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Bias-Motivated Physical or Verbal Violence Among Men Who Have Sex with Men: Findings from the Lisbon Cohort of MSM

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Abstract

Introduction Victimization based on sexual orientation or gender identity is a cause for concern. Bias-motivated violence affect not only the individuals targeted but also their communities and societies as a whole.

Objective To estimate the proportion of bias-motivated victimization among cisgender men who have sex with men (MSM) and to compare sociodemographic and behavioral characteristics and HIV and syphilis test results between victims and non-victims.

Methods We used data from the baseline visit of 2811 adult cisgender MSM from July 2017 to December 2020 in the Lisbon Cohort of MSM. Victimization was defined as self-reported lifetime or recent (in the previous 12 months) experience of physical or verbal violence motivated by sexual orientation or gender identity. Rapid HIV and syphilis tests determined serostatus. We conducted descriptive statistics to summarize the sociodemographic and behavioral characteristics and the prevalence of victimization and compared groups using the Student *t*-test or Mann–Whitney *U* test and chi-square test, as appropriate.

Results Overall, 40.3% of participants reported lifetime bias-motivated physical or verbal violence, and 11.7% reported recent victimization. Recent victimization contexts more frequently reported were street/neighborhood (67.9%) and workplace/school (35.5%). Victimization was associated with younger age (mean age: 26.5 vs 30.2, p-value < 0.001), being born in Brazil or other American countries, or being 14 or younger at their anal intercourse with a man debut (19.5% vs. 11.0%, p-value < 0.001). Lifetime victimization was not significantly associated with reactive results for HIV (p-value $= 0.135$) or syphilis (p-value $= 0.760$).

Conclusion The violence motivated by sexual orientation or gender identity was quite frequent in this community. The occurrence of violence based on sexual orientation or gender identity in the Lisbon Cohort of MSM was associated with adverse social conditions and health risk behaviors.

Policy Implications Raising awareness about bias-motivated violence as a hate crime may deter potential aggressions. Primary violence prevention should tackle specificities of sexual and gender minorities.

Keywords Victimization · Sexual and gender minorities · HIV · Syndemics

Introduction

Continuous, serious, and widespread human rights violations are still perpetrated, too often with impunity, against individuals based on their sexual orientation or gender identity (United Nations Human Rights Council, 2011, 2015). Moreover, at the beginning of the twenty-first century, despite the large underreporting provided by official statistics (European Union Agency for Fundamental Rights, 2020; United Nations Human Rights Council, 2015), the literature clearly shows that these populations are more likely to be victims of physical and sexual violence than the general population (Blondeel et al., 2018).

"Physical violence" could be interpreted as any form of physical force or assault intended to harm or intimidate the

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victim, including but not limited to hitting, pushing, or using a weapon. "Verbal violence," on the other hand, encompasses any use of words to harm, threaten, or demean an individual, such as insults, threats, derogatory comments, and slurs based on sexual orientation or gender identity. For example, instances of physical violence may range from a shove or slap during a confrontation to more severe assaults causing bodily harm. Verbal violence examples include using homophobic or transphobic slurs, making threats of physical harm, or engaging in persistent harassment aimed at belittling or intimidating the individual because of their sexual orientation or gender identity.

A systematic review by the World Health Organization, including papers published between January 2000 and April 2016, found the overall lifetime prevalence of physical violence motivated by sexual orientation or gender identity ranged from 6.0 to 25.0%[4]. Regarding sexual violence motivated by sexual orientation or gender identity perception, the same review showed a prevalence between 5.6 and 11.4% for all sexual and gender minority groups (SGMG) (Blondeel et al., 2018).

In a comprehensive survey conducted by the European Union Agency for Fundamental Rights (FRA) from 27 May to 22 July 2019, a detailed examination was undertaken to assess experiences of physical and sexual violence based on sexual orientation and gender identity. The study encompassed a diverse SGMG, including gays, lesbians, bisexuals, transgender, and intersex individuals. In addition, the survey did not define forms of physical or sexual violence, allowing respondents to consider every experience that they would describe as a physical or sexual attack or as involving both. In total, 11% of respondents reported having been physically or sexually assaulted because of their sexual orientation or gender identity in the preceding 5 years, and 5% reported at least one violent attack in the 12 months before the survey (European Union Agency for Fundamental Rights, 2020). Regarding harassment in the prior 12 months, the same inquiry identified that 38% of respondents experienced one or more acts because they belonged to a SGMG (European Union Agency for Fundamental Rights, 2020). Focusing on the Portuguese data, the FRA has shown Portugal to have one of the lowest proportions of physical or sexual abuse (5%) due to sexual orientation or gender identity and motivated harassment (30%) in the preceding 5 years (European Union Agency for Fundamental Rights, 2020).

