

Trends and predictors of recent HIV testing over 22 years among a clinic sample of men who have sex with men in South Australia

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Introduction

Increasing the frequency of HIV testing is crucial for effective HIV prevention and care. The Sexually Transmitted Infections in Gay Men Action group (STIGMA) recommended testing for HIV at least once a year for all MSM and up to four times a year for MSM at highest risk including any unprotected anal sex and more than 10 sexual partners in the previous six months.

Aim

Our aim was to report the data from South Australia to complement the data from other centres on HIV testing in MSM. This will then provide national data to assess treatment as prevention (Tasp) as a goal of the current national HIV strategy, which aims to 'work towards achieving the virtual elimination of HIV transmission in Australia by 2020'; and to 'increase the proportion of people living with HIV on treatments with an undetectable viral load'.

Methods

We used computerised medical records of MSM who attended the SASSH at their first visit between 1994 and 2015, to determine whether HIV testing had changed among MSM. First HIV tests in each calendar year and return tests within 12 months were analysed. Factors associated with recent HIV testing were also examined.

Statistical Analysis

1. We used a chi square test to determine if there was a change in HIV testing over time. Crude and adjusted Odds Ratio (OR and aOR) and 95% confidence intervals (95% CI) for HIV testing.
2. Univariable and multivariable logistic regression analyses were performed to assess the factors associated with the recent HIV testing.
3. Trends in testing and returning for HIV testing within 12 months were examined using nonparametric test for trend to examine trends by calendar year.

Results

Figure 1: Proportion of the newly registered MSM who reported ever tested for HIV, recent HIV testing and current HIV testing at their first visit to the South Australia Specialist Sexual Health (SASSH), January 1994 to December 2015

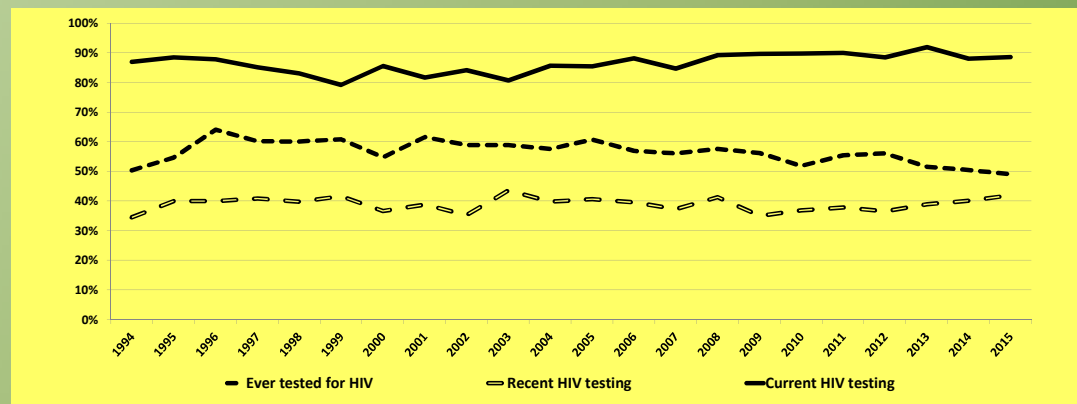


Table 1: Description of HIV tests among the newly registered MSM at their first visit to the South Australia Specialist Sexual Health (SASSH), January 1994 to December 2015

