

# Characteristics of men who have sex with men surveyed in sex-on-site venues in New Zealand

*Findings from the GAPSS and GOSS surveys 2002-2011*  
Research brief to the Ministry of Health

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## Introduction

Community events, commercial venues and online spaces are used by minority groups such as men who have sex with men (MSM) to congregate, socialise, and meet potential partners. For HIV prevention, these sites can also be mechanisms to deliver health promotion and target social marketing interventions to an otherwise invisible and often stigmatised population at heightened risk of infection.

MSM who visit sex-on-site venues such as gay saunas and cruise clubs are of particular public health interest. This is because of the opportunities for multiple sexual practices on site in a brief period of time, and also their patronage by highly sexually active individuals. Both of these traits – behavioural clustering and partner turnover - can potentially facilitate transmission of HIV and other STIs within the MSM population. Therefore a better understanding of the behaviours of MSM attending sex-on-site venues can inform decisions about targeting responses, and shape what those responses should look like.

This research brief describes and compares the characteristics of MSM recruited at different venues (the Big Gay Out (BGO) community event, gay bars, sex-on-site venues, Internet dating sites) in the Gay Auckland Periodic Sex Surveys (GAPSS) and the Gay Online Sex Surveys (GOSS). The specific aim is to describe the demographic characteristics, recent behaviours and attitudes of MSM recruited from each site in 2011 (and for some behaviours, 2008) and identify whether MSM recruited from sex-on-site venues were different to those recruited elsewhere

## The studies

GAPSS and GOSS is a programme of repeated surveys designed to monitor changes in HIV risk behaviours, testing and attitudes among MSM, the group most at risk of HIV infection in New Zealand. In 2011, of those participants who lived in Auckland, 51% were recruited from the Big Gay Out (n=994), 6.3% from gay bars (n=123), 9.6% from sex-on-site venues (n=187), and 33.3% from Internet dating sites (n=650).

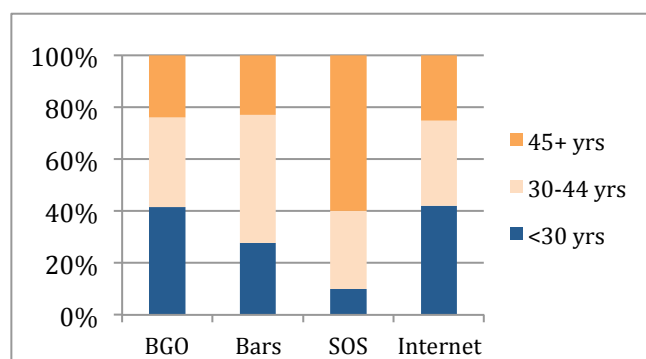
## Analysis

This research brief is descriptive. The venues examined represent specific populations of MSM that can be reached directly by delivering interventions through the sites themselves. It is less important whether any differences in behaviour between venues, such as condom use, can be explained by the different characteristics such as age of the MSM found there. More important is that large numbers men reporting specific behaviours can be accessed there. They also exhibit different demographic characteristics that can be used to design and target site-specific social marketing interventions.

## How do their characteristics differ?

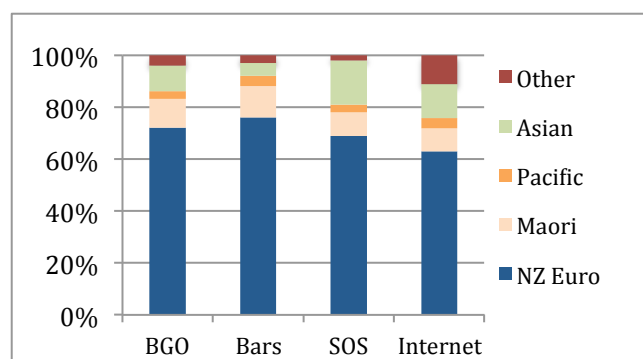
Figures 1-4 show how respondents recruited at each of the four sites differed according to age, ethnicity, sexual identity and free time with gay men. MSM recruited at sex-on-site venues were generally older than other respondents, with 90% being aged over 30 and 60% aged 45 and over (Figure 1). Respondents recruited from sex-on-site venues were more likely than MSM recruited from other venues to identify as an Asian ethnicity (17%) (Figure 2). However the majority (69%) identified as NZ European, with 9% identifying as Maori, 3% as Pacific, and 2% as an “other” ethnicity.