Nevertheless, those figures may be underestimated due to barriers to engaging SGMG in research, mainly on stigmatized topics. Victims are often reluctant to report their experiences for fear of extortion, breach of confidentiality, or reprisals (United Nations Human Rights Council, 2015). Thus, community peer counselors' involvement in research processes could be a considerable asset in improving the validity and completeness of the information and the disclosure of past traumatic events (World Health Organization & Joint United Nations Programme on HIV/AIDS, 2011). In addition, it may provide study legitimacy among community members[5] and a more specific culturally competent understanding to reach them (Mayer et al., 2012).

It is fundamental to understand that victimization, as bias-motivated crimes, affects not only the individuals targeted but also their communities and societies as a whole (Bell & Perry, 2015; European Union Agency for Fundamental Rights, 2020; Iganski, 2001). On the individual level, the empirical evidence indicates that bias-motivated crime victims experience greater levels of emotional and psychological distress (European Union Agency for Fundamental Rights, 2020; Herek et al., 2002; Mensinger et al., 2020) and lower levels of actual and perceived safety (Bell & Perry, 2015; European Union Agency for Fundamental Rights, 2020). In addition to these psychological effects, they may also suffer from the lack of access to legal, health, and other social services; loss of income, employment, housing, and educational opportunities (Evens et al., 2019); increased criminal justice involvement; and problematic substance use (Hotton et al. 2019). On a societal level, those crimes enhance cultural heterosexism, "an ideological system that denies, denigrates and stigmatizes any non-heterosexual form of behavior, identity, relationship or community."(Herek, 1992).

Lifelong victimization motivated by sexual orientation or gender identity also has a potentially harmful effect on the HIV epidemic, resulting in what has been described as a syndemic (Ferlatte et al., 2018; Willen et al., 2017). Syndemics emerge when two or more health conditions co-occur in environments of aggravated adversity and interact synergistically to yield worse health outcomes than each affliction would likely generate on its own (Willen et al., 2017). Previous studies have shown the impact of past events — notably violent experiences — on developing syndemic conditions (Herrick et al., 2013), leading to worse HIV-related outcomes — increased risk behavior and infection occurrence (Abaver & Cishe, 2018; Chandler et al., 2020; Guadamuz et al., 2014; Gyamerah et al., 2020; Herrick et al., 2013; Mustanski et al., 2007; Santos et al., 2014; Stall et al., 2003). In addition, evidence obtained by studies focusing on MSM (Meireles et al., 2015; World Health Organization, 2016) revealed the deleterious impact of interrelated psychosocial health conditions in HIV testing behavior and treatment adherence (Chandler et al., 2020; Gyamerah et al., 2020; Harkness et al., 2018), key factors in the control of the HIV epidemic (Abaver & Cishe, 2018).

Prejudicial and inexact categorization of cases results in misidentification, concealment, and underreporting. Failure to investigate, prosecute, and punish violations when reported also contributes to incomplete assessments of the scale of violence (United Nations Human Rights Council,

2015). Thus, supported by the evidence presented above, a better understanding of violence based on sexual orientation or gender identity at local levels and their determinants is essential to respond to bias-motivated crimes and their consequences adequately. Therefore, we aimed to estimate the proportion of victimization motivated by sexual orientation among cisgender males who have sex with men and to assess potential associations with sociodemographic and behavioral characteristics, as well as the HIV and syphilis test results by comparing victims and non-victims.

Methods

Study Design and Participants

In the design of our study, we adopted a quantitative research paradigm, focusing on the collection and quantitative analysis of data to explore the prevalence and factors associated with bias-motivated violence among MSM. Specifically, we conducted a cross-sectional study using participants' baseline information from the Lisbon Cohort of MSM. The Lisbon Cohort of MSM is an ongoing open, prospective cohort conducted in a community-based HIV counseling and testing center in Lisbon – CheckpointLX. The cohort is a joint initiative from Grupo de Ativistas em Tratamento, and Instituto de Saúde Pública da Universidade do Porto, established in April 2011. Further information can be found elsewhere (Meireles et al., 2015). Participants voluntarily attended CheckpointLX for testing. The eligibility criterion to be invited to participate in the baseline evaluation of the cohort was being a cisgender man aged 18 or over who reported having had sex with other men during their lifetime (Meireles et al., 2015).

