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1 **The People Living with HIV StigmaSurvey UK 2015: HIV-related sexual**  
2 **rejection and other experiences of stigma and discrimination among gay and**  
3 **heterosexual men**

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43 **The People Living with HIV StigmaSurvey UK 2015: HIV-related sexual**  
44 **rejection and other experiences of stigma and discrimination among gay and**  
45 **heterosexual men**

46 We aim to understand the difference in stigma and discrimination, in particular sexual rejection,  
47 experienced between gay and heterosexual men living with HIV in the UK. The People Living  
48 with HIV StigmaSurvey UK 2015 recruited a convenience sample of persons with HIV through  
49 over 120 cross sector community organisations and 46 HIV clinics to complete an online survey.  
50 1,162 men completed the survey, 969 (83%) gay men and 193 (17%) heterosexual men, 92%  
51 were on antiretroviral therapy. Compared to heterosexual men, gay men were significantly more  
52 likely to report worrying about workplace treatment in relation to their HIV (21% vs. 11%),  
53 worrying about HIV-related sexual rejection (42% vs 21%), avoiding sex because of their HIV  
54 status (37% vs. 23%), and experiencing HIV-related sexual rejection (27% vs. 9%) in the past 12  
55 months. In a multivariate logistic regression controlling for other sociodemographic factors,  
56 being gay was a predictor of reporting HIV-related sexual rejection in the past 12 months (aOR  
57 2.17, CI 1.16, 4.02). Both gay and heterosexual men living with HIV experienced stigma and  
58 discrimination in the past 12 months, and this was higher for gay men in terms of HIV-related  
59 sexual rejection. Due to the high proportion of men reporting sexual rejection, greater awareness  
60 and education of the low risk of transmission of HIV among people on effective treatment is  
61 needed to reduce stigma and sexual prejudice towards people living with HIV.

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63 Keywords: HIV/AIDS, stigma, discrimination, gay/MSM.

64 Word count:3,024

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## 70 **Introduction**

71           In the United Kingdom, 95% (37,301/39,185) of gay/bisexual men receiving ART were  
72 virally suppressed in 2015 (Kirwan, Chau, Brown, Gill, & Delpech, 2016). Having a  
73 suppressed viral load dramatically reduces the likelihood of onward transmission, and  
74 treatment as prevention has been effective at reducing the onward transmission of HIV among  
75 men who have sex with men (MSM) who are diagnosed in the UK (Brown, Gill, & Delpech,  
76 2013) (Phillips et al., 2015). Furthermore, the PARTNER study found that there was zero  
77 within-couple HIV transmissions among MSM and heterosexual couples who were having  
78 condomless sex (Rodger et al., 2016).

79           To end the AIDS epidemic by 2030 UNAIDS called for an elimination of HIV-related  
80 stigma and discrimination by the year 2020 (Hollingdale, 2016). HIV stigma can be defined as  
81 labelling, stereotyping, segregating or discriminating against people living with HIV by social,  
82 political, or economic means (Mahajan et al., 2008). HIV stigma can be conceptualised as  
83 internalized stigma, anticipated stigma, and experienced stigma and/or discrimination  
84 (Earnshaw & Chaudoir, 2009). In a meta-analysis, experiencing HIV-stigma was significantly  
85 associated with higher rates of depression and lower social support (Rueda et al., 2016). In  
86 Canada, HIV stigma and specifically sexual rejection, was associated with increased risk of  
87 suicide among gay and bisexual men living with HIV (Ferlatte, Salway, Oliffe, & Trussler,  
88 2017). In a nationally representative sample of people seen for HIV care in the UK, two in five  
89 MSM reported depression or anxiety (Carrion et al., 2015). Furthermore, the suicide rate among  
90 men diagnosed with HIV in the UK in the post ART era is twice that of the general population,  
91 and five times higher than the general population one year after diagnosis (Croxford et al.,  
92 2017).

