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Recreational drug use among NZ gay and bisexual men and its association with HIV and STI risk

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Prevalence among GBM

- Flux: 51% of Australian GBM reported any drug use <6mths 2014/15 (Hammoud et al 2016)
- Prahran clinic: Recent methamphetamine reported by 40% of HIV+ vs 16.4% HIV- (Eu et al 2015)
- UK HIV+ cohort: 29% "chemsex"; 10% "slamsex" (Pufall et al 2016)
- UK NATSAL study: Gay identified men vs exclusively heterosexual OR 4.2 drug use in <12 mths (32.8% vs 6.7%) (Mercer et al 2016)



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Why do gay men take drugs?

Same reasons anyone does. But also:

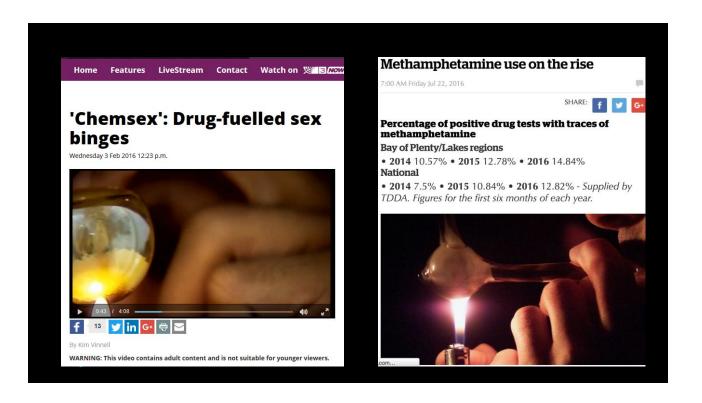
- More **exposure** via gay social spaces (bars, clubs)
- **Minority** stress (heterosexism/HIV stigma)
- Sexual sensation seeking



Drug use for gay men

- Unsafe sex and unsafe injecting due to drug use has different **consequences** (HIV, STIs, BBIs)
- Impair adherence to HIV treatment / PrEP
- "Chemsex" concentrates risks

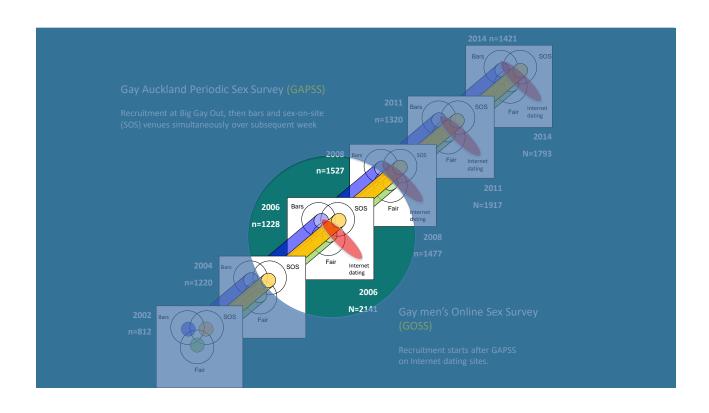






Aims

- Obtain baseline prevalence of drug use among GBM in New Zealand
- · Examine characteristics of GBM reporting drug use
- · Explore associations with HIV and STI risk



Substances

- Cannabis
- Volatile nitrates/poppers
- Ecstasy
- Amphetamine
- Methamphetamine
- LSD
- Cocaine
- GHB
- Ketamine
- Frequency of use <6 months







Sample

- N=3211
- 69% gay identified, 24% bisexual
- 80% European, 9% Maori, 3% Pacific, 4% Asian
- 25% Fair day, 11% gay bars/ saunas, 64% online dating



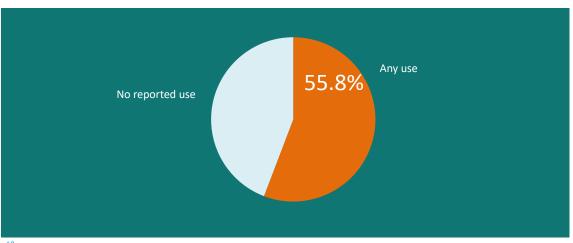






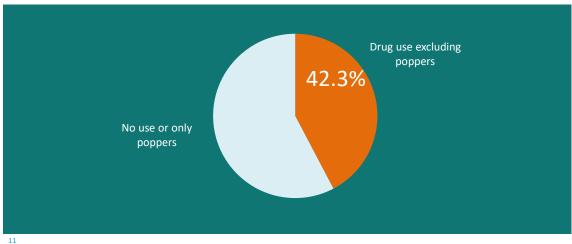
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Any substance use