The Lisbon Cohort of MSM utilizes a community-based, peer-led methodology for data collection. This approach involves engaging members of the MSM community, trained as peer community health workers (CHWs), to conduct face-to-face interviews and administer questionnaires. This peer-led model is predicated on the shared experiences and mutual understanding between the interviewers and the participants, facilitating a safe and supportive environment for disclosing sensitive information, including experiences of bias-motivated violence. Participants may feel more understood and less judged, reducing the likelihood of underreporting due to fear of stigma or misunderstanding.

In addition to conducting interviews, peer CHWs also performed rapid testing for HIV-1/2 and *Treponema pallidum* antibodies. Linkage to care was also offered to those with reactive tests at any visit.

For this cross-sectional study, we included 2,811 individuals with a baseline interview between July 2017 and December 2020. All participants gave their written informed consent, and the study protocol was approved by the ethics committee for health from the University Hospital Centre São João/Faculty of Medicine of the University of Porto (ID 104/12).

Data Collection and Variables

For our study, we used information from the baseline interviews. The questionnaire collected information on sociodemographic characteristics, including age, country/region of birth, educational level, employment situation, and sexual orientation, as well as behavioral indicators: age at first anal intercourse; the number of steady and occasional sexual partners in the last 12 months; frequency of condom use for anal intercourse with steady and occasional partners in the last 12 months; sex to get money, goods, or drugs in the last 12 months; history of previous HIV testing; knowledge and use, in the last 12 months, of HIV post- and pre-exposure prophylaxis; use of alcohol in the last 12 months, use of cannabis or recreational drugs (defined as having used lysergic acid diethylamide (LSD), poppers, heroin, ecstasy, amphetamines, mephedrone, gamma-hydroxybutyric acid (GHB), ketamine, or cocaine) in the last 12 months.

We were interested in assessing potential associations among those variables and the occurrence of victimization. Participants were asked to self-report experiences that they considered bias-motivated physical or verbal violence in their lifetime or the previous 12 months. In addition, the contexts of recent (in the previous 12 months) victimization episodes — work or study environment, the street/neighborhood, family settings, social networks, and the relationship with sexual partners —were collected.

Statistical Analysis

Characteristics of cohort participants were described using proportions in the case of categorical variables. Continuous variables were described as means and standard deviations (SD), or medians and 25th and 75th percentiles (P25–75). The prevalence of lifetime and recent victimization and its contexts were expressed as counts and proportions. Missing and "I prefer not to answer" answers were excluded from the analysis since they varied between 0 and 5.4% in all variables analyzed. The comparison between participants who reported experiencing physical or verbal abuse and those who did not was performed using the Student *t*-test or Mann–Whitney *U* test for continuous variables and chi-square test for categorical variables, as appropriate. The significance level was set at $p < 0.05$. All statistical analyses were computed with Statistical Package for Social Sciences (SPSS), version 26.

Results

The mean age (SD) of participants was 29.8 (8.82) years; 62.3% were born in Portugal, while most foreign-born participants were from Brazil or other American countries (21.7%) and other European countries (9.3%); 64.3% had more than 12 years of schooling, and 6.6% were unemployed. Most of the participants identified themselves as gay (84.7%). A more detailed description of the sample characteristics is provided in Table 1.

A previous HIV testing was reported by 84.6% of the participants. The participant's responses regarding sexual practices and partners, HIV prevention measures, and substance use are presented in Table 2.

Overall, 40.3% of MSM reported at least one-lifetime experience of victimization, and 11.7% reported an episode in the previous 12 months. The abuse episodes in the last 12 months were mainly reported to occur in public places, such as the street/neighborhood (67.9%) or at the workplace/school (35.5%). Attacks perpetrated within social networks or by family members were mentioned by 19.2% and 18.6% of participants, respectively, and 6.0% reported episodes of recent victimization within relationships with sexual partners (Table 3).

Table 4 shows significant differences in the prevalence of lifetime and recent victimization according to sociodemographic characteristics. Both lifetime and recent victimization were less frequent among those who were full-time employees or retired and those who self-identified as bisexual or heterosexual. The mean age of respondents was lower among those reporting lifetime (28.34 years old vs 30.73 years old, p-value < 0.001) and in the last 12 months violence episodes (26.54 years old vs 30.2 years old, p-value < 0.001). Recent victimization was more frequently reported by participants born in Brazil or other American countries and less educated.

Table 5 shows that MSM who had anal sex for the first time before the age of 14 reported experiencing lifetime verbal or physical attacks motivated by their sexual orientation more frequently (55.1%) compared to those who had their first anal sex at age 14 or older (39.1%, p-value < 0.001). The same was observed in those who reported violence in the last 12 months (19.5% vs 11%, p-value < 0.001).

