

Risk behaviour among Aboriginal and Torres Strait Islander gay men: comparisons with other gay men in Australia

Chris G. Lawrence^{A,C}, Patrick Rawstorne^B, Peter Hull^B, Andrew E. Grulich^A,
Scott Cameron^C and Garrett P. Prestage^{A,D}

^ANational Centre in HIV Epidemiology and Clinical Research, University of New South Wales, Sydney, NSW 2000, Australia.

^BNational Centre in HIV Social Research, University of New South Wales, Sydney, NSW 2000, Australia.

^CNational Centre in Epidemiology and Population Health, Australian National University, Canberra, ACT 2601, Australia.

^DCorresponding author. Email: gprestage@nchehr.unsw.edu.au

Abstract. *Objectives:* To determine any differences in HIV-risk and drug-use behaviour among Aboriginal and Torres Strait Islander gay men and other gay men in Australia. *Methods:* *The Gay Community Periodic Survey* is a repeated cross-sectional prevalence study of the sexual and drug use behaviours of Australian gay men conducted since 1996. Responses from Aboriginal and Torres Strait Islander (ATSI) gay men were compared with those from non-ATSI gay men for the years 2000–2004. *Results:* Of 34 708 responses collected in major Australian cities over a 6-year period, 1208 identified as Aboriginal or Torres Strait Islander. There was little difference between ATSI and non-ATSI men in the reported prevalence of HIV, though ATSI gay men were more likely than non-ATSI gay men to engage in unprotected anal intercourse with casual partners and to inject illicit drugs but were more likely to have been recently tested for HIV. *Conclusions:* These ATSI gay men were at increased risk of HIV and other blood-borne viruses, though this may be due to differences in socio-economic status as much as cultural background. These findings indicate the continued need for targeted sexual and injecting-drug-use health interventions among this population.

Additional keywords: injecting drug use, sexual behaviour, unprotected anal intercourse.

Introduction

The *National Indigenous Australians Sexual Health Strategy* (NIASHS)¹ suggests that within many Aboriginal and Torres Strait Islander (ATSI) communities, HIV has been thought of as affecting white gay men only, and argues that ATSI men who have sex with men (MSM) face discrimination due to both their aboriginality and their sexuality. Yet little research to determine who among this population is at greatest risk has yet been undertaken.

Although the transmission of HIV among homosexually-active Australian men has been relatively well researched,² less is known about HIV transmission among homosexually-active ATSI men. Even less is known about how cultural factors specific to the ATSI population may influence the sexual behaviours of this group.

Existing public-health strategies in Australia have, over many years, been relatively successful in slowing the spread of HIV among homosexually-active men.² These strategies have predominantly addressed either the general population, especially in the early phases of the epidemic, or gay men

of Anglo Saxon background and gay communities in inner urban areas of the major cities.

Homosexually-active ATSI men are harder to contact than non-ATSI men, given that they are less concentrated in urban populations, less likely to identify as gay due to cultural taboos and attachment to traditional communities, less likely to be literate and less likely to have confidence in health institutions that they consider do not display sensitivity to their needs.³

Given the problem of reaching this group, government-funded organisations have developed campaigns and resources that specifically address sexual-health issues in the ATSI population. However, the efficacy of such campaigns has largely been evaluated on an anecdotal level.^{4,5}

Moreover, the limited research that has been undertaken in relation to HIV in indigenous communities often relates not to Australia's ATSI population but, rather, to Canadian Aboriginals, American Indians and Alaskan Natives.^{6,7} These studies have shown that HIV, sexually transmissible infections (STIs) and other blood-borne viruses (BBVs) are

significant causes of morbidity in indigenous people. In Australia, among indigenous male populations, poor sexual- and reproductive-health issues have been attributed to poor education, low socio-economic living standards and high-unemployment rates.⁸

In the present study, we compare, for the first time, Gay Community Periodic Surveys (GCPS) data about HIV-risk and drug-use behaviours among ATSI and non-ATSI gay men.

Methods

The GCPS, which was originally conducted in Sydney in 1996, has since been repeated at regular intervals in major Australian cities and the methods have been previously described.^{9–15} In 1998, respondents were first asked specifically: 'Are you of Aboriginal or Torres Strait Islander origin?' Data included here are for the period from 2000 to 2004.

Questionnaire

A self-administered questionnaire was used and included questions on sexual behaviours, condom use and relationship status, HIV testing practice and HIV serostatus, antiretroviral treatment (ART), recreational drug use including injecting drug use (IDU), sexual identity and measures of gay community attachment. Complete wording of the questions used has been previously reported.^{9–15} On average, men usually completed the questionnaire in about 10 min. No assistance was provided for completion of the questionnaire.

Participants

Participants were recruited from a range of gay community venues, clinics and events at each location.¹¹ Men were eligible to participate if they had had sex with another man within the previous 5 years. We have included all men who completed a questionnaire for the survey between 2000 and 2004.