93           An international literature review of HIV stigma within the gay community found living  
94 with HIV was associated with social exclusion, ageism, sexual rejection, and violence from  
95 other gay men (Smit et al., 2012). Qualitative interviews with gay men living with HIV in  
96 England found that men reported worrying and experiencing sexual rejection in relation to their  
97 HIV status (Bourne, Dodds, Keogh, Weatherburn, & Hammond, 2009). Almost two thirds of  
98 HIV-negative gay men who took part in the Gay Men’s Sexual Health Survey in England in  
99 2014 reported avoiding having sex with people who have HIV (Hickson, Reid, Hammond, &  
100 Weatherburn, 2016). Conversely, a European wide study of MSM in 2010 found that being  
101 aware that ART reduces HIV transmissibility was an independent predictor of engaging in  
102 unprotected anal intercourse (Kramer et al., 2016).

103           Research in Australia suggested that overall, heterosexuals were more likely to report  
104 negative HIV-experiences than gay participants, and that the two groups did not differ in the  
105 reporting of HIV-related sexual rejection (Brenner, Wilson, Slavin, & de Wit, 2013). However,  
106 the heterosexual sample comprised of both men and woman, therefore not accounting higher  
107 reporting of HIV stigma among women in Australia (Tzemis et al., 2013). Although, research  
108 in Canada which controlled for gender and sexuality found that general HIV-related stigma  
109 was reported more among heterosexuals and women (Emlet et al., 2015).

110           Due to the high level of viral suppression among gay and bisexual men in the UK, and  
111 the very low risk of transmission of HIV from gay and bisexual men who achieve viral  
112 suppression, therefore rejecting someone on the basis of their HIV status can be considered  
113 outdated and discriminatory behaviour.

114           The aim of this research is to better understand the extent to which people living with  
115 HIV in the UK, in particular men who have sex with men, experience stigma and sexual

116 rejection compared to heterosexual men despite current knowledge that undetectable viral load  
117 means that HIV is untransmissible.

118

## 119 **Methods**

### 120 *Participants*

121 *The People Living with HIV StigmaSurvey UK 2015* was a convenience sample and  
122 recruited participants from 120 community organisations and 46 NHS clinics across the UK.  
123 Recruitment sites were selected through existing HIV networks in the first instance and  
124 expanded as others approached us to participate. Community organisations approached eligible  
125 clients during support groups or online via e-mail lists and social media platforms. Nurses and  
126 consultants in participating NHS clinic sites approached eligible patients during their HIV care  
127 appointments. We aimed to invite clinics and support organisations from all areas of the  
128 country as well as third sector organisations that serve clients outside the field of HIV. All  
129 participants met eligibility criteria that they were living with HIV, aged 18 or over, and  
130 currently resided in the UK. Ethical approval was gained from the Brighton and Sussex NHS  
131 Research Ethics Committee. Responses were stored securely and analysed at Public Health  
132 England in accordance with the Data Protection Act 1998. The survey was either undertaken  
133 in the clinic using iPads or the participants could choose to complete the survey online in their  
134 own time. Participants were informed that the survey would take approximately 20 to 40  
135 minutes to complete and the median completion time was 28 minutes. Participants were also  
136 informed that the survey features some sensitive questions and therefore participants were  
137 informed that they survey was also available online and they could it in the privacy of their  
138 own home. Participants completed the survey independently and therefore the survey

139 respondents were limited to those with a proficiency of the English language or who could  
140 source a formal or informal interpreter to assist with the completion of the study.

#### 141 *Procedure*

142         The survey researched many aspects of HIV-related stigma, but this research will focus  
143 specifically on stigma in social settings and sexual rejection. For questions about stigma in  
144 social settings, participants were asked if they had worried about, avoided or experienced  
145 discrimination across various social settings in the past 12 months, and then asked to rate how  
146 much this was related to their HIV on a scale of 1-100. Worrying about, avoided or experienced  
147 discrimination was chosen to reflect internalised, anticipated, or experienced stigma. A score  
148 greater than or equal to 50 was considered to be HIV related. This was chosen because HIV  
149 was therefore the main factor contributing to the participants' experience of stigma and/or  
150 discrimination.