In the same table, concerning current sexual practices, there was no overall difference in the median number of sexual partners (steady or occasional) in the past 12 months regarding lifetime and recent victimization. Lifetime victimization was less frequent in the population who referred to using condoms consistently with steady partners (35.4% vs 44.2%, p-value = 0.002). Physical or verbal bias-motivated abuse in lifetime and previous 12 months reports were

Table 1 Baseline description of participants: sociodemographic characteristics (n = 2811), Lisbon, Portugal, 2017–2020

Age, median (P25–P75)	28 (23–34)
Age, mean (SD)	29.8 (8.82)
Age, minimum – maximum	18–75
Country/Region of origin, *n* (%)	
Portugal	1750 (62.3)
Brazil or other American countries	696 (24.8)
Other European countries	264 (9.3)
PALOP and other African countries	52 (1.9)
Asia/Middle East/Oceania	48 (1.7)
Educational level, *n* (%)	
Secondary education or less, including professional training (> = 12 years)	974 (35.7)
Bachelor/Master or Doctoral/Post-secondary non-higher education/ Other (< 12 years)	1753 (64.3)
Employment situation, *n* (%)	
Full-time employee	1452 (53.3)
Other employee's categories*	370 (13.4)
Unemployed (with or without social subsidy)	179 (6.6)
Student, including student /worker	710 (26.1)
Retired/Other	15 (0.6)
Sexual orientation, *n* (%)	
Gay	2347 (84.7)
Bisexual	317 (11.4)
Heterosexual	18 (0.6)
Other	25 (0.9)
I do not usually use a term	63 (2.3)

*including part-time employee; temporary worker; independent worker; sex worker; undeclared work

Table 2 Baseline description of participants: behavioral characteristics ($n = 2811$), Lisbon, 2017–2020

Age at first anal intercourse with a man	
Age, median (P25–P75)	18 (17–21)
Age, mean (SD)	19.5 (5.29)
Age, minimum – maximum	5–61
Age at first anal intercourse with a man, *n* (%)	
≤ 14	237 (8.8)
> 14	2454 (91.2)
Number of sexual partners (steady and occasional) in the past 12 months, median (P25–P75)	
Median (P25–P75)	5 (3–10)
Mean (SD)	9.51 (21.88)
Minimum – Maximum	1–601
Sex (oral, anal, vaginal) to get money, goods or drugs in the last 12 months, *n* (%)	
Yes	67 (2.4)
No	2669 (97.6)
Previous HIV testing, *n* (%)	
Yes	2339 (84.6)
No	425 (15.4)
Knowledge and use of PEP, *n* (%)	
Did not know	1237 (45.2)
Knew, but never used PEP	1275 (46.6)
Knew and has used PEP before	223 (8.2)
Knowledge and use of PrEP, *n* (%)	
Did not know	930 (34.3)
Knew, but never used PEP	1677 (61.8)
Knew and has used PEP before	105 (3.9)
Alcohol use in the last 12 months, *n* (%)	
Yes	2383 (87.1)
No	352 (12.9)
Cannabis use in the last 12 months, *n* (%)	
Yes	974 (35.7)
No	1756 (64.3)
Recreative drug use in the last 12 months, *n* (%)	
Yes	941 (34.5)
No	1788 (65.5

Table 3 Proportion of victimization (lifetime and recent) and context of recent victimization among participants of the Lisbon Cohort of MSM, Lisbon, Portugal, 2017–2020

	n (%) *
Verbal or physical abuse - lifetime	1096 (40.3)
Verbal or physical abuse - last 12 months	319 (11.7)
Context of verbal or physical abuse in the last 12 months (n=319)	
At the workplace/school	113 (35.5)
In the street/neighborhood	216 (67.9)
Within my family	59 (18.6)
In relationships with sexual partners	19 (6.0)
Social networks, including online	61 (19.2)
Other +	24 (7.7)

*Missing and "I prefer not to answer" values were not included in the proportion calculation and varied between 1 and 6

+Including: healthcare services; governmental agencies; public transportation; bars and nightclubs; circle of friends

Table 4 Distribution of participants who reported victimization (lifetime and recent) and those who did not according to sociodemographic characteristics, Lisbon, Portugal, 2017–2020

