

Prevalence and factors of HCV infection among HIV-negative MSM and TW, PrEP users versus non-PrEP users, in a community health center EPC235.

A. Rivero Calaf (1,2,3), A. Dalmau-Bueno (2), F. Perez Tejera (2), P. Coll Verd (3,4,2,1), J.M. Cabrera Guarin (2,1,3), M. Lucejko (2,1,3), J. Reguant Guitart (2,1), J. Fernandez Perez (2,1), J. Calderon Torres (2), J. Romero (2), G. Marazzi (2), A. Alonso Baile (2), C. Oro (2), D. Jacobs (2), H. Vicioso (2), L. Moises Enrique (2), M. Ristovsky (2), R. Lopez (2), M. Bernardi (2), E. Robles (2), E. Muñoz Campos (2), J.J. Sotomayor Cortes (2), H. Taboada Gonzalez (2), J. Saz Berges (2), F. Pujol Roca (2), M. Meulbroek (2), R. Paredes Deirós (3,1,4) (1) Hospital Universitari Germans trias i Pujol, Infectious Disease Unit, Badalona, Spain, (2) Projecte dels NOMS HISPANOSIDA, Barcelona, Spain, (3) Fundació Lluita contra la SIDA i les Malalties Infeccioses, Badalona, Spain, (4) IrsiCaixa AIDS Research Institute, Badalona, Spain

Background

Since 2000, multiple HCV outbreaks have been reported in the community of people living with HIV, but to a much lesser extent in HIV-negative Men who have Sex with Men (MSM) and Transgender Women (TW). During the last decade new developments like the accepted U=U campaign, PrEP implementation, and extension of ChemSex use may have contributed to fueling the transmission chain. BCN Checkpoint, a community center with experience of early HIV detection, linkage to care, and treatment initiation might be able to create a model with Point-of-Care (PoC) HCV detection in an understudied population. The study aims to determine the prevalence of acute and chronic HCV infection in HIV-negative MSM community and to assess risk factors associated with HCV infection.

Methods:

All clients, including PrEP users and non-PrEP users, coming for routine HIV testing to the community center were offered to be screened for HCV. Sexual behavior and drug use were assessed with digital questionnaires. A PoC serology test (Abbott® Bioline™ HCV) was performed. Positive results were immediately confirmed by a PoC PCR test (Xpert® HCV VL Fingerstick). Additionally, clients with a negative serology and pre-defined criteria (e.g. ChemSex, fisting, recent HIV diagnosis) were offered a PCR test to detect a potential acute HCV infection. All confirmed cases were referred to start treatment rapidly.

Results:

Table 1. Socioeconomic characteristics of included participants

Variable	Total		Non PrEP user		PrEP user	
	N	%	N	%	N	%
Total	6543	100,00%	4479		2064	
Key Population						
MSM	6496	99,28%	4457	99,51%	2039	98,79%
TW	47	0,72%	22	0,49%	25	1,21%
Age group						
<25 years old	810	12,40%	725	16,20%	85	4,10%
25-29 years old	1423	21,70%	1130	25,20%	293	14,20%
30-34 years old	1475	22,50%	978	21,80%	497	24,10%
35-44 years old	1725	26,40%	986	22,00%	739	35,80%
45 or more years	1110	17,00%	660	14,70%	450	21,80%
Origin						
Spain	2330	35,60%	1706	38,10%	624	30,20%
Other European Countries	1563	23,90%	984	22,00%	579	28,10%
Center and South America	254	3,90%	144	3,20%	110	5,30%
Other origins	2396	36,60%	1645	36,70%	751	36,40%
Educational level						
Primary	75	1,10%	53	1,20%	22	1,10%
Secondary	1591	24,30%	1118	25,00%	473	22,90%
University	4877	74,50%	3308	73,90%	1569	76,00%

Interim analysis: Between August 2021 and June 2022 a total of 6.543 MSM and TGW were included (PrEP users: 31,5%). 36 cases had a previous HCV history, from which 3 reinfections were identified. 10 active HCV infections have been detected, 3 in PrEP users and 7 in non-PrEP users. Screening obtained 14 positive serologies, from which 6 active HCV infections were confirmed and 3 cases of coinfection with undiagnosed HIV and 5 false positive results. Furthermore, 1 acute HCV infection was found with negative serology and positive PCR. Overall, a prevalence of 0,15% was found in our cohort.

Table 2. Socioeconomic characteristics of detected cases

Variable	Total	
	N	%
Total	10	100,00%
Key Population		
MSM	10	100,00%
TW	0	0,00%
Age group		
<25 years old	0	0,00%
25-29 years old	4	40,00%
30-34 years old	1	10,00%
35-44 years old	3	30,00%
45 or more years	2	20,00%
Origin		
Spain	3	30,00%
Other European	1	10,00%
Center & South America	6	60,00%
Other origins	0	0,00%
Educational level		
Primary	1	10,00%
Secondary	2	20,00%
University	7	70,00%

Conclusions:

Preliminary results show a low prevalence of HCV in HIV-negative MSM (0.15%), and further screening will allow more insight. PrEP users are periodically screened, which may bias prevalence results. Chemsex and group sex, appears as main factors, but due to low prevalence, statistical significance could not be assessed.

However, these results suggest that targeted screening may be effective, once criteria are established, for future HCV testing and treat strategies. Use of Viral Load as screening method with the specific criteria can increase the performance of screening programs. Community centers play an important role in detecting cases in people not engaged to the health system or subpopulations with difficulties in accessing the public system.

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