151         To control for internalized HIV-stigma, self-image in relation to participants' HIV  
152 status was measured. Participants were asked to rate nine statements about their HIV in the last  
153 12 months (see Table 2), some of which overlap with the Beck Depression Inventory (Beck,  
154 Steer, & Brown, 1996) , a widely used, 21-question multiple-choice, self-report inventory for  
155 measuring the severity of depression. An overall 'self-image' composite score was generated  
156 based on all nine questions: a "yes" answer to a question about positive feelings was given a  
157 value of -1 and a not sure -0.5, a "yes" answer to a question about negative feelings a value of  
158 1, and a "not sure" of 0.5. Scores ranged from -4 to 5, where positive scores were related to  
159 poorer self-image. Therefore higher scores were reflective of poorer self-image. We used the  
160 mid-point score of 1 or below to indicate a poor self-image. Sensitivity analyses were  
161 conducted using different cut-offs.

162 Men who have sex with men were identified from participants who identified as male  
163 or trans male and selected men or trans men from the gender of their sexual partners, regardless  
164 of whether other genders were also selected. The vast majority (94%) of this group reported  
165 exclusively having sex with men, and are therefore referred to as 'gay men' in this study.  
166 Heterosexual men were identified from participants who selected male or trans male from the  
167 gender identity question, and only selected women when asked the gender of their sexual  
168 partners.

169 Descriptive analyses of reported experiences in social settings were conducted using  
170 chi-square tests, and a multivariate logistic regression was used to explore the association of  
171 sociodemographic and well-being factors with reporting experiencing sexual rejection in  
172 relation to HIV status in the past 12 months.

## 173 **Results**

174 In total there were 1908 responses to the survey, 273 were excluded as the respondent  
175 did not fulfil the entry criteria e.g. did not consent to the use of data, under the age of 18, not  
176 living with HIV, living outside of the UK or having previously completed the survey. There  
177 were 59 respondents who were excluded from the survey as they did not answer any questions  
178 about experiences of stigma. In the final dataset there were 1576 responses included in the  
179 survey analyses.

180 There were 1,162 male respondents. The demographics for the 969 gay and 193 heterosexual  
181 men who took part in the study (total 1,162) are displayed in Table 1. The mean age of gay  
182 men was 44 years old (range 18-78), 82% were of white ethnicity, had been diagnosed with  
183 HIV for a median of 9 years (95% CI 7-9 years), and 92% were currently on ART. This is  
184 compared to a mean age of 47 years (range 18-82) for heterosexual men, 32% of white  
185 ethnicity, diagnosed with HIV for a median of 8 years (95% CI 6-11 years), and 94% were

186 currently on ART. Most other demographic details were similar for the two groups with notable  
187 exceptions being that gay men were more likely to report being single (50% vs. 31%), engaging  
188 in chemsex in the past 12 months (25% vs. 1%), and keeping up with bills (46% vs. 31%)  
189 compared to heterosexual men. Gay men were also more likely to have a poor self-image in  
190 relation to HIV compared to heterosexual men (40% vs. 25%). A breakdown of the variables  
191 determining the self-image score can be seen in Table 2. Over half of the participants were  
192 recruited through NHS clinics (52%) with gay men less likely to report being recruited through  
193 NHS clinics than heterosexual men (47% vs. 72%) and a slightly higher proportion of gay men  
194 were recruited through community organisations (17% vs. 11%).

195 In the past 12 months, a high proportion of all men reported worrying about and  
196 experiencing HIV-related stigma and discrimination or avoiding situations because of fear of  
197 HIV stigma (Figure 1). Compared to heterosexual men, gay men were more likely to report  
198 worrying about workplace treatment in relation to their HIV (21% vs. 11%), worrying about  
199 HIV-related sexual rejection (42% vs 21%), avoiding sex because of their HIV status (37% vs.  
200 23%), and experiencing HIV-related sexual rejection (27% vs. 9%). Additionally, other factors  
201 besides HIV status contributed to the difference in worrying about, avoiding and experiencing  
202 social situations, because overall gay men were more likely to report worrying about, avoiding  
203 or experiencing these social situations than heterosexual men.