**Figure 1. Age of venue recruits**



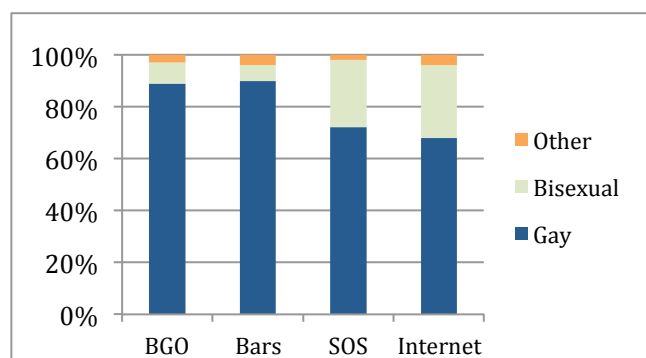
$p < 0.001$

**Figure 2. Ethnicity of venue recruits**



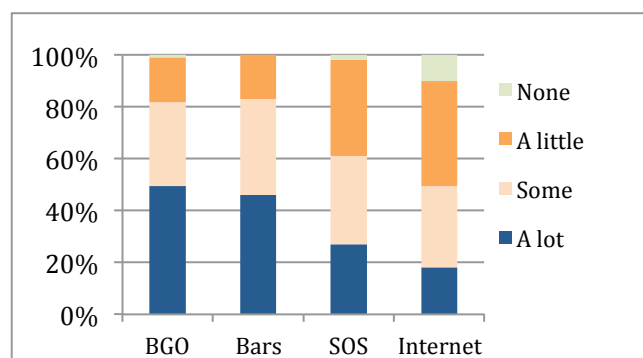
$p < 0.001$

**Figure 3. Sexual identity of venue recruits**



$p < 0.001$

**Figure 4. Free time with gay men of venue recruits**



$p < 0.001$

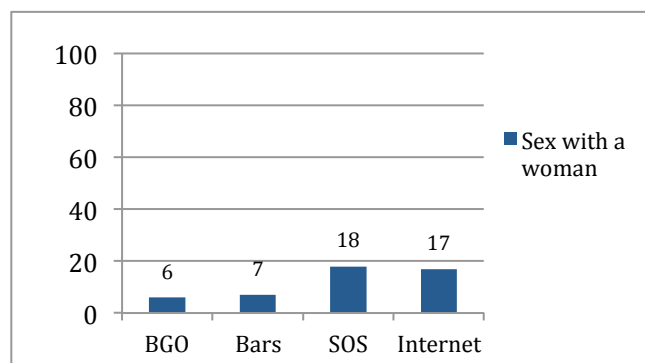
MSM recruited at sex-on-site venues were the most likely of any offline venue to identify as bisexual (26%), a higher proportion than those recruited from the BGO (8%) and gay bars (6%) and similar to MSM recruited in Auckland from Internet dating sites (28%) (Figure 3).

Respondents participating at the sex-on-site venues were the least likely of the MSM recruited at the offline venues to report spending “a lot” of their free time with other gay and bisexual men (27%). A further 34% reported spending “some” time with other gay men while 39% reported spending only “a little” or “none” of their spare time in this way. MSM recruited from Internet dating sites in Auckland were even less likely to report being gay community attached (Figure 4).

## How many sexual partners and what type?

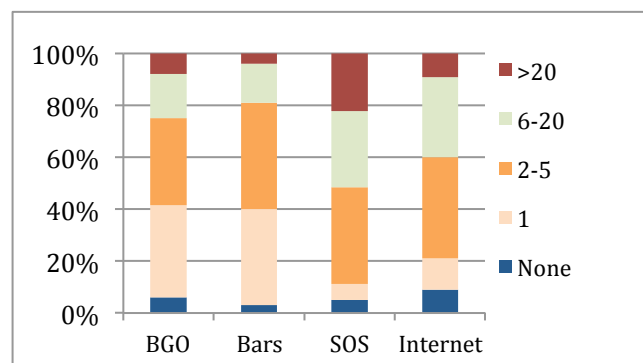
The GAPSS and GOSS surveys posed questions on both the number and type of sexual relationships individuals had had in the previous six months. Sex was defined as “any physical contact you felt was sexual” and could have included for example mutual masturbation or anal intercourse.

