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Case report

Are Australian sexual health clinics attracting priority populations?

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Abstract. To answer a key question ('Are Australian sexual health clinics attracting priority populations?'), we used data from 44 Australian sexual health clinics between 2004 and 2011. We assessed the proportion of patients that were from priority populations (deemed to be at risk of sexually transmissible infections) and compared this to their proportions in the general population using data from Australian Bureau of Statistics and the Australian Study of Health and Relationships. A χ^2-test was used. A total of 278 154 new patients attended during 2004–2011. The proportions from each priority population were significantly higher ($P < 0.01$ for all) than for the general population: young people aged 15–29 years (58.1% *v.* 20.1%), men who have sex with men (26.0% *v.* 6.0%), female sex workers (10.8% *v.* 0.5%), and Aboriginal and Torres Strait Islander people (4.2% *v.* 2.3%). This study confirms that Australian sexual health clinics attract higher proportions of priority populations and are thus meeting their mandate as defined in the 2010–2013 National Sexually Transmissible Infections Strategy.

Additional keywords: Aboriginal and Torres Strait Islander, at-risk populations, men who have sex with men, sex workers, sexually transmissible infections, young people.

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Introduction

General practitioners provide the bulk of sexual health care in Australia.[1] However, many people prefer sexual health clinics as they provide specialist expertise, confidential systems and targeted services.[2] Sexual health clinics in Australia, generally provide care to people with sexually transmissible infection (STI) related symptoms and to asymptomatic people from priority populations. As defined in the 2010–2013 National STI Strategy, these populations include young people, Aboriginal and Torres Strait Islander people, men who have sex with men (MSM) and sex workers.[3]

In this paper we aim to answer a key question: 'Are Australian sexual health clinics attracting priority populations?' We describe the demographics and risk behaviour of patients attending sexual health clinics across Australia and compare these findings with the general population.

Methods

We conducted a cross-sectional analysis of clinic encounter data (2004–2011) from sexual health clinics and compared these findings to the general population. In addition to priority populations, we included data on other populations of interest.

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Sexual health clinics

We included data from 44 sexual health clinics participating in a network of the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS) project.[4] Briefly, ACCESS sexual health clinics are located across all states and territories except South Australia. The clinics provided deidentified line-listed data on all patients. Ethical approval for ACCESS was granted by the human research ethics committees of St Vincent's Hospital and the University of New South Wales, and the ethics committees that oversee each of the participating sexual health clinics.

New patients were defined as any person attending the clinic for the first time. We used the following terms: 'young people' for patients aged between 15 and 29 years, 'MSM' for men who reported having sex with another man in the last 12 months (though some had sex with both men and women), 'women who have sex with women (WSW)' for women who reported having sex with another woman in the last 12 months (though many had sex with both men and women), 'heterosexual' for patients who reported having sex only with people of the opposite gender in the last 12 months, 'sex worker' for patients who reported sex work in the last 12 months and 'traveller' for patients who arrived from another country in the current or previous calendar year. Area of residence was based on the patient's postcode of residence and categorised into urban versus regional or remote based on the Australian Bureau of Statistics (ABS) geographical remoteness classification system.[5]

General population

Australian population data breakdowns (age, sex, Aboriginal and Torres Strait Islander, remoteness, country of birth and year of arrival in Australia) are publicly available from the ABS website.[6] Data were downloaded and collated by state and territory. Population data on sexual orientation and sex work were only available from the Australian Study of Health and Relationships (ASHR).[7,8] Briefly, ASHR is a repeatable population survey with the last data collection in 2001–2002. To allow comparisons with sexual health clinic data, we used the term 'heterosexual' for ASHR participants who reported having sex only with people of the opposite sex. All other participants were classified as either MSM or WSW. The ASHR survey also asked participants if they were ever paid for sex and the proportion of women who answered yes was used as a proxy for the proportion of female sex workers in the country.

Statistical analysis

A Pearson's χ^2-test was used to compare the proportions of patients from priority populations and other populations of interest attending sexual health clinics, with their proportion in the general population. Analyses were conducted using STATA ver. 12 (StataCorp, College Station, TX, USA).

Results

A total of 278 154 new patients attended the 44 sexual health clinics between 2004 and 2011; 45.4% were females. The median age of female patients was 25 years (interquartile range: 21–32) compared with 29 years in males (interquartile range: 23–38).

Priority populations

A significantly higher proportion of new patients from the following priority population groups attended the sexual health clinics compared with the general population: young people aged 15–29 years (58.1% *v.* 20.1%), MSM (26.0% *v.* 6.0%) and female sex workers (10.8% *v.* 0.5%) overall (Table 1) and in each state or territory (data not shown) ($P < 0.01$ for all). A significantly higher proportion of Aboriginal and/or Torres Strait Islander people attended sexual health clinics compared with the general population overall (4.2% *v.* 2.3%; $P < 0.01$), though the proportions were significantly lower in the Australian Capital Territory (ACT) (0.4% *v.* 1.2%), Northern Territory (13.4% *v.* 27.8%) and Tasmania (2.4% *v.* 3.5%) ($P < 0.01$ for all).

