LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE & MPOWER PROGRAMME AT HIV IRELAND

EMERGE

EFFECT OF COVID-19 AND GOVERNMENT RESTRICTION ON THE SEXUAL HEALTH AND WELL-BEING OF GAY AND BISEXUAL MEN IN IRELAND

AUTHORS

DR T CHARLES WITZEL
Sigma Research, London School of Hygiene and Tropical Medicine

MR ADAM SHANLEY
MPOWER Programme, HIV Ireland

MR PETER WEATHERBURN
Sigma Research, London School of Hygiene and Tropical Medicine

HIV Ireland · MPOWER · Sigma Research · London School of Hygiene & Tropical Medicine

Table of Contents

List of tables and figures

Tables

Figures

Summary

Background

The COVID-19 crisis has had an enormous impact globally and affected almost every area of life in the countries which have been worst hit. This includes disruption to health care services, restrictions on social interactions, closures of parts of the economy, job losses and limits on social and sexual relationships. In the Republic of Ireland, COVID-19 restrictions have included national lockdowns and a tiered system of restrictions aiming to limit social contact to protect the health service and reduce morbidity and mortality.

Gay, bisexual and other men who have sex with men (gbMSM) may be at greater risk of poor health and well-being outcomes related to the COVID-19 crisis and government restrictions. GbMSM have higher rates of HIV and STIs than other groups. Closing sexual health services during the COVID-19 crisis will have disrupted gbMSM's ability to access HIV and STI testing, as well as other preventative services. In addition, gbMSM tend to have poorer mental health and higher rates of substance use compared to heterosexual people and these issues may have been made worse during the pandemic.

Understanding the scale and impact of these issues, and which sub-groups of gbMSM are most affected is critical in designing responses which will aid recovery efforts targeting these groups.

The EMERGE study (**E**ffect of COVID-19 and govern**me**nt **r**estriction on the sexual health and well-being of **g**ay and bis**e**xual men) is a collaborative survey funded by HIV Ireland as part of its MPOWER programme and run by Sigma Research at the London School of Hygiene and Tropical Medicine.

EMERGE aims to investigate the effect that COVID-19 and associated government restrictions have had on the sexual behaviour, health and well-being of gbMSM in Ireland.

Methods

We ran an anonymous online survey between 4th June and 5th July 2021 recruiting 942 gbMSM resident in the Republic of Ireland. Recruitment occurred online through social media (Facebook, Instagram, Twitter), dating apps (Grindr) and the LGBT press. The survey was hosted on Alchemer online survey software.

Results

The recruited sample was predominantly gay (85%, n=799), cisgender (98%, n=921), with a mean age of 37 years (range 18-89, median 34). Most (74% n=689) were born in Ireland, with Brazil being the next most common country of birth (8%, n=80). Following was the UK (4%, n=40), then Poland (1% n=14) and Spain (1% n=10).

Sixty-one percent of the sample was based in Dublin for the majority of the COVID-19 crisis. The sample was highly educated (68%, n=642 achieved degree or higher). Six percent of respondents reported having a disability.

The vast majority of participants (72%, n=668) reported having no partners or reducing their partner numbers during the COVID-19 crisis. COVID specific prevention measures during sex with new or casual partners included enhanced hygiene techniques, sex without mouth-to-mouth contact, and wearing masks during sex.

Sexual health service access was highly disrupted. GbMSM between the ages of 18-24 years old, older than 35, bisexual, based outside of Dublin and those without a degree were least likely to access services during this period. Services which were most disrupted were STI testing, HIV testing, PrEP and sexual health vaccinations. HIV positive gbMSM on the whole were able to continue to access HIV care.

Overall 17% of participants were concerned about their alcohol use, drug use, or both. Of participants who had consumed alcohol in the preceding 12 months, 27% (n=213) screened positive for alcohol use disorder. Although prevalence varied by age with peak prevalence of problem drinking between 25-54, results were statically significant only for differences in region, with more gbMSM in Dublin screening positive. Cannabis and cocaine were the most commonly used drugs.

The majority of gbMSM (75%, n=684) reported that their mental health was a little or a lot worse during the COVID-19 crisis. The closure of LGBT venues and social distancing restrictions contributed to a worsening of well-being in 57% of gbMSM. Only 23% of gbMSM accessed mental health services during this period.

Employment was impacted for 34% of participants; this was most commonly having reduced income followed by being in receipt of Pandemic Unemployment Payment. Impacts on education were felt by 24%, most commonly classes moving online or changes to further education plans.

Discussion

Despite pronounced reductions in frequency of sex with new and casual partners, there is substantial unmet sexual health need as the COVID-19 crisis continues to evolve. Large portions of the gbMSM population were unable or did not attempt to access sexual health services despite obvious need. Services urgently need to be expanded and additional HIV/STI testing options implemented to meet the needs of diverse gbMSM.

Problematic alcohol and drug use was common in the sample, highlighting the importance of targeted interventions supporting individuals struggling with these issues. In addition, work developing the capabilities of drug and alcohol services to meet the needs of gbMSM is required.

A focus on improving well-being for gbMSM is critical. This group frequently has more fragile social networks, something clearly exacerbated by COVID-19 social distancing regulations and venue closures.

1. Background

The COVID-19 crisis has caused enormous disruption to social, economic and healthcare systems worldwide. Governments have had to quickly adapt and prioritise maintaining healthcare systems by enforcing social distancing and other measures to reduce viral transmission. This has impacted virtually every aspect of everyday life in the most affected countries.

Significant challenges have been faced in Ireland. As of the 1st of March 2022, Ireland has had over 1.3 million COVID-19 cases and 6,497 deaths (1). Like many other nations, Ireland has implemented rapidly changing measures which have sought to reduce the impact on the health service by reducing SARS-COV-2 transmissions (2). The term "government restrictions" is used throughout this report to denote any public policy measure adopted by the Irish Government following the onset of the COVID-19 pandemic aimed at curbing transmission of the virus among the general population, minimising pressure on available health service resources.

Gay, bisexual and other men who have sex with men (gbMSM) in Ireland face higher incidence of HIV and sexually transmitted infections (STIs) than the general population, have higher rates of substance misuse and of common mental illness (3-6). These three, interrelated epidemics are often termed a syndemic whereby effects of each amplify and exacerbate the others (7-9). The COVID-19 crisis is likely to have worsened all three morbidities in distinct ways, driven by lack of access to services, increases in substance use and common mental illnesses. This could exacerbate health inequalities, alongside increasing financial precarity and decreases in community support.

Sexual health services have faced substantial disruption with significant service reductions, due to government restrictions and sometimes complete service closure, including those driven by staff shortages caused by redeployment. This has likely led to a decrease in testing opportunities and potentially longer waiting times for STI treatment. Evidence suggests limits on social mixing have had detrimental impacts on mental health in Ireland (2, 10); gbMSM may be more vulnerable to these as this population often has weaker social ties, something which may be especially true for certain subgroups such as older men and migrants (11-15).

New and escalating levels of substance use during the pandemic has been observed in many settings (16-18). It is plausible that this will disproportionately impact gbMSM in Ireland given the higher rates of substance use observed in this group compared to the general population prior to COVID-19 (3, 4). In addition, economic precarity may have a more pronounced impact on some gbMSM because of pre-existing vulnerabilities, again perhaps leading to mental health challenges (19). Protective behaviours (including access to PrEP and PEP) may have been interrupted due to issues related to accessing clinical services, and through changes in personal circumstances including worsening mental health.

GbMSM from Latin American backgrounds are a critical priority group in Ireland in the context of increased risk to health and well-being (3, 20). The COVID-19 crisis may have had greater impacts on this group when compared to White Irish gbMSM given their pre-existing vulnerabilities related to employment, weaker social ties and marginalisation. In addition, as Latin American gbMSM are disproportionately represented in sex work, incomes for some men will likely have been curtailed by social distancing measures as sex work globally has been disrupted (21).

Understanding the potential effects of the COVID-19 crisis to date on different groups of gbMSM is essential for planning and delivering sexual health and well-being services in the near and medium terms. Social and structural marginalisation drive significant health inequalities within the diverse communities represented in gbMSM which interact with HIV and STI risk, ability to access services as well as mental well-being and substance use. These are related to educational attainment, country of origin and sexual identity (3, 22). Recovery efforts as the pandemic moves into a new phase must address both those inequalities which existed previously and those exacerbated by the pandemic. Understanding the scale of these is therefore critical.

EMERGE is a collaborative study funded by HIV Ireland as part of its MPOWER programme and conducted by Sigma Research at the London School of Hygiene and Tropical Medicine. The study methodology employed a cross-sectional survey of gbMSM in Ireland to investigate the impact of the COVID-19 crisis, including government restrictions, on the sexual behaviour, health and well-being of this group. The recommendations arising from the findings of this study should inform the planning of effective service provision aimed at gbMSM.

Aim:

To investigate the effect that COVID-19 and associated government restrictions have had on the sexual behaviour, health and well-being of gbMSM in Ireland.

Objectives

1. Understand the effect of COVID-19 on the sexual behaviours (including frequency of sex, number of partners, condom use, PrEP use) of gbMSM and how and where they met partners for sex since the onset of the pandemic and the government restrictions limiting social interaction.

2. Understand the effect of COVID-19 on gbMSM's access to sexual health services and prevention strategies, particularly HIV and STI screening, testing and diagnosis, and access to PrEP/PEP.

3. Understand the effect of COVID-19 on gbMSM's employment status, income, drug and alcohol use, and mental well-being since the onset of the pandemic.

4. To provide key findings that can inform planning and development of resources, services and interventions for sexual health service providers and other partners working with gbMSM, health policy and practice.