**Figure 5. Had sex with a woman <6 mths**



$p < 0.001$

**Figure 6. Number of male contacts <6 mths**

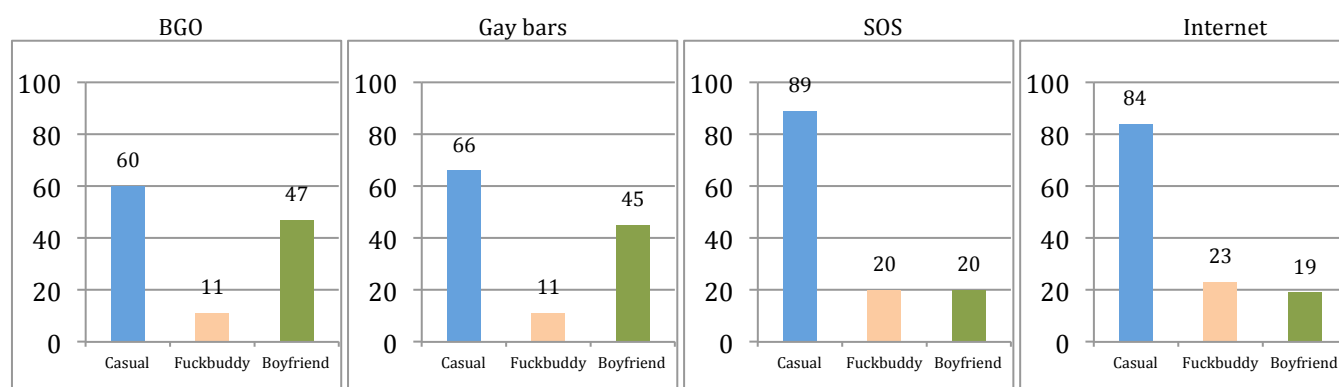


$p < 0.001$

MSM participating at the sex-on-site venues were most likely to report having had sex with a woman in the last 6 months (18%), similar to those recruited from Internet dating sites in Auckland (17%) but higher than those recruited at the BGO (6%) and gay bars (7%) (Figure 5).

Figure 6 shows that those recruited from sex-on-site venues had the highest number of male sexual contacts in the previous six months. Over one in five (22%) of such men reported sex with more than 20 male sexual partners in the previous six months, and half (51%) had over 5 sexual partners. In contrast, fewer than one in ten of MSM recruited from other sites reported over 20 sexual partners (8% at the BGO, 4% at gay bars, 9% of those from Internet dating sites in Auckland).

**Figure 7. Types of male sexual partnerships <6 mths**



$p < 0.001$  across all types

Respondents reported multiple types of sexual relationships over the last six month period (Figure 7). MSM recruited from sex-on-site venues were more likely than other respondents to report any recent casual sex partners (89%). Compared to MSM recruited at the BGO and gay bars, they were also more likely to report a current regular fuckbuddy-type partner (20%), but less likely to report a current regular boyfriend partner (20%). The sexual relationships of MSM recruited from sex-on-site venues were most like those reported by MSM recruited from Internet dating sites in Auckland. Virtually all (98%) MSM recruited from sex-on-site venues who had a current regular sexual relationship of at least six months duration also reported sex with other men in the previous six month period – what is referred to as concurrent or overlapping sexual relationships.

