Key findings from the HIV Seroconversion Study

Presented by Garrett Prestage & Ian Down Grace Vaughan House Tuesday, 5th July 2016

EXPERIENCES OF hiv

The HIV Seroconversion Study

- Between 2007-2015, 707 gay and bisexual men (GBM) completed an online survey
- **113 were** interviewed in depth
- The study aims to understand the circumstances in which the men acquired their infection, and identify any changes that may have occurred since

Method of referral to the study

N=707	Frequency	%
Other	148	20.9
AIDS Council website	122	17.3
PLHIV organisation staff	70	9.9
Other online	67	9.5
AIDS Council staff	60	8.5
PLHIV organisation website	53	7.5
Sexual Health service	49	6.9
Workshop	42	5.9
Doctor	23	3.3
Not provided	73	10.3

Time between diagnosis and participation

N=707	n	%
Within three months	243	34.4
4-6 months	87	12.3
7-12 months	101	14.3
1-2 years	11	14.1
More than two years	125	17.7
Not provided	51	7.2

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Year of diagnosis

	SCS	Surveillance Proportion of s	
	N=707	N=6871	population
Year diagnosed	n	n	
2005	8	667	1.2%
2006	19	669	2.8%
2007	56	654	8.6%
2008	84	618	13.6%
2009	88	634	13.9%
2010	89	610	14.6%
2011	84	716	11.7%
2012	89	775	11.5%
2013	62	722	8.6%
2014	43	806	5.3%

Location of diagnosis

	SCS		Surveillance	
	N=	707	N=6871	
Jurisdiction	n	%	n	%
NSW	223	31.5%	2687	39.1%
VIC	171	24.2%	2062	30.0%
QLD	129	18.2%	1280	18.6%
WA	40	5.7%	383	5.6%
SA	26	3.7%	267	3.9%
ACT	12	1.7%	78	1.1%
TAS	8	1.1%	69	1.0%
NT	7	1.0%	45	0.7%
Overseas	42	5.9%	-	-
Missing	49	6.9%	-	-

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About the sample



Characteristics of the sample

		Seroconve	Seroconversion Study		illance
_		n	%	n	%
Age					
	Mean (SD)	34.8	(9.58)	37.2	(11.2)
	Median	34		36	
	Missing	55	7.8		
Cour	ntry of birth				
	Australia	501	70.9	4701	68.4
	Elsewhere	200	28.3	1952	28.4
1	Not reported	6	0.8	218	3.2

Characteristics of the sample

- Mostly gay identified: 91.5%
 - 6.2% bisexual
- **52.6% h**ad university education
 - 19.8% had postgraduate qualifications
- 16% report ever having been paid for sex
 - Of those, 26.3% had been paid for sex within 12 months of their diagnosis

Sexual relationships prior to diagnosis

- 42.4% of men had a primary regular partner at the time of their high-risk event
 - Around 70% of men in the GCPS have a regular male partner
 - 14.5% of relationships were serodiscordant
 - 86.9% reported sex with casual partners in the six months prior to diagnosis
 - 40% reported having more than 10 casual partners during that period
 - 52.3% report engaging in group sex

Preferred role in anal sex

N=552	Frequency	%
Prefer to bottom	236	42.8
Like both equally	230	41.7
Prefer to top	70	14.3
Neither, I don't like anal sex	7	1.3

Over 30% of HIM participants consistently reported a preference for the insertive role in anal intercourse over one or more years of follow-up. Though only 10% of participants were 100% exclusive in their practice of insertive anal intercourse

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Meeting men for sex

N=707	Frequency	Percent
Online	370	52.3
Saunas	250	35.4
Gay bars	219	31.0
Sex clubs	192	27.2
Beats	179	25.3
Dance parties	125	17.7
Private sex parties	109	15.4
Gym	60	8.5
Commercial sex parties	20	2.8
N=215	Frequency	Percent
mobile apps	88	40.9

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Condomless sex with casual partners in 6 months prior to diagnosis

		Frequency	%
Rece	ptive CLAI		
	With HIV-positive partners	38	8.8
	With HIV-negative partners	125	28.9
	With partners of unknown status	269	62.1
Inser	tive CLAI		
	With HIV-positive partners	35	8.1
	With HIV-negative partners	122	28.2
	With partners of unknown status	162	37.4

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HIV testing



Previous HIV testing

- 79.9% of men had previously tested for HIV
 - 69.2% of whom had tested within one year of diagnosis

The main reasons why gay and bisexual men delay HIV testing:

- the belief they had not done anything 'risky'
- fear of being told they were HIV-positive.