Other populations of interest

A significantly higher proportion of people born outside Australia attended sexual health clinics overall compared with the general population (36.2% *v.* 29.4%, $P < 0.01$), though the proportions were lower in Tasmania (15.8% *v.* 16.8%), Western Australia (26.3% *v.* 34.7%) and ACT (14.3% *v.* 27.0%) ($P < 0.05$ for each). Proportionately more international travelers (14.2% v 2.2%; $P < 0.01$) were seen at the sexual health clinics, whereas fewer WSW attended the clinics (5.3% v 8.5%; $P < 0.01$). A significantly higher proportion of patients from urban areas visited the clinics compared with the general population (71.9% *v.* 68.2%, $P < 0.01$) in all states and territories except Queensland and ACT, where a higher proportion of patients from regional or

Table 1. Characteristics of new patients attending 44 Australian sexual health clinics compared with characteristics of the general population, 2004–2011

	Sexual health clinics (%)	Population (%)	*P*-value
Area of residence			
Urban	71.9	68.2	<0.01
Regional or remote	28.1	31.8	
Age group (years)			
<15	0.6	19.9	<0.01
15–19	11.4	6.8	
20–24	25.2	6.8	
25–29	22.0	6.5	
30+	40.7	59.9	
Sexual behaviour			
Heterosexual men	74.0	90.7	<0.01
Men who have sex with men	26.0	6.0	
Heterosexual women	94.7	88.3	
Women who have sex with women	5.3	8.5	
Female sex worker	10.8	0.5	<0.01
Aboriginal and Torres Strait Islander	4.2	2.3	<0.01
Country or region of birth			
Australia	63.8	70.6	<0.01
New Zealand	3.3	2.1	
South-East Asia	3.6	2.8	
Sub-Saharan Africa	1.4	1.0	
Europe	14.2	10.2	
Other	13.7	13.3	
International traveller	14.2	2.2	<0.01

remote areas attended the clinics (49.4% *v.* 39.8% and 5.5% *v.* 0.2% respectively; $P < 0.01$; Table 1).

Discussion

This study shows that Australian sexual health clinics attract a higher proportion of patients from priority populations compared with their proportion in the general population, in line with the 2010–2013 National STI Strategy which encourages a focus on priority populations.[3] The major strength of this study is that it combines three national data sources, one of which includes 8 years of data on all new patients attending 44 sexual health clinics across Australia: these clinics provide care to >80% of patients attending public sexual health clinics. The national scale of the ACCESS project reduces concerns about using data from a single clinic or region.

It is important to note that since ACCESS does not include all sexual health clinics in Australia, our findings are only a crude assessment of the comparison between sexual health clinic patients and the general population in the respective state or territory. The ideal comparison would be between the clinic population and the surrounding community. However, defining a clinic's catchment area is not possible, as people from any location can attend and some clinics offer outreach services in specific locations. Also, state-based comparisons could not be made for the proportion of sex workers, MSM and WSW, as the state-specific data were not publicly available from ASHR.

There are a few factors to consider that may have caused the general population estimates to be underestimated and thus have caused a positive bias (a greater difference between the two data sources). ASHR data are now a decade old and the population proportions may have increased since then, participants in ASHR may have under-reported behaviours, and ABS data have underestimated the population of Aboriginal and Torres Strait Islander people.[9] Conversely, different definitions used in the data sources may have caused the general population estimates to be overestimated and caused a negative bias (a smaller difference between the two data sources). Clinics collect sex work status and sex of the partner for (for MSM and WSW) in the last 12 months, whereas the general population definitions are based on 'ever'. A previous study used a different question from ASHR, where respondents were asked to self-identify themselves as heterosexual, homosexual or bisexual.[10] Only 2% of men identified themselves to be homosexual or bisexual, compared with 6% who actually reported having sex with other men.

The higher proportions of priority populations at the sexual health clinics compared with the general population is probably a reflection of two key factors: (1) triage systems at sexual health clinics aim to prioritise services for priority populations by referring asymptomatic patients that are not from priority populations to general practitioners for STI screening;[11] and (2) priority populations are at a higher risk of STIs and are recommended to have more regular testing.

Although the proportion of Aboriginal and Torres Strait Islander people attending sexual health clinics was higher than or equivalent to the proportion in general population in most states; in ACT, Northern Territory and Tasmanian sexual health clinics, the proportion was smaller. This may be due to: (a) a preference of Aboriginal and Torres Strait Islander people to attend Aboriginal Community Controlled Health Services[12] (in Darwin and Alice Springs, for example, there are Aboriginal Community Controlled Health Services in close proximity to the sexual health clinics); (b) data entry omissions or errors at sexual health clinics (i.e. Aboriginal and Torres Strait Islander status was not entered into the electronic data at the time of data entry from paper registration forms); and (c) many Aboriginal and Torres Strait Islander people reside in regional and remote areas,[13] whereas sexual health clinics tend to be located mainly in urban areas.

In conclusion, the findings from this study confirm that sexual health clinics are attracting higher proportions of priority populations compared with their proportion in the general population. This shows that the clinics are meeting their mandate in response to the national STI strategy. With increasing sexual risk-taking behaviour in some priority populations,[14,15] and the increasing prevalence of STIs and increasing notifications of HIV,[16–18] sexual health clinics need to keep their focus on these populations.

Conflicts of interest

None declared.

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