

THE ROLE OF MENTAL HEALTH ISSUES IN HIV ACQUISITION AMONG FEMALE DRUG USERS

Gail Gilchrist¹, Alicia Blazquez¹, Joan Mestre¹, Francina Fonseca², Laura Díaz³, Marta Torrens²
¹Institut Municipal d'Investigació Mèdica (IMIM)-Hospital del Mar, Barcelona, Spain
²Consorci Mar Parc de Salut de Barcelona, Spain; ³Centre Fòrum-Hospital del Mar, Barcelona, Spain

BACKGROUND

Spain has one of the highest rates of HIV infection among female drug users in Europe. 33% of treatment seeking female drug users in outpatient drug treatment centres in Barcelona are infected with HIV [1]. Furthermore, recent studies indicate that without a better understanding of female drug users' risk behaviours to inform the development of effective interventions, these rates will remain unchanged [2]. FDU report greater HIV risk behaviors, psychiatric co-morbidity and intimate partner violence than their male counterparts, putting them at greater risk of HIV [3-7].

AIMS

To study the role of psychiatric disorders, personality traits, intimate partner violence (IPV) and assertiveness in HIV acquisition among female drug users.

RESULTS

118 FDU participated. 27.1% (32/118) were HIV seropositive. 77.1% met criteria for lifetime polysubstance abuse/dependence and 54.2% had ever injected. The most common lifetime substance abuse/dependence disorders were cocaine (76.3%), heroin (62.7%) and alcohol (39.8%). In their lifetime, 58.6% met criteria for major depression (30.4% for substance-induced major depression), 27.1% for post traumatic stress disorder, 22.9% for antisocial personality disorder and 33.1% for borderline personality disorder. 57.3% had experienced intimate partner violence in the previous year and 71.3% had experienced childhood abuse.

HIV+ve participants were older and a greater proportion had primary studies or no schooling. The odds of having substance-induced major depression, antisocial personality disorder, heroin abuse/dependence, sedative abuse/dependence, and reporting drug and sexual risk behaviours were greater among participants with HIV (**Table 1**). The mean number of lifetime substance use disorders was significantly greater among HIV+ve than HIV-ve participants.

In stepwise multiple backward logistic regression, lifetime antisocial personality disorder, having ever injected with a syringe someone else had used before them, having ever had an HIV+ve partner; lifetime substance-induced depression and ever been in prison were associated with being HIV+ve (**Table 2**).

Table 2. Factors associated with HIV positive status in stepwise backward multiple logistic regression (n=81)*

	Significance	OR (95 CI)
Lifetime Antisocial Personality Disorder	0.016	10.72 (1.54, 74.22)
Ever injected with syringe someone else had used before you	0.005	10.61 (2.06, 54.71)
Any partner HIV+ve	0.006	9.51 (1.88, 47.97)
Lifetime Substance-Induced Major Depression	0.020	6.93 (1.36, 35.49)
Ever been in prison	0.057	0.16 (0.02, 54.71)

Hosmer and Lemeshow Test 0.502**

Classification of model 89.3

*Variable(s) entered on step 1: ever had unsafe sex with people who could be HIV+ve or IDUs/ their partners or had periods in your life where you had sex with lots of different people, people who meant very little to you, or had unsafe sex (sexual risk); schooling; substance-induced major depression; antisocial personality disorder; borderline personality disorder; ever injected with syringe someone else had used before you; ever been in prison; exchanged sex for drugs or money; ever homeless; any partner IDU and any partner HIV+ve.

**Pearson Chi-Square Goodness of Fit test

METHODS

The study had a mixed methods design. 118 participants in treatment were assessed using the Psychiatric Research Interview for Substance and Mental Disorders [8] and the Revised Temperament and Cloninger's Character Inventory (TCI-R) [9]. Intimate partner violence (IPV) [10], childhood abuse [11], HIV sexual and injection related risk behaviours [12], assertiveness [13] and HIV status were also assessed. Unadjusted odds ratios (OR) and 95% confidence intervals (CI) were calculated using logistic regression. Variables with p<0.2 were included in the multivariate logistic regression to determine the factors associated with having HIV.

