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Sexualised drug use and co-occuring high risk behaviours among gay and bisexual men living with HIV/Hepatitis C co-infection

Harney B, Stoové M, Sacks-Davis R, Cutts J, Pedrana A, Fairley C, Medland N, O'Reilly M, Moore R, Tee BK, Sasadeusz J, Hellard M, Doyle J on behalf of the co-EC study investigators

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Disclosures

- co-EC funded by Bristol-Myers Squibb
- Presenting author has no financial disclosures





People living with HCV & HIV co-infection

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Minimal overlap between populations



Drug and sex related behaviours



Mahony et al. Med J. Aust. 2013; Lea et al. Sex. Health. 2013 Vanhommerig et al. Open Forum Infect. Dis. 2015



Methods

- Eliminating Hepatitis C Transmission by Enhancing Care and Treatment Among HIV Co-infected Individuals – co-EC
- Six sites sexual health clinic, two hospitals and three primary care clinics – HIV related care for approx. 75% of people living with HIV in Victoria¹
- Primary aim treat and eliminate hepatitis C
- Secondary aim understand behaviours before and after treatment

1. Sacks-Davis et al. J. Int. AIDS Soc. 2018

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Methods

- · Behavioural data collected at enrolment
- Males reporting ≥ 1 male sex partner in the six months prior to enrolment
- Behaviours Injecting drug use, group sex
- Added after three months fisting, sharing sex toys & using drugs before or during sex; amyl nitrite, ecstasy, GHB and crystal methamphetamine
- Prevalence ratios; Poisson regression with robust variance



Demographic & clinical characteristics

Characteristics n=101	n (%)
Age, mean (range, s.d.)	46 (21-72, 10.5)
Australian born	72 (71.3)
Non-Indigenous	96 (95.0)
Post-high school education	66 (65.3)
Employed; FT, PT or Casual	52 (51.5)
Year HIV diagnosis ≥ 2010#	28 (29.8)
Year HCV diagnosis ≥ 2010#	60 (63.8)

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Behaviours in prior six months



*Among 54 who had later questionnaire

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Number of Behaviours

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Number of Behaviours







Sexualised drug use in prior six months

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			Any SDU/ Last Month*	No	Yes
			No	9	2
			Yes	11	32
SDU ecstasy *		10/5	54(19%)		
SDU GHB *		19/!	54(35%)		
SDU amyl nitrite *		- 3	33/54(61%))	
SDU crystal meth.*			33/54 (61%))	
Any SDU *			43/54(800	%)	
Any drug use last month			53/101	(52%)
≥1 male sex partner				10)1
	0		50	100	
*Among 54 who had later que	estionnaire				
				the second second	

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Number of Drugs Used Before or During Sex

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Number of Drugs Used Before or During Sex



Crystal/Amyl	No	Yes
No	13	8
Yes	8	25
Crystal/GHB	No	Yes
No	19	2
Yes	16	17
Crystal/Ecstasy	No	Yes
No	19	2
Yes	25	8

None One Two Three Four

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Behaviour	No Sexualised Drug Use, n (%)	Sexualised Drug Use, n (%)	Prevalence ratio (95%CI) <i>p</i> -value
<u>Injecting Drug Use</u> No Yes	11 (44) 0	14 (56) 28 (100)	1.79 (1.26-2.54) 0.001
<u>Group Sex</u> No Yes	8 (26.7) 3 (12.5)	22 (73.3) 21 (87.5)	1.19 (0.91-1.56) 0.19
<u>Fisting</u> No Yes	10 (27.8) 1 (5.6)	26 (72.2) 17 (94.4)	1.31 (1.04-1.65) 0.024
<u>Sharing Sex Toys</u> No Yes	10 (25.6) 1 (6.7)	29 (74.4) 14 (93.3)	1.26 (0.99-1.58) 0.054

Behaviour & Sexualised Drug Use n=54

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Behaviour & Sexualised Drug Use n=54

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Discussion

- Sizeable minority reported no high risk behaviours
- Not all engage in sexualised drug use
- High risk behaviours occur almost exclusively among participants reporting sexualised drug use
- More understanding of the relationship between sexualised drug use and risk behaviours

Discussion

- Risk of reinfection complicated by multiple and overlapping behaviours
- More frequent, post-treatment testing may be needed
- A small but important group for HCV elimination among gay and bisexual men living with HIV

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The lived experience

"Now I got to change my circle of friends again...it's difficult, they'll be still using when I'm with them... I probably have to stop hanging around them as much." Oliver, 44²



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2. Schroeder et al. AIDS 2018

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The social context

- Living with HIV less likely to social and sexually exclude people with HCV³
- More positive attitudes towards people who inject drugs and people with HCV compared to HIV negative and untested participants³
- Less perceived stigma & higher levels of resilience among gay and bisexual men living with HIV who use party & play drugs⁴
- Associated with more time spent with people living with HIV and friends in the gay community⁴

3. Brener et al. Sex. Health 2015; Power et al. Sex. Health 2018



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Limitations

- · Specific to participants undergoing treatment
- Potential desirability bias
- No understanding of frequency
- Small sample
- No causality

Conclusion

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- Sexualised drug use and risk behaviours that may potentially lead to reinfection are common with substantial overlap
- Many participants >1 behaviour or drug used
- Stigma-free post-treatment testing for reinfection likely to be required among many participants
- Community input essential to develop acceptable programs to reduce potential HCV primary infection and reinfection

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Brendan Harney

Disease Elimination Program, Burnet Institute brendan.harney@burnet.edu.au



@BrendanLHarney



Of in Equity Through Better Health burnet.edu.au Victoria, 3004

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