Men who were less socially connected to other gay men were more likely to have avoided or delayed testing prior to their diagnosis.

....was HIV something you wanted to avoid?

Some thing that I wanted to avoid but it's not something that I necessarily proactively avoided, if that makes sense? Basically, having condomless sex, I knew the risk that I was undertaking, and what it could mean for me - probably not in its entirety - but I guess that's one of the reasons why I was getting tested so frequently was because I knew it was a very real possibility of contracting. But I wanted to make sure that, if it happened, I was at least on top of it straight away.

How the men acquired their infection



High Risk Event

- 82.4% of could identify and describe an event they believe led to their infection.
 - 18.5% of these men reported the high-risk event (HRE) as occurring overseas
- **51.8%** of HREs occurred in a home
 - 19.5% occurred in a sex on premises venue
- 24.6% of men who could identify a HRE report group sex on that occassion

Anal sex practices at high-risk event

N=569	n	%
Any anal intercourse	518	91.0
Any condomless anal intercourse	468	82.2
Receptive anal intercourse	434	76.8
Receptive condomless anal intercourse:	403	70.8
withdrawal	154	27.1
with ejaculation	249	43.8
Insertive anal intercourse	220	38.7
Insertive condomless anal intercourse	180	31.6
Reciprocal anal intercourse	136	23.9
Reciprocal condomless anal intercourse	115	20.2

Drug use at the high-risk event

N=544	Frequency	%
Any drug use	276	50.7
Amyl	181	33.3
Crystal	95	17.5
Viagra	61	11.2
Marijuana	55	10.1
Ecstasy	41	7.5
GHB	37	6.8
Speed	20	3.7
Special K	9	1.7
Cocaine	8	1.5
LSD	2	0.4

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Risk reduction

On the occasion when they believe they were infected, gay men who acquire HIV showed little evidence of the use of risk reduction strategies.

Prior knowledge of casual sex partner

		SCS	PASH	D.Value
1		n (%)	n (%)	P value
Met fo	or first time at this event	140 (70.0)	136 (39.7)	P<0.001
Had se	ex with previously	41 (20.5)	156 (45.5)	P<0.001
Knowle	edge of HIV status			
	Believed HIV-positive	29 (14.5)	13 (3.8)	P<0.001
	Believed HIV-negative	53 (26.5)	232 (67.6)	
	Didn't know	110 (55.0)	95 (27.7)	

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Sex practices at CLAIC event

	SCS	PASH	
	n (%)	n (%)	P value
CLAIC in the context of group sex	74 (37.0)	40 (11.7)	P<0.001
CLAIC highest risk practice			
Receptive CLAIC	170 (85.0)	216 (63.0)	P<0.001
without ejaculation	64 (32.0)	106 (30.9)	P=0.599
with ejaculation	106 (53.0)	110 (32.1)	P<0.001
Insertive CLAIC	72 (36.0)	203 (59.2)	P=0.021
Reciprocal CLAIC	42 (21.0)	85 (24.8)	P=0.041

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A large portion of sexual activity that I was engaging in was condomless sex. There was only a handful of times where a condom was used. I'm a bottom so I'm always the receiver; I'm never the giver. I just never enjoyed the feeling of sex with a condom on. I always felt like there was some kind of barrier. I guess there is. But, yeah, the connection wasn't really there if there was a condom being used. But it was also in relation to the end result of the climax, the ejaculation. I didn't, didn't appreciate that being inside a condom; I preferred that to be either inside me or on me.

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- 57.8% had heard of post-exposure prophylaxis (PEP) at the time of their HIV infection.
 - Of those who knew about PEP, 27.8% had accessed it previously.
- Barriers to accessing PEP
 - Not believing risk was sufficient

"Obtaining PEP was horrendous and one of the worst experiences of my life. [It's] easier just to accept getting HIV, hence my decision not to go a third time"

"The last time I had asked about taking PEP at the local hospital I was met with attitude and condescension. This made me feel like asking for PEP was a crime and that I was taking up valuable resources by asking."