Year	MSM who reported ever tested for HIV			MSM who reported recent HIV testing			MSM who have had current HIV testing			
	n†	n‡	%*	n†	%**	Median age‡	n†	%***	Median age‡	
1994	232	117	50.4%	29.6	80	34.5%	26.0	202	87.1%	28.1
1995	245	134	54.7%	28.2	98	40.0%	27.5	217	88.6%	27.5
1996	240	154	64.2%	28.1	96	40.0%	25.6	211	87.9%	25.9
1997	264	159	60.2%	30.0	108	40.9%	28.9	225	85.2%	28.5
1998	231	139	60.2%	29.7	92	39.8%	29.1	192	83.1%	28.0
1999	197	120	60.9%	34.0	82	41.6%	30.5	156	79.2%	29.0
2000	237	130	54.9%	31.7	87	36.7%	29.0	203	85.7%	28.5
2001	219	135	61.6%	31.6	85	38.8%	30.2	179	81.7%	30.1
2002	241	142	58.9%	32.1	85	35.3%	27.5	203	84.2%	29.3
2003	280	165	58.9%	31.0	122	43.6%	27.9	226	80.7%	30.0
2004	274	158	57.7%	32.0	109	39.8%	28.0	235	85.8%	29.1
2005	275	167	60.7%	32.0	112	40.7%	28.5	235	85.5%	26.7
2006	356	203	57.0%	29.4	141	39.6%	28.0	314	88.2%	26.2
2007	321	180	56.1%	31.3	120	37.4%	29.3	272	84.7%	27.7
2008	300	173	57.7%	31.3	124	41.3%	29.5	268	89.3%	27.4
2009	322	181	56.2%	30.5	113	35.1%	30.6	289	89.8%	27.0
2010	401	208	51.9%	30.2	148	36.9%	29.4	360	89.8%	27.1
2011	510	283	55.5%	29.4	193	37.8%	28.0	459	90.0%	26.4
2012	435	244	56.1%	29.5	159	36.6%	27.7	385	88.5%	26.4
2013	473	244	51.6%	29.0	184	38.9%	27.2	435	92.0%	26.5
2014	580	293	50.5%	27.9	233	40.2%	26.5	511	88.1%	25.1
2015	581	285	49.1%	29.2	244	42.0%	26.6	515	88.6%	25.9

†No tests <0.05 **P for trend <0.05 ††P for trend <0.05 †††P for trend <0.05 ††††P for trend <0.05 †††††P for trend <0.05 ††††††P for trend <0.05 †††††††P for trend <0.05 ††††††††P for trend <0.05 †††††††††P for trend <0.05 ††††††††††P for trend <0.05

Table 2: Factors associated with recent HIV testing among the newly registered MSM at their first visit to South Australia Specialist Sexual Health (SASSH), January 1994 to December 2015

Factors	HIV test in the last 12mths		No HIV test in the last 12mths		OR	95% CI	aOR	95% CI
	N	%	n	%				
Year of testing								
2815								
4389								
1.00 0.99-1.01								
Age (years)								
<20								
243 8.6 602 13.7 1.00								
20-40								
2047 72.7 2828 64.4 1.79 1.53-2.10 1.55 1.26-1.91								
≥40								
525 18.7 959 21.9 1.36 1.13-1.63 1.48 1.14-1.91								
Education								
Tertiary/University or higher								
996 61.9 1381 56.1 1.28 1.12-1.45 1.11 0.97-1.28								
High school or less								
612 38.1 1082 43.9 1.00								
Race								
Indigenous Australian								
47 1.67 46 1.1 1.67 1.11-2.53 2.40 1.36-4.23								
Asian								
305 10.9 381 8.7 1.31 1.12-1.54 1.40 1.14-1.71								
African								
124 4.4 121 2.8 1.68 1.30-2.17 1.75 1.29-2.37								
Caucasian								
2336 83.1 3837 87.5 1.00								
Marital status								
Married/Defacto								
191 6.8 324 7.4 0.75 0.65-0.87 0.88 0.73-1.07								
Divorced, separated or widowed								
343 12.2 676 15.5 0.88 0.73-1.05 0.94 0.71-1.24								
Never married								
2268 80.9 3368 77.1 1.00								
No. Partners in the past 3 months								
2-4								
1092 41.5 1864 45.4 0.98 0.88-1.10 1.09 0.94-1.27								
≥5								
612 23.3 695 16.9 1.47 1.29-1.69 1.37 1.13-1.65								
1								
925 35.2 1549 37.7 1.00								
Sex contacts in the past 12 mths								
Interstate								
644 23.5 723 17.1 1.61 1.42-1.82 1.49 1.25-1.76								
overseas								
435 15.9 514 12.1 1.53 1.33-1.76 1.50 1.25-1.79								
SA only								
1661 60.6 3001 70.8 1.00								
Injecting drug use								
Yes								
234 8.3 241 5.5 1.56 1.29-1.88 1.71 1.25-2.35								
No								
2581 91.7 4148 94.5 1.00								

Conclusions

HIV testing rate among MSM attending the SASSH was suboptimal. New approaches are needed to increase the uptake and early detection of HIV infection among the high priority MSM population.

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