2. Methods

EMERGE was a rapidly conducted cross-sectional, anonymous online survey of gbMSM (cis and trans) resident in the Republic of Ireland. A cross-sectional survey was chosen to gather a broad but thorough understanding of the behaviours and needs of gbMSM during the crisis. The resulting data provides considerable insight into the scale of the challenges for service planning ahead and of potential solutions.

Eligible participants were men (cis and trans) aged 18 years or who lived in Ireland for some or all of the COVID-19 pandemic, and who reported sexual attraction to other men (cis or trans) or lifetime sex with men (cis or trans).

2.1 Survey design and measures

Survey items were developed by the core team in collaboration with the project advisory committee. The survey questionnaire is available to access at mpower.hivireland.ie/emerge.

The survey asked for baseline details (age, gender, sexual orientation, ethnicity, country of birth, highest educational qualification, employment status, income, city & county of residence) and behavioural details (number of partners in preceding 3/12 months, condom use in preceding 3/12 months, HIV testing history, PrEP use). We also asked for perceptions of how their own sexual behaviour changed during the crisis. We asked about specific sexual behaviours to assess not only sexual health need, but also understand potential COVID risk. We also asked about the use of specific drugs to enhance sex (termed chemsex) and whether or not chemsex participation had changed during the COVID-19 crisis.

In addition, we collected data on ability to access sexual and mental health services, changes in PrEP use, drug and alcohol use and impact of the COVID-19 crisis on employment and education. We asked participants the degree to which access to sexual health service was disrupted. We included the CAGE-4 validated scale in order to screen for potential alcohol dependence (AUD). It includes 4 questions and a cut-off value of ≥2 positive answers was utilised, which is recommended to detect potential alcohol use dependence with the optimal combination of sensitivity and specificity (23). Although internationally-validated, CAGE-4 remains a screening rather than diagnostic tool (24).

Data on ability to access sexual and mental health services, changes in PrEP use, drug and alcohol use and impact of the COVID-19 crisis on employment and education was also collected. The purpose of collecting this information was to investigate the degree to which access to sexual health service access was disrupted among the cohort of participants.

Participants were asked to provide information about their COVID-19 vaccination status, willingness to be vaccinated, how anxious they were about COVID-19 and about their precautionary behaviours in sexual situations.

The survey was delivered in English, Spanish and Brazilian Portuguese to meet the needs of diverse communities and reduce bias related to language fluency.

The survey was piloted with 10 gbMSM (6 English, 2 Brazilian Portuguese and 2 Spanish speakers) to ensure that any errors were identified and corrected before roll-out.

Upon completing the survey, participants were provided with additional signposting information to the MPOWER Programme and other relevant organisations for further information and support.

2.2 Consent to participate and Data Protection

The survey was designed to be anonymous. All participants were required to consent to participate prior to accessing the questionnaire. The opening page of the survey described the project, the inclusion criteria and the data protection procedures. Potential participants were required to tick a box to confirm that they provided consent to participate in the study and for their data to be processed.

2.3 Sampling approach and recruitment

We sought an overall sample of 800 gbMSM from across the country.

Recruitment was primarily through social media (Facebook, Instagram & Twitter), with smaller numbers recruited through geo-social sexual networking apps (Grindr, Squirt & Growlr), and through the LGBT press during a project launch campaign.

Recruitment used motivational language and imagery inclusive of a range of gbMSM identities. The language used emphasised how participation in the study would contribute to the well-being of the gbMSM community while also highlighting the potential to inform service delivery and planning. The report appendix contains example adverts.

Recruitment source	% (Number)
Apps	21.2% (200)
Paid social media	31.5% (297)
Organic social media	30.9% (291)
LGBT press	7.4% (70)
Targeted social media	7.2% (68)
Other	2.0% (16)

Table 1: Recruitment by source, EMERGE Survey, 2021

2.4 Analysis

Data was analysed using quantitative research software Stata V16, cleaned and organised by variables of interest. Analysis began with a descriptive analysis of dependent and independent variables. Following, we applied chi^2 tests for associations between independent variables and outcomes of interest.

Ethnicity categories were taken from standard Irish ethnicity codes. Responses were re-categorised into Asian, Black, Latin American, White and Other.

In order to understand service access need, we created a binary variable from a question investigating sexual health service access experiences. Those who were able to access with no difficulty or with some difficulty were classed as 'able to access', and those who were not able to access services or did not attempt to access services as 'did not access services'. We then explored associations between service access and baseline demographic and behavioural variables of interest using chi^2 tests.

We created a variable classifying participants who scored 2+ on CAGE questions as screening positive for alcohol use disorder. We then compared prevalence of alcohol use disorder by key demographic and behavioural variables using tests.

Ethical approval was granted by the LSHTM observational research ethics committee (ref: 25827) and the Irish College of General Practitioners research ethics committee (ref:21_0016).

3. Results

3.1 Recruitment

Overall 946 gbMSM were recruited to the study between June 5th and July 4th 2021. During the initial phase of recruitment, an error in the survey which allowed participants who did not live in Ireland during the COVID-19 crisis was discovered and corrected. During analysis 4 ineligible participants were identified and removed, leaving a final sample of 942 gbMSM.

EMERGE primarily recruited participants through social media (Twitter, Facebook & Instagram) through a series of paid and unpaid adverts, including targeted posts seeking specific groups (e.g. Latin American gbMSM, gbMSM who use PrEP). 70% of participants came through these channels. Paid advertising on apps (Grindr, Squirt and Growlr) were also used and contributed 20% of the sample. Small numbers (9%) came through other recruitment sources including the LGBT press and an email mailing list. Table 1 provides overall recruitment source details.

The majority of participants completed the survey in English (n=915, 97%) with a minority completing it in Brazilian Portuguese (n=18, 2%) and Spanish (n=9, 1%).

3.2 Sample description

This section describes the demographic features of the recruited sample as well as their sexual health status. Following we outline their personal circumstances during the COVID-19 crisis before exploring their history of COVID-19 infections and their vaccination status.

3.2.1 Demographic features

The recruited sample was predominantly gay (85%, n=799), cisgender (98%, n=921), with a mean age of 37 years (range 18-89, median 34). Most (74% n=689) were born in Ireland, with Brazil being the next most common country of birth (8%, n=80). Following was the UK (4%, n=40), then Poland (1% n=14) and Spain (1% n=10).

Sixty-one percent of the sample was based in Dublin for the majority of the COVID-19 crisis. The sample was highly educated (68%, n=642 achieved degree or higher). Six percent of respondents reported having a disability.

3.2.2 Baseline sexual health status

Seventy-five percent were HIV negative at last test (n=707), 17% (n=161) had not previously tested for HIV and 8% (n=70) were HIV positive. Of the HIV negative participants who had previously tested for HIV, 51% had tested in the 3-months preceding enrolment, 14% in the 3-12 months preceding and 35% longer than 12 months previously. Eighteen percent of the HIV negative participants reported they were using PrEP in January 2020.

Of the HIV positive participants, 91% were on treatment with an undetectable viral load; 9% (n=6) were not on treatment. Table 2 provides sample baseline demographics.

Overall 80% of the sample had previously tested for STIs. Of those who had, 39% had done so in the preceding 3 months, 23% within 3-12 months, and 39% longer than 12 months prior to enrolment.

3.2.3 Personal circumstances during the COVID-19 crisis

The majority of participants (79%) were in employment, with 6% unemployed. The majority of the remainder were students (9%), retired (4%), or medically retired / on long term sick leave (1%). Most participants (n=532, 58%) were single, with 19% in a monogamous relationship, 8% in a complicated relationship and 15% in a non-monogamous relationship. Overall 25% were either cocooning (defined as staying home most or all of the time because of high clinical vulnerability to COVID-19 or older age) or living with someone who was cocooning. Table 3 describes living arrangements.

Table 2: Baseline demographic and behavioural features, EMERGE survey, 2021

Characteristic	% (Number)
Age (Mean = 37)	(n=942)
18-24	13.7 (129)
25-34	36.8 (347)
35-44	26.3 (248)
45-54	14.1 (133)
55-64	6.2 (58)
65+	2.8 (27)
Sexual orientation	**(n=942)**
Gay or homosexual	84.8 (799)
Bisexual	12.9 (121)
In another way	2.3 (22)
Gender	**(n=942)**
Cis man	97.8 (921)
Trans man	2.2 (21)
Ethnicity	**(n=941)**
White	89.2 (839)
Asian	2.1 (20)
Black	1.1 (10)
Latin American	6.4 (60)
Other	1.2 (12)
Education	**(n=925)**
Degree or higher	69.4 (642)
Higher education below degree level	15.8 (146)
Leaving certificate or equivalent	11.8 (109)
Intermediate/junior/group certificate	2.1 (20)
No educational qualifications	0.9 (8)
Region	**(n=926)**
Dublin	62.3 (569)
Rest of Leinster	14.8 (136)
Munster	15.8 (147)
Connaught & Ulster	8.0 (74)
Region of birth	**(n=935)**
Ireland	74.3 (689)
Latin American & Caribbean	9.2 (92)
Other	15.7 (146)
Disability	**(n=909)**
Yes	6.3 (57)
No	93.7 (852)
Income in Euros per year	**(n=911)**
0-9,999	11.4 (104)
10,000-19,999	11.6 (105)
20,000-39,999	31.6 (287)
40,000-99,999	39.1 (356)
100,000+	6.4 (59)

Table 3. Living arrangements for the majority of the COVID-19 crisis, EMERGE survey, 2021
*** direct provision, rehabilitations facility, prison.**

Who have you lived with during the COVID-19 crisis?	% (Number)
No-one / on my own	17.9 (186)
Others in an institutional co-living facility*	0.5 (5)
Parents / other family	24.3 (252)
Regular house/flat mates	27.5 (286)
Romantic partners	26.6 (277)
Children	1.9 (20)
Other	1.4 (14)

3.2.4 COVID-19 infections and vaccinations

At the time of fieldwork in June 2021, 7% (n=61) of participants reported previously having had a test confirming they had COVID-19, while a further 12% (n=110) suspected so but either were unable to or did not access testing (see fig 1). Just over half (52% n=468) had received either one or two doses of a COVID-19 vaccine by the time our fieldwork was undertaken. Of the unvaccinated participants, reported vaccine hesitancy was low: 4% (n=9) stated they would not take a vaccine when offered, while 3% (n=7) were unsure. Response rates to this question were low however (<50%). The remaining 93% (n=199) of the unvaccinated group would take a COVID-19 vaccine when offered.