About the person they believe to be the source of their infection





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Characteristics of relationship

N=545		Casual	Fuckbuddy	Boyfriend
n (%)		n=360	n=127	n=58
Familiarity with Source Person				
	Met for first time at HRE	259 (71.9)	25 (19.7)	1 (1.7
	Someone met recently	69 (19.2)	58 (45.7)	10 (17.2)
	Previously well known	28 (7.8)	44 (34.6)	47 (81.0)
	Not provided	4 (1.1)	-	-
First sex with Source Person before HRE				
	Never	286 (79.4)	43 (33.9)	6 (10.3)
	Less than one month	25 (6.9)	14 (11.0)	9 (15.5)
	2-3 months	18 (5.0)	15 (11.8)	15 (25.9)
	4-6 months	8 (2.2)	15 (11.8)	6 (10.3)
	7-12 months	9 (2.5)	16 (12.6)	5 (8.6)
	More than one year	10 (2.8)	24 (18.9)	16 (27.6)
	Not provided	4 (1.1)	-	1 (1.7)

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Diagnosis



Reason for testing at time of diagnosis

N=707	Frequency	Percent	
I had symptoms that made me worry	243	34.4%	
It was part of my regular testing pattern	189	26.7%	
I did something risky	132	18.7%	
Doctor asked	73	10.3%	
I had sex with someone I knew to be positive	59	8.3%	
I wanted to know my status	40	5.7%	
A partner told me they tested positive	33	4.7%	
My partner did something risky	26	3.7%	
My partner asked me to	25	3.5%	
Condom slippage/breakage	20	2.8%	
I changed partners	19	2.7%	
As part of a negotiated safety agreement	13	1.8%	

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Expectations of HIV test at time of diagnosis

I had absolutely no expectation that I would test positive

If I'm positive I should find out so I can protect my partners

The sooner I get tested the sooner I can start treatment

Getting tested will ease my anxieties

I wanted to be able to reassure my partners that I didn't have $$\rm HIV$$



□ Very much ■ Somewhat ■ Not at all

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How HIV test result was received

N=193	Frequency	Percent
I went back at a later date to see the doctor/nurse	125	64.8
They gave the result about 30 minutes after the test	23	11.9
I got the results over the phone	18	9.3
I did the test myself	4	2.1
They sent me a text message	1	0.5
They emailed me	1	0.5
Some other way	15	7.8
Not provided	6	3.1

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Preferred way to receive HIV test results

N=57	Frequency	Percent
Straight away, or about 30 minutes after the test	24	42.1
From a repeat visit with the doctor/nurse	15	26.3
Some other way	8	14
At home, by myself	5	8.8
Via email	2	3.5
Over the phone	1	1.8
Via text message	1	1.8
Not provided	1	1.8

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After diagnosis



Changes in sexual behaviour

After diagnosis most gay men with HIV dramatically change their sexual behaviour in ways that would likely minimise the possibility of onward transmission.

2008-2010 Casual sex partners prior to and since diagnosis

n (%)	4 weeks before	4 weeks following	
Number of casual partners			
No casual partners	122 (54.0)	157 (69.5)	
One	13 (5.8)	21 (9.3)	
2-3	41 (18.1)	18 (8.0)	
4-5	27 (12.0)	19 (8.4)	
More than 5	22 (9.7)	6 (2.6)	
Not provided	1 (0.4)	5 (2.2)	

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2008-2010 Condomless anal intercourse (CLAI) with casual sex partners prior to and since diagnosis

n (%)	4 weeks before diagnosis	4 weeks following diagnosis
Sex	with any casual partners		
	No casual partners	122 (54.0)	157 (69.5)
	No CLAI	42 (18.6)	33 (14.6)
	CLAI with known HIV-positive only	2 (0.9)	14 (6.2)
	CLAI with partners not known to be HIV-positive	60 (26.6)	22 (9.7)

The role of peer support

2008-2010

- Only peer-support from other people with HIV was associated with reducing number of partners
- No other demographic or behavioral characteristics were associated with having reduced the number of casual partners.
- Men who had stopped engaging in CLAIC with non HIV-positive partners following their HIV diagnosis tended to report greater support from other HIV-positive people

2010-2015: Changes



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The role of peer support

2010-2015

- Access to peer-support after diagnosis was the only factor associated with reductions in risky CLAIC.
- While it was also associated with partner reduction, so was depression, which may suggest that partner reduction also reflects the fact that some men don't cope so well and withdraw from sex generally.

Prestage G, Brown G, Allan B, Down I. The role of peer-support in changing sexual behavior among Australian gaymen following diagnosis with HIV infection. *JAIDS* 2016. Epub ahead of print

I get a very clinical response from her rather than an emotional or a connecting response from her. So that's why I've reached out to [PLHIV organisation] to be able to talk to other people who've been through the experience that can relate to me. And how's that been?

