; 95%CI:

2.11-4.49), shared sexual orientation with their fathers (OR = 2.00; 95%CI: 1.47-2.72), experienced suicidal ideation in the previous two weeks (OR = 2.09; 95%CI: 1.46-2.98), and used illicit drugs in the previous six months (OR = 1.61; 95%CI: 1.19-2.18) (Table 4).

Discussion

In this analysis, we were able to confirm the relevance of contextual factors which potentially increase the likelihood of DDSO among MSM in Brazil. The combination of a latent indicator of discrimination previously described and an ordinal logistic regression approach used for analysis may more comprehensively capture the effects of potential exposures on different levels of DDSO.

Between our two MSM surveys in 2009 and 2016, the prevalence of self-reported DDSO increased from 27.7% to 65%^{20,21} in Brazil. Since the end of the first decade of the 21st century, the Brazilian government, though in favor of the social and preventive agendas claimed by MSM, decided to negotiate with the extreme right-wing caucus to approve its other social and economic, and start to give up progressive agendas. The most affected by this decision were younger men, who were found more likely to report DDSO than older men, a trend already observed in 2009²⁰ in Brazil, as well as in other countries^{34,35}. Moreover, another explanation may be that older MSM could be desensitized from repeated exposure to abuse, creating cognitive mechanisms that may partially neutralize the identification and effects of discrimination³⁶.

White MSM and those with higher education were more likely to report DDSO, although the multivariate analysis excluded the latter. In Brazil, higher schooling educational levels are more

Table 4

Multivariate analysis of the association between discrimination due to sexual orientation (DDSO) and predictor variables among men who have sex with men in 12 Brazilian cities, 2016.

Variables	OR (95%CI)
Age (years)	
≥ 25	1.00
< 25	1.66 (1.21-2.27)
Race/Skin color	
Black	1.00
Mixed race	1.38 (0.98-1.96)
White	1.43 (1.02-2.01)
Sexual violence due to sexual orientation	
No	1.00
Yes	2.33 (1.58-3.43)
Physical violence due to sexual orientation	
No	1.00
Yes	3.08 (2.11-4.49)
Told father about sexual orientation	
No	1.00
Yes	2.00 (1.47-2.72)
Suicidal ideation in previous two weeks	
No	1.00
Yes	2.09 (1.46-2.98)
Illicit drug use in previous six months	
No	1.00
Yes	1.61 (1.19-2.18)

95%CI: 95% confidence interval; OR: odds ratio.

prominent among white men than in black men³⁷. We may hypothesize that white, younger MSM with higher schooling level are potentially more willing to report DDSO²⁰. Stigma and discrimination are consequences of social structures and forms of domination used in society to identify and to discriminate against all divergence from heteronormative white male identity. In Brazil, DDSO affects even white and educated men who express or identify their sexual orientation. On the other hand, for black MSM, facing the intersection of sexual, racial, and class discrimination^{38,39,40} may affect both visibility and willingness to report discrimination.

Another concern relates to the fact that only 26.9% of MSM reported DDSO. Moreover, when they did, the vast majority failed to report it to the judicial system, doing so to their friends or relatives. This lack of reporting is problematic in two senses. First, due to underreporting, DDSO is underestimated in the Brazilian society, reducing public administrators, legislators, and the civil society's visibility of this problem. On the other hand, this may affect MSM's physical and mental health since not talking about the problem may aggravate internalized homophobia^{41,42}, which can be defined as homophobic attitudes toward oneself which, in turn, can lead to low self-esteem and self-hatred⁴³. This difficulty in reporting discrimination may be aggravated if there is a lack of family acceptance. In this study, we showed that one-third of participants reported their families' disapprove their sexual identity. Moreover, disclosing their sexual identity to their fathers was independently associated with a greater likelihood of experiencing DDSO.

In this study, both physical and sexual violence were strongly associated with DDSO, as in other studies^{6,20}. Discrimination and violence may influence perception of insecurity among MSM: 60% reported feeling fear of circulating in public places, a much higher percentage than that found in hostile locations for MSM in Abuja, Nigeria (17%)⁴⁴.

Our study also showed an association with suicidal ideation in the previous two weeks and illicit drug use in the previous six months before the survey, respectively. However, we should note the cross-sectional nature of the data and time-frame differences among these variables. Despite this, other studies have shown an association between DDSO, mental health distress^{35,45,46}, and the use of psychoactive substances among MSM^{4,8,11,12}.