204 Due to the high proportion of men experiencing HIV-related sexual rejection in the past  
205 12 months, a multivariate logistic regression analysis to investigate what sociodemographic  
206 factors contribute to reporting this experience in the past 12 months was conducted (Table 3).  
207 Being gay, not in a relationship, falling behind some or many bills, and having a poor self-  
208 image in relation to HIV were independent predictors of men reporting HIV-related sexual  
209 rejection in the past 12 months. Being aged greater than 50 was a protective factor against  
210 reporting HIV-related sexual rejection in the past 12 months. This multivariate was repeated

211 for reported sexual rejection, regardless of whether this was attributed to HIV status, with the  
212 same predictors and protective factors of sexual rejection, with the addition of being aged 18-  
213 24 as a protective factor (aOR 0.25, CI 0.08, 0.75) and engaging in chemsex in the past 12  
214 months as an independent predictor (aOR 1.63, CI 1.11, 2.52).

215 Because 93% (258/276) of all men who experienced HIV-related sexual rejection in the  
216 past 12 months were gay, and being gay was associated with HIV-related sexual rejection, we  
217 conducted a multivariate logistic regression to identify predictors of HIV-related sexual  
218 rejection among gay men specifically. Again, this had the same predictors of HIV-related  
219 sexual rejection, with the addition of engaging in chemsex in the past 12 months (aOR 1.52,  
220 CI 1.03, 2.26), and having a poor self-image was no longer a predictor.

## 221 **Discussion**

222 This is the first study to compare experiences of stigma and discrimination between gay  
223 and heterosexual men living with HIV in the UK, and to distinguish HIV-related experiences  
224 from other types of stigma and discrimination. All men reported high levels of stigma and  
225 discrimination, but gay men were more likely to report worrying about, and experiencing  
226 stigma and discrimination across various social settings in the past 12 months, in particular  
227 HIV-related sexual rejection. They were also more likely to avoid sex because of their HIV  
228 status. Being gay was a strong predictor of reported HIV-related sexual rejection in the past 12  
229 months which suggests greater levels of HIV stigma within the gay community. This is in line  
230 with previous research which examined HIV-related stigma within the gay community (Smit  
231 et al., 2012) (Bourne et al., 2009). Although this finding is contradictory to that found in  
232 Australia (Brenner et al., 2013), this study did not control for higher reporting of HIV-stigma  
233 among women. In terms of general reporting of HIV stigma, our results contradict similar  
234 research in Canada, where stigma was reported more among heterosexuals even when

235 controlling for gender (Emlet et al., 2015). However, the differences could be due to cultural  
236 differences between Canada and the UK, or due to the additional use of community  
237 organisations involved in our recruitment method, so participants did not necessarily have to  
238 be engaging in care to be involved.

239 An alternate explanation could be that, compared to heterosexual men, gay men have  
240 more tools at their disposal to meet potential sexual partners such as hook-up apps (Lehmiller  
241 & Ioerger, 2014) and to disclose their HIV status, and are therefore more likely to face rejection  
242 due to a greater frequency of meeting potential sexual partners. Number of sexual partners, or  
243 potential partners, in the past 12 months was not collected in this survey to control for this.  
244 However, the suggestion of negative attitudes among gay men towards other gay men living  
245 with HIV is in agreement with previous research (Hickson et al., 2016).

246 Age was a predictive factor against reporting HIV-related sexual rejection for those  
247 aged over 50, which could be due to a lower frequency of potential sexual partners in this age  
248 group. Not being in a relationship was a predictor of reporting HIV-related sexual rejection,  
249 possibly because those that are in a relationship have a partner that is supportive and  
250 knowledgeable about their HIV status, but also because people not in a relationship are more  
251 likely to be meeting multiple sexual partners. Having a poor self-image in relation to HIV was  
252 a significant predictor of HIV-related sexual rejection, which could be related to internalized  
253 stigma, or having a poorer self-image could be due to sexual rejection experienced. Engaging  
254 in chemsex in the past 12 months was a significant predictor of HIV-related sexual rejection  
255 when the multivariate was conducted amongst gay men only, as those who reported engaging  
256 in chemsex were mostly gay men. Additionally, engaging in chemsex was a significant  
257 predictor for all men when conducting predictors of sexual rejection, regardless of attributing  
258 sexual rejection to HIV status, suggesting this is a further stigmatising behaviour in terms of  
259 sexual rejection.