	Bias-motivated victimization					
	In lifetime			In the last 12 months		
	No	Yes	*p*-value	No	Yes	*p*-value
Total*, *n* (%)	**1626 (59.7)**	**1096 (40.3)**		**2397 (88.3)**	**319 (11.7)**	
Age, mean (SD)	30.73 (9.33)	28.34 (7.79)	*< 0.001*	30.20 (8.96)	26.54 (6.88)	*< 0.001*
Country/region of origin, *n* (%)			0.132			*< 0.001*
Portugal	1029 (60.3)	678 (39.7)		1526 (89.7)	175 (10.3)	
Brazil or other American countries	394 (56.2)	291 (43.8)		550 (82.7)	115 (17.3)	
Other European countries	159 (62.1)	97 (37.9)		236 (92.2)	20 (7.8)	
PALOP and other African countries	31 (64.6)	17 (35.4)		44 (91.7)	4 (8.3)	
Asia/Middle East/Oceania	32 (71.1)	13 (28.9)		8 (88.9)	5 (11.1)	
Educational level, *n* (%)			0.753			*0.024*
Secondary education or less, including professional training (≤ 12 years)	605 (59.3)	416 (40.7)		880 (86.4)	138 (13.6)	
Bachelor/Master or Doctoral/other (> 12 years)	998 (59.9)	668 (40.1)		1491 (89.3)	178 (10.7)	
Employment situation, *n* (%)			*< 0.001*			*0.002*
Full-time employee	915 (63.9)	517 (26.1)		1291 (90.3)	138 (9.7)	
Other employee's categories+	195 (53.4)	170 (46.6)		315 (86.3)	50 (13.7)	
Unemployed (with or without social subsidy)	98 (56.0)	77 (44.0)		151 (86.3)	24 (13.7)	
Student, including student/worker	384 (54.6)	319 (45.4)		595 (85.0)	105 (15.0)	
Retired/other	30 (86.7)	12 (13.3)		15 (100)	0	
Sexual orientation, *n* (%)			*< 0.001*			*< 0.001*
Gay	1322 (57.5)	978 (42.5)		2031 (88.5)	263 (11.5)	
Bisexual or heterosexual	262 (79.4)	68 (20.6)		301 (91.2)	29 (8.8)	
Other/I do not usually use a term	41 (44.3)	49 (55.7)		60 (69.0)	27 (31.0)	

Abbreviations: *SD*, standard deviation; *PALOP*, Portuguese-speaking African countries

*Missing and "I prefer not to answer" values were excluded from the analysis and were in maximum 4.5% (127/2811), corresponding to "employment situation"

+Including part-time employee; temporary worker; independent worker; sex worker; undeclared work

similar according to the history of sex work in the previous 12 months and previous HIV testing.

Considering biomedical HIV prevention measures, individuals who knew about PrEP and PEP, regardless of utilization, presented a higher prevalence of victimization. In addition, those with knowledge of these HIV prevention strategies reported a higher proportion of recent victimization, particularly in the subgroup who reported having previously used PEP (18.3% vs 9.1%, p-value < 0.001).

Participants who used alcohol, cannabis, or recreational drugs in the past 12 months presented higher proportions of victimization (lifetime and recent) than those who did not use (as illustrated in Table 5).

Fifty-two (1.8%) participants had an HIV reactive test at entry, of which 15 (28.8%) had a previous negative test in the last 12 months. Regarding syphilis rapid tests, there were 151 (6.1%) reactive tests. HIV and syphilis rapid test results according to lifetime and recent victimization are presented in Table 6. Neither lifetime nor recent victimization was significantly associated with reactive results for HIV or syphilis.

Discussion

Our results show a high prevalence of victimization, both lifetime and recent. Additionally, it was possible to show associations between reported abuse and adverse social background. Another notable finding was the association of bias-motivated abuse and some well-defined sexual risk behaviors; however, the absence of significant associations between experiencing victimization and the HIV and syphilis results at baseline was unexpected.

Our research found a higher prevalence of bias-motivated violence in the Lisbon Cohort of MSM than previously obtained data in the Portuguese setting (European Union Agency for Fundamental Rights, 2020). We believe these differences may be attributable to the peer-based approach to data collection of the Lisbon Cohort of MSM. This strategy has already proven to improve the disclosure of sensitive issues among MSM (World Health Organization & Joint United Nations Programme on HIV/AIDS, 2011). However, it can also partially be explained by the fact that the respondents' experience could encompass a great variety of

Table 5 Distribution of participants who reported victimization (lifetime and recent) and those who did not according to behavioral characteristics, Lisbon, Portugal, 2017–2020