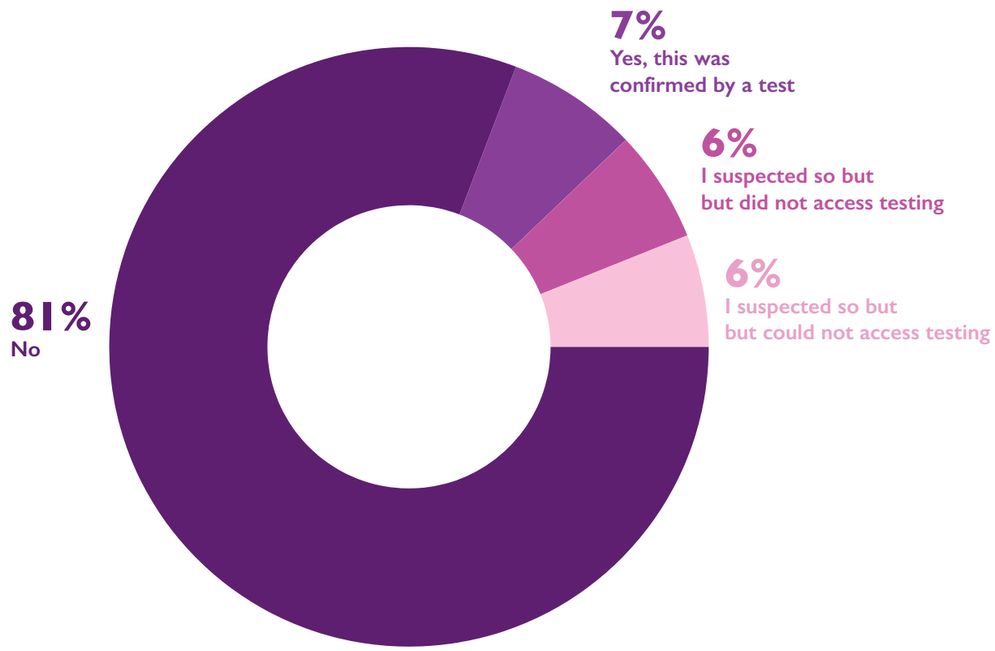

Figure 1: Have you had COVID-19?

3.3 Sexual behaviour

This section outlines results pertaining to sexual behaviour during the COVID-19 crisis overall, then by the 12- and 3-months preceding recruitment. We explore changes in sexual partner numbers during this period, protective behaviours adopted and types of sex had.

3.3.1 Sexual behaviour during the COVID-19 crisis overall

Most gbMSM (60% n=558) had sex with new or casual partners during the COVID-19 crisis. The majority (91% n=505) met casual partners online. Cruising grounds or other public places were less common (15% n=82), followed by sex parties (11% n=60) and other meeting places (6% n=31). The vast majority (72% n=668) either had no sex or reduced the amount of sex they were having during the COVID-19 crisis, with a small proportion (11% n=99) increasing their sexual activity levels (see table 4). Two percent of participants (n=22) had sold sex since January 2020, with a smaller number (n=4) reporting they started selling sex because of financial pressure related to the COVID-19 crisis.

Anxiety or concern about contracting COVID-19 through sex with new or casual partners was reported frequently, with only 21% not concerned about contracting COVID through sexual contact (see Figure 2).

Table 4: changes in sexual contact during the COVID-19 crisis

Thinking of all types of sex involving physical contact, have you had more or less during the COVID-19 crisis?	
Response	**% (Number)**
A lot more	5.0 (46)
A few more	5.7 (53)
About the same	16.6 (157)
A few less	9.9 (92)
A lot less	40.4 (374)
I have not had any partners during the crisis	22.0 (204)

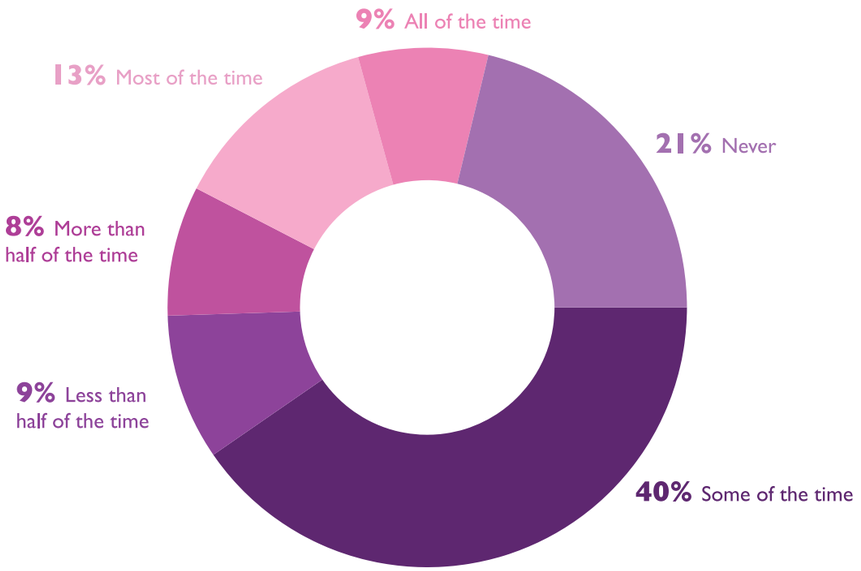

Figure 2. How often have you felt anxious or concerned about contracting COVID-19 through sex with new or casual partners?

GbMSM who reported having sex with new or casual partners during the COVID-19 crisis (n=550) were asked about what COVID specific protective behaviours they used (if any). Although just over half of gbMSM did not engage in specific protective behaviours for COVID-19 during sex, a range of methods to reduce risk were used across the sample, the most popular being enhanced hygiene techniques, followed by sex without mouth-to-mouth contact and wearing masks during sex (see Figure 3).

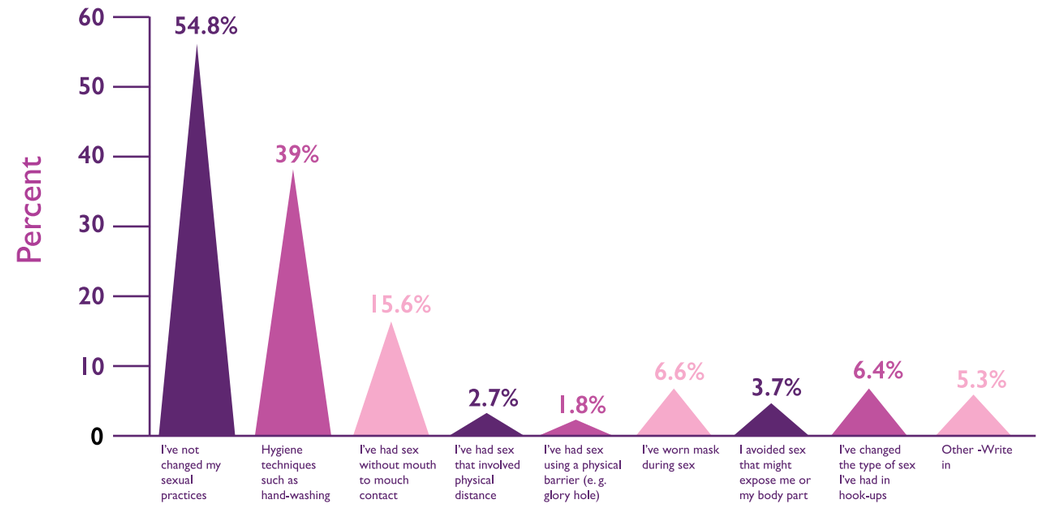

Figure 3. What, if any, COVID-19 prevention measures have you taken during sex with new or casual partners?

3.3.2 Sexual behaviour in the preceding 12-months

In the 12-months preceding the survey, 76% (n=697) of gbMSM reported having male (cis or trans) sexual partners. Types of sex were diverse, oral sex being most common, followed closely by anal sex (Figure 4 provides more information). Approximately 11% (n=77) reported chemsex participation during that period. Of the 11% reporting chemsex, 53% (n=40) had either less or the same amount as in the preceding 12-months as they would have had usually, while 47% (n=36) increased the amount of chemsex they had compared to what they would have had usually.

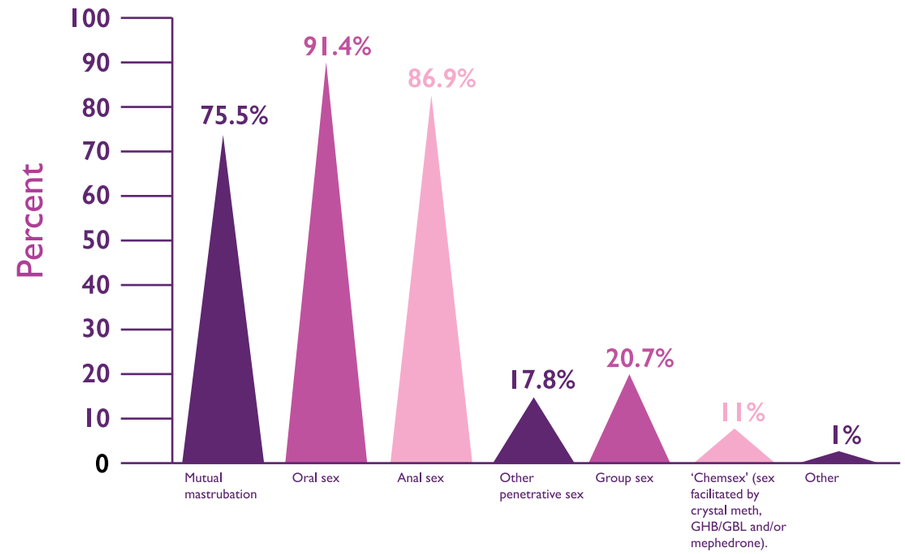

Figure 4: Type of sex in the preceding 12-months in those reporting sexual behaviour.