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263 **Strengths and limitations of the study**

264 A strength of this research is that the StigmaSurvey UK 2015 was conducted with  
265 community involvement, allowing people living with HIV to be involved with the design of  
266 the survey, collection, and dissemination of the results. Furthermore, the StigmaSurvey UK  
267 2015 was demographically representative of people living with HIV in the UK.

268 One limitation of the study was that it did not collect data pertaining to the individual  
269 community organisations from which the participants were recruited. However, the  
270 demographic breakdown of men who took part in the study closely reflected the demographic  
271 of those attending for HIV care in the UK (Crenna-Jennings et al., 2017).

272 A limitation of this research is that it is difficult to separate the interlinked stigmatising  
273 factors experienced by people living with HIV. In an attempt to overcome this, a multivariate  
274 analysis was conducted to separate these factors. Additionally, when HIV was not the main  
275 contributing factor to reporting stigma, a list of other possible attributions such as sexuality,  
276 gender identity, race, were made available to participants. However, due to the complex nature  
277 of discrimination, and high association of gay men with HIV, it would be easy to misattribute  
278 the cause to be HIV-related when it could be homophobic and vice versa. Choosing sexual  
279 rejection as the main outcome variable helped overcome this as sexual rejection between two  
280 men is much more unlikely to be due to homophobia. Furthermore, our research could be  
281 subject to recall and selection bias due to the self-selected sample, and may not be truly  
282 representative of all men living with HIV. However, that should not diminish the finding that

283 these experiences were still reported, and stigma still exists for these individuals, despite  
284 successful treatment and low probability of onward transmission

285

## 286 **Conclusion**

287 In conclusion, gay and heterosexual men living with HIV experience high levels of  
288 stigma and discrimination, especially in reference to sexual rejection by potential HIV-negative  
289 partners. Health outcomes for people living with HIV in the UK are excellent, and those who  
290 are on treatment and virally suppressed are at a very low risk of further transmission. However,  
291 stigma and discrimination can impact on mental health and wellbeing for people living with  
292 HIV, and our research suggests sexual prejudice towards men living HIV exists, particularly  
293 among gay men, despite there being a minimal risk of transmission. We suggest educating the  
294 general population, and in particular the gay community, about the clinical benefits of  
295 antiretroviral therapy and the low risk of transmission among those on treatment may help to  
296 reduce fear of transmission, and therefore sexual prejudice and stigma towards people living  
297 with HIV. Other strategies to reduce stigma in social and professional settings should also be  
298 developed and implemented.

