

# PS2/03 HIV Diagnosis At Time Of Sexually Transmitted Infection Among Men Who Have Sex With Men In Catalonia, 2011-2013

**Authors:** R. Lugo<sup>1,2</sup>, N. Vives<sup>1,2</sup>, M. Arando<sup>3</sup>, M. Vall<sup>3</sup>, P. Armengol<sup>3</sup>, M.J. Barberà<sup>3</sup>, A. Vives<sup>4</sup>, M. Alsina<sup>5</sup>, C. Muñoz<sup>5</sup>, J.L. Blanco<sup>5</sup>, J. Sobrino<sup>6</sup>, J. Relat<sup>7</sup>, M.J. Jareño<sup>8</sup>, J. Xandri<sup>9</sup>, V.M. Silvestre<sup>8</sup>, J. Casabona<sup>1,2</sup>, The Catalan STI Sentinel Surveillance Study Group. **E-mail:** rlugo@iconcologia.net

<sup>1</sup>Centre for Epidemiological Studies on STI/HIV/AIDS in Catalonia (CEEISCAT)-ICO-Agència de Salut Pública de Catalunya, Badalona, Spain, <sup>2</sup>CIBER of Epidemiology and Public Health (CIBERESP), Badalona, Spain, <sup>3</sup>Hospital Universitari Vall d'Hebron, Programa Especial de Malalties Infeccioses Vall d'Hebron-Drassanes, Barcelona, Spain, <sup>4</sup>Fundació Puigvert, Servei d'Andrologia, Barcelona, Spain, <sup>5</sup>Hospital Universitari Clínic de Barcelona, Servei Dermatologia, Barcelona, Spain, <sup>6</sup>Institut Català de la Salut (ICS), Programa a la Atenció de la Salut Sexual i Reproductiva (ASSIR), Sabadell, Spain, <sup>7</sup>Institut Català de la Salut (ICS), Programa a la Atenció de la Salut Sexual i Reproductiva (ASSIR), Granollers, Spain, <sup>8</sup>Consorci Castelldefels Agents de Salut (CASAP), Equip d'Atenció Primària Can Bou, Castelldefels, Spain, <sup>9</sup>Institut Català de la Salut (ICS), Programa a la Atenció de la Salut Sexual i Reproductiva (ASSIR), Barcelona, Spain

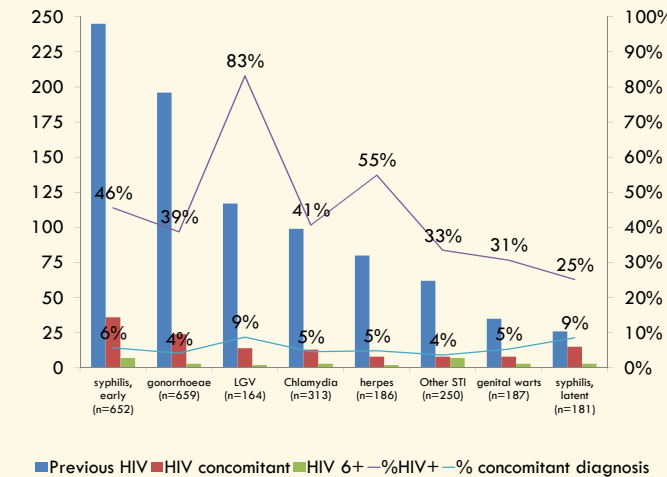
**Introduction:** Control of sexually transmitted infection (STI) gives the opportunity for HIV screening and early diagnosis for linkage-to-care. In Catalonia, STI among men who have sex with men (MSM) continues on the rise and the determinants for HIV detection at STI diagnosis are unknown. Data from complementary enhanced surveillance systems are useful to monitor changes in the epidemiology of non-individualized mandatory STI in Catalonia. Epidemiological and clinical data of main STI is collected by 114 sentinel professionals of 58 centers (Sexual Health Units, STI Units and Primary care centers) in the Sentinel STI Registry (RITS) as part of the Department of Health's online Epidemiological Repository of Catalonia.

