

PS2/03

HepHIV 2014
5-7 OCTOBER BARCELONA
HIV and Viral Hepatitis: Challenges of Timely Testing and Care

HIV diagnosis at time of sexually transmitted infection among men who have sex with men in Catalonia, 2011-2013

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Background

- Men who have sex with men (**MSM**) remain the **largest high-risk group** involved in on-going transmission of sexually transmitted infections (STI).
- MSM with an STI diagnosis shows **higher HIV co-infection**.
- **STI-HIV synergies** facilitates the chance for new infections.
- Control of STI gives the **opportunity for HIV screening and early diagnosis for linkage-to-care**.

Background

- *Increasing sexually transmitted infection rates in young men having sex with men in the Netherlands, 2006-2012.* Koedijk FD, et al. *Emerg Themes Epidemiol.* 2014 Aug 28;11:12.
- *High prevalence of drug consumption and sexual risk behaviours in men who have sex with men.* Folch C, et al. *Med Clin (Barc).* 2014 Sep 22.
- Many HIV infections remain undiagnosed and persistence of frequent risk behaviours and STI despite knowledge of HIV-positive status. *Undiagnosed HIV infection in a population of MSM from six European cities: results from Sialon project.* Ferrer L, et al. *Eur J Public Health.* 2014 Aug 26.

Background: Catalonia

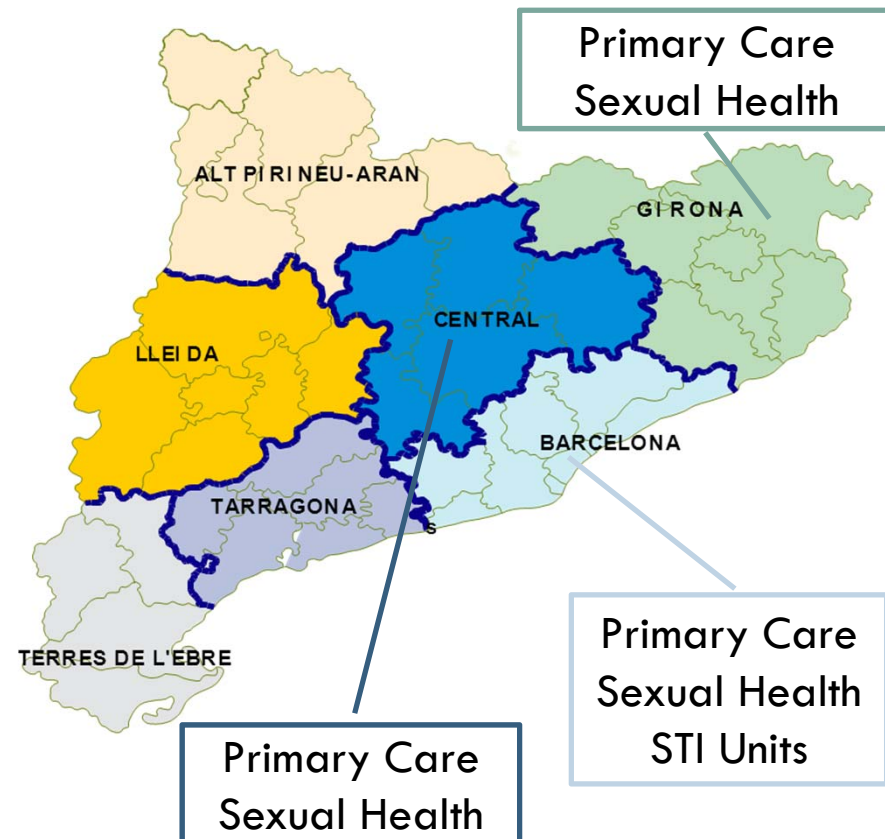
- Determinants for **HIV detection at STI diagnosis are unknown.**
- Data from complementary **sentinel surveillance systems are useful to monitor epidemiological changes of 12 STIs in Catalonia.**

Objectives

- To calculate HIV prevalence among men who have sex with men (MSM) diagnosed with an STI.
- To calculate the proportion of concomitant STI-HIV diagnosis.
- Identify determinant factors for concomitant HIV-STI diagnosis among MSM.