299

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309

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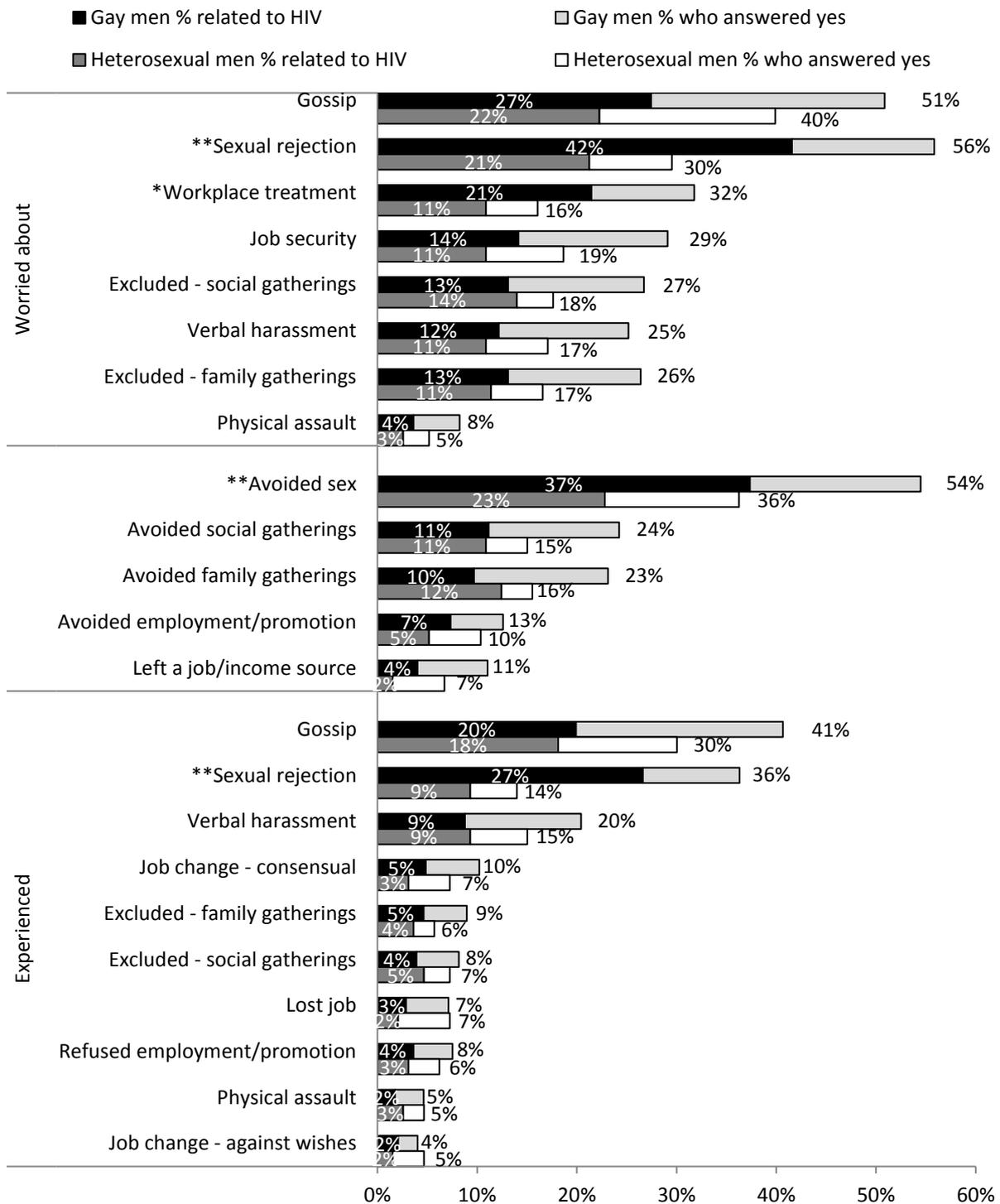
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398 Figure 1. Participants' HIV related and other experiences of stigma and discrimination in social  
 399 settings in the past 12 months.



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401 Statistical difference between gay and heterosexual men related to HIV status.

402 \*p<0.01

403 \*\*p<0.001



Table 1. Demographic and social characteristics of participants.