Data analysis

Univariate analysis was undertaken using SPSS (SPSS Inc., Chicago, IL), calculating *P*-values using the χ^2 -test or Fisher's exact test. Descriptive analysis compared ATSI and non-ATSI respondents with respect to demographic variables, sexual identity and gay community attachment, sexual and injecting-drug-use behaviours, HIV serostatus and HIV testing behaviours. Trend data were analysed separately for ATSI and non-ATSI men and it was determined that trends over time applied equally to both groups. Results should be interpreted with caution because some respondents may have completed the survey on more than one occasion: in February 1997, 26.2% of Sydney respondents indicated they had completed the survey in 1996.

A multivariate logistic regression was undertaken to determine independent associations with sexual-risk behaviour, in this case unprotected anal intercourse with casual partners (UAIC), to determine if ATSI status was an independent risk factor.

Results

The proportion of ATSI respondents was lowest in Canberra and highest in Brisbane. These proportions are consistent with Australian Bureau of Statistics data, which show that the total population in Queensland, during the December 2004 quarter, was 3 919 500 persons. Of this total, 3.2% identified as ATSI. In the same period in the Australian

Capital Territory, the total population was 324 300, with 1.2% identifying as ATSI.¹⁶ Overall, in the current study, between 2000 and 2004, there were 1208 ATSI respondents and 33 497 non-ATSI respondents (Table 1). Although numbers did not permit detailed analysis by city, the findings presented here were generally true regardless of from which city the men were recruited.

The study found that ATSI gay men included in the survey had a mean age of 33 years, whereas non-ATSI men were slightly older, with a mean age of 35 years ($P = 0.001$). One-quarter (27.1%) of ATSI men and 20.8% of non-ATSI men were not in employment ($P < 0.001$). When employed, ATSI men were less likely than non-ATSI men to be in managerial or professional positions (28.7 and 39.3% respectively; $P < 0.001$). One-third (33.9%) of ATSI men had received university education, compared with 46.6% of non-ATSI men ($P < 0.001$).

It was found that ATSI men were less likely to identify as homosexual: 85.2% of ATSI men and 90.4% of non-ATSI men identified as gay ($P < 0.001$). They were also less likely to indicate having 'mainly' gay friends ($P = 0.006$).

There was no difference between ATSI and non-ATSI respondents in reported HIV prevalence: 11.3% of ATSI men and 10.6% of non-ATSI men reported being HIV-positive. Though not a large difference proportionally, ATSI men were more likely to have been recently tested for HIV; among those men who were not HIV positive, 64.6% of ATSI men and 59.2% of non-ATSI men had been tested for HIV in the 12 months prior to completing the survey ($P < 0.001$). Men who reported being HIV-positive were asked if they were currently on antiretroviral treatments (ART). Two-thirds (66.2%) of HIV-positive non-ATSI men and three-quarters (77.5%) of HIV-positive ATSI men were on ART ($P = 0.005$).

During 2000 and 2001, men in Sydney, Melbourne, Perth and Canberra were asked if they had been diagnosed with specific sexually transmissible infections (STIs) in the 12 months prior to the survey. The number of ATSI respondents was small and so these data should be interpreted with caution (ATSI = 208, non-ATSI = 9941). We found that ATSI men were more likely than non-ATSI men to report episodes of gonorrhoea (9.6 and 6.2% respectively; $P = 0.035$) and syphilis (5.3 and 2.0%; $P = 0.004$). Though not statistically significant, this tended also to be the case for chlamydia (7.7 and 5.1%; $P = 0.068$).

Respondents were asked about sexual and drug-using behaviours, which showed that ATSI men were more likely to use most types of illicit drugs than non-ATSI men, including marijuana (51.4 and 43.6% respectively; $P < 0.001$), heroin (5.5 and 1.4% respectively; $P < 0.001$) and speed (34.8 and 28.0% respectively; $P < 0.001$). They were also more likely to have injected illicit drugs: 10.8% of ATSI men and 5.9% of non-ATSI men had injected drugs in the 6 months prior to being surveyed ($P < 0.001$).

Table 1. Number of responses by Aboriginal or Torres Strait Islander (ATSI) status and year and location

	Sydney (n = 16 813)		Melbourne (n = 8909)		Queensland (n = 8654)		Perth (n = 2748)		Adelaide (n = 2226)		Canberra (n = 595)		Total (n = 40 146)	
	ATSI	Non-ATSI	ATSI	Non-ATSI	ATSI	Non-ATSI	ATSI	Non-ATSI	ATSI	Non-ATSI	ATSI	Non-ATSI	ATSI	Non-ATSI
2000	46	2767	29	1457	117	1112	27	973			6	338	225	6647
2001	58	2719	42	1687	73	1446			13	530			186	6382
2002	72	2724	45	1744	82	1613	28	746					227	6827
2003	99	2375	70	1934	83	1397			26	706	10	241	288	6653
2004	101	2667	70	1831	86	1541	25	949					282	6988
Total	376	13 252	256	8653	441	7109	80	2668	39	1236	16	579	1208	33 497
(%)	2.8	97.2	2.9	97.1	5.8	94.2	2.9	97.0	3.1	96.9	2.7	97.3	3.5	96.5

Note: Percentages are of the total number of respondents from each location.