Table 5: Anal and other penetrative sex partners in the preceding 12-months (overall and condomless)

Anal and other penetrative sex in preceding 12 months			
All penetrative sex partners	**% (number)**	**Condomless sex partners**	**% (number)**
0	0.2 (1)	0	21.2 (130)
1	29.6 (182)	1	36.1 (221)
2-3	25.8 (159)	2-3	22.7 (139)
4-6	18.5 (113)	4-6	7.8 (48)
7-9	7.5 (46)	7-9	3.9 (24)
10+	18.5 (114)	10+	8.3 (51)

3.3.3 Sexual behaviour in the preceding 3-months

In the preceding 3-months, 63% of gbMSM reported having male (cis or trans) sexual partners. As with at the 12-month point, oral and anal sex were most popular, with relatively small numbers having chemsex (9%, n=50). Of the 63% who reported having anal or other penetrative sex partners in the preceding 3-months, 76% (n=377) reported having 1-3, with small numbers having 10 or more. Condom use patterns were similar to 12-months (see Table 6).

Table 6: Anal and other penetrative sex partners in the preceding 3-months (overall and condomless)

Anal and other penetrative sex in preceding 3 months			
All penetrative sex partners	**% (number)**	**CAI partners**	**% (number)**
0	0.8 (4)	0	22.7 (113)
1	43.3 (216)	1	43.9 (219)
2-3	32.3 (161)	2-3	21.0 (105)
4-6	12.0 (60	4-6	6.2 (31)
7-9	5.8 (29)	7-9	1.8 (9)
10+	5.8 (29)	10+	4.4 (22)

3.4 HIV & sexual health service access

This section describes access to HIV and sexual health services during the COVID-19 crisis. We provide analysis of which groups were least likely to access sexual health services during this period, and outline which services gbMSM struggled to access. We also explore changes in PrEP use and PEP accessibility.

3.4.1 Access to HIV services

HIV care remained accessible to most participants during the COVID-19 crisis: 87% (n=61) were able to access care while 13% (n=9) reported care disruption. Disruption was most commonly to bloodwork (56%, n=5) followed by mental health support (44%, n=4) and then HIV treatment (33% n=3).

3.4.2 Access to sexual health services

Sexual health services were disrupted primarily for HIV negative and HIV untested gbMSM, with less evidence disruption for those with diagnosed HIV.

In HIV negative / untested men, 19% (n=190) had attempted but were unable to access services, 41% (n=353) did not attempt to access, whereas 27% (n=232) had some difficulty but were ultimately able to access services, and 13% (n=115) accessed services with no difficulty. For HIV positive gbMSM, 44% (n=31) accessed services with no difficulty, compared to 21% (n=15) who had some difficulty but were able to access, 10% (n=7) who were unable to access services, and 24% (n=17) who did not attempt services.

In order to identify unmet sexual health service access need, we explored associations between demographic and behavioural characteristics and not accessing or not being able to access sexual health services during the COVID-19 crisis. In chi^2 tests, those most likely to not access or not be able to access services were gbMSM aged 18-24 years and 35-65+ years, bisexual men, gbMSM living outside Dublin, and those without a degree. HIV positive gbMSM were most likely to be able to access services. All tests for associations were statistically significant, demonstrating diversity of experience during the COVID-19 crisis based on demographic and behavioural variables. Table 7 presents full results.

HIV negative and untested gbMSM reporting difficulty with service access were asked what services they were attempting to access. Responses showed they were primarily attempting to access STI testing (82%, n=317), HIV testing (73%, n=283), PrEP (53%, n=204) with less than a quarter attempting to access sexual health vaccinations (22%, n=84), condoms and lube (17%, n=66), general advice (11%, n=41), PEP (5%, n=20) or chemsex support (1%, n=5).

When considering PrEP, 51% (n=82) of participants who were taking PrEP in January 2020 maintained their regimen, while 24% (n=38) interrupted and restarted, 11% (n=17) changed their dosing, 8.0% (n=13) interrupted and had not restarted but planned to, and 7% (n=12) stopped all together.

Overall, 7% (n=62) of HIV negative/untested men felt they needed PEP during the COVID-19 crisis, of these 36% (n=21) were able to access it, while the remainder either were unable to get to a clinic or emergency department (32%, n=19), didn't access PEP because of the emergency department charge (20%, n=12) or because they wanted to avoid clinics and hospitals during the crisis (18%, n=11). One man was told he was not eligible (see Figure 5).

HIV positive gbMSM who reported difficulty with service access (n=39) were primarily attempting to access STI testing (86%, n=19), sexual health vaccinations (32%, n=7) condoms and lube (14%, n=3) followed by general advice (14%, n=3).

Overall, 14% (n=126) participants experienced symptoms of an STI during the COVID-19 crisis, 12% (n=112) had an STI treated by a clinician. In a further question, 7% (n=60) reported self-medicating for an STI they thought they had.

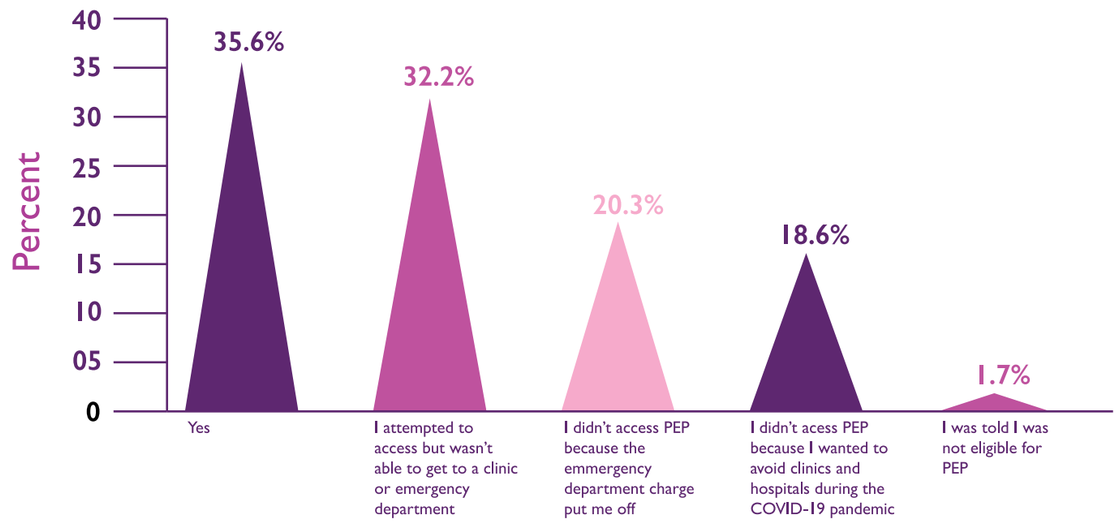

Figure 5: Access to PEP during the COVID-19 crisis for those who felt they needed it.

Table 7. Sexual health service accessing by demographic and behavioural variables using chi² test

Characteristic	Total	Accessed services % (n)	Did not access services % (n)
Overall	930	42.3 (393)	57.7 (537)
Age			
18-24	129	31.8 (41)	68.2 (88)
25-34	346	55.2 (191)	44.8 (155)
35-44	244	39.8 (97)	60.3 (147)
45-54	126	35.7 (45)	64.3 (81)
55-64	58	27.6 (16)	72.4 (42)
65+	27	1.1 (3)	88.9 (24)
			$Chi^2(5) = 48.2498$ P=0.000
Sexual Orientation			
Gay	789	44.0 (347)	56.0 (442)
Bisexual	119	32.8 (39)	67.2 (80)
In another way	22	31.8 (7)	68.2 (15)
			$Chi^2(2) = 6.3286$ P=0.042
HIV status			
Negative	702	46.6 (327)	53.4 (375)
Untested	158	12.7 (20)	87.3 (138)
Positive	70	65.7 (46)	24.3 (24)
			$Chi^2(2) = 77.8936$ P=0.000
Region			
Dublin	563	47.3 (266)	52.8 (297)
Rest of Leinster	136	32.4 (44)	67.7 (92)
Munster	144	41.0 (59)	59.0 (85)
Connaught & Ulster	73	26.0 (19)	74.0 (54)
			$Chi^2(3) = 19.1739$ P=0.000
Region of birth			
Ireland	682	40.0 (273)	60.0 (409)
LA & Caribbean	91	56.0 (51)	44.0 (40)
Other	144	45.1 (389)	54.9 (79)
			$Chi^2(2) = 8.9468$ P=0.011
Education Level			
High	637	47.6 (303)	52.4 (334)
Medium	252	30.6 (77)	69.4 (175)
Low	27	22.2 (6)	77.8 (21)
			$Chi^2(2) = 25.9570$ P=0.000

3.5 Drugs & alcohol

This section describes results from the drugs and alcohol portion of the survey. First, we explore the overall proportion who reported concerns with alcohol and/or drugs, then examine problem drinking by demographic and behavioural characteristics. We then explore types of drugs used, and the ability of gbMSM to access drug and alcohol services during the COVID-19 crisis.

3.5.1 Concerns with alcohol and drug use

Results on alcohol and drug use were highly variable. Seventeen percent (n=160) of the sample described being concerned about their alcohol or drug use, with the majority (59% n=94) being concerned about alcohol, with smaller numbers being concerned about drugs (22%, n=35) or both drugs and alcohol (19%, n=31).