At the highest government levels, between 2002 and 2014, policies and health interventions were developed in Brazil which positively addressed MSM's discrimination and vulnerabilities. For example, the Committee for LGBTQI+ Health in the Brazilian Ministry of Health, the reassertion of LGBTQI+ rights to health care in the Brazilian Unified National Health System (SUS), and the Brazilian National Policy for LGBTQI+ Health^{47,48} were developed. However, Brazil has experienced setbacks in LGBTQI+ health policies over the last five years due to the advance of reactionary conservative religious groups and social movements in Brazilian society, reflected in the National Congress and the Presidency^{49,50}. More recently, the current national government, as of 2019, has further exacerbated this situation⁵⁰. The new president and his old party – who elected the largest number of members in the National Congress – were voted in on a platform which contained explicit rejection of LGBTQI+ individuals and identities and published a program vowing to exclude LGBTQI+ communities from human rights protections and social policies⁴⁹. Moreover, the Department of Continuing Education, Literacy, Diversity and Inclusion, responsible for promoting policies to secure sexual, gender, and ethnic diversity in Brazilian public schools, was terminated. HIV prevention guidelines for transgender populations were also removed under the argument that this document contained “content offensive to families”⁴⁹.

Brazil faces a political context of increased stigma directed toward LGBTQI+ communities that most likely will increase DDSO. From 2009 to 2016, the persistence and increase in DDSO may constitute a significant barrier for access to health services, including the commitment to universal access to antiretroviral therapies to treat and to prevent HIV (such as pre-and post-exposure prophylaxes)^{51,52,53}.

An unfavorable and stressful environment is increasingly associated with physiological effects that make MSM more vulnerable to several diseases⁵⁴. In line with minority stress theory^{43,55}, stressors are portrayed as events and conditions requiring constant change, causing exposed individuals to make intense efforts to adapt to new circumstances. Therefore, individuals subjected to stressors suffer from constant psychological and physical tension which erodes their capacity to adapt, inducing mental and somatic disorders⁵⁵. As Goffman⁵⁶ indicated, the response to “deviance”, embedded in

stigma and discrimination, can lead to the problematization of previously uncontested terrains: challenges to masculinity and heteronormativity can be seen as a response to serious problems of gender violence and intimate partner violence, both widespread in Brazil and elsewhere. As with in-group stigma, occupying a stigmatized role can offer opportunities for leadership, not just oppression. In the light of this, in relation to strategies that diminish DDSO among MSM, there are several initiatives in Latin America, including interventions sensitive to gender and culture, which focus on creating new values that enable an expansion of different forms of masculinity⁵⁷.

Although this study shows robust results, it also has some limitations. The original questionnaire was not designed to evaluate DDSO. Moreover, we do not have information about exposure timing or duration, the context in which episodes occur, and DDSO intensity and frequency. Furthermore, RDS studies show limitations regarding sample representativeness, potential biases in estimating and sampling social networks and indicator data, and potential violation of several theoretical assumptions of RDS in implementation.

Conclusion

This study reports a high level of DDSO among MSM in Brazil, which shows a concerning increase from 2009 to 2016. We emphasize the high levels of reported DDSO among younger, white, and better-educated MSM. However, the potential “iceberg” nature of DDSO may indicate that the documented discrimination might be significantly smaller than the actual one. We should also highlight other contextual factors associated with DDSO in our analysis, namely, sexual and physical violence and use of illicit drugs, which may synergistically increase the chances of DDSO among MSM. This study was conducted in 2016, a time of relatively progressive political and social movement in Brazil. The current government in Brazil has worsened the rising homophobia it engendered since it has implicitly and explicitly granted permission for homophobia. There is certainly a need for vigilance and documentation of discrimination and violence acts, as well as more in-depth studies on the association between DDSO and racial discrimination in an intersectional perspective, and the social and political context in which they occur. The rise and patterns of distribution of DDSO show how contingent stigma and discrimination depend on political and moral leadership or lack thereof. Therefore, monitoring DDSO throws into sharp relief our broad social and political failings, affecting all Brazilians.

Contributors

L. Magno contributed to the study design, data analysis and interpretation, writing, and review. M. D. C. Guimarães contributed to the data analysis and interpretation, writing, and review. A. F. Leal, I. Dourado, D. R. Knauth, X. P. D. Bermúdez, G. M. Rocha, M. A. S. M. Veras, C. Kendall, and A. M. Brito contributed to the data collection and analysis and review. L. R. S. Kerr contributed to the data interpretation and review. All the authors approved the final version of the manuscript.