Methods: Catalan Sentinel STI Network

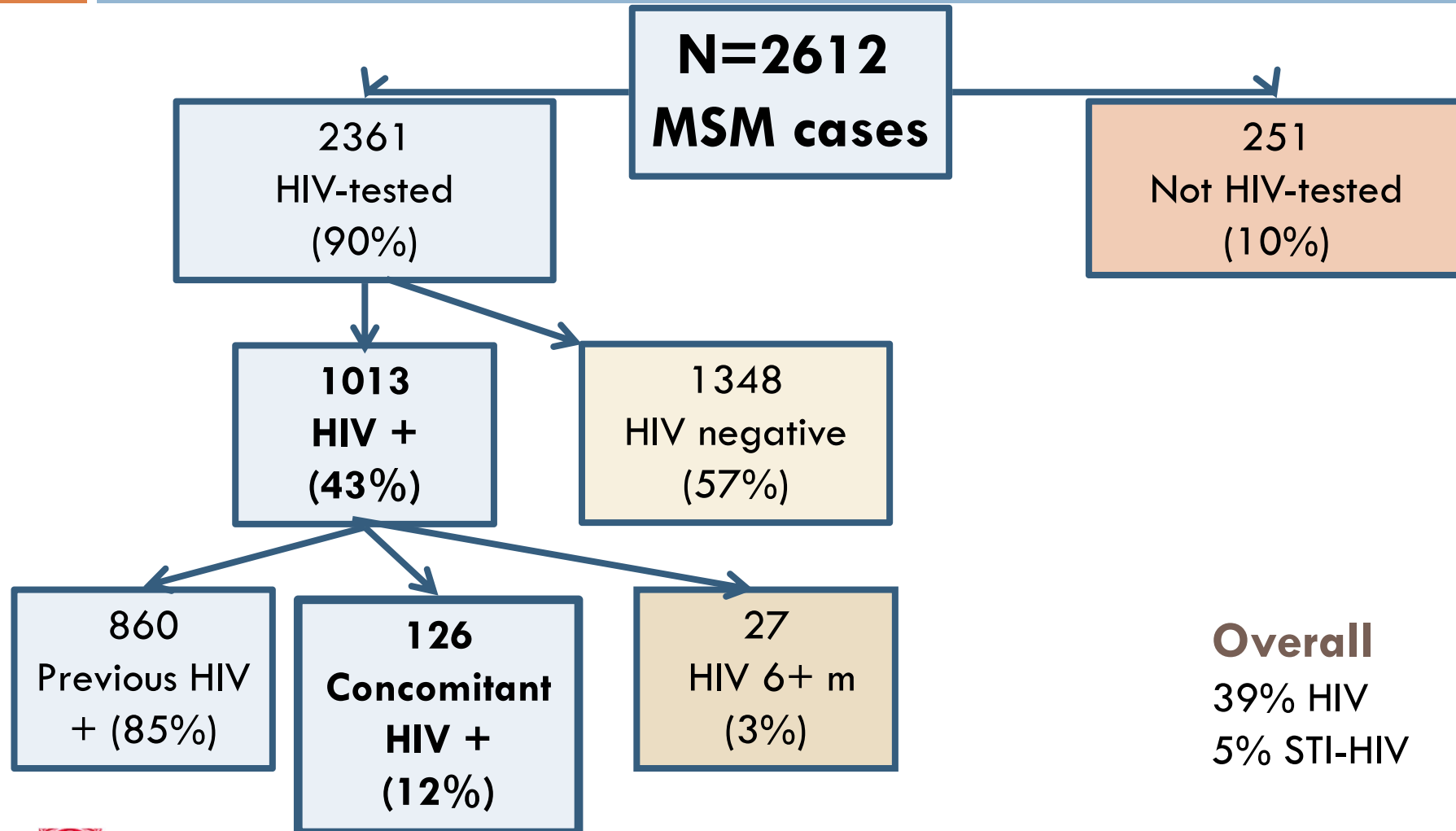
- Sentinel surveillance project which collect epidemiological and clinical data since 2007 within the **Sentinel STI Registry** (RITS) as part of the Catalan Epidemiological Repository (REC).
- **Inclusion:** any patient diagnosed with a new STI at collaborating centres.
- **Collaborators:** 114 sentinel professionals from 58 centers (Sexual Health Centres, STI Units and Primary care centers)



Methods

- **Inclusion criteria:** MSM 13+ years of age, reported to the STI Sentinel Surveillance System during 2011 to 2013.
- **Concomitant HIV:** HIV diagnosis within previous 3 months or 6 months after STI.
- **Variables included:** age at diagnosis, origin, sexual orientation, STI, HIV, previous STI \leq 12 months and year of STI or HIV diagnosis.
- **Data analysis:** Factors associated with concomitant HIV were assessed designing a multivariate logistic regression model, assuming a 95% confidence interval.