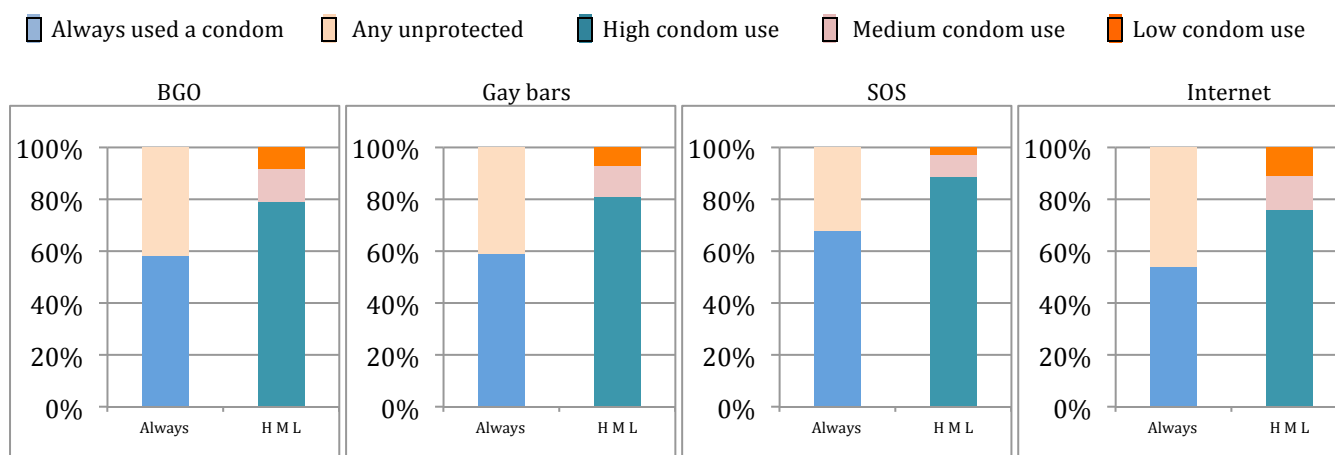
## Sexual behaviours and condom use

### *Anal intercourse and condom use with casual partners*

MSM recruited from sex-on-site venues were just as likely to report any anal intercourse with their recent casual male partners (74%) as those recruited from the BGO (77%) and gay bars (77%), but were less likely to do so than MSM recruited from Internet dating sites (85%).

Condom use was higher among MSM recruited from sex-on-site venues than among MSM recruited at other sites (Figure 8). For example, 89% were “High” condom users (used condoms always or almost always) during anal intercourse with casual partners, and 68% had used them all the time in the previous six months.

**Figure 8. Condom use with casual partners by site of recruitment in 2011**



p=0.05 for Always measure, p=0.09 for HML measure

### *Anal intercourse and condom use with fuckbuddy-type regular partners*

Respondents recruited from sex-on-site venues were just as likely to engage in anal sex with their fuckbuddy-type partners as other respondents. When doing so, condom use was slightly higher among sex-on-site recruited MSM (e.g. 71% were “High” condom users with their fuckbuddy) than among MSM recruited from the BGO (64% being “High” condom users) or from Internet dating sites (59% were “High” condom users).

### *Anal intercourse and condom use with boyfriend-type regular partners*

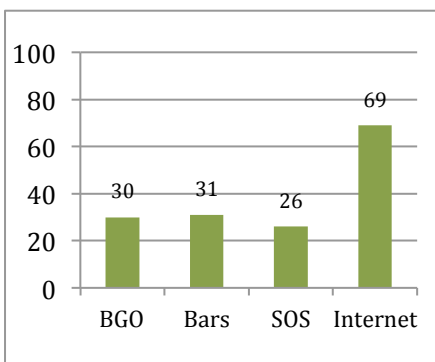
Proportionately fewer MSM recruited from sex-on-site venues engaged in anal intercourse with their current boyfriend-type partner (67%) compared to MSM recruited from other sites (85% of MSM recruited BGO, 84% of those from gay bars, and 94% of those from Internet dating sites). When doing so, condom use was again higher among MSM recruited from sex-on-site venues (e.g. 58% were “High” condom users with their boyfriend) compared to those recruited from other venues such as the BGO (33% were “High” condom users) or from Internet dating sites (34% were “High” condom users).

### Internet hook-ups, group sex, recreational substance use during sex

Only a quarter (26%) of respondents recruited from sex-on-site venues reported that they had sex with a man they had met on the Internet in the previous six months, which was lower than that reported among MSM from the BGO (30%), gay bars (31%) or from Internet dating sites (69%) (Figure 9).

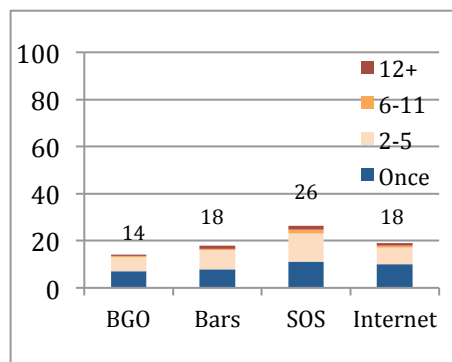
Conversely, MSM recruited from sex-on-site venues were more likely to report having engaged in group sex at least once in the previous six months (26%) compared to other respondents, and if they had done so, to report engaging in this more frequently than others (Figure 10). MSM recruited from sex-on-site venues were also more likely to have used the recreational substance amyl during sex in the previous six months (55%), compared to other respondents (38% of those at the BGO, 41% of those at gay bars, and 43% of those from Internet dating sites) (Figure 11).

