

# HIV screening and retention in care in people who use drugs in Madrid, Spain : a prospective study

P-032

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## 1. INTRODUCTION

The burden of human immunodeficiency virus (HIV) infection in people who use drugs (PWUD) is significant. The HIV continuum of care may be used as a public health tool to measure the effectiveness of health systems and monitor progress towards the goals set to end the HIV epidemic, consisting of several steps required to achieve HIV suppression. Moreover, linkage and retention in care after HIV diagnosis present unique challenges for PWUD infected with HIV.

Data related to people retained in HIV care in PWUD attended in harm reduction services remain scarce.

## 2. AIM

We aimed to screen HIV infection among PWUD and describe their retention in HIV care. Besides, we also screen for HCV infection among HIV seropositive PWUD and describe their linkage to care.

## 3. METHOD

We conducted a prospective study in 529 PWUD who visited the "Cañada Real Galiana" (Madrid, Spain). The study period was from June 1, 2017, to May 31, 2018. HIV diagnosis was performed with a rapid antibody screening test at the point-of-care (POC) and HCV diagnosis with immunoassay and PCR tests on dried blood spot (DBS) in a central laboratory. Positive PWUD were referred to the hospital. We used the Chi-square or Fisher's exact tests, as appropriate, to compare rates between groups.

## 4. RESULTS:

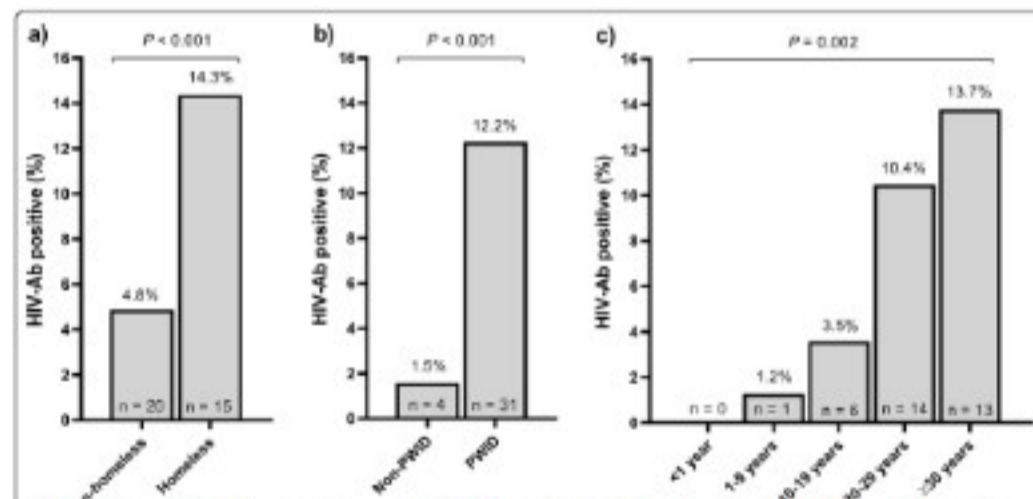
Thirty five (6.6%) participants were positive HIV antibodies, but 34 reported previous HIV diagnoses, and 27 (76 %) had prior antiretroviral therapy. Among patients with a positive HIV antibody test, we also found a higher prevalence of homeless ( $P < 0.001$ ) and injection drug use (PWUD) ( $P < 0.001$ ), and more decades of drug use ( $P = 0.002$ ). All participants received HIV test results at the POC.