Methods: Sentinel STI Registry



Overall
39% HIV
5% STI-HIV

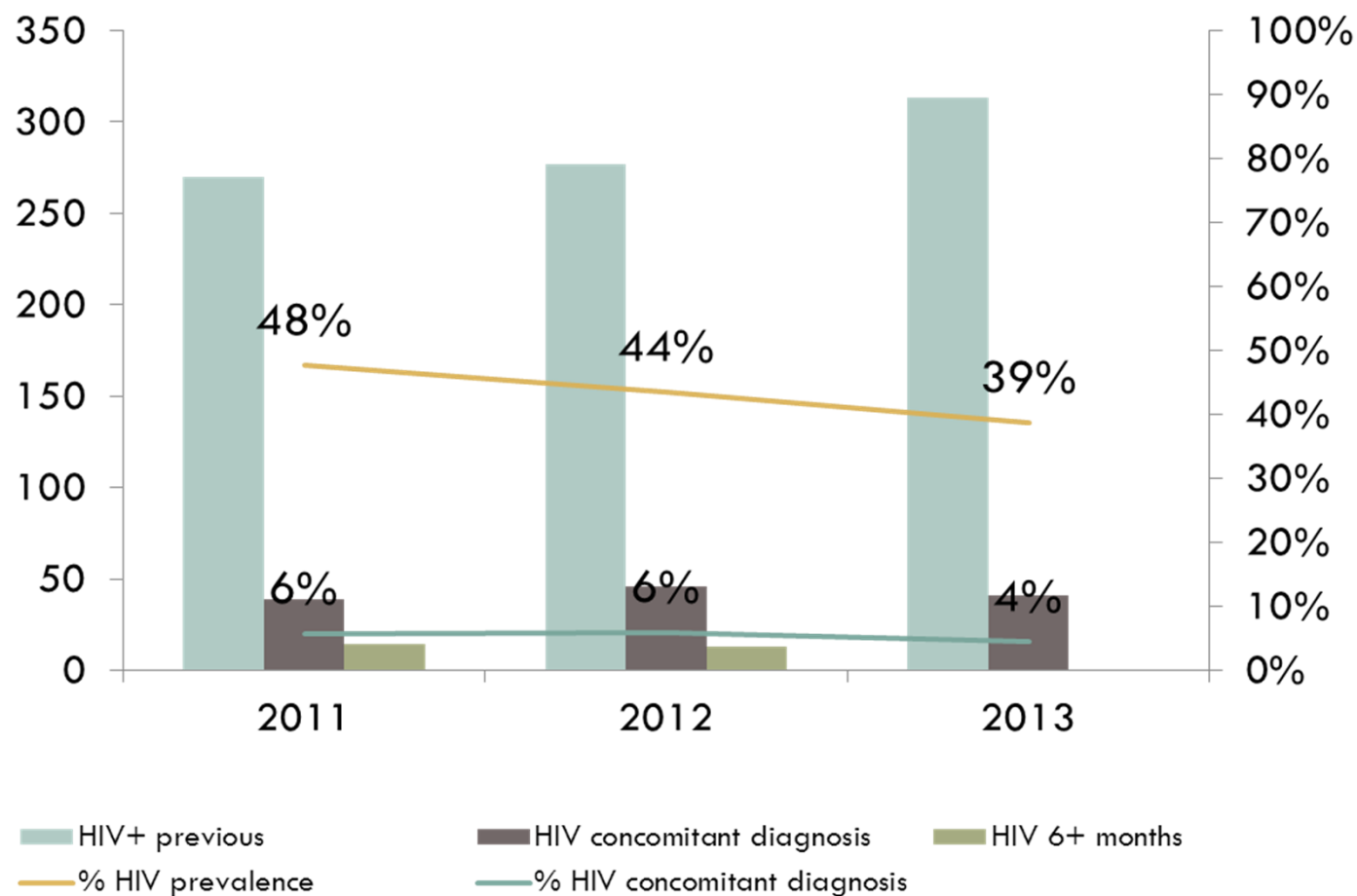
Results: Trend

Overall HIV prevalence was 43%.

Out of 2361 MSM, 5% were STI/HIV concomitant.

Out of 1013 MSM HIV+, 12% were STI/HIV concomitant.