**Figure 9. Sex with a man met online <6 mths (2011)**



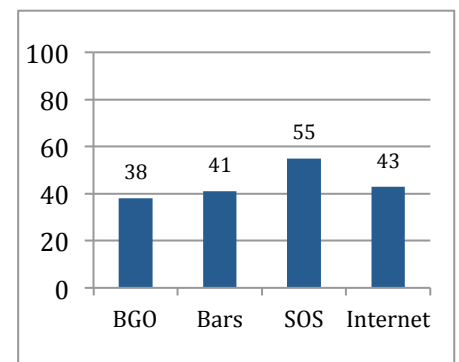
p<0.001

**Figure 10. Group sex <6 mths (2008)**



p<0.001

**Figure 11. Used amyl during sex <6 mths (2008)**

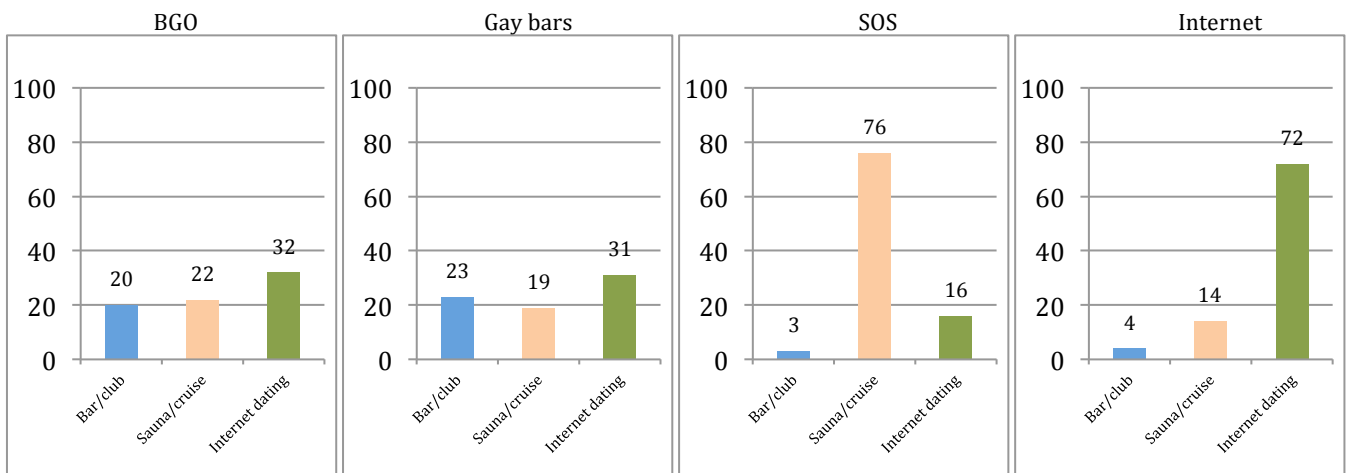


p<0.001

### Source of last casual anal sex partner in the previous six months

Figure 12 indicates where MSM from each of the four recruitment sites met their last casual partner they had anal intercourse with. The three most popular places listed by respondents are shown (gay bar or club, sauna or cruise club, Internet dating site). Most MSM recruited from the sex-on-site venues met this man at a sauna or cruise club, with fewer doing so online or at a gay bar. The reverse was true for men recruited from Internet dating sites. Of MSM recruited from the BGO or gay bars, almost equal proportions met this man at a gay bar or SOS venue, with just under a third meeting him online.

**Figure 12. Source of last casual anal sex partner <6 mths by recruitment site in 2011**

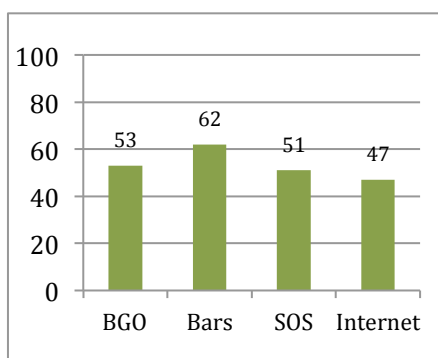


## HIV and sexual health testing

Half (51%) of those recruited from sex-on-site venues had tested for HIV in the year prior to survey, lower than that among gay bar recruits and higher than among MSM recruited online in Auckland (Figure 13). Of MSM recruited from the offline sites, a similar proportion had tested HIV positive (6% at the BGO, 7% at gay bars, 7% at sex-on-site venues); this was higher but not significantly so than reported among MSM recruited from Internet dating sites (4%).