**Objective:** The aim of this study was to calculate HIV prevalence and determinant factors for HIV diagnosis during 2011 to 2013. Concomitant HIV was defined as any HIV diagnosis within previous 3 months or 6 months after STI. Variables included were: age, origin, sexual orientation, STI, previous STI disclosure <=12 months and year of diagnosis. Factors associated with concomitant HIV were assessed using a multivariate logistic regression model, assuming a 95% confidence interval.

## Results:

- A total of 2612 MSM cases were reported to the STI Sentinel Surveillance System during 2011-2013.
- HIV prevalence was 39% overall, 55% herpes, 41% Chlamydia, 31% genital warts and 25% latent syphilis.
- Out of 1013 HIV-positive, 12% were diagnosed concomitant to STI.
- Concomitant HIV diagnosis was independently associated with younger age (20-24 years, 25-34 years, 35-44 years), having a latent syphilis diagnosis, and no previous STI disclosure.

Variables	Frequency N=2612	(%)	% HIV+ (%)	% HIV-STI concomitant diagnosis	OR <sup>m</sup>	p	95% IC
<b>Age (mean)</b>	34 years	**	35 years	32 years			
	(SD:8,7)		(SD:7,8)	(SD:7,5)			
<b>Age group (years)</b>			p<0,001	p<0,005			
13-24	313	12,0	19,5	7,3	20,26	0,000	6,78 60,57
25-34	1180	45,2	37,8	4,6	3,73	0,008	1,42 9,81
35-44	817	31,3	47,1	5,4	3,21	0,018	1,22 8,45
45+	301	11,5	40,2	1,7	R		
<b>Origin</b>			p<0,001	p<0,001			
Foreign	1094	41,9	50,1	6,5	1,17	0,445	0,78 1,75
Spain	1518	58,1	37,7	3,6	R		
<b>Year of Diagnosis</b>			p<0,001	p<0,001			
2011	753	28,8	47,7	5,2	1,08	0,762	0,65 1,79
2012	849	32,5	43,6	5,4	1,20	0,462	0,74 1,95
2013	1010	38,7	38,8	4,1	R		
<b>Centre of diagnosis</b>			p<0,05	p<0,001			
Reproductive/Sexual health	24	0,9	10,5	8,3	0,58	1,000	0 .
STI Unit	2583	98,9	43,2	4,7	0,00	0,999	0 .
Primary care	5	0,2	50,0	40,0	R		
<b>Sexual orientation</b>			p<0,001	p<0,001			
Homosexual	2410	92,3	44,5	4,9	0,85	0,817	0,23 3,24
Bisexual	173	6,6	17,2	1,7	1,10	0,918	0,17 7,17
Transsexual	29	1,1	51,9	13,8			
<b>Previous STI, &lt;12months</b>			p<0,001	p<0,001			
No	503	19,3	34,4	5,7	3,16	0,000	1,78 5,60
Yes	2109	80,7	57,0	3,2	R		
<b>STI diagnosis</b>			p<0,001	p<0,001			
syphilis early	672	25,7	45,6	5,4%	0,89	0,796	0,36 2,21
syphilis latent	181	6,9	25,1	8,3%	3,87	0,014	1,32 11,33
Gonorrhoea	659	25,2	38,7	3,6%	0,76	0,567	0,29 1,96
LGV	164	6,3	38,1	8,5%	0,77	0,616	0,28 2,13
Chlamydia	313	12,0	40,6	4,2%	0,89	0,829	0,32 2,52
Herpes	186	7,1	54,9	4,3%	0,80	0,691	0,26 2,45
Genital warts	187	7,2	30,7	4,3%	0,95	0,933	0,26 3,39
Other STI	250	9,6	33,5	3,2%	R		



## Conclusions:

- Data from STI Sentinel Surveillance improve the knowledge of determinants factors, increasing the opportunity for early detection in settings where STI are diagnosed.
- High HIV co-infection among MSM and low risk perception among the youngest, who does not disclose previous STI, brings the need for HIV/STI-assessment and awareness of STI symptoms.
- Further analysis is needed to address testing and risk behaviour among young MSM aged <25.

## Limitations:

Analysis is based on cases reported by sentinel physicians, so people with limited access or poor use of health services or visiting private health care are not included. The sentinel network collects data from few geographical areas of Catalonia, so these findings are not representative of the whole territory and can not be extrapolated.