In terms of alcohol, overall, 38% (n=354) reported that their alcohol consumption increased either a little or a lot during the COVID-19 crisis, with a similar proportion (34% n=319) reporting decreases in alcohol consumption or complete cessation, and 17% (n=155) reporting no change.

When considering drug use during COVID-19, 15% (n=139) reported that their drug use increased a little or a lot, with 13% (n=119) reporting that they reduced their drug use or stopped entirely; 61% (n=561) of the sample reported not using drugs at all.

3.5.2 Problem alcohol use

Using CAGE-4, a validated scale which assesses potential alcohol use disorder, 27% (n=213/782) of those who had drank in the preceding 12 months screened positive for alcohol use disorder (defined as a score of 2 or more). Table 8 reports proportions screening negative and positive on alcohol use disorder by demographic and behaviour variable with associations tested using chi² tests.

Groups with higher-than-average prevalence of alcohol use disorder were gbMSM between 26-45 years old, who described their sexual orientation as gay, were HIV negative, based in Dublin and born in Latin America and the Caribbean. However, differences in alcohol use disorder screening were statistically significant for area of residence only.

3.5.3 Types of drugs used

Among all who reported using drugs during the COVID-19 crisis (n=363), in the 12-months preceding recruitment, cannabis was most popular (62%, n=188), followed by cocaine (58%, n=174) and MDMA (46%, n=138). Methamphetamine and GHB/GBL were used by smaller numbers: 15% (n=45) and 23% (n=68) respectively. Figure 6 provides full details of the popularity of specific drugs among men that used any of these drugs.

When considering accessing services for alcohol or drug use, of those with concerns (n=160), 71% (n=112) reported not attempting to access services. A further 16% (n=25) did not know how to access services, 4% (n=7) were unsuccessful in attempts at access. Small numbers were able to access services with no problems (3%, n=5), or with some difficulty (6%, n=10).

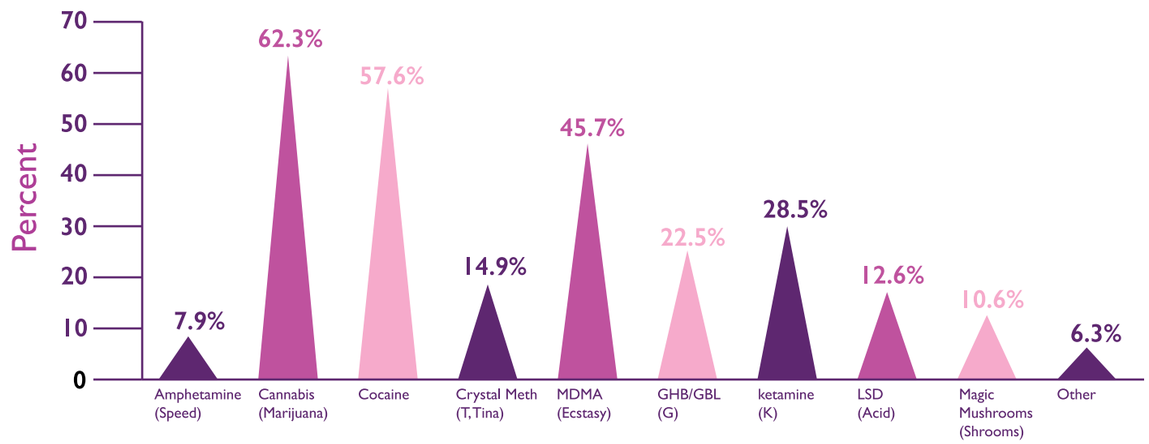

Figure 6: Types of drugs used during the COVID-19 crisis among gbMSM who had used drugs.

Table 8: Demographic and behavioural categories and alcohol dependence screening using Chi² tests

Characteristic		Alcohol use disorder screen negative	Alcohol use disorder screen positive
	Total	% (n)	% (n)
Overall	780	72.7 (567)	27.3 (213)
Age			
18-24	110	76.4 (84)	23.64 (26)
25-34	308	70.1 (216)	29.8 (92)
35-44	209	72.3 (151)	27.8 (58)
45-54	89	68.5 (61)	31.5 (28)
55-64	46	89.1 (41)	10.9 (5)
65+	18	77.8 (14)	22.2 (4)
			Chi^2=9.0558 p=0.107
Sexual Orientation			
Gay	663	71.6 (475)	28.4 (188)
Bisexual	100	79.0 (79)	21.0 (21)
In another way	17	76.5 (13)	23.5 (4)
			Chi^2=2.4936 p=0.287
HIV status			
Negative	594	71.6 (425)	28.5 (169)
Untested	130	78.5 (102)	21.4 (28)
Positive	54	72.2 (39)	27.2 (212)
			Chi^2=2.5791 p=0.275
Region			
Dublin	480	70.00 (336)	30.0 (144)
Rest of Leinster	114	71.9 (82)	28.1 (32)
Munster	120	77.5 (93)	22.5 (27)
Connaught & Ulster	55	87.27 (48)	12.7 (7)
			Chi^2=9.0735 p=0.028*
Region of birth			
Ireland	577	73.3 (423)	26.7 (154)
LA & Caribbean	77	63.6 (49)	36.4 (29)
Other	118	75.42 (89)	24.58 (29)
			Chi^2=3.7334 p=0.155
Education Level			
High	544	72.6 (395)	27.4 (149)
Medium	205	72.2 (148)	27.8 (57)
Low	22	77.3 (17)	22.73 (5)
			Chi^2=0.2582 p=0.879

3.6 Impacts on mental health, well-being, employment and education

This section described impacts on mental health and well-being for gbMSM during the COVID-19 crisis. Following we describe and characterise impacts on employment and education.

3.6.1 Impacts on mental health and well-being

Impact on mental health and well-being were felt by many gbMSM during the COVID-19 crisis. Overall, 75% (n=684) described their mental health as being a little or a lot worse, 16% (n=142) reported no change, while 10% (n=92) reported that it had improved a little or a lot.

The closure of LGBT venues during the COVID-19 crisis was felt to contribute to a worsening of well-being in 57% of gbMSM (n=523) while 22% reported no impact (See Figure 7).

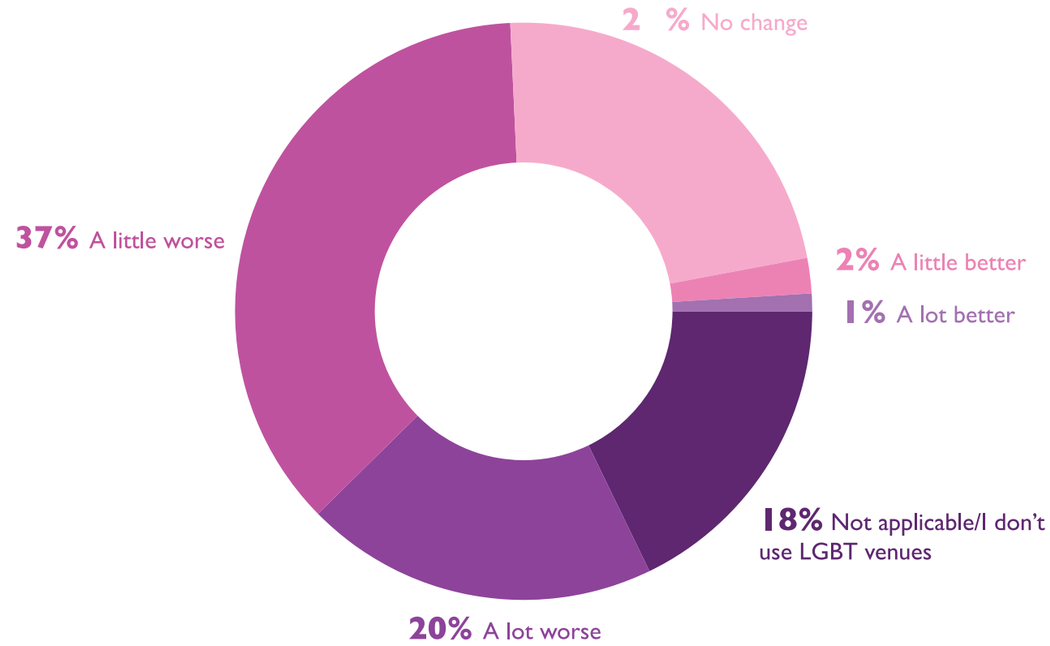

Figure 7. Thinking about the closure of LGBT venues during the COVID-19 crisis, how has this impacted your well-being?

Limits on socialisation with other LGBT people through sport or social groups were also felt by many: 61% (n=554) reported this negatively impacted on their well-being a little or a lot, 18% (n=165) reported no change based on this, while 3% (n=24) reported an improvement. 18.9% (n=173) felt this was not applicable as they did not participate in such groups.

Mental health service access during the COVID-19 crisis was highly variable. Although 34% (n=314) felt they did not need to access these, 7% (n=61) did not know how to access such services, 6% (n=54) tried unsuccessfully and 11% (n=104) were able to access but with some difficulty (see Figure 8).

Participants reported varying amounts of COVID-19 anxiety: 36% (n=333) reported they felt anxious about COVID-19 more than half the time or more frequently. Only 8% (n=71) reported they were never anxious about COVID-19. See fig 11.