Variable	Gay men (n=969)		Heterosexual men (n=193)	
	N	%	N	%
<b>Age group***</b>				
18-24	21	2%	6	3%
25-34	171	18%	14	7%
35-50	492	51%	89	46%
>50	252	26%	63	33%
missing	33	3%	21	11%
<b>Ethnicity***</b>				
White	798	82%	62	32%
Other ethnicity	170	18%	130	67%
missing	1	0%	1	1%
<b>Relationship status***</b>				
Living with a partner	350	36%	93	48%
In a relationship, living separately	115	12%	38	20%
Relationship with >1 partner	19	2%	2	1%
No relationship/single	483	50%	59	31%
missing	2	0%	1	1%
Ever engaged in chemsex***	391	40%	23	12%
<i>In the past 12 months***</i>	243	25%	7	1%
Ever injected drug use**	177	18%	18	9%
<i>In past 12 months***</i>	68	7%	1	1%
Ever been paid for sex***	170	18%	6	3%
<i>In the last 12 months*</i>	31	3%	1	1%
<b>Employment status***</b>				
Full time	546	51%	87	42%
Part time	100	9%	17	7%
Retired	79	7%	10	7%
Unemployed	92	9%	37	17%
Sick/disabled	92	18%	16	14%
Other	60	6%	26	13%
<b>Living locale size*</b>				
Large town or city	723	75%	147	76%
Town	200	21%	32	17%
Rural area	45	5%	11	6%
Missing	1	0%	3	2%
<b>Financial hardship***</b>				
keeping up with bills	441	46%	60	31%
keeping up but struggling	432	45%	101	52%
fallen behind on some or many bills	93	10%	25	13%
missing	3	0%	7	4%
<b>Going short of food**</b>				
Never	703	73%	122	63%
Sometimes	178	18%	58	30%
Often	88	9%	13	7%
<i>Health</i>				
<b>Year diagnosed*</b>				
In the last year	86	9%	16	8%
2010-2014	254	26%	44	23%
2005-2009	239	25%	44	23%
2000-2004	155	16%	45	23%
More than 15 years ago	225	23%	38	20%
missing	10	1%	6	3%
<b>Ever diagnosed mental health condition***<sup>1</sup></b>				
Yes	499	52%	41	21%
No	356	37%	127	66%
missing	114	12%	25	13%
<b>Current disability<sup>2</sup></b>				
Yes	219	23%	32	17%
No	717	74%	154	80%
missing	33	3%	7	4%

<sup>1</sup> Depression, anxiety, bipolar-disorder, post-traumatic stress disorder, psychosis, or schizophrenia

<sup>2</sup> Learning, behavioural, emotional, hearing, visual, speech, or mobility

406 Table 2. Reported feelings in relation to living with HIV among participants.

In the last 12 months have you experienced any of the following feelings in relation to your HIV status?	Gay men (n=969)		Heterosexual men (n=193)	
	Yes	%	Yes	%
Shame***	489	50%	70	36%
Guilt	450	46%	82	42%
In control of your health***	560	58%	137	71%
Blaming yourself	469	48%	86	45%
Blaming others	203	21%	34	18%
Positive about the future	591	61%	129	67%
Positive about life	598	62%	131	68%
Low self-esteem***	512	53%	58	30%
As good as anyone else*	540	56%	129	67%
<i>Overall poor self-image score***</i>	<i>386</i>	<i>40%</i>	<i>49</i>	<i>25%</i>

407 Statistical difference between gay and heterosexual men.  
 408 \* p < 0.05  
 409 \*\*p < 0.01  
 410 \*\*\*p < 0.001

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412 Table 3. A multivariate analysis of predictors of reported HIV-related sexual rejection in the past 12 months.

