

CORRELATES OF POLYDRUG USE AMONG INJECTION DRUG USERS: THE ROLE OF SOCIOECONOMIC STRESS AND QUALITY OF LIFE

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Introduction

Over half (56 %) of all persons admitted to drug treatment reported abuse of at least one substance in addition to their primary substance (DASIS Report 2001).

Multiple drug use has been also related to both drug overdose and HIV risk behaviors (Risser and Schneider, 1994; Darke et al., 1994b).

In 1998, drug related deaths were found to involve an average of 2.5 drugs (SAMHSA, 2000).

Preliminary Studies

Depression symptoms have been related to polydrug use involving cocaine among blacks in a high-risk community sample (Wang, 1997).

Younger users were more likely to report polydrug use (Darke, 1995).

Polydrug use occurred more frequently than single drug use until age 45 (DASIS Report, 2001).

Study Aim

To determine sociodemographics and other potential factors such as depression, quality of life and socioeconomic stress associated with levels of polydrug use among a sample of injection drug users (IDUs).

Methods

Sample

- 400 IDUs recruited from 50 communities in the extended San Juan Metropolitan Area (Robles, et al., 1993)

Primary drug of injection:

- speedball (87%)

Recruitment period:

- May 2002-June 2003

Eligibility criteria:

- injecting drugs within 30 days previous to the interview
- not enrolled in a drug treatment program (within 30 days previous to the interview)
- 18 years of age or older

Measures

Sociodemographics

- gender, age, education, marital status, employment status

Health related variables

- depression symptoms (CES-D)
- quality of life (MOS, SF-30)

Drug use (last week)

- patterns of drug use
- frequency of injection

Levels of stress* (3 problem areas: family, medical, socioeconomic)

- an 17-item questionnaire developed by research team (Table 1)

Dependent Variable

Polydrug use was defined as reported use (during the week prior to the interview) of at least two non-injected substances in addition to the primary drug of injection.

Substances that will be considered in this study are alcohol, cannabis, non-injected cocaine non-injected opiates and non-prescribed tranquilizers.

Data Analyses

Descriptive analysis
Number of drug classes used in the preceding week.

Bivariate analysis

Chi-square tests were performed to assess the relationships between polydrug use over the preceding week and variables previously described.

Multivariate analysis

Multiple logistic regression to assess the factors that might be independently associated with levels of polydrug use.

Results

Table 2. Non-injected drug classes used (last week)

# of drugs	n	%
0	195	48.8
1	109	27.3
2	63	15.8
3	26	6.5
4	7	1.8

Table 2 presents that of the total sample, 48.8% reported exclusively injection of cocaine, heroin or the combination of both (speedball), 27.3% reported the use of one non-injected drug in addition to their primary drug of injection. This table also shows that 24.1% of IDUs reported higher levels of polydrug use (two or more non-injected drugs).

Figure 1. Prevalence of non-injected drug use in the preceding week (n=400)

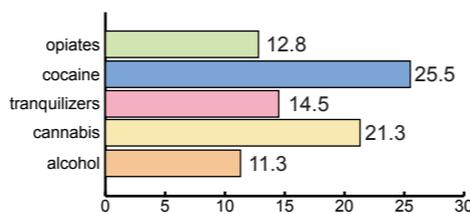


Figure 1 shows that cocaine (25.5%) and cannabis (21.3%) were the non-injected drugs more prevalent among IDUs.

Table 4 shows that quality of life was the only significant health related variable associated with polydrug use. IDUs that were classified in the poor quality of life category were significantly more likely to report the use of two or more drugs as compared with those in the good/fair category (53% vs. 22.9%).

Table 3. Relationship of polydrug use and sociodemographic variables among IDUs (n=400)

	n	two or more drugs used, %	p value
Gender			
female	89	37.1	
male	311	20.3	0.001
Age Group			
18-34	248	25.8	
35-44	103	24.3	
45 +	49	14.3	0.225
Living with partner			
no	328	22.3	
yes	72	31.9	0.058
Educational Level			
less than HS	178	23.6	
HS or more	222	24.3	0.480
Employment status			
unemployed	210	25.7	
full/part time job	190	22.1	0.234

Table 3 shows that female were significantly more likely to report the use two or more drugs when compared with males (37.1% vs. 20.3%). IDUs living with a partner were also more likely to use two or more drugs when compared with those that were not living with a partner (31.9% vs. 22.3%). No significant differences were found between educational level and employment status with polydrug use.

Table 4. Relationship of polydrug use and health related variables among IDUs (n=400)

Last 30 days	n	two or more drugs used, %	p value
Depression symptoms			
0-16	70	18.6	
16 or more	329	25.2	0.151
Quality of life (SF-30)			
good/fair	385	22.9	
poor	15	53.3	0.012

Table 5. Relationship of polydrug use and stress related variables among IDUs (n=400)

Last 30 days	n	two or more drugs used, %	p value
Family score			
0-2	221	16.7	
3 or more	179	33.0	<0.001
Medical score			
0-3	241	18.7	
4 or more	159	32.1	0.002
Socioeconomic score			
0-6	306	19.0	
7 or more	94	40.4	<0.001
Community & network			
0-2	211	20.9	
3 or more	189	27.5	0.075

According to Table 5, those who had higher scores in the family, medical and socioeconomic stress were significantly more likely to report the use of two or more drugs.

Table 6. Multiple logistic regression* (n=400)

	OR	95% CI	p value
Female	1.94	1.36-2.50	0.02
18-34 years old	2.73	1.80-3.66	0.04
35-44 years old	1.77	0.78-2.76	0.26
45 or more	1.00	---	---
Living with sex partner	1.04	0.39-1.69	0.90
Poor quality of life	3.39	2.24-4.54	0.04
Family stress	1.64	1.08-2.20	0.09
Medical stress	1.27	0.70-1.84	0.40
Socioeconomic stress	2.04	1.41-2.67	0.03

Multivariate analysis results show that females were almost two times more likely to report higher levels of polydrug use. IDUs younger than 35 years were also significantly more likely to report higher levels of polydrug use as compared with those with 45 or more years old (OR=2.73). Having a poor quality of life (as measured by the SF-30) and higher scores in the socioeconomic stress items were also independently associated with higher levels of polydrug use (OR=3.39, OR = 2.04, respectively). (Table 6)

Conclusions

- Cannabis and cocaine were the non injected drugs more prevalent among IDUs.
- Almost one fourth of this sample reported the use of at least two non injected drugs in addition to their primary drug of injection.
- These findings suggest that drug use reduction programs should consider more seriously the role of socioeconomic stress in efforts to persuade drug users to reduce polydrug use, especially among females and young injectors.



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Table 1. Stress Items Results

Problem area	# of items	Min	Max	Cronbach's alpha
Family	3	0	6	0.81
Medical	4	0	8	0.73
Socioeconomic	6	0	12	0.80
Community & Network	4	0	8	0.80