$P < 0,001$



Results: Age group

Not tested for HIV

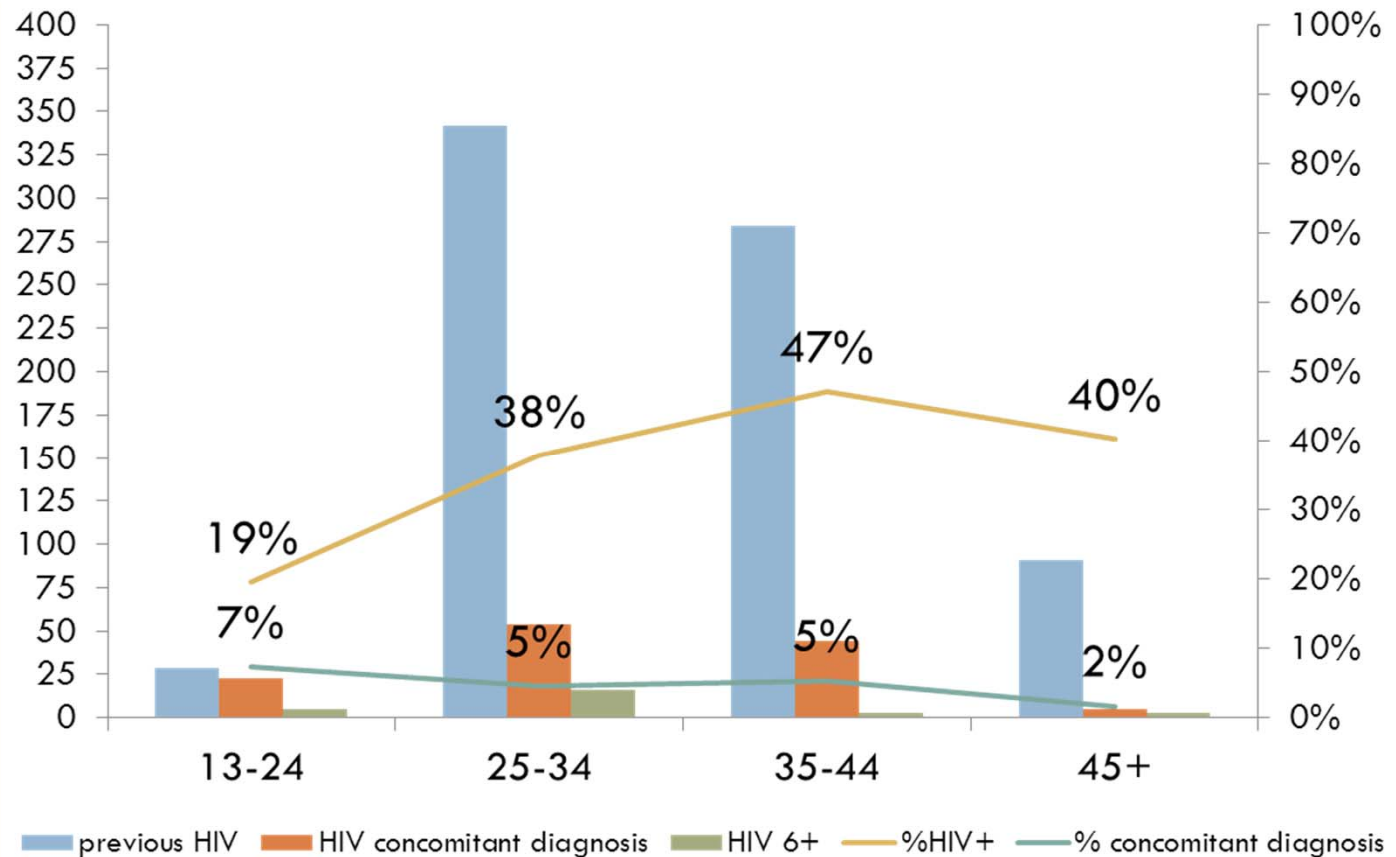
aged <25: 13%

25-34: 10%

35-34: 7%

45+: 9%

$P < 0,001$