	Bias-motivated victimization					
	In lifetime			In the last 12 months		
	No	Yes	*p-value*	No	Yes	*p-value*
TOTAL*, *n* (%)	1626 (59.7)	1096 (40.3)		2397 (88.3)	319 (11.7)	
Age at first anal intercourse with a man, *n* (%)			*< 0.001*			*< 0.001*
≤ 14 years	106 (44.9)	130 (55.1)		190 (80.5)	46 (19.5)	
> 14 years	1480 (60.9)	949 (39.1)		2155 (89.0)	267 (11.0)	
Number of sexual partners (steady and occasional) in the past 12 months, median (P25–P75)	6 (3–10)	5 (3–10)	0.840	5 (3–10)	5 (3–11)	0.637
Frequency of condom use in anal intercourse with steady partners in the last 12 months, *n* (%)			0.002			0.417
Always	245 (64.6)	134 (35.4)		337 (88.9)	42 (11.1)	
Often/Occasionally/Rarely/ Never	754 (55.8)	598 (44.2)		1176 (87.4)	170 (12.6)	
Frequency of condom use in anal intercourse with occasional partners in the last 12 months, *n* (%)			0.098			0.527
Always	607 (62.1)	371 (37.9)		863 (88.4)	113 (11.6)	
Often/Occasionally/Rarely/ Never	726 (58.6)	513 (41.4)		1082 (87.5)	154 (12.5)	
Sex (oral, anal, vaginal) to get money, goods or drugs in the last 12 months, *n* (%)			0.607			0.099
Yes	38 (56.7)	39 (43.3)		55 (82.1)	12 (17.9)	
No	1559 (59.8)	1053 (40.2)		2318 (88.6)	298 (11.4)	
Previous HIV testing, *n* (%)			0.856			0.144
Yes	1373 (60.1)	928 (39.9)		2034 (88.6)	261 (11.4)	
No	252 (59.7)	167 (40.3)		360 (86.1)	58 (13.9)	
Knowledge and use of PEP, *n* (%)			*< 0.001*			*<0.001*
Did not know	818 (67.3)	398 (32.7)		1103 (90.9)	111 (9.1)	
Knew, but never used PEP	684 (54.0)	583 (46.0)		1099 (86.9)	136 (13.1)	
Knew and has used PEP before	113 (51.1)	108 (48.9)		178 (81.7)	40 (18.3)	
Knowledge and use of PrEP, *n* (%)			*< 0.001*			*0.001*
Did not know	637 (69.8)	276 (30.2)		833 (91.3)	79 (8.7)	
Knew, but never used PEP	903 (54.4)	758 (45.6)		1431 (86.5)	224 (13.5)	
Knew and has used PEP before	57 (55.3)	46 (44.7)		91 (88.3)	12 (11.7)	
Alcohol use in the last 12 months, *n* (%)			*< 0.001*			*0.004*
Yes	251 (73.4)	91 (26.6)		316 (92.9)	24 (7.1)	
No	1354 (57.6)	995 (42.4)		2054 (87.6)	290 (12.4)	
Cannabis use in the last 12 months, *n* (%)			*< 0.001*			*< 0.001*
Yes	1140 (66.0)	586 (34.0)		1585 (91.9)	139 (8.1)	
No	464 (48.3)	496 (51.7)		780 (81.7)	175 (18.3)	
Recreative drug+ use in the last 12 months, *n* (%)			*< 0.001*			*< 0.001*
Yes	1110 (63.0)	653 (37.0)		1582 (89.9)	177 (10.1)	
No	491 (53.3)	431 (46.7)		782 (85.1)	137 (14.9)	

PEP, post-exposure HIV prophylaxis; *PrEP*, pre-exposure HIV prophylaxis

*Missing and "I prefer not to answer" values were excluded from the analysis and were in maximum 5.4% (153/2811), corresponding to "age at first anal intercourse with a man"

+Includes lysergic acid diethylamide (LSD), poppers, heroin, ecstasy, amphetamines, mephedrone, gamma-hydroxybutyric acid (GHB), ketamine and cocaine

Table 6 Distribution of HIV and syphilis test results according to reporting of victimization (lifetime and recent) between participants of the Lisbon Cohort of MSM, Lisbon, Portugal, 2017–2020

	Syphilis rapid test result			HIV rapid test result		
	Negative $n=2309$	Positive $n=151$	p-value	Negative $n=2759$	Positive $n=52$	p-value
Lifetime experiences of victimization, n (%)			0.760			0.135
Yes	922 (94.0)	59 (6.0)		1081 (98.6)	15 (1.4)	
No	1319 (93.7)	89 (6.3)		1591 (97.8)	35 (2.2)	
Experiences of victimization in last 12 months, n (%)			0.606			0.203
Yes	270 (93.1)	20 (6.9)		316 (99.1)	3 (0.9)	
No	1965 (93.9)	128 (6.1)		2349 (98.0)	47 (2.0)	

incidents and phenomena (mobbing, bullying, rape, insults, etc.), as the survey did not discriminate the forms of verbal or physical attacks.