**Acknowledgements:** CIBER-SP, ASPCa, CEEISCAT, The Catalan STI Sentinel Surveillance (RITS) Study Group: R Lugo, N Vives, N. Romero, J Casabona (Centre for Epidemiological Studies on STI/HIV/AIDS in Catalonia (CEEISCAT)-ICO-Agència de Salut Pública de Catalunya), M Arando, P Armengol, M. J. Barberà, M. Vall, M. Cajal, C. Martín, G. Torrell, E. Ugarte (Programa Especial de Malalties Infeccioses Vall d'Hebron-Drassanes, Hospital Universitari Vall d'Hebron), A. Vives (Servei d'Andrologia, Fundació Puigvert), M. Alsina, J.L. Blanco, I. Fortes, S. Pedregosa (Servei Dermatologia Hospital Clínic de Barcelona), G. Falguera (Àmbit Metropolitana Nord, Institut Català de la Salut), A. Acera, R. Contero, D. Rodríguez, P. Soteras, M. Lluçà, A.M. Carceles, N.A. Sánchez, M. Robert (ASSIR Cerdanyola/Ripollet, Institut Català de la Salut), D. Guix, J. Relat, A. Prats, M. Duran (ASSIR Granollers, Institut Català de la Salut), M.J. Ayuso, E. López (ASSIR Mollet del Vallès, Institut Català de la Salut), E. Coll (ASSIR Rubí/Sant Cugat/Terrassa/Múria Terrassa), M. Àbela, E. López, Á. Yus, J. Sobrino, V. Ila, P. Solà, M. Villanueva, B. Morillas, E. Ruiz, M.C. Uyé (ASSIR Sabadell, Institut Català de la Salut), A. Avesilla, M. de Sebastian, I. Ferré, M. Teixidó, D. Mateo, M. del Socorro Ferrero (ASSIR Badalona, Badalona Serveis Assistencials), C. Coll (ASSIR Maresme, Institut Català de la Salut), C. Martínez (Àmbit Barcelona Ciutat, Institut Català de la Salut), M.R. Almirall, J. Cid, J. Xandri, A. Payaró (ASSIR Esquera, Institut Català de la Salut), M. Vilamala, S. Vera, A. Ramírez, M. Padró, J. Gimeno, M. Honrado (ASSIR Lloral, Parc Salut Mar), D. Meza, E. Castañeda, D. Pérez, E.M. Vicedo, J.M. Marqueta, E. Apalimov, E. Folch, M.L. Monje, E. Llerenas, V. Márquez, M. Hidalgo, Ma R. Vila, M.E. Cesar, A. Garatea (ASSIR Baix Empordà, CABE), R. Hernández (ASSIR Anoia, Institut Català de la Salut), M. María Dolores Rivero (CAP Alfons Moré i Paretas, Institut Català de la Salut), X. Puigdemolins (CAP Sant Fruitós de Bages, Institut Català de la Salut), P. Aguilà Pujols, R. Codinach, (CAP El Remei, Institut Català de la Salut), C. Pérez (CAP Gornal, Institut Català de la Salut), M.J. Jareño, V.M. Silvestre (CAP Can Bou, Institut Català de la Salut), J. Mílozji Berrocal (CAP Baix-a-Mar), B. Escorriuella Martínez (CAP Sant Martí, Institut Català de la Salut), P. Paulo (CAP La Riera, Institut Català de la Salut), A. Valls (CAP Premià de Mar, Institut Català de la Salut), L. Valerio (Unitat de Salut Intercanal Metropolitana Nord, Institut Català de la Salut), J. Caylà (Epidemiological service of Public Health Agency of Barcelona), J. Álvarez (UVE Barcelonès Nord-Maresme), MR Sala (UVE Barcelonès Centre), N Camps (UVE Girona), S Minguell (UVE Tarragona), R Torra (UVE Catalunya Central), I Barraibeg (UVE Barcelonès Costa Ponent), P Godoy (UVE Lleida/Alt Pirineu), J Ferras (UVE Terres de l'Ebre), J.L. Martínez (Program for AIDS prevention).

**Conflicts of interest:** The authors of this communication have not had any financial or other relationship that could have influenced the conduct and preparation of this work.