... it was actually really, really, ... good to be able to sit down with [peer worker]. I think I'm lucky in that [peer worker] and I have very, ... similar experiences and we've got very, very similar personalities. And that's just from, you know, like an hour and a half of sitting down and talking to each other. We're like two peas in a pod, basically. I found that really beneficial but it also really cemented into my head that this doesn't necessarily need to be a bad thing in my life. I can use it for, to have a, a good, positive influence in other peoples' lives as well. And I can do that with organisations like [PLHIV organisation]. So it's not something that I'm looking at doing right now-I'm still not completely me just yet - but, yeah, it's shown me more hope than what I had beforehand anyway, yeah I still have, I was saying this to the psychologist today as well, I still have this trepidation of walking into a room full of people whom I don't know and, automatically, the first thing they know about me is my HIV status, just because of where I am. I find that really, really hard to comprehend in my head so, like I said to my psychologist, it seems a little bit silly but, yeah, I'd prefer to walk in and, you know, basically, whisper, "HIV positive," rather than walk into a room and, and just, automatically, everybody knows just because I'm there, if you know what I mean? Not something I plan on doing, although I've had a couple of people ask if I'll come with them. I've not said yes but I've not said no

Decisions about treatments

The decision whether or not to commence ART by HIV-positive gay men continues to be a challenging one.

The idea was to try and start at the start of the year where there mightn't be as much work because then it's easier to manage side effects, as opposed to being very busy, possibly involved in full-time work and then trying to deal with it, which is a little bit harder I think. I was weighing up in my mind being able to reduce the possibility of damage, you know? So, that was occurring to the system from the virus and stuff like that. So I know that, in the long-term, the medications across a lifespan could, obviously, cause problems because it's a foreign substance that's going into your body. And, with *limited amounts of research done, even if it's five-year clinical trials* or however long they do it, it's still, you're taking these drugs for a much longer period of time than what they've researched. But either, which way, what do you do? You don't take a medication, you'll be fine for X amount of years, unless you get an AIDS-defined illness or something like that prior where you're just stuffed anyway. Or you begin medication where you at least feel more confident that you're trying to control something

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I was away from home... I picked up the drugs, picked up my car and then drove down to [regional town] to work. And I'd planned to start taking them that night. I had a bit of a realisation that night though. 'Cause I was away from home, I mean I live by myself but I have a cat at home so I was by myself in a hotel room... And, you know, I just kind of had this, this realisation that, once I take that first pill, that's it: I have to keep taking them every single day for the rest of my life. And I just thought to myself, "I'll, I'll just give myself one more night of freedom and I'll do it when I'm back at home in an environment that I'm comfortable in." ... I gave myself the one more night. I enjoyed my night... I came home and started taking them the next day.

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Differences over time & between jurisdictions



Differences across jurisdictions

Little evidence of substantial differences across the jurisdictions, except those that would be expected.

• Access to services reflected the local availability of those services

Changes over time

Also little evidence of substantial changes over time.

- Among GBM, the types of men, and the circumstances of their HIV infection, appeared to remain much the same over time.
- Some evidence of growing optimism about HIV treatment and prevention over time.

Summary

- Seroconverters are fairly typical gay men
- Little evidence of use of use of risk reduction strategies
- Half of men who seroconvert were not aware of PEP
- History of PEP use is high among men who seroconvert
- The experience some men have requiring PEP appears to put some off accessing PEP following subsequent exposures
- Men who seroconvert appear to test at levels similar to those seen in behavioural surveillance
- Post-diagnosis changes in sexual behaviour in the short term, are they sustained?

Thanks & acknowledgements

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The study team: Garrett Prestage, Ian Down, Jeanne Ellard, Kathy Triffitt and Graham Brown

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Future work



Mapping and designing referral pathways

AIMS

- To map current clinic-based processes applicable to individuals who have been newly diagnosed with HIV
 - post-diagnosis counselling, additional blood tests, treatment initiation protocols, referrals to community and peer support services, other referrals, data collection
- To map current processes in community organisations
 - counselling, community and peer support services, referrals to clinical services, data collection
- To describe current HIV surveillance mechanisms in each jurisdiction

Exploratory focus groups

- Informants:
 - Clinicians
 - HIV s100 prescribers
 - HIV specialists
 - HIV Nurses
 - Counsellors
 - Peer workers HIV testing services
 - Peer support workers/counsellors
 - Contact tracers (partner notification officers)
 - HIV Case Managers
 - Pharmacists
 - Surveillance systems/data collection

When and where?

Date	Time	Place
Tuesday 0 August	6.900	WAAC
Tuesuay 9 August	σ-σμπ	664 Murray Street, West Perth
		Seminar Room
Wednesday 10 Augu	ıst 10.30am-12.30pm	Grace Vaughan House (GVH)
		227 Stubbs Terrace, Shenton Park

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https://kirby.unsw.edu.au/projects/hiv-seroconversion-study