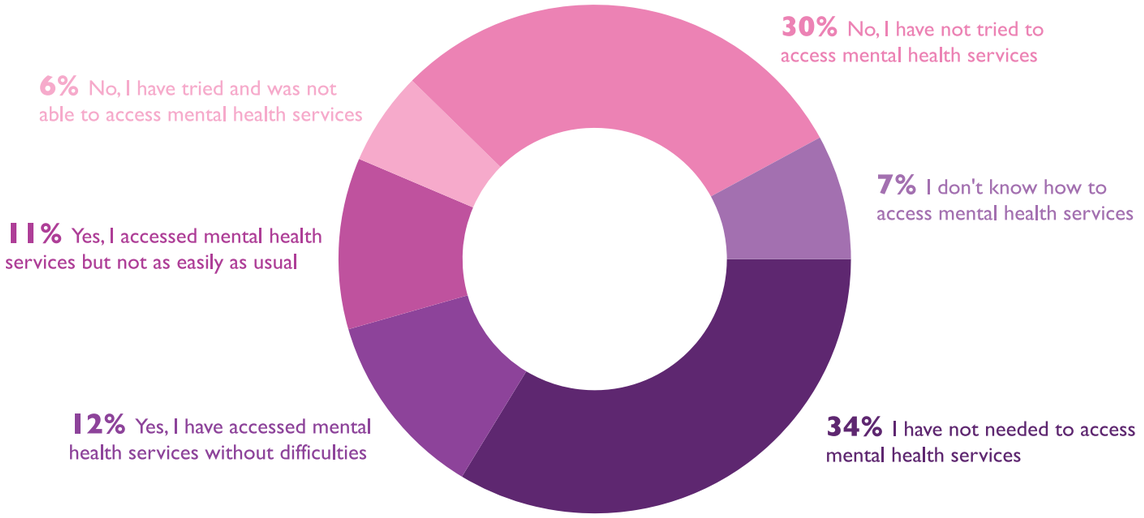

Figure 8. Access to mental health services during the COVID-19 crisis.

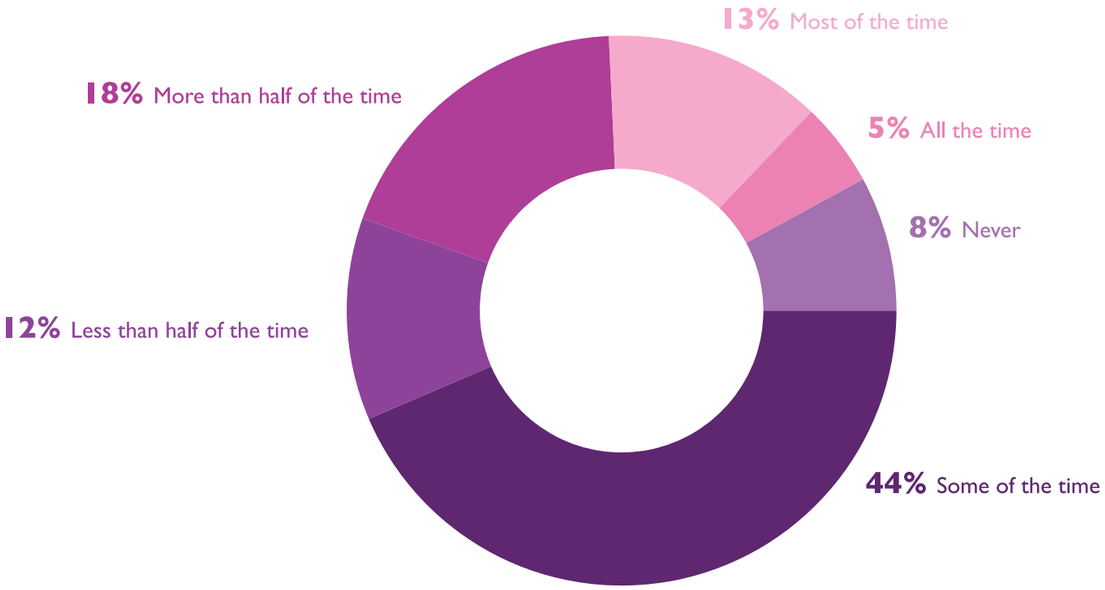

Figure 9. How much of the time have you felt anxious about COVID-19 overall?

3.6.2 Impacts on employment

This section describes impacts on employment and education for gbMSM.

Overall 34% (n=314) said the COVID-19 crisis had impacted on their employment opportunities, of which 54% (n=502) said it had not and 12% (n=111) said this was not applicable. For those reporting impacts, these took several forms: most commonly gbMSM reported having less income (39%, n=121), and/or being in receipt of the Pandemic Unemployment Payment (36% n=110), followed by a decrease in working hours (29%, n=88) (see Figure 10).

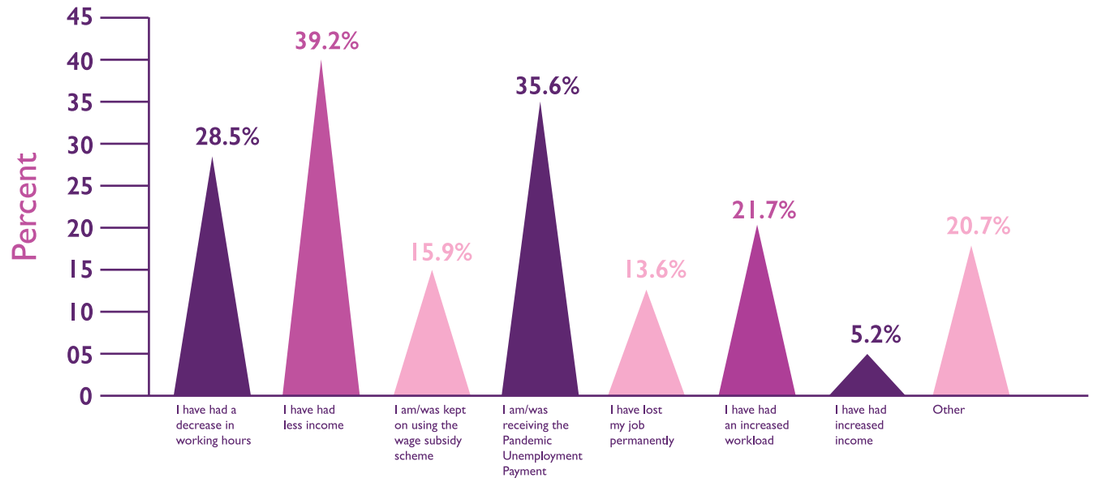

Figure 10: How has the COVID-19 crisis impacted on your employment opportunities?

3.6.3 Impacts on education

Impacts on education were reported by 24% of gbMSM (n=221). For those that reported an impact of COVID-19 on their education, there were impacts to how they learned, such as classes moving online (80%, n=125), Leaving Certificate being interrupted (12%, n=18) and further education plans being changed (28%, n=44) (see Figure 11).

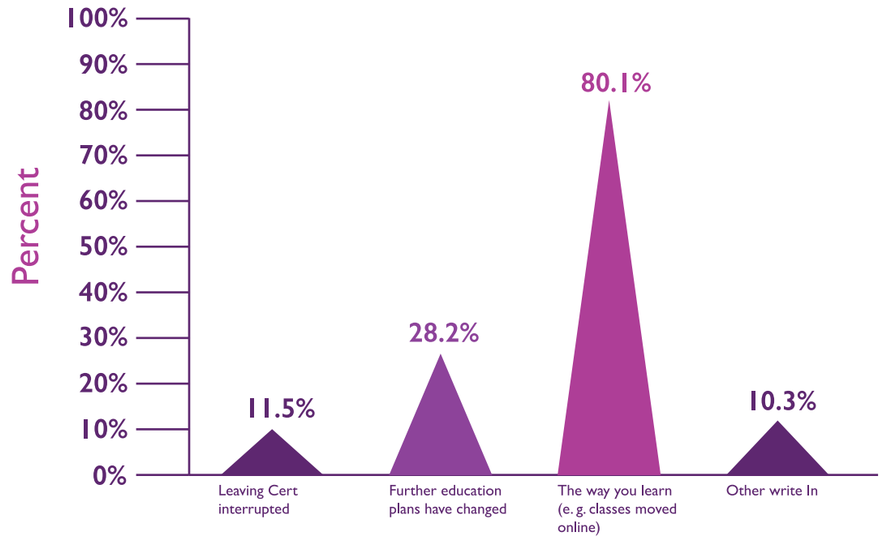

Figure 11. How COVID-19 impacted on education, among those that reported an impact

4. Discussion

4.1 Summary

This study of gbMSM in the Republic of Ireland provides timely and important insights into the experiences of this key group during the COVID-19 crisis.

Most participants reported that they had not had a ...COVID-19 infection at the time of our field work. In line with expectations given the national vaccination programme prioritised older people and those with health conditions, more than half had already received at least one dose of a COVID-19 vaccine when they survey was conducted. Encouragingly hesitancy was very low in the unvaccinated group.

Although the vast majority (72%) reduced their sexual activity during the COVID-19 crisis, well over half of respondents reported having sex with new and casual partners. Meeting new partners online was reported by most who had new and casual partners, with small proportions of gbMSM meeting partners in public places or cruising grounds. More common protective behaviours employed by gbMSM when having sex with new and casual partners included enhanced hygiene, having sex without mouth-to-mouth contact and wearing masks during sex. A relatively small proportion of gbMSM (8%) reported having chemsex during the 12-months preceding enrolment, a substantial reduction from the 14% reporting stimulant drug use to make sex more intense or last longer in EMIS 2017 (3).

Encouragingly, HIV care services remained accessible to 87% of the diagnosed HIV positive gbMSM in the sample. For those who experienced care disruption, this was primarily for blood work and mental health support. However, three gbMSM with HIV were unable to access HIV treatment which is vital to preserve health and prevent onwards transmission.