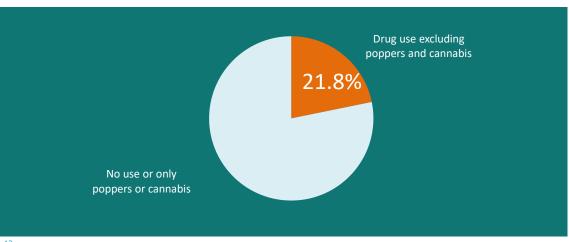


Any but poppers



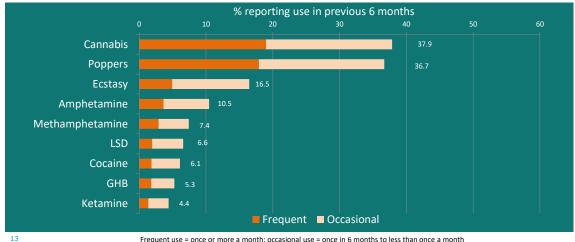


Any but poppers, cannabis





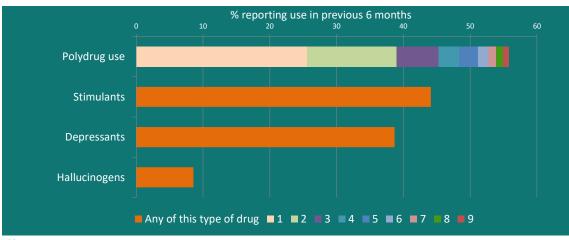
Proportion and frequency using drug



Frequent use = once or more a month; occasional use = once in 6 months to less than once a month



Type and number of drugs





Any drug use by characteristics

Characteristic	Any drug use (%)
Recruitment site	P<0.001
Fair day	59
Gay bars	74
Saunas	58
Online dating	53
Residence	P<0.001
Akl/Wgn/Chc	59
Other NZ/os	48
Age group	P<0.001
16-29	60
30-44	57
45+	45

Characteristic	Any drug use (%)	
HIV test status	P<0.001	
HIV negative	60	
HIV positive	73	
Never tested	49	
Ethnicity	P<0.001	
European	56	
Maori	69	
Pacific	56	
Asian	35	
Other	53	
Sexual identity	P<0.001	
Gay	58	
Bisexual	50	
Other	57	

15



Drug use and sexual behaviour

Drug use measure	> 20 partners ^a		Any condomless sex with casual b	
	%	AOR (95% CI)	%	AOR (95% CI)
Any drug use				
No	5.3	1	17.5	1
Yes	16.4***	3.7 (2.8-2.9)	31.4***	2.0 (1.7-2.4)
Cannabis				
No	9.0	1	21.1	1
Yes	15.5***	2.1 (1.7-2.6)	32.0***	1.7 (1.4-2.0)
Methamphetamine				
No	10.5	1	23.9	1
Yes	24.4***	3.0 (2.2-4.3)	43.0***	2.2 (1.7-3.0)
Polydrug				
No	5.3	1	17.5	1
1-4 drugs	15.1	3.4 (2.6-4.5)	29.9	1.9 (1.6-2.3)
5 + drugs	24.6***	7.0 (4.7-10.5)	41.2***	3.2 (2.3-4.4)

***Univariate p<0.001. ^a AOR controlling for site of recruitment and age group. ^b AOR controlling for number of partners, recruitment site and age.



Drug use and STI and HIV screening

Drug use measure	STI diagnosed <12 months ^a		HIV test < 12 months ^b	
	%	AOR (95% CI)	%	AOR (95% CI)
Any drug use				
No	5.2	1	29.3	1
Yes	11.0***	2.0 (1.5-2.7)	41.4***	1.4 (1.3-1.7)
Cannabis				
No	6.4	1	33.0	1
Yes	11.9***	2.0 (1.5-2.6)	40.9***	1.3 (1.1-1.5)
Methamphetamine				
No	7.4	1	36.0	1
Yes	21.4***	2.9 (2.0-4.2)	36.0 ^{ns}	1.1 (0.8-1.5)
Polydrug				
No	5.2	1	29.3	1
1-4 drugs	9.3	1.7 (1.3-2.1)	41.2	1.5 (1.3-1.8)
5 + drugs	21.8***	4.3 (2.8-6.4)	42.3***	1.5 (1.1-2.0)

^{***} Univariate p<0.001. DAOR controlling for number of partners, recruitment site and age. AOR controlling for number of partners, site of recruitment, age group and urbanicity.



Strengths and limitations

Strengths

- Large and diverse sample
- · Explore drug use and sexual behaviours
- 2006 baseline, repeat survey can monitor change

Limitations

- Not generaliseable to all GBM
- Cannot attribute causality (drug use ⇒ behaviour)
- No data on chemsex, injecting (but 2011), alcohol



Conclusion

- Drug use was common
- Half any drug use, fifth "hard drugs"
- Most used drugs **occasionally**, minority polydrug use
 - are addiction services responsive to GBM?
 - harms poorly described (Holt 2014)
- Drug use universally associated with risk behaviours and STIs
 - consistent with behavioural disinhibition
 - or marker for risk taking generally
 - Network effect: does sex with/between GBM who use drugs concentrate STI & HIV risk?



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Participants and venues

Team

19

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