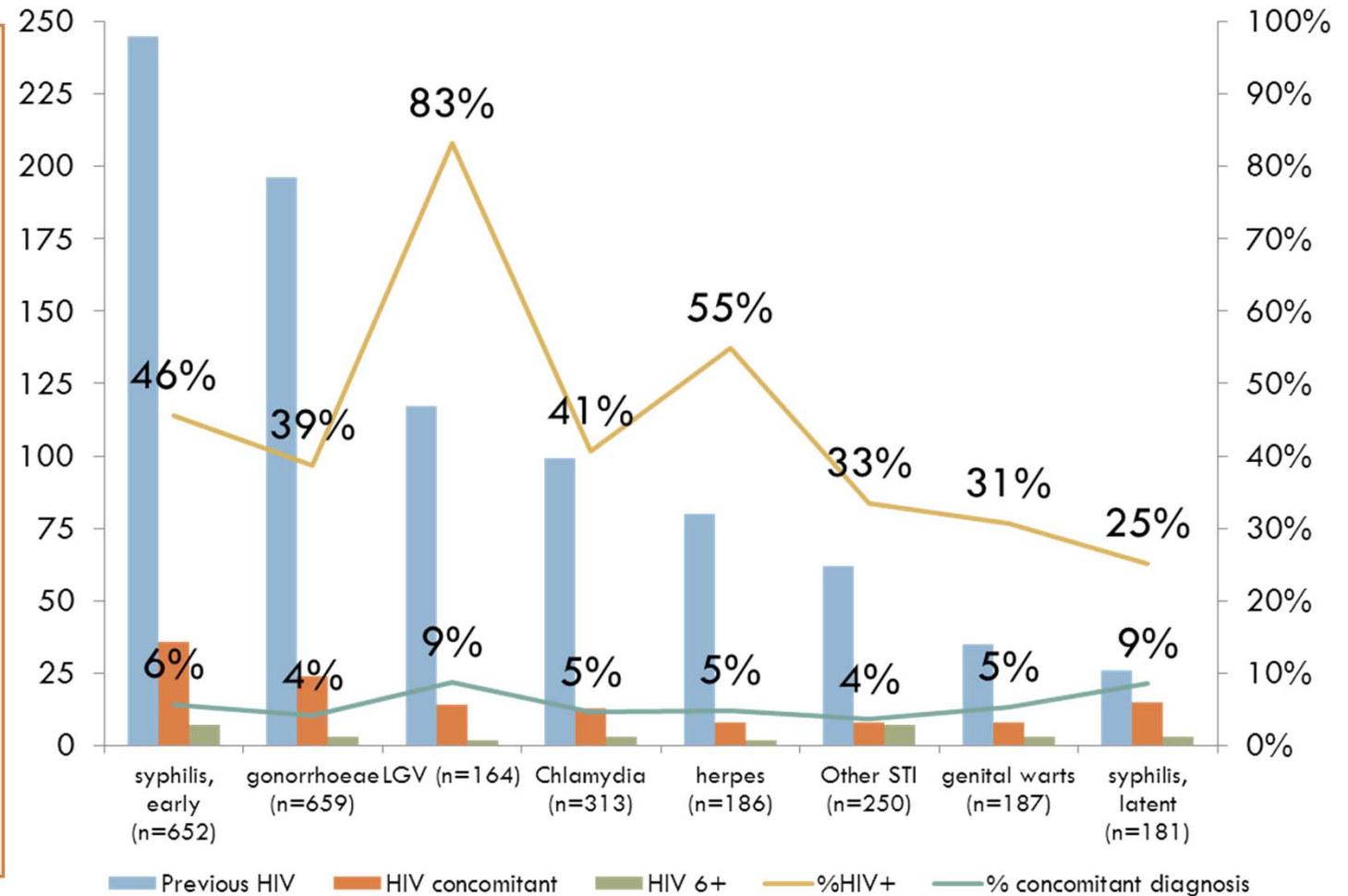


Results: STI

Not tested for HIV:

- genital warts: 20%
- gonorrhoeae: 13%
- herpes and other STI: 12%
- Chlamydia: 10%