Access to sexual health services was much more problematic, with widespread disruption experienced. For HIV negative and untested gbMSM, 60% did not access sexual health services during the COVID-19 crisis, this includes almost one in five who attempted to access sexual health care and were not able to do so. A smaller proportion of HIV positive gbMSM did not or were not able to access these services, perhaps reflecting the reality that HIV care provides this function for many and that this group likely has more experience and skills in accessing services generally. Overall, older men (age 55+), bisexual men, men who had never tested for HIV and those with medium or low levels of education were least likely to have or been able to access sexual health care. Services most likely to be disrupted were HIV and STI testing. 7% reported self-treating an STI they thought they had. Moreover, more than half of those reporting difficulty accessing services were attempting to access PrEP care. Further, nearly half of PrEP using gbMSM reported having changed their dosing regimen. In addition, for gbMSM who felt they needed PEP during the crisis, only 36% were able to access it.

Alcohol consumption changed for many during the COVID-19 crisis, with similar proportions reporting their consumption had increased (38%) and decreased (34%). In our sample, 17% reported being concerned about their alcohol or drug use. Concern about alcohol was most common (60%) with fewer (40%) being concerned about drug use, or both. A quarter (27%) of the whole sample screened positive for alcohol use disorder (defined as a score of 2+ on CAGE-4). A greater proportion of gbMSM in Dublin screened positive for alcohol use disorder than in Connaught and Ulster.

Drug use increases and decreases were reported by similar proportions (15% and 13% respectively). Cannabis was the most popular drug, followed by cocaine and MDMA, with smaller numbers using methamphetamine and GHB/GBL, echoing findings about lower chemsex engagement during the crisis.

Mental health impacts were felt by the vast majority, with 75% reporting their mental health was a little or a lot worse during the COVID-19 crisis. In line with expectations, well-being was impacted by the closure of LGBT venues, and limits on socialisation through LGBT sports and social groups. As with sexual health, mental health services were largely not accessed with only 17% accessing these despite clear evidence of increased need during this period.

A substantial proportion of gbMSM (34%) reported impacts on their employment. These were primarily having less income, being in receipt of the Pandemic Unemployment Payment or decreased working hours. Impacts on education were felt by a smaller proportion (24%), with 80% of impacted gbMSM reporting educational activities had moved online.

4.2 Implications for policy and practice

Despite a clear reduction in sexual partner numbers and in chemsex engagement for the vast majority of respondents, these data provide important insights into the extent of unmet sexual health need as the COVID-19 crisis evolves. Large proportions of individuals reported not accessing services, with concerning numbers attempting unsuccessfully to access sexual health services. This is reflected by the 6% who treated themselves for an STI they thought they had, potentially leading to unresolved infections.

Although a significant increase in syphilis infections was recognised prior to the COVID-19 crisis, the disruption in sexual health services (and especially to STI testing) will have led to many syphilis (and other) infections not being diagnosed promptly, with clear implications for an acceleration of onward transmission, even if rates of sexual partner change are somewhat lower as a consequence of COVID-19 and associated government restrictions. It is essential that sexual health services have the resources and personnel to proactively tackle the substantial unmet HIV and STI testing need.

Given the substantial proportion who screened positive for alcohol use disorder, and relatively significant proportions who increased their alcohol and drug intake, substance misuse is a clear area for further intervention. Indeed, a significant minority (17%) reported being concerned about their alcohol and/or drug use. As in other settings, social isolation and poor mental health during the crisis will have likely exacerbated need, as will the interruption of services. Ensuring that alcohol and drug use services are equipped to meet the needs of gbMSM will be a key activity in order to address this.

Finally, gbMSM reported significant impacts on employment and well-being (and education to a lesser extent). As this group often has more fragile social networks, it is important that initiatives to build social connectedness among the most marginalised are considered. These could include support for LGBT community events and sports or increased investment in relevant community spaces where gbMSM (and the LGBT community more broadly) can socialise and build connectedness.

4.3 Strengths and limitations

This is the first community survey of gbMSM in Ireland investigating impacts of the COVID-19 crisis. These findings are novel and will be useful for a range of community services and commissioners in responding to health inequalities and unmet need within this group. Never-the-less some limitations are noted.

This cross-sectional study recruited an online convenience sample and all data were self-reported. This means that we cannot be sure that data are unbiased with regards to representativeness or that relationships between outcomes are necessarily causal.

Although our sample includes a large proportion of gbMSM from Latin American and the Caribbean, other migrant groups were recruited in smaller proportions, including gbMSM from Poland and Lithuania. This is likely because our survey was available in English, Brazilian Portuguese and Spanish, but not in some of the other languages commonly spoken by gbMSM in Ireland. Our results therefore do not provide insights into the needs of these other sub-populations of gbMSM who may be at greater risk of financial and social precarity.

Our sample was primarily recruited through social media, with smaller proportions (20%) being recruited from geo-location social networking applications than previous studies (3, 25). This may have led to increases in those with stronger social networks participating, potentially leading to an underestimation in the proportion experiencing impacts on well-being.

Generally speaking, our sample included larger numbers of gbMSM with high levels of education and income. This may reduce our confidence in outcomes relating to the most marginalised.

In order to measure service access during the crisis we re-categorised a categorical into a binary variable. This included collapsing a range of experiences into ‘accessed services’ and ‘did not access services’. This has had the impact of obscuring the degree of difficulty faced by many when attempting to access sexual health care. Never-the-less this analysis provides important evidence on health equity impacts of restrictions during the COVID-19 crisis.

Finally, except for our use of CAGE-4 to screen for alcohol use disorder, we did not rely on validated scales to measure mental health and well-being. This was a deliberate choice, as we sought to measure self-identified rather than clinical need in a number of areas. Never-the-less this will potentially have underestimated the proportion with mental health need emerging from the COVID-19 pandemic.

4.4 Recommendations

1. Testing and access to services

A. Restore and improve sexual health services across Ireland and resource the expansion of their capacity to respond to a surge in testing and treatment needs.

This study shows that the widespread disruption to sexual health services throughout the country has resulted in significant barriers to accessing sexual health services, including HIV and STI testing and – as evidenced by the recently declared national syphilis outbreak – has likely substantially impacted the number of undiagnosed and hence untreated STIs in the community.

Sexual health services before the COVID-19 crisis were under resourced and accessibility was already poor nationally. Capacity issues predate COVID-19 but have been exacerbated by the pandemic and related government restrictions. Services must be appropriately resourced so that they can reopen with enough capacity to respond to a surge in testing demand and associated treatment needs while also expanding to cater for the substantial unmet demand which existed prior to the COVID-19 crisis.

B. Expand low threshold testing initiatives and invest in additional innovative HIV and STI testing strategies.

Results from this study demonstrate the diversity of experience during the COVID-19 crisis of a variety of gbMSM who did not or were unable to access services. These results support the need for increasing emphasis on innovative strategies for HIV and STI testing to ensure it is as easy as possible for gbMSM to access testing.

Some community-based rapid HIV testing services quickly reopened following the initial lockdown, and pilot initiatives (HSE online STI testing, MPOWER HIV Self-Test) were deployed and helped minimise service interruptions for those at risk of HIV and STI acquisition during subsequent waves of COVID-19. However, their geographical reach and capacity were limited. These services should be permanently established and expanded to be accessible throughout the country. Investment in additional innovative HIV and STI testing strategies should also be considered, particularly for those who prefer low threshold testing options and those who have not tested before.

C. Provide additional capacity to ensure equitable access to PrEP services across Ireland.

Demand for PrEP in Ireland has been consistently high since the introduction of a National PrEP Programme in 2019, however, capacity to deliver this service to the many gbMSM who want and would benefit from it has been suboptimal. Findings from this study show that more than half of the HIV negative men who had difficulty accessing services during restrictions were attempting to access PrEP, leading to potentially significant missed HIV prevention opportunities.

As restrictions begin to lift and social mixing increases, access to PrEP is critically important, particularly given the potential surge in untreated infections. Enthusiasm for the uptake of PrEP risks being diminished due to the increasing difficulty in accessing it. Without a critical mass of those vulnerable to acquiring HIV using PrEP, efforts to reduce new diagnoses in Ireland will not be feasible. Provision of additional capacity to ensure equitable access to PrEP services across Ireland is an urgent requirement.

2. Well-being and mental health

A. Prioritise responses for those experiencing increased health inequalities.

While health inequalities within the community of gbMSM existed before the pandemic, the results of this study provide an early signal that these inequalities may have intensified. Migrant men, men living in rural areas, men with low educational attainment, bisexual men and those or who have experienced employment insecurity due to government restrictions are likely to be experiencing increasing health inequalities. All interventions targeting gbMSM should be especially mindful of their likely acceptability and accessibility to these groups. Prioritising responses addressing inequalities due to additional marginalisation must be a priority for sexual health programming going forward.

B. Invest in community spaces, social activities and create resources that support well-being.

GbMSM reported significant impacts on employment and well-being (and education to a lesser extent). As this group often has more fragile social networks, it is important that initiatives to build social connectedness with the most marginalised are considered. These could include support for LGBT community events and sports or increased investment in relevant community spaces where gbMSM (and the LGBT community more broadly) can socialise and build connectedness. Additionally, it would be worthwhile to create resources that encourage and support mental and sexual well-being as we emerge from restrictions.

3. Alcohol and drug use

A. Equip existing alcohol and drug support services and invest in targeted peer-led initiatives.

Given the substantial proportion of respondents who screened positive for alcohol use disorder, and proportions who increased their alcohol and drug intake during COVID-19, substance misuse is a clear area for further intervention. As in other settings, social isolation and poor mental health during the crisis will have likely exacerbated need. Further, lifting of restrictions will create opportunities to increase alcohol and drug use, potentially leading to additional need in those who had reduced their use.

Ensuring gbMSM know how to access alcohol and drug use services, and that these services are equipped to meet the specific additional needs of gbMSM are critical. This includes capacity building ensuring services are confident in discussing alcohol and drug use connected with sexual practices and cultural contexts they may currently be less familiar with. Additionally, continued investment in targeted peer-led initiatives may have a critical role in addressing emerging need.