**Table 2** Sociodemographic and epidemiological characteristics associated with HIV infection among people who use drugs

Variables	Univariate		Multivariate	
	OR (95% CI)	P-value	aOR (95% CI)	P-value
Age (years)*	1.05 (1.01-1.09)	0.007	-	-
Homeless	3.34 (1.64-6.78)	<0.001	2.64 (1.23-5.68)	0.013
Injection drug user	9.42 (3.27-27.09)	<0.001	5.37 (1.81-15.93)	0.002
Time using drugs (decades)	1.25 (1.09-1.43)	<0.001	1.22 (1.05-1.42)	0.008
Primary care assistance	0.34 (0.12-1.01)	0.050	0.56 (0.18-1.73)	0.321
opioid substitution therapy	3.42 (1.71-6.88)	<0.001	1.95 (0.91-4.14)	0.081

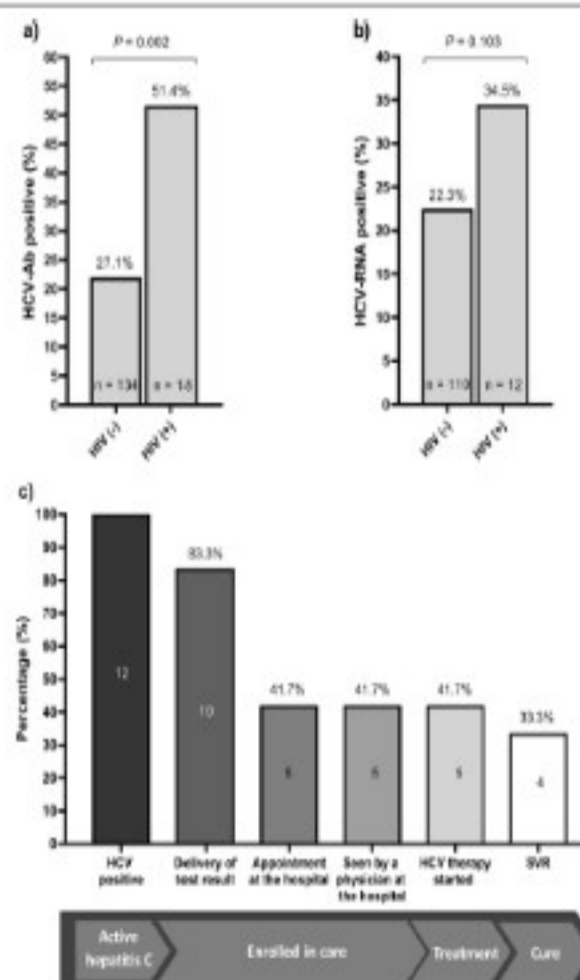
Statistical analysis: The association analysis was performed using logistic regression. (\*), age was discarded in multivariate analysis because it was highly correlated with time using drugs ( $r = 0.661$ ;  $P < 0.001$ )

OR odds ratio; aOR adjusted odds ratio; 95% CI 95% confidence interval



**Fig. 1** Prevalence of HIV infection in people who use drugs (PWUD) from Cañada Real Galiana. a) Population stratified by homeless; b) population stratified by injection drug users; c) population stratified by decades of drug use. PWUD people who injected drugs; HIV human immunodeficiency virus; HIV-Ab antibodies against HIV; P-value, level of significance

Of the 35 HIV positives, 28 (80%) were retained in HIV medical care at the end of the HIV screening study (2018), and only 22 (62.9%) at the end of 2020. Moreover, 12/35 (34.3%) were positive for the HCV RNA test. Of the latter, 10/12 (83.3%) were contacted to deliver the HCV results test (delivery time of 19 days), 5/12 (41.7%) had an appointment and were attended at the hospital and started HCV therapy, and only 4/12 (33.3 %) cleared HCV.



**Fig. 2** Prevalence of hepatitis C infection (a) and linkage to care (b) among HIV-infected drug users in Cañada Real Galiana. HIV human immunodeficiency virus; HCV hepatitis C virus; HCV-Ab antibodies against HCV; HCV-RNA HCV ribonucleic acid; SVR sustained virological response; P-value level of significance

## 5. CONCLUSIONS

We found almost no new HIV infected PWUD, but their cascade of HIV care was low and remains a challenge in this population at risk. The high frequency of active hepatitis C in HIV infected PWUD reflects the need for HCV screening and reinforcing the link to care.

## 6. ACKNOWLEDGEMENTS

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