

Intersection of drug selling and HIV risk behaviours

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Introduction

- HIV rates in Canada among people who inject drugs have plateaued
- Possibility of new avenues for HIV prevention interventions by targeting groups that have not been traditionally prioritized by public health, such as people who sell drugs
- Drug sellers are often perceived as predatory and therefore not direct targets of programming
- However, the distinction between drug sellers and drug users is not so clear cut



Research questions

- What percentage of people who inject drugs report engaging in drug selling?
- Are people who engage in drug selling more likely to initiate others to injection drug use?
- Are people who engage in selling more likely to report using previously used equipment themselves and/or sharing used equipment with others?



Methods

- Data collected for the *Change the Cycle* study, an intervention study designed to reduce initiation into injection drug use
- Participants were recruited using respondent driven sampling (RDS), n=98 participants
- 'Dealers' were identified by asking, "In the past 6 months, have you worked as someone who sold drugs, including small time dealing to friends?"



Methods

- Data were weighted in RDSAT using the procedure described by Heckathorn (1997)
- Data analyses were conducted using SAS survey-based procedures to calculate adjusted Odds Ratios (AORs) to adjust for complex sampling framework



Results – demographic characteristics

Characteristic	Sample frequency (n=98)	Adjusted prevalence	Adjusted 95% CI
GENDER			
Male	68	65.9%	50.2-79.5
Female	30	34.1%	20.5-49.8
AGE			
20-29 years old	9	8.0%	2.1-14.4
30-39 years old	19	24.8%	14.4-36.8
40-49 years old	34	36.1%	25.1-48.1
50 years and older	36	31.1%	19.8-45.7
RACE/ETHNICITY/CULTURAL BACKGROUND			
White	89	88.4%	73.0-98.0
Aboriginal	17	16.7%	7.8-27.4
Black	9	8.3%	2.6-16.4
Other	6	5.1%	0.7-12.0

Results – Drug use characteristics

Characteristic	Sample frequency (n=98)	Adjusted prevalence	Adjusted 95% CI
MOST COMMONLY REPORTED DRUGS INJECTED IN LAST 6 MONTHS			
Opiates (other than heroin, non-prescribed)	67	61.4%	47.0-77.4
Heroin	66	63.1%	48.2-76.5
Crack	45	38.5%	25.0-52.3
Cocaine	44	41.9%	31.5-53.5
MOST COMMONLY REPORTED DRUGS USED BY MEANS OTHER THAN INJECTION IN LAST 6 MONTHS			
Crack	77	76.5%	59.0-92.4
Opiates (other than heroin, non-prescribed)	42	39.9%	28.3-53.1
Cocaine	32	30.2%	2.0-41.5
Benzos (non-prescribed)	27	28.6%	17.9-40.1
Heroin	22	17.2%	2.0-41.5

Type of work

Weighted prevalence estimates for type of work

Type of Work	Sample frequency (n=98)	Adjusted prevalence	Adjusted 95% CI
Selling drugs	58	59.1%	45.6-72.6
Other illegal activities	38	31.2%	18.1-44.3
Small contracts	34	40.8%	27.2-54.4
Part-time work	31	25.1%	13.7-36.5
Peer work	24	13.8%	7.1-20.5
Panhandling	21	19.6%	7.6-31.7
Full-time work	17	16.7%	9.1-26.9
Sex work	16	17.3%	6.2-28.5
Not working	15	24.1%	7.4-40.7