5. About the authors

Charles Witzel is a Senior Research Fellow at University College London with expertise in the sexual health and well-being of gbMSM and gender diverse people. His PhD explored the contribution that HIV self-testing can make to the well-being of gbMSM in England and Wales. Most recently, Charles was the LSHTM principal investigator on a cross-sectional study investigating app use, sexual behaviour and service access for gbMSM in the first UK COVID-19 lockdown. Charles has longstanding links with the community sector in the Republic of Ireland having acted as a consultant to the Health Service Executive on the evaluation of the Gay Men's Health Service Outreach Programme. He also led the development of the MPOWER logic model and theory of change, and designed the current MPOWER monitoring and evaluation framework.

Adam Shanley is the manager of the MPOWER Programme at HIV Ireland. He works closely with his peers in the community and on the MPOWER team to devise evidence-based, peer-driven and community-located interventions that help gay and bisexual men to have a fun, pleasurable and healthy sex life. Adam is a dedicated advocate for gay men's sexual health. He has pioneered the development of services for his community, advised on national health policy and is committed to keeping the sexual health and wellbeing needs of gay and bisexual men firmly on the national public health agenda. Adam has been actively involved in Ireland's LGBT+ community for many years having previously held the position of Director of Gay Switchboard Ireland - the country's longest running LGBT+ support organisation. He is committed to social justice and the accessibility of support for both individual and community wellbeing.

Peter Weatherburn has been the Director of Sigma Research since 1997. He leads most of Sigma Research's research and development programmes including the European MSM Internet Survey (EMIS) in both 2009-2011 and 2016-2019. He has developed, specified and managed more than 80 research and evaluation projects, with a total research income of over £12,000,000. He has written more than 125 articles in scientific journals, a book, and over 80 research reports and book chapters. He is an Associate Professor in Health Promotion LSHTM, where he is also Head of his departmental Sexual & Reproductive Health Research Group in the Faculty of Public Health & Policy.

6. Acknowledgements

We would like to extend our deep thanks to all the participants who gave their time to EMERGE. Without the participation of so many gay, bisexual and other men that have sex with men across the Republic of Ireland we would not be able to provide these vital data.

The EMERGE project advisory group has been a very important source of conceptual input and methodological expertise throughout the study. Thanks to John Gilmore, Fiona Lyons, Cathal O'Broin, Kate O'Donnell, Thomas Strong, Owen Brennan, and Kate Tierney.

Our thanks also to the HSE Sexual Health and Crisis Pregnancy Programme for their continued funding and support of the MPOWER Programme at HIV Ireland. Their funding of the MPOWER Programme allowed for this research to be commissioned. Additional thanks to colleagues at HIV Ireland and the MPOWER team.

Finally, we would like to acknowledge Luiz Gasparelli, Francisco Figueroa, Cormac Cashman, Lisa Connell, Stephen Moloney, Pradeep Mahadeshwar, Mike Mark, Michael O'Higgins, Renan Santos, Freddy Montenegro, Andrew Leavitt, Karl Hayden, Noah Halpin, Ronald Sousa, Jason Doyle and the Gay Health Network for their support during piloting and recruitment, and to Adriano Puerta Gaubeur and Carlos Prats Silvestre for their efforts in translating the survey into Portuguese and Spanish respectively.

Design and layout by Pradeep Mahadeshwar / QueerMyths on Instagram.

7. References

1. Johns Hopkins University Medicine. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins 2021. Available from: https://coronavirus.jhu.edu/map.html.

2. Hyland P, Shevlin M, McBride O, Murphy J, Karatzias T, Bentall RP, et al. Anxiety and depression in the Republic of Ireland during the COVID-19 pandemic. Acta Psychiatrica Scandinavica. 2020;142(3):249-56.

3. EMIS-2017 Ireland. Findings from the European Men who have sex with men Internet Survey (Ireland). Dublin: Health Protection Surveillance Centre, 2019.

4. Glynn RW, Byrne N, O'Dea S, Shanley A, Codd M, Keenan E, et al. Chemsex, risk behaviours and sexually transmitted infections among men who have sex with men in Dublin, Ireland. Int J Drug Policy. 2018;52:9-15.

5. HSE Health Protection Surveilance Centre. HIV in Ireland, 2018. Dublin: HSE Health Protection Surveilance Centre,, 2019.

6. O'Connor L, O'Donnell K, Barrett P, Hickson FCI, McCartney D, Quinlan M, et al. Use of geosocial networking applications is independently associated with diagnosis of STI among men who have sex with men testing for STIs: findings from the cross-sectional MSM Internet Survey Ireland (MISI) 2015. Sexually transmitted infections. 2019;95(4):279-84.

7. Klein H. Using a syndemics theory approach to study HIV risk taking in a population of men who use the internet to find partners for unprotected sex. American journal of men's health. 2011;5(6):466-76.

8. Halkitis PN, Moeller RW, Siconolfi DE, Storholm ED, Solomon TM, Bub KL. Measurement model exploring a syndemic in emerging adult gay and bisexual men. AIDS and Behavior. 2013;17(2):662-73.

9. Tulloch TG, Rotondi NK, Ing S, Myers T, Calzavara LM, Loutfy MR, et al. Retrospective reports of developmental stressors, syndemics, and their association with sexual risk outcomes among gay men. Archives of Sexual Behavior. 2015;44(7):1879-89.

10. O'Connor K, Wrigley M, Jennings R, Hill M, Niazi A. Mental health impacts of COVID-19 in Ireland and the need for a secondary care mental health service response. Irish Journal of Psychological Medicine. 2020:1-9.

11. Meyer IH. Minority stress and mental health in gay men. Journal of health and social behavior. 1995:38-56.

12. King M, McKeown E, Warner J, Ramsay A, Johnson K, Cort C, et al. Mental health and quality of life of gay men and lesbians in England and Wales: Controlled, cross-sectional study. The British Journal of Psychiatry. 2003;183(6):552-8.

13. McCann E, Sharek D, Higgins A, Sheerin F, Glacken M. Lesbian, gay, bisexual and transgender older people in Ireland: Mental health issues. Aging & Mental Health. 2013;17(3):358-65.

14. McCann E, Sharek D. Survey of lesbian, gay, bisexual, and transgender people's experiences of mental health services in I reland. International journal of mental health nursing. 2014;23(2):118-27.

15. Mayock P, Bryan A, Carr N, Kitching K. Supporting LGBT lives: A study of the mental health and well-being of lesbian, gay, bisexual and transgender people: Citeseer; 2009.

16. Rogers AH, Shepherd JM, Garey L, Zvolensky MJ. Psychological factors associated with substance use initiation during the COVID-19 pandemic. Psychiatry research. 2020;293:113407.

17. Wang QQ, Kaelber DC, Xu R, Volkow ND. COVID-19 risk and outcomes in patients with substance use disorders: analyses from electronic health records in the United States. Molecular psychiatry. 2020:1-10.

18. Jemberie WB, Williams JS, Eriksson M, Grönlund A-S, Ng N, Nilsson MB, et al. Substance use disorders and COVID-19: multi-faceted problems which require multi-pronged solutions. Frontiers in Psychiatry. 2020;11.

19. Vasquez del Aguila E, Cantillon S. The labour market and LGBT discrimination in Ireland. 2010.

20. Barrett P, O'Donnell K, Fitzgerald M, Schmidt A, Hickson F, Quinlan M, et al. Drug use among men who have sex with men in Ireland: Prevalence and associated factors from a national online survey. International Journal of Drug Policy. 2019;64:5-12.

21. Callander D, Meunier É, DeVeau R, Grov C, Donovan B, Minichiello V, et al. Investigating the effects of COVID-19 on global male sex work populations: a longitudinal study of digital data. Sexually transmitted infections. 2020.

22.Mannix-McNamara P, O'Grady E, Devaney E, Jourdan D. Tackling social and health inequalities: Vulnerability among the young lesbian, gay and bisexual population in Ireland. Psychology & Sexuality. 2013;4(3):268-82.

23. Dhalla S, Kopec JA. The CAGE questionnaire for alcohol misuse: a review of reliability and validity studies. Clinical and Investigative Medicine. 2007:33-41.

24. Chen Y-T, Ibragimov U, Nehl EJ, Zheng T, He N, Wong FY. Validity of the CAGE questionnaire for men who have sex with men (MSM) in China. Drug and alcohol dependence. 2016;160:151-6.

25. O'Donnell K, Fitzgerald M, Barrett P, Quinlan M, Igoe D. MISI 2015: findings from the men who have sex with men internet survey. Dublin: Health Service Executive, Health Protection Surveillance Centre & Gay Health Network, 2016.


Você achou difícil acessar os serviços de saúde sexual durante o COVID?
PREENCHA O QUESTIONÁRIO EMERGE E NOS AJUDE A ELABORAR SERVIÇOS PARA HOMENS GAYS E BISSEXUAIS
MPOWER
HIV Ireland


Sua vida sexual mudou durante o isolamento social?
PREENCHA O QUESTIONÁRIO EMERGE E NOS AJUDE A ELABORAR SERVIÇOS PARA A SAÚDE SEXUAL DA NOSSA COMUNIDADE.
MPOWER
HIV Ireland


Has your drug use changed during lockdown?
DO THE EMERGE SURVEY AND HELP SHAPE SERVICES FOR GAY & BI MEN
MPOWER
HIV Ireland


We're looking for gay & bi guys to help us understand what services our community needs after COVID
DO THE EMERGE SURVEY AND HELP US PLAN COMMUNITY SERVICES
MPOWER
HIV Ireland


Has your drinking changed during lockdown?
DO THE EMERGE SURVEY AND HELP SHAPE SERVICES FOR GAY & BI MEN
MPOWER
HIV Ireland


Has your sex life changed during lockdown?
DO THE EMERGE SURVEY AND HELP SHAPE SEXUAL HEALTH SERVICES
MPOWER
HIV Ireland