	Total (n=1,162)		Reported rejection	HIV-related sexual	Univariate	Adjusted model
	n	% <sup>3</sup>	n	% <sup>4</sup>	OR (95% CI)	aOR (95% CI)
<b>Sexuality</b>						
Gay men	969	83%	258	27%	3.53 (2.13, 5.85)***	2.17 (1.16, 4.02)*
Heterosexual men	193	17%	18	9%	ref.	ref.
<b>Age group</b>						
18-24	27	2%	4	15%	0.44 (0.15, 1.30)	0.34 (0.10, 1.12)
25-34	185	16%	54	29%	1.05 (0.73, 1.51)	0.86 (0.56, 1.32)
35-50	581	50%	164	28%	ref.	ref.
>50	315	27%	47	15%	0.45 (0.31, 0.64)***	0.57 (0.37, 0.86)**
Missing	54	5%	7	13%		
<b>Ethnicity</b>						
White British or Irish	860	74%	217	25%	ref.	ref.
BAME	300	26%	59	20%	0.73 (0.52, 1.00)	0.93 (0.62, 1.40)
Missing	2	0%	0	0%		
<b>Relationship status</b>						
Living with a husband, wife or partner	443	38%	68	15%	ref.	ref.
In a relationship with a partner, not living together	153	13%	30	20%	1.35 (0.84, 2.16)	1.49 (0.87, 2.53)
In relationships with more than one partner	21	2%	5	24%	1.72 (0.61, 4.86)	1.71 (0.53, 3.58)
No relationship and/or single	542	47%	173	32%	2.59 (1.89, 3.54)***	2.24 (1.56, 3.21)***
Missing	3	0%	0	0%		
<b>Engaging in chemsex (past 12 months)</b>						
Yes	250	22%	89	36%	2.14 (1.58, 2.91)***	1.47 (1.00, 2.17)
No	912	78%	187	21%	ref.	ref.
<b>Injecting drug use (past 12 months)</b>						
Yes	69	6%	25	36%	1.91 (1.14, 3.18)*	1.10 (0.59, 2.05)
Not reported	1,093	94%	251	23%	ref.	ref.
<b>Been paid for sex (past 12 months)</b>						
Yes	32	3%	13	41%	2.26 (1.10, 4.63)*	1.27 (0.54, 2.98)
Not reported	1,130	97%	263	23%	ref.	ref.
<b>Employment status</b>						
Full time	633	54%	158	25%	ref.	ref.
Part time	117	10%	24	21%	0.78 (0.48, 1.26)	0.72 (0.41, 1.24)
Casual	13	1%	1	8%	0.25 (0.03, 1.94)	0.20 (0.02, 1.76)
Retired	89	8%	11	12%	0.43 (0.22, 0.82)*	0.67 (0.32, 1.41)
Unemployed	129	11%	40	31%	1.35 (0.89, 2.04)	0.99 (0.60, 1.65)
Sick or disabled	108	9%	30	28%	1.16 (0.73, 1.83)	0.86 (0.50, 1.64)
Carer	4	0.3%	1	25%	1.00 (0.10, 9.70)	0.53 (0.04, 5.82)
Student	15	1%	4	27%	1.09 (0.34, 3.48)	1.90 (0.49, 7.38)
Volunteering	21	2%	4	19%	0.71 (0.23, 2.13)	0.46 (0.13, 1.55)
Missing	33	3%	3	9%		

<sup>3</sup> Column percentage

<sup>4</sup> Row percentage

<b>Living locale size</b>							
Large town or city	870	75%	217	25%	ref.	-	
Town	232	20%	47	20%	0.76 (0.54, 1.09)	-	
Rural area	56	5%	12	21%	0.82 (0.43, 1.58)	-	
Missing	4	0%	0	0%			
<b>Financial commitments</b>							
keeping up with bills	501	43%	97	19%	ref.	ref.	
keeping up but struggling	533	46%	130	24%	1.34 (1.00, 1.81)	1.34 (0.94, 1.92)	
fallen behind on some or many bills	118	10%	49	42%	2.96 (1.93, 4.54)***	2.75 (1.61, 4.68)***	
missing	10	1%	0	0%			
<b>Year diagnosed</b>							
In the last year	102	9%	32	31%	1.50 (0.91, 2.48)	-	
2010-2014	298	26%	74	25%	1.09 (0.74, 1.59)	-	
2005-2009	283	24%	66	23%	ref.	-	
2000-2004	200	17%	52	26%	1.16 (0.76, 1.76)	-	
more than 15 years ago	263	23%	51	19%	0.79 (0.52, 1.19)	-	
missing	16	1%	1	6%			
<b>Ever mental health condition</b>							
Yes	540	46%	158	29%	1.16 (0.87, 1.55)	-	
No	483	42%	96	20%	ref.	-	
missing	139	12%	22	16%			
<b>Ever physical health condition</b>							
Yes	617	53%	160	26%	1.12 (0.86, 1.47)	-	
No	406	35%	94	23%	ref.	-	
missing	139	12%	22	16%			
<b>Disability</b>							
Yes	251	22%	70	28%	1.31 (0.96, 1.81)	-	
No	871	75%	198	23%	ref.	-	
missing	40	3%	8	20%			
<b>Poor self-image</b>							
Yes	435	37%	137	32%	1.94 (1.48, 2.56)***	1.45 (1.05, 2.00)*	
No	727	63%	139	19%	ref.	ref.	

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\*\*p&lt;0.01

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\*\*\*p&lt;0.001

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p

&lt;0.05