Type of Work by Gender

Type of work	Weighted prevalence estimates for type of work by gender				Adjusted OR
	Men (n=68)		Women (n=30)		Women vs. Men
	n	Adj. % (95% CI)	n	Adj. % (95% CI)	OR (95% CI)
Selling drugs	34	46.1% (29.2-63.0)	24	81.6% (65.2-97.9)	5.2 (1.5-18.0)
Other illegal activities	26	28.8% (14.8-42.7)	12	35.7% (10.7-60.8)	1.4 (0.4-4.8)
Small contracts	26	41.9% (26.8-57.1)	8	38.7% (14.9-62.5)	0.9 (0.3-2.7)
Part-time work	25	29.4% (15.2-43.6)	6	17.3% (1.3-33.3)	0.5 (0.1-1.7)
Peer work	14	10.4% (2.8-18.0)	10	20.2% (6.3-34.1)	2.2 (0.6-7.7)
Panhandling	16	17.4% (7.8-27.0)	5	23.7% (0.8-46.6)	1.5 (0.5-4.9)
Full-time work	17	25.0%*	0	0%*	(P<0.0001)
Sex work	3	2.5% (0.0-5.8)	13	44.7% (21.8-67.7)	31.1 (6.7-143.7)
Not working	11	26.9% (5.8-48.0)	4	18.9 (0.0-37.7)	0.6 (0.2-2.6)



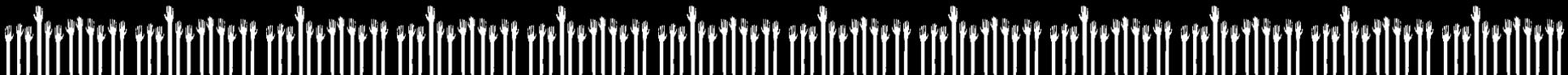
Association between dealing and initiation

	Weighted prevalence estimates for having initiated another person by dealing status				Adjusted OR
	'Dealers'		Non-dealers		Dealer vs. Non-dealer
	N	Adj. % (95% CI)	n	Adj. % (95% CI)	OR (95% CI)
Initiated another person	18	25.7% (11.1-40.2)	11	29.0% (15.1-42.9)	0.8 (0.3-2.3)



Using injection equipment after someone else

Receptive injection risk behaviour	Weighted prevalence estimates for receptive injection risk by dealing status				Adjusted OR
	'Dealers'		Non-dealers		Dealer vs. Non-dealer
	n	Adj. % (95% CI)	n	Adj. % (95% CI)	OR (95% CI)
Used needle after someone	5	4.7% (0.0-10.0)	4	8.5% (0.0-18.0)	0.5 (0.1-2.7)
Used spoon after someone	16	21.8% (8.9-34.6)	5	7.1% (0-14.5)	3.6 (0.9-14.5)
Used filter after someone	7	7.5% (0.0-15.1)	5	8.6% (0.0-17.4)	0.9 (0.2-3.8)
Used mixing water after someone	6	10.3%*	0	0%*	(P<0.0001)



Sharing used injection equipment with others

Distributive injection risk behaviour	Weighted prevalence estimates for receptive injection risk by dealing status				Adjusted OR
	'Dealers'		Non-dealers		Dealer vs. Non-dealer
	n	Adj. % (95% CI)	n	Adj. % (95% CI)	OR (95% CI)
Someone used needle after you	11	19.0%*	0	0%*	(P<0.0001)
Someone used spoon after you	17	21.9% (9.9-33.8)	4	5.7% (0.0-12.1)	4.6 (1.2-17.7)
Someone used filter after you	15	15.2% (5.9-24.6)	4	4.7% (0.0-10.1)	3.6 (0.9-14.8)
Someone used mixing water after you	8	8.8% (0.3-17.2)	2	2.3% (0.0-5.9)	4.0 (0.7-23.8)



Conclusions

- A majority of participants reported engaging in drug selling in the previous 6 months
- Our results suggest that people who sell drugs are no more likely to initiate others than non-dealers
- Concerns that providing this population with additional harm reduction supplies might encourage them to initiate more people is likely unfounded



Conclusions

- Our data point to some elevated risk behaviour amongst people who sell drugs
- To increase their potential impact, HIV prevention programs might consider developing programs that work directly with drug sellers
 - Targeted education and prevention programs
 - People who sell drugs could benefit from increased access to sterile injection equipment to distribute among their networks



Conclusions

- People who sell drugs are well positioned to reach otherwise 'hidden' injectors and may be available more hours of the day than current programs
- Users of current programs may already operate a peer-like equipment distribution program
 - Essential to integrate peers in the design and development of programming
- Capitalizing on existing relationships and building new ones may extend the reach and effectiveness of HIV prevention efforts



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