

INDEPENDENT OF INJECTING DRUG USE, BEING A FOREIGN NATIONAL IS ASSOCIATED WITH RISK OF REACTIVE HCV SCREENING IN EUROPEAN COMMUNITY-BASED TESTING SERVICES 2017

COBATEST NETWORK

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Background

HIV testing in CBVCTs has proven to be cost effective (1) have high user satisfaction (2) and identify patients at an earlier stage of HIV infection than testing in clinical settings (3). The HCV epidemic in Europe is concentrated in PWID (4). On-site testing with pre-test counselling and education in health settings has been identified as an intervention to enhance HCV testing among PWID (5). As CBVCTs are increasingly offering HCV screening, more investigation is required to understand if services are reaching populations at higher risk of HCV. The COBATEST Network collects standardised testing data from community-based voluntary counselling and evaluation of services. COBATEST has been recognised as an example of good practice in the public health response to HIV by both the WHO and the ECDC. The network promotes the incorporation of CBVCT data into national surveillance systems. In 2017, 38 CBVCT services in 20 European countries submitted data to the network.

Methods

Data collected using COBATEST data collection tool and disaggregated data submission from 14 CBVCTs performing HCV screening in 7 countries in the period 1 January 2017– 31 December 2017. The standardised questionnaire collects sociodemographic and epidemiological information and is completed by counsellor in consultation. The study population described, proportion of reactive tests calculated, risk factors associated with and calculated the proportion of reactive tests for each sociodemographic variable. We then identified risk factors for a reactive test result using univariate and multivariate logistic regression with 95% CIs and p values.



Results

In the COBATEST Network in 2017, 1,976 HCV screening tests were performed in 15 CBVCT services in 7 countries. Of these services, 9 are based in Spain representing less than a quarter of all reported screenings (Fig 1). For this analysis, 18 testers aged under 16 were excluded, and 115 testers with no available test result were excluded.

The proportion of reactive tests between centres varied, the highest being 22.2% (n=2) in CAS/ARD Barcelona – a service for people who inject drugs (PWID) (Fig.2). Overall, the proportion of reactive tests was significantly higher in foreign nationals than non-foreign nationals and in PWID compared to non-PWID (Table 1). In the univariate analysis, being a foreign national or PWID increased risk of a reactive test. This finding remained after adjusting for gender, foreign national and PWID (Table 2).



Figure 1: Proportion of HCV tests from each centre COBATEST Network 2017

ACASC (Spain)

- SOMOS LGBT (Spain)
- AVACOS-H (Spain)
- Lambda (Spain)
- CAS/ARD Lluis Companys (Spain)
- CASDA (Spain)
- GaisPositius (Spain)
- OMSIDA (Spain)
- Ambit prevenció (Spain)
- ARAS (Romania)
- Demetra (Lithuania)
- LilaMilano (Italy)
- AIDS Hilfe Wien (Austria)
- AIDS Fondet (Denmark)

Figure 2: Frequency of testing and proportion of reactive tests in each centre COBATEST Network 2017



Table 1: HCV tests performed and reactive tests by sociodemographic variables - COBATEST Network 2017

	Total		Reactive Tests	
	Ν	n	%	
Total	1,844	25	1.4	
Male	e 1451	19	1.3	
<i>Gender</i> Missing = 0.2% Female	e 382	6	1.6	
Trans	s 8	0	0	
Aae aroun Missina=0.3%**	5 222	3	1.4	
>=2!	5 826	11	1.3	
Foreign national * Missing=2.2%	s 549	13	2.4	
No	b 1254	12	1	
Yes	s 997	9	0.9	
NON	o 847	16	1.9	
HIV+ MSM	s 17	1	5.9	
No	b 1827	24	1.3	
Yes	s 57	1	1.8	
Sex worker Missing=3.4%** No	b 820	24	1.3	
Don't knov	v 113	1	0.9	
Yes	s 22	7	31.8	
Intravenous drug use* Missing=2.9% No	o 1705	18	1.1	
Don't knov	v 63	0	0	

*Signficant different between categories **Not including one centre with no data (n=791) Baltic HIV (Estonia)

Table 2: Risk Factors for a Reactive HCV Test COBATEST Network 2017

		cOR		aOR*				
		(95% CI)	p value	(95% CI)	p value			
Gender	Men	1		1				
	Women	1.2(0.5;3)	0.696	1.2(0.4;3.2)	0.724			
Age group**	<25	1						
	>=25	1.2(0.5;3)	0.696					
Foreign National	No	1		1				
	Yes	2.5(1.1;5.5)	0.023	2.6(1.1;6.0)	0.022			
MSM	No	1						
	Yes	0.5(0.2;1.1)	0.074					
MSM HIV+	No	1						
	Yes	4.7(0.6;36.8)	0.141					
Sex worker**	No	1						
	Yes	1.2(0.2;9.4)	0.861					
	Don't know	0.6(0.1;4.7)	0.627					
Intravenous Drug User	No	1		1				
	Yes	43.7 (15.9;120.1)	<0.001	40.1(14.3;112.9)	< 0.001			
HIV+**	No	1						
	Yes	3.2(0.4;25.8)	0.284					
*Logistic regression model adjusted for gender, foreign national and intravenous drug use								

**Not including one centre with no data (n=791)

Conclusions

Bibliography



Although relatively few PWIDs tested in COBATEST CBVCT services, the high proportion of reactive tests in this population indicates that CBVCT should be a element of national strategies to increase testing in PWID. Migrants accessing CBVCT services in the COBATEST network are at increased risk of a reactive HCV test compared to nonmigrants, independent of intravenous drug use. Given the small number of cases, this finding should be investigated further using data from COBATEST Network 2014-18. Using the larger dataset would also provide an opportunity to investigate screening of HIV+ MSM. The CBVCT service with the largest number of screening tests does not collect the minimum set of variables which limited the variables that could be included in the multivariate analysis. Data on RNA tests should be improved (information only available for 6/25 reactive tests) to provide evidence of whether CBVCTs are diagnosing people with an active HCV infection.

The results demonstrate that CBVCT services are well-placed to increase HCV screening amongst people at higher risk of HCV who are not accessing mainstream healthcare. CBVCT services with limited resources could improve targeting of testing by incorporating a risk identification tool to decide whether to screen clients for HCV. [1] Perelman J, Rosado R, Amri O, Morel S, Castro R, Chanos S, et al. Economic evaluation of HIV testing for men who have sex with men in community-based organizations – results from six European cities. AIDS Care. Taylor & Francis; 2017;121. [2] Préau M, Lorente N, Sagaon-teyssier L, Champenois K, Marie J, Gall L, et al. Factors associated with satisfaction with community-based non-medicalized counseling and testing using HIV rapid tests among MSM in France. AIDS Care. 2016;121. [3] Freeman-romilly N, Sheppard P, Desai S, Cooper N, Brady M. Does community-based point of care HIV testing reduce late HIV diagnosis ? A retrospective study in England and Wales. 2017. [4] European Centre for Disease Prevention and Control. Hepatitis B and C testing activities , needs , and priorities in the EU / EEA. 2017. [5] Bajis S, Dore GJ, Hajarizadeh B, Cunningham EB, Maher L, Grebely J. Interventions to enhance testing , linkage to care and treatment uptake for hepatitis C virus infection among people who inject drugs : A systematic review. Int J Drug Policy. 2017.

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