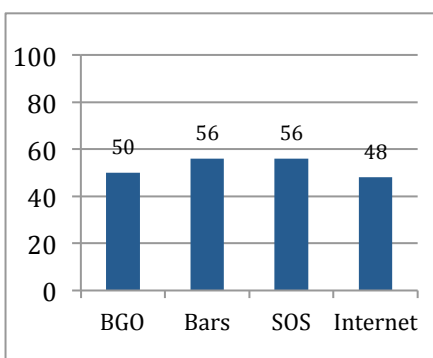
In 2011, MSM recruited at the offline venues were invited to provide an oral fluid specimen for anonymous HIV antibody testing and the proportion offering to do so was higher at the BGO (82%) than at the sex-on-site venues (77%) and gay bars (72%). Of the respondents who provided specimens, a slightly higher proportion of MSM recruited from the sex-on-site venues had undiagnosed HIV infection (3.5%) compared to those at the BGO (1.1%) and gay bars (0%), although this difference was not statistically significant.

**Figure 13. HIV testing <12 mths**



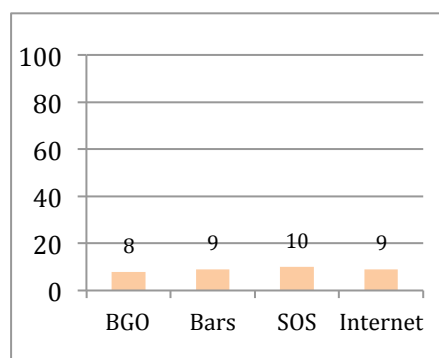
p<0.001

**Figure 14. Sexual health checkup or treatment <12 mths**



p=ns

**Figure 15. Diagnosed with an STI <12 mths**



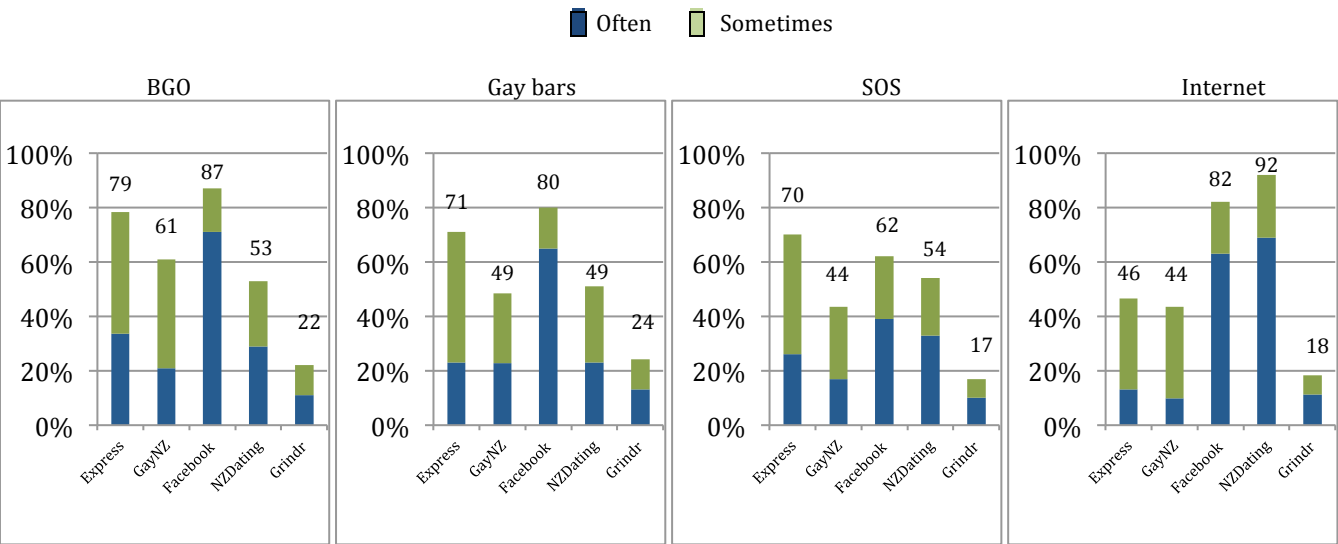
p=ns

Just over half of MSM recruited at the sex-on-site venues had been for a sexual health checkup or treatment in the 12 months prior to survey, and this was similar to respondents at other sites (Figure 14). Ten percent had been diagnosed with an STI in the previous year, which was also similar to reports of diagnosed STIs among other respondents (Figure 15).