Both ATSI and non-ATSI men were equally likely to have had sex with casual partners in the preceding 6 months. They were also equally likely to have had sex with regular partners. However, ATSI men were more likely than non-ATSI men to engage in UAIC: 23.5% of ATSI men and 20.7% of non-ATSI men had engaged in UAIC in the preceding 6 months ($P = 0.010$). They were, however, no more likely to engage in UAI with their regular partners.

In the multivariate analysis of factors associated with sexual-risk behaviour, engaging in UAIC was not associated with being of Aboriginal or Torres Strait Islander background (Table 2). Factors that were associated with UAIC were being HIV-positive, having more sex partners in the previous 6 months, being surveyed in cities other than Melbourne, any use of illicit drugs and not being employed as a manager or professional. Only the latter two of these items were associated with being of ATSI background in the univariate analysis. Other items that were tested in the analysis were: age, sexual identity and number of gay friends.

Discussion

There was no difference in the reported rate of HIV infection between these ATSI and non-ATSI men, even though the ATSI men were somewhat more likely to engage in behaviours associated with the transmission of HIV. This difference in risk behaviour, although significant at a univariate level, was only a small difference in absolute terms and being of ATSI background was not independently associated with UAIC in the multivariate analysis.

Table 2. Factors associated with engaging in UAIC (multivariate logistic regression analysis)

Variable	Adjusted odds ratio	95% CI	<i>P</i> value
Location of recruitment			<0.001
Sydney	1.00		
Melbourne	0.764	0.710–0.822	
Queensland	1.058	0.980–1.142	
Adelaide	1.001	0.891–1.125	
Perth	0.926	0.789–1.085	
Canberra	0.851	0.590–1.227	
Employment			<0.001
Managerial/professional	1.00		
Para-professional	1.126	1.012–1.252	
Trade	1.194	1.030–1.384	
Clerical and sales	1.202	1.116–1.295	
Plant operator/Labourer	1.458	1.258–1.691	
Not employed	1.237	1.143–1.340	
HIV status			<0.001
HIV-positive	1.00		
HIV-negative	0.379	0.349–0.411	
Untested/Results unknown	0.445	0.396–0.499	
Any illicit drug use	1.502	1.407–1.604	<0.001
Number of male sex partners	2.575	2.492–2.660	<0.001

It has been reported that, in some rural Aboriginal communities, men who engage in risky sexual behaviours are more likely to seek tests for the presence of HIV.¹⁶ Given that ATSI gay men were slightly more likely to engage in UAIC—a behaviour well understood to be associated with HIV transmission¹⁷—it is not surprising that they were more likely to have been recently tested for HIV and that they were more likely to also report recent infection with other STIs. Nonetheless, indigeneity was not independently associated with UAIC. Factors associated with UAIC included other indicators of risk behaviour, such as illicit drug use or having multiple sex partners, as well as occupational and employment status. Socio-economic status may be of greater consequence than cultural background in accounting for sexual-risk behaviour in this population.

To date, there has been relatively little research into injecting drug users of ATSI background.¹ National monitoring of needle and syringe programs has reported a low prevalence of HIV infection resulting from IDU for both ATSI and non-ATSI populations.¹⁸ It is, however, difficult to determine the level of hepatitis C (HCV) infection among indigenous Australians, because indigenous status is not recorded in the notifiable disease statistics of several states and territories.¹⁹ Nonetheless, the *Australian hepatitis C Surveillance Strategy*²⁰ identified indigenous Australians as being at increased risk, compared with the general population, of HCV transmission. In our univariate analysis, injecting drug use was higher among indigenous than non-indigenous gay men, suggesting that HCV infection is a potential issue in this population.^{21,22}

According to these findings, ATSI gay men represent at least as important a target group for public-health intervention as do other gay men. The national HIV/AIDS and BBV strategies suggest that gay men, people who inject drugs and ATSI populations are at increased risk of infection. The ATSI gay men in this study are at increased risk, though this may be a function of their socio-economic status and marginalisation rather than their indigeneity and they also represent several of the identified priority areas so they, therefore, require a targeted response.

These samples, recruited through gay community sites, are not representative of all men who have sex with men (MSM). In particular, men who have little or no contact with organised gay communities are unlikely to be represented in the surveys. With respect to ATSI MSM in particular, we cannot know what proportion participates in local gay communities. It may be that the ATSI men in this sample, due to their close connections with gay community, are more informed about practices that are at risk of HIV and STI transmission than MSM who are not so connected, or, equally, that MSM who do not participate in gay community may be more cautious about the risk of HIV and STI infection and so are less likely to engage in risk behaviour. Whichever is the case, there is a clear need for further research that

targets ATSI MSM who do not participate in local gay community activities.

Nonetheless, these surveys have recruited many homosexually-active men who identified both as gay and as ATSI. These data provide, for the first time, some insights into the risk behaviour of this group of men. Overall, the ATSI and non-ATSI men in this survey are more alike than different. Where differences do emerge, they indicate that ATSI men are at increased risk of infection by HIV and other blood-borne viruses, but are also, like their heterosexual counterparts, more disadvantaged on several socio-economic indicators and it may be that this relative disadvantage underlies their greater risk of infection.

Conflicts of interest

None exist.

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