P<0,001



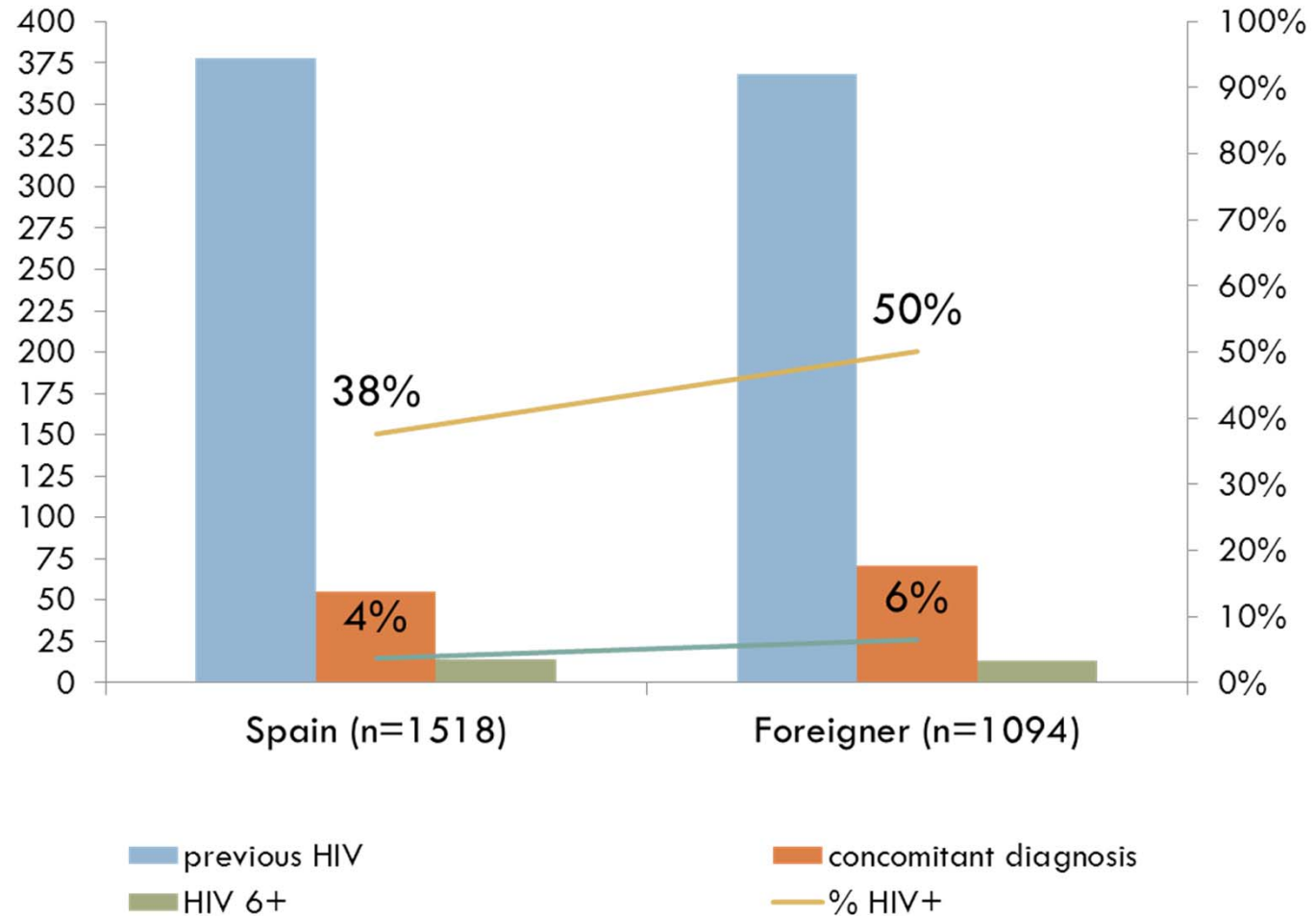
Results: Origin

37% foreigner

Not tested for HIV:

autoctonus: 9%

foreigners: 10%



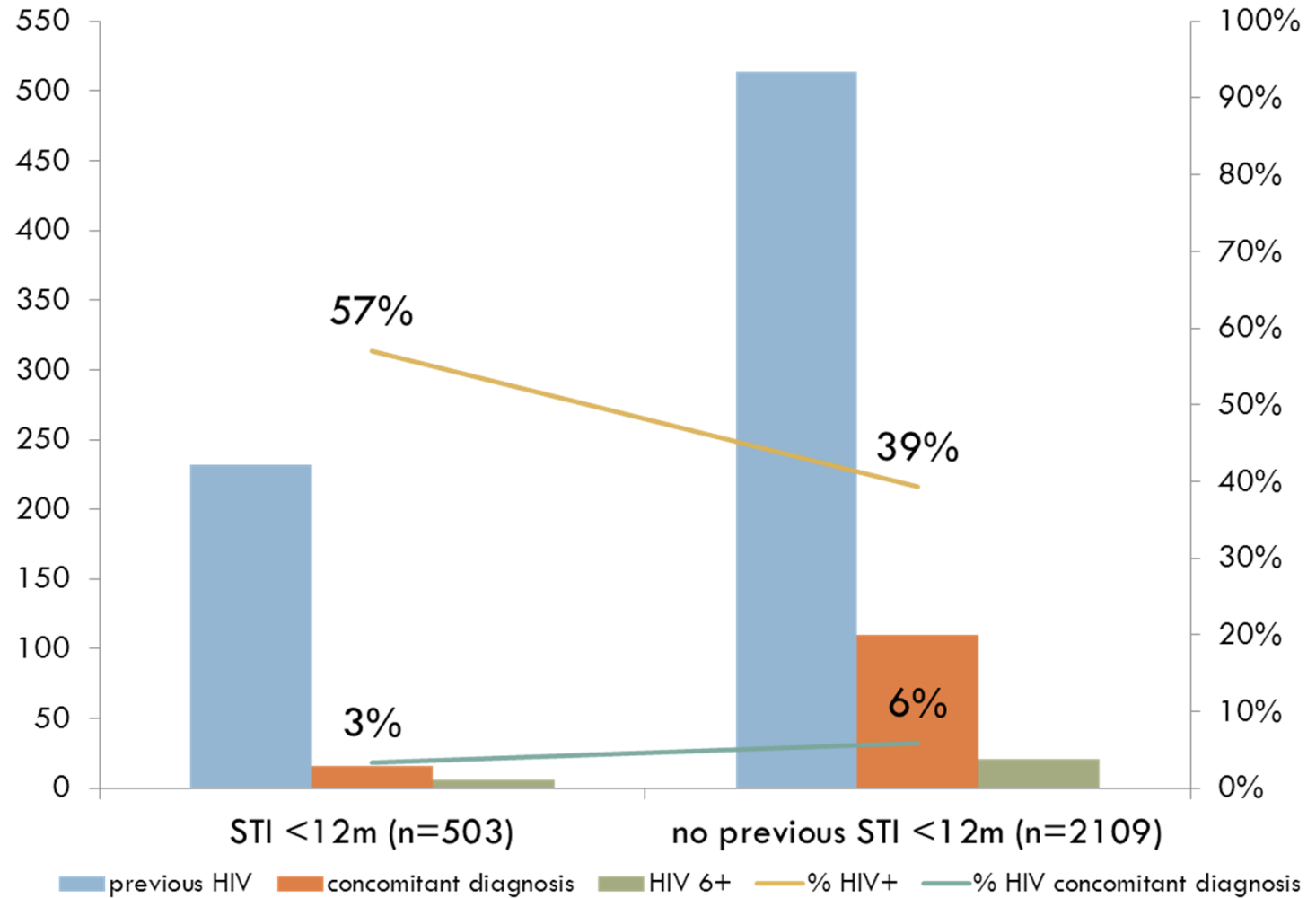
Results: STI <12 months

Not tested for HIV:

STI <12 months: 4%

no previous STI <12m: 11%

P<0,001



Results: Sexual orientation

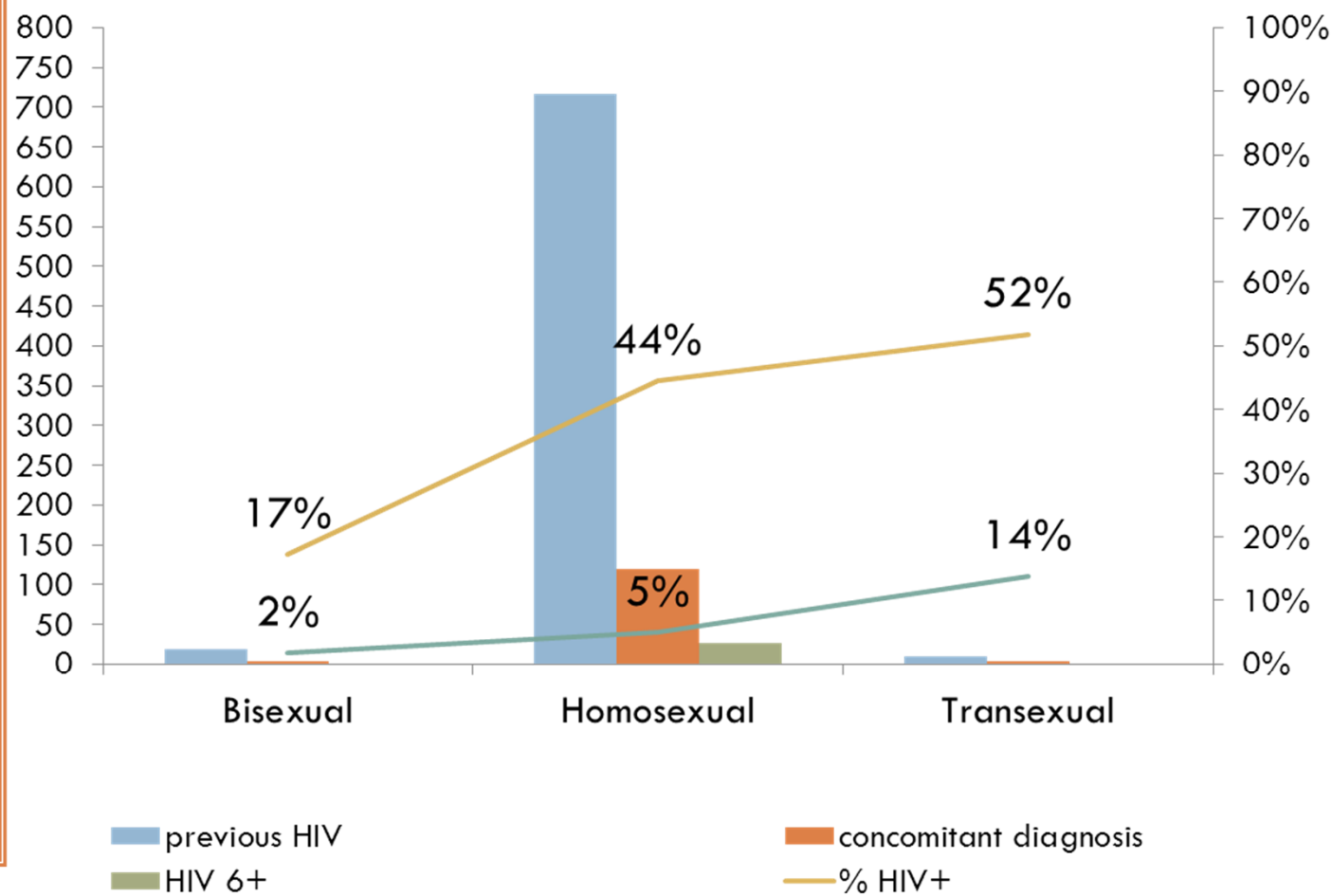
Not tested for HIV:

Bisexual 16%

Homosexual 9%

Transexual 7%

P<0,01



Results: Multivariate

Concomitant HIV diagnosis among MSM diagnosed with and STI was independently associated with:

- younger age
- latent syphilis
- no previous STI diagnosis

Characteristics of MSM with STI diagnosis, Sentinel STI Network, Catalonia, 2011-2013

Variables	Frequency N=2612	(%)	% HIV+ (%)	% HIV-STI concomitant diagnosis	OR ^m	p	95% IC
Age (mean)	34 years (SD:8,7)	**	35 years (SD:7,8)	32 years (SD:7,5)			
Age group (years)			p<0,001	p<0,005			
13-24	313	12,0	19,5	7,3	20,26	0,000	6,78
25-34	1180	45,2	37,8	4,6	3,73	0,008	1,42
35-44	817	31,3	47,1	5,4	3,21	0,018	1,22
45+	301	11,5	40,2	1,7	R		
Origin			p<0,001	p<0,001			
Foreign	1094	41,9	50,1	6,5	1,17	0,445	0,78
Spain	1518	58,1	37,7	3,6	R		
Year of Diagnosis			p<0,001	p<0,001			
2011	753	28,8	47,7	5,2	1,08	0,762	0,65
2012	849	32,5	43,6	5,4	1,20	0,462	0,74
2013	1010	38,7	38,8	4,1	R		
Sexual orientation			p<0,001	p<0,001			
Homosexual	2410	92,3	44,5	4,9	0,85	0,817	0,23
Bisexual	173	6,6	17,2	1,7	1,10	0,918	0,17
Transsexual	29	1,1	51,9	13,8			
Previous STI, <12months			p<0,001	p<0,001			
No	503	19,3	34,4	5,7	3,16	0,000	1,78
Yes	2109	80,7	57,0	3,2	R		
STI diagnosis			p<0,001	p<0,001			
syphilis early	672	25,7	45,6	5,4%	0,89	0,796	0,36
syphilis latent	181	6,9	25,1	8,3%	3,87	0,014	1,32
Gonorrhoea	659	25,2	38,7	3,6%	0,76	0,567	0,29
LGV	164	6,3	83,1	8,5%	0,77	0,616	0,28
Chlamydia	313	12,0	40,6	4,2%	0,89	0,829	0,32
Herpes	186	7,1	54,9	4,3%	0,80	0,691	0,26
Genital warts	187	7,2	30,7	4,3%	0,95	0,933	0,26
Other STI	250	9,6	33,5	3,2%	R		

Conclusions

- High HIV-STI co-infection among MSM.
- Over 5% of all MSM cases were HIV-STI concomitant, but still 10% no being tested at STI diagnosis.
- Concomitant HIV diagnosis was independently associated with younger age, latent syphilis diagnosis, and no previous STI <12 months.
- Data from STI Sentinel Surveillance improve the knowledge of STI determinants factors.
- Further analysis is needed to address testing and risk behaviour among young MSM <25 diagnosed with a STI.

Public health messages

- **Improve early and rapid STI/HIV detection and testing** in primary care and STI/sexual health settings, where STI are diagnosed.
- Need for regular **HIV/STI-assessment and awareness** of STI symptoms and testing among the young MSM.
- Continuous **surveillance and monitoring** of HIV/STI co-infection, HIV testing and risk taking behaviour among MSM.
- Effective policies and programs that address **youth asset-development.**

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**
- **Agència de Salut Pública de Catalunya**
- **Centre for Epidemiological Studies on STI/HIV/AIDS in Catalonia**
- **The Catalan STI Sentinel Surveillance (RITS) Study Group:**

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Conflicts of interest

The authors of this communication did not have any financial or other relationship that could have influenced the conduct and preparation of this work.

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