Social media

Figure 16 shows that engagement with media varied among MSM recruited from different sites. Any engagement with gay media such as Express (79%) and GayNZ.com (61%) was highest among MSM recruited at the BGO, whereas those recruited from Internet dating sites had the lowest engagement with Express magazine (46%). MSM recruited from sex-on-site venues were generally similar to those recruited from gay bars, with less Facebook use (62%).

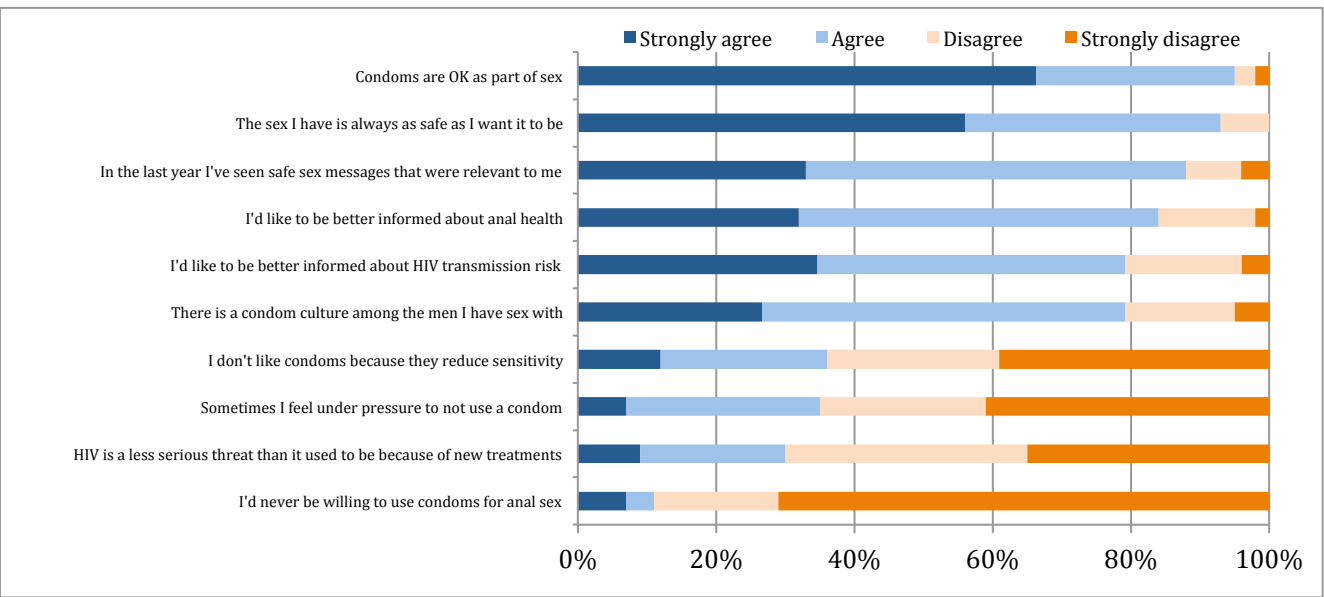
Figure 16. Media engagement by recruitment site in 2011



Attitudes

Figure 17 shows responses to various statements in 2011 among MSM recruited from sex-on-site venues ranked according to agreement and disagreement. These were mostly positive about sexual health and did not significantly differ from the attitudes of MSM recruited at the BGO.

Figure 17. Attitudes among MSM recruited at the sex-on-site venues



## Summary

- MSM recruited from sex-on-site venues in 2011 are a distinct group compared to other respondents. These men are typically:
  - aged 30 or over and less socially connected with other gay men
  - NZ European and gay identified, however compared to MSM recruited from other venues they were more likely to identify as Asian or as bisexual.
- Sexual partnering patterns of MSM recruited from sex-on-site venues are very different to other MSM. They reported:
  - more recent male sexual partners
  - more casual and regular fuckbuddy-type relationships
  - fewer boyfriend-type relationships
  - more overlapping sexual relationships
  - more group sex.
- Condom use by MSM recruited from sex-on-site venues was not lower than the condom use of other MSM. With all types of sexual partners, it was equal to, and sometimes higher than, condom use reported by other respondents.
- Rates of HIV and sexual health testing were similar to other respondents.
- Their most recent casual partner whom they had anal intercourse with was substantially more likely to have been sourced at a sex-on-site venue than at gay bars or the Internet.
- MSM recruited from sex-on-site venues engaged with a variety of media.
  - Of the online media, there was less emphasis on gay news media and more on dating sites, relative to other respondents.
- Attitudes among MSM recruited from sex-on-site venues were similar to that of MSM recruited at the BGO.
- MSM using sex-on-site venues should be targeted for interventions primarily due to their high sexual partner turnover and potential to propel infection through gay communities if condoms are not used for anal intercourse.