Concerning recent victimization, our results show that it is fundamental to understand the role of public places as contexts for abuse, as 66.9% of recent episodes occurred in public spaces. Existing literature already evidenced fears among SGMG related to public exposure. In the FRA survey, around 33% of respondents always or often avoided certain places for fear of being assaulted, threatened, or harassed based on their sexual orientation, and 61% always or often avoided public displays of affection, such as holding hands (Blondeel et al., 2018). Another cause of concern is the high proportion of bias-motivated violence episodes at the workplace/school among participants of the Lisbon Cohort of MSM. Perceiving those environments as intolerant can negatively affect individuals' decision to disclose their sexual orientation in contexts of everyday life (Bell & Perry, 2015; Blondeel et al., 2018), carrying deleterious effects at psychological and interpersonal levels (Bell & Perry, 2015). In the European scenario, previous research estimated that around 30% of LGBTI individuals aged 15 to 17 hide or disguise their sexual orientation at school (Blondeel et al., 2018), and among those who work, a third hide their sexual orientation or gender identity while at work (European Union Agency for Fundamental Rights, 2014).

Emerging evidence has already demonstrated that SGMG are disproportionately affected by intimate partner violence (IPV), with prevalence among MSM equal to or greater than among heterosexual couples (Miltz et al., 2019; Stephenson & Finneran, 2017). In our analysis, recent victimization in relationships with sexual partners has been mentioned by participants. Our variable does not provide a direct measurement of IPV, but it is reasonable to admit that this might be a form of it in some cases. This interpretation stems from the characteristics of the reported victimization, which aligns with IPV's definitions, encompassing not only physical but also emotional and psychological abuse within intimate relationships. The PROUD trial — a multicenter clinical trial of PrEP for HIV-negative MSM in the UK — showed strong associations between experiences of IPV victimization and IPV perpetration with markers of internalized homophobia, the internalization of anti-gay attitudes as a consequence of perpetual negative feedback and shaming, which led to feelings of worthlessness and negativity about the self (Miltz et al., 2019).

Violence based on sexual orientation is also referred to as hate-motivated violence and represents a hate crime according to Portuguese legislation (Perry, 2001; Portuguesa, 1995). It constitutes a mechanism of power and oppression, reaffirming the precarious hierarchies that characterize a given social order (Perry, 2001). Therefore, violence motivated by sexual orientation has emerged from heterosexism that permeates society and societal institutions (Connell, 2012; Herek, 1992). This can explain the lower victimization prevalence found in our study among individuals that identified themselves as bisexual or heterosexual, a group that might be considered more compliant with the structures of heteronormativity when compared with self-identified gay respondents.

Younger mean ages were verified among groups who reported any episode of motivated violence. This is in line with findings from the FRA survey, which demonstrated a higher prevalence of victimization among young adults (aged 18 to 24), significantly decreasing with age (Blondeel et al., 2018). Our study also illustrated significant associations between experiences of victimization and predictors of poor social conditions, such as lower educational levels and the absence of formal employment. These findings suggest that adverse environments interact synergistically in determining the occurrence of bias-motivated violence, a major social issue. It is relevant to note the greater prevalence of motivated violence in the last 12 months in MSM natives of Brazil or other American countries than in those born in Portugal or other European countries. This may be attributable to the participation of other forms of bias, such as ethnic

or color discrimination, as contributors to the occurrence of victimization, besides the sexual stigma.

The Lisbon Cohort of MSM analysis evidenced significant associations between experiencing victimization and recognized sexual risk behaviors (Menza et al., 2009; Smith et al., 2012): a higher proportion of victimization among those reporting condomless anal intercourse (with steady partners) and drugs or alcohol use. Another cause of concern is the substantial proportion of individuals in the Lisbon Cohort who reported having had anal intercourse for the first time before 14 years old and the higher prevalence of bias-motivated violence experiences among them. Our study did not inquire about some specificities of those experiences, especially whether involving peers of similar ages. Further research on this topic must be done in the next questionnaire version for the cohort or other studies. Nevertheless, it is arguable that at least part of these reports might constitute childhood sexual abuse based on Portuguese legislation (Portuguesa, 1995). A positive association between HIV-related risks and childhood sexual abuse has already been established (Xu et al., 2018). This could suggest a syndemic production involving bias-motivated violence and markers of sexual risk behaviors.

Bias-motivated victimization among MSM in the Lisbon Cohort was associated with knowledge and use of HIV prevention measures, both PEP and PrEP. This may translate to eligibility determination based on the criterion of social vulnerability present in the Portuguese PrEP guidelines. MSM who experienced a combination of psychosocial health problems (i.e., bias-motivated victimization and its interrelated conditions as presented above) may have sought more frequently healthcare supporting information and healthcare facilities, where markers of sexual risk behaviors could be identified, and counseling about PEP or PrEP provided.