Additional informations

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Resumo

A discriminação com base na orientação sexual mostra uma associação forte com desfechos de saúde entre homens que fazem sexo com homens (HSH). O estudo buscou analisar fatores associados com a discriminação por orientação sexual entre HSH em 12 cidades brasileiras. Um estudo transversal recrutou 4.176 HSH em 2016, usando o método respondent-driven sampling em 12 cidades brasileiras. Os níveis de discriminação por orientação sexual foram identificados previamente por análise de classes latentes, com base em 13 variáveis do capítulo sobre discriminação. Foi usada regressão logística ordinal para avaliar as associações com esses níveis de discriminação por orientação sexual, e o estimador de Gile foi utilizado para estimar as razões de chances ordinais ponderadas (OR) e os respectivos intervalos de 95% de confiança (IC95%). Os participantes eram majoritariamente jovens (< 25 anos), solteiros, com filiação religiosa, com escolaridade primária ou Ensino Médio incompleto, pretos ou pardos e com nível socioeconômico alto ou médio. Mais da metade relatava discriminação por orientação sexual nos últimos 12 meses (65%). Observamos uma associação independente entre as quatro classes latentes de discriminação por orientação sexual e as seguintes variáveis: idade < 25 anos (OR = 1,66; IC95%: 1,21-2,27), cor branca (OR = 1,43; IC95%: 1,02-2,01), história de violência sexual (OR = 2,33; IC95%: 1,58-3,43) e física (OR = 3,08; IC95%: 2,11-4,49), ter divulgado ao pai a orientação sexual enquanto HSH (OR = 2,00; IC95%: 1,47-2,72), relato de ideação suicida nas últimas duas semanas (OR = 2,09; IC95%: 1,46-2,98) e uso de qualquer droga ilícita nos últimos seis meses (OR = 1,61; IC95%: 1,19-2,18). Nossos resultados indicam que fatores contextuais podem contribuir para os altos níveis de discriminação contra HSH no Brasil. São urgentes políticas de saúde pública voltadas para a vigilância e proteção dos direitos humanos dos HSH.

Minorias Sexuais e de Gênero; Homens que Fazem Sexo com Homens; Discriminação Social; Determinantes Sociais da Saúde; Brasil

Resumen

La discriminación debida a la orientación sexual (DDSO, por sus siglas en inglés) tiene una asociación importante con los resultados de salud entre los hombres que tienen sexo con hombres (HSH). El objetivo de este estudio fue analizar factores asociados con DDSO entre HSH en 12 ciudades brasileñas. Un estudio trasversal con 4.176 participantes HSH reclutados en 2016, usando un método de muestreo basado en los encuestados de 12 ciudades brasileñas. Los niveles de DDSO se identificaron previamente mediante un análisis de clase latente, basado en 13 variables desde la sección de discriminación. Se utilizó una regresión logística ordinal para evaluar las asociaciones con estos niveles de DDSO y se estimaron las razones de posibilidades ponderadas ordinales (OR) y su respectivo intervalo de 95% de confianza (IC95%) usando el estimador de Gile. La mayoría de los participantes eran jóvenes (< 25 años de edad), solteros, tenían filiación religiosa, una escolaridad primaria o secundaria incompleta, eran negros o mestizos (pardos) y tenían un elevado promedio socioeconómico. Más de la mitad informaron DDSO en los 12 meses previos (65%). Observamos una asociación independiente entre las cuatro clases latentes de DDSO y las siguientes variables: edad < 25 años (OR = 1,66; IC95%: 1,21-2,27), color de piel blanca (OR = 1,43; IC95%: 1,02-2,01), historia de violencia sexual (OR = 2,33; IC95%: 1,58-3,43) y violencia física (OR = 3,08; IC95%: 2,11-4,49), revelaron al padre su orientación sexual como HSH (OR = 2,00; IC95%: 1,47-2,72), tuvieron ideas suicidas durante las dos semanas previas (OR = 2,09; IC95%: 1,46-2,98) y consumieron alguna droga ilícita en los últimos seis meses (OR = 1,61; IC95%: 1,19-2,18). Nuestros resultados indican que los factores contextuales podrían haber contribuido a los altos niveles de DDSO entre HSH en Brasil. Se deben dirigir urgentemente políticas públicas de salud orientadas a la vigilancia y protección de los derechos humanos entre HSH.

Minorias Sexuales y de Gênero; Hombres que Hacen Sexo con Hombres; Discriminación Social; Determinantes Sociales de la Salud; Brasil

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