## Discussion

MSM recruited from sex-on-site venues who had not previously completed the GAPSS survey elsewhere are more sexually active compared to other GAPSS and GOSS respondents. This was particularly evident in the number of recent partners, where 1 in 5 reported over 20 partners in the previous six months, and in the nature of partnering, with regular fuckbuddy-type partners as common as regular boyfriend-type partners.

This rate of partner change creates densely connected networks of sexual contacts. These in turn create conditions for the rapid and efficient spread of sexually transmitted infections such as HIV in the absence of condom use. Encouragingly, condom use was similar to or in some cases higher among men recruited at sex-on-site venues compared to other MSM, meaning that the additional risk entailed in multi-partnering may be offset to some extent by these protective behaviours. This also indicates that the men participating from sex-on-site venues are responding to safe sex campaigns as well as are any other MSM. Nevertheless, condom use needs to increase further among these men in order to reduce new HIV infections.

The rate of HIV testing and sexual health checkups was similar among MSM recruited from sex-on-site venues to that of MSM recruited elsewhere, as was the proportion who had an STI diagnosed in the previous year. However, given that the number of sexual contacts is higher among MSM at sex-on-site venues, suggesting that the absolute number of unprotected anal sex contacts will also be higher even if the proportion doing so is not, then a similar rate of sexual health screening and STI diagnosis may in fact indicate that undiagnosed infections are higher among these MSM. There was evidence of this in the rate of undiagnosed HIV infection from another study, although this was not statistically confirmed. Increasing the proportion who test for



HIV and other STIs, and the frequency of testing among those who already do, would be an appropriate public health response.

Some information on these men's sexual and social mixing is described in this research brief. Three quarters of such men acquired their most recent casual anal intercourse partner at a cruise club or gay sauna, presumably many of these episodes occurred on premises. Thus continuing to place condom social marketing inside these venues is critical as this will be proximal to point-of-encounter. MSM recruited from these venues were slightly less engaged with some forms of gay media but were as likely to use Internet dating applications as other respondents; this should be considered when planning social marketing placement for this group. The demographics of these MSM also differed to other MSM, being older and less community attached. Although most were NZ European and identified as gay, compared to MSM recruited at other venues they were more likely to be of Asian ethnicity or to identify as bisexual. These characteristics should inform the design of condom messaging.

An important limitation to these data are that they only relate to MSM who were recruited from sex-on-site venues following the recruitment at BGO. This is a subset of all MSM who use such venues. Thus many MSM recruited from the BGO and gay bars, and some from Internet dating sites, use sex-on-site venues but are not part of the sex-on-site recruited sample. For example, of respondents recruited into GAPSS/GOSS from other venues whose last anal intercourse partner was a casual or anonymous type, a cruise club or gay sauna was listed as the source of partner acquisition by 14% of Internet dating site recruits in Auckland, 19% of gay bar recruits, and 22% of BGO recruits. Clearly sex-on-site venues are still important sources of sexual partner acquisition for many MSM.

Both GAPSS and GOSS are established survey programmes with large and diverse samples of MSM, and the consistency in most findings over time suggests that they are robust. While the survey methodology means it is not possible to generalise the data to all MSM in New Zealand, we believe the respondents offer a good reflection of the experiences of most MSM.

In conclusion, the high rate of sexual partner turnover and overlapping relationships among MSM recruited at sex-on-site venues in Auckland make them an ongoing HIV prevention priority. Because of these practices, condom promotion should be increased to offset the higher potential risk of acquisition and transmission, and to disrupt chains of infection. Extra attention should also be directed at more widespread and more frequent HIV and STI testing among this group so that any undiagnosed infections can be detected early. Social marketing interventions intended for these MSM need to take account of their demographic characteristics.

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