Table 1. Lifetime Mental and Substance Use Disorders (SUD), and lifestyle factors by HIV status

	All participants n=118 (%)*	HIV status Negative n=86 (%)*	Positive n=32 (%)*	OR (95 CI)
Demographics				
Mean age (SD)	39.07 (7.75)	37.98 (8.13)	42.00 (5.79)	1.07 (1.01, 1.14)
Primary studies or no schooling (vs. secondary studies)	57 (48.3)	37 (43.0)	20 (62.5)	2.21 (0.96, 5.08)
Lifetime Mental Disorders				
Any major depression	68 (58.6)	44 (52.4)	24 (75.0)	2.73 (1.10, 6.76)
Primary major depression	41 (35.3)	31 (36.9)	10 (31.3)	0.78 (0.33, 1.85)
Substance-induced major depression	35 (30.4)	19 (22.9)	16 (50.0)	3.37 (1.42, 7.97)
Post traumatic stress	32 (27.1)	20 (23.3)	12 (37.5)	1.98 (0.83, 4.74)
Borderline personality	39 (33.1)	24 (27.9)	15 (46.9)	2.28 (0.99, 5.28)
Antisocial personality	27 (22.9)	12 (14.0)	15 (46.9)	5.44 (2.16, 13.71)
Lifetime SUD				
Mean number SUD (SD)	2.58 (1.50)	2.31 (1.37)	3.28 (1.61)	1.52 (1.15, 2.00)
Heroin	74 (62.7)	43 (50.0)	31 (96.9)	31.00 (4.05, 237.38)
Cocaine	90 (76.3)	63 (73.3)	27 (84.4)	1.97 (0.68, 5.73)
Alcohol	47 (39.8)	36 (41.9)	11 (34.4)	0.73 (0.31, 1.70)
Sedatives	38 (32.2)	21 (24.4)	17 (53.1)	3.51 (1.50, 8.22)
Cannabis	27 (22.9)	18 (20.9)	9 (28.1)	1.48 (0.58, 3.74)
Stimulants	15 (12.8)	11 (12.8)	4 (12.9)	1.01 (0.30, 3.44)
Lifestyle factors-partner				
Intimate Partner Violence	67 (57.3)	47 (55.3)	20 (62.5)	1.35 (0.59, 3.10)
Sexual or physical partner violence	50 (42.7)	33 (38.8)	17 (53.1)	1.79 (0.79, 4.06)
Any Childhood Abuse	82 (71.3)	57 (68.7)	25 (78.1)	1.63 (0.63, 4.25)
Any Partner IDU	67 (65.0)	41 (54.7)	26 (92.9)	10.78 (2.39, 48.72)
Any Partner HIV+ve	38 (41.3)	16 (23.9)	22 (88.0)	23.38 (6.18, 88.44)
Lifestyle factors-sexual risk				
Ever had unsafe sex with people who could be VIH+ve or IDUs/ their partners	42 (36.5)	25 (29.8)	17 (54.8)	2.87 (1.23, 6.69)
Ever had periods in your life where you had sex with lots of different people, people who meant very little to you, or had unsafe sex	49 (42.6)	30 (35.7)	19 (61.3)	2.85 (1.22, 6.66)
Exchanged sex for drugs or money	39 (34.8)	18 (22.2)	21 (67.7)	7.35 (2.94, 18.39)
Lifestyle factors-drug use				
Ever injected regularly	56 (47.9)	29 (33.7)	27 (87.1)	13.27 (4.24, 41.54)
Ever injected with syringe someone else had used before you	44 (38.6)	19 (22.6)	25 (83.3)	17.11 (5.76, 50.76)
Lifestyle factors-other				
Ever been homeless	35 (30.4)	21 (25.3)	14 (43.8)	2.30 (0.98, 5.41)
Ever been in prison	66 (55.9)	44 (51.2)	22 (68.8)	2.10 (0.89, 4.96)

*Discrepancies due to missing data

CONCLUSIONS

Psychiatric comorbidity, gender inequalities and intimate partner violence may decrease female drug users' ability to negotiate safer interactions in their drug and sex networks/relationships. HIV risk behaviour and prevention interventions should be understood in the context of female drug users' sexual and drug using relationships with their partners [14].

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Contact details:

Gail Gilchrist, Ph.D.
 Substance Use Disorders Research Group
 Institut Municipal d'Investigació Mèdica (IMIM)-Hospital del Mar
 Parc de Recerca Biomèdica de Barcelona
 c/ Dr. Aiguader, 88
 08003 Barcelona, Spain
 Tel: +34 933160449
 Email: ggilchrist@imim.es



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