Unexpectedly, we did not find significant associations between experiencing bias-motivated violence and the HIV and syphilis results at baseline. As presented above, we have anticipated a positive association between the prevalence of HIV and syphilis in the Lisbon Cohort baseline and victimization experiences, which the data did not confirm. We may attribute this to the small absolute number of reactive cases in the baseline analysis, which could fail to find statistically significant differences. Another possible explanation in the Lisbon Cohort of MSM may be that even though a positive association was found between condomless anal intercourse (CAI) (the main route of HIV transmission in the MSM group (Connell, 2012; Smith et al., 2012)) with steady partners and lifetime victimization, no differences were observed regarding CAI with occasional partners, as well as with condom use in anal intercourse with both steady and occasional partners concerning recent victimization. This means that the exposure to CAI among recent victims was similar to that of non-victims. In this context, it is more plausible that the occurrence of HIV was not also different in the two groups. Moreover, the increased awareness and utilization of HIV biomedical prevention measures, PrEP and PEP, among victimized MSM could have potentially mitigated their risk of HIV infection.

Additional limitations of the study must be noted. Most of them are intrinsic to the design of cross-sectional studies. Furthermore, in the Lisbon Cohort of MSM, violence measures were considered necessary but were not intended to occupy too much time in these questionnaires. Therefore, our questions did not include several types of violence and did not allow us to distinguish the frequency of physical or verbal forms of violence. However, the main concern of using general questions and not a standardized instrument is the underestimation of violence, as people may find it difficult to identify themselves as victims.

As a facility-based structure, the Lisbon Cohort of MSM is unlikely to provide a representative sample of the MSM population. This limits our ability to infer conclusions from our findings for the adult MSM population. On the other hand, historically, MSM configures a "hard-to-reach" population, and the community-research partnerships securely constitute one of the best applicable strategies for improving group participation. However, leveraging community-research partnerships has proven to be an effective strategy to enhance participation from this group. It is also noteworthy that our study focuses on MSM who seek HIV testing and counseling, which might not reflect the risk profiles of the wider MSM community.

Our confidence in the peer-based approach to lessen social desirability bias stems from its foundation in shared experiences and identities between researchers and participants. This method facilitates a more comfortable and relatable environment for respondents, encouraging openness and honesty in discussing sensitive topics. By sharing similar backgrounds or experiences with participants, peer interviewers inherently understand the stigmas and sensitivities that might influence responses. Furthermore, our approach includes comprehensive training for peer interviewers on addressing sensitive topics delicately and without judgment, enhancing the reliability of self-reported data. However, we acknowledge that while this method can significantly reduce bias, it does not eliminate it. The efficacy of the peer-based approach in minimizing social desirability bias underlines the importance of designing research methodologies that consider the unique contexts and experiences of study populations. Despite these limitations, the study offers valuable insights with significant public health implications.

Public Health Implications

Our research in the Lisbon Cohort of MSM has provided an alarming overview of bias-motivated victimization among MSM in an urban center. Further research should provide a better description of those experiences of bias-motivated violence among participants of the Lisbon Cohort of MSM through qualitative methods.

Addressing bias-motivated victimization as a human rights and public health issue is essential, especially given its consequences for communities and health equity. Our study on cisgender MSM highlights the intersection of violence with adverse conditions and risky behaviors, supporting the need for comprehensive violence prevention strategies. While focused on cisgender MSM, the findings underline the importance of inclusive efforts to protect all sexual and gender minorities. We recommend a collaborative, evidence-based approach involving public health, justice, education, and social services to develop gender-transformative programs tailored to the diverse needs of the LGBTQ + community. This multi-sector engagement aims to respond to bias-motivated victimization and promote health equity effectively.

Author Contribution LV performed data analysis and wrote the first draft of the manuscript. PM and SF participated in the study design, helped write the manuscript, reviewed the analysis and interpretation of data, and reviewed the manuscript for important intellectual content. MO and MR were involved in the recruitment and data collection management, reviewing the analysis and interpretation of data, and reviewing the manuscript for important intellectual content.

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Data Availability Data are available upon reasonable request to the corresponding author.

Declarations The authors declare that this manuscript is an accurate and transparent account of the study being reported, that no important aspects of the study have been omitted, and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

Conflict of Interest The authors declare no competing interests.

Ethics Approval The study protocol was approved by the ethics committee for health from the University Hospital Centre São João/Faculty of Medicine of the University of Porto (ID 104/12).

Consent to Participate Written informed consent was obtained from all participants, and no identifying information was collected.

Code Availability Not applicable.

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