

HIV rapid testing in a mobile unit in several urban settings in Spain: A strategy reaching a different population?

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Introduction

In Spain, HIV testing is offered free of cost in a wide range of healthcare settings. However, one third of the people living with HIV remain undiagnosed and nearly half of the new diagnoses during 2010 had a CD4 count under 350¹. Offering outreach rapid HIV testing is one of the strategies designed to reach this undiagnosed portion, by removing barriers and expanding HIV testing. We aim to evaluate a street-based rapid HIV testing programme and its capacity of reaching populations who might find it difficult to access already existing diagnostic services.

Methods

Between May 2008 and March 2011, the NGO "Madrid Positivo" implemented a programme offering rapid HIV testing (Determine HIV 1/2 and Determine HIV 1/2 combo) in a mobile unit deployed in several urban areas around Spain. In total, 7860 individuals were tested. After signing an informed consent and taking the test, participants completed a self-administered questionnaire. Those with a reactive result were referred for confirmation to public centres. Those with no data available on confirmation result were considered HIV positive in the analysis. The extent to which attendants were indeed a hard to reach and differential population was assessed by analyzing sociodemographic, behavioural and HIV testing related variables as well as their immunological state and comparing their profile to the one shown by those diagnosed at a group of 20 specific diagnostic centres in Spain² (EPIHIV group) and the National HIV Case Registry¹ (NHIVR).

Table 1. Main sociodemographic characteristics of attenders to a mobile rapid testing site by Sex/Sexual Behaviour.

	MSM ² 2661 (33,9%)	HTX ¹ 2480 (31,6%)	p (MSM vs HTX)	Women 2719 (34,6%)	p (HTX vs Women)	Total 7860 (100%)
	%	%		%		
Mobile unit situation			<0.001		0.009	
City of Madrid:Gay neighbourhood	79.0	55.0		59.8		64.8
City of Madrid:Areas with a high presence of immigrants	4.7	7.9		7.5		6.7
Dormitory cities (Madrid Suburbs)	3.0	7.5		6.0		5.5
Canary Islands	7.3	18.3		15.9		13.7
Cities of the eastern coast of Spain	6.1	11.2		10.8		9.3
Under 30 years of age	48.6	47.9	0.141	63.3	<0.001	53.4
Place of Birth*			<0.001		<0.001	
Spain	69.7	66.1		67.9		67.9
Latin America	21.7	21.4		22.2		21.8
Other Countries	8.6	12.6		9.8		10.3
Educational Level			<0.001		<0.001	
None/less than primary education	2.5	6.7		3.4		4.1
University	53.6	38.4		49.8		47.5
Main Source of Income			<0.001		<0.001	
Employment	84.6	86.0		78.8		83.0
Unemployment insurance/retirement pension/grant	5.3	7.0		6.2		6.1
Money from couple, family, husband or wife	8.5	5.4		12.8		9.0
Prostitution and illegal activities	1.6	1.6		2.3		1.9
Ever injected drugs	2.8	4.7	0.001	1.9	<0.001	3.1

*Exclusively heterosexual men, ² Men who have sex with men

Results

Table 2. Sociodemographic characteristics of new diagnoses detected in Madrid + and the EPIHIV group.

	EPIHIV Group ¹ N=1293	Madrid Positivo N=117	%HIV+ (CI95%)
	%	%	
Sex			
Men ²	91,6	96,6	2.1 (1.7-2.5)
Women	8,4	3,4	0.1(0.04-0.4)
Age			
<25	16,7	27	1.5 (0.9-2.0)
25-34	47,3	44,3	1.5 (1.0-1.9)
35-44	24,9	20	1.7 (1.0-2.4)
>=45	11,2	8,7	1.4 (0.5-2.4)
Total	100,0		
Level of Education			
None/Primary	24,4	5,3	1.8 (0.2-3.4)
Secondary	40,9	51,3	1.5 (1.1-1.9)
University	34,8	43,4	1.3 (0.9-1.7)
Total	100,0		
Country of Birth			
Spain	64,1	55,7	1.2 (0.9-1.5)
Foreigner	35,9	44,3	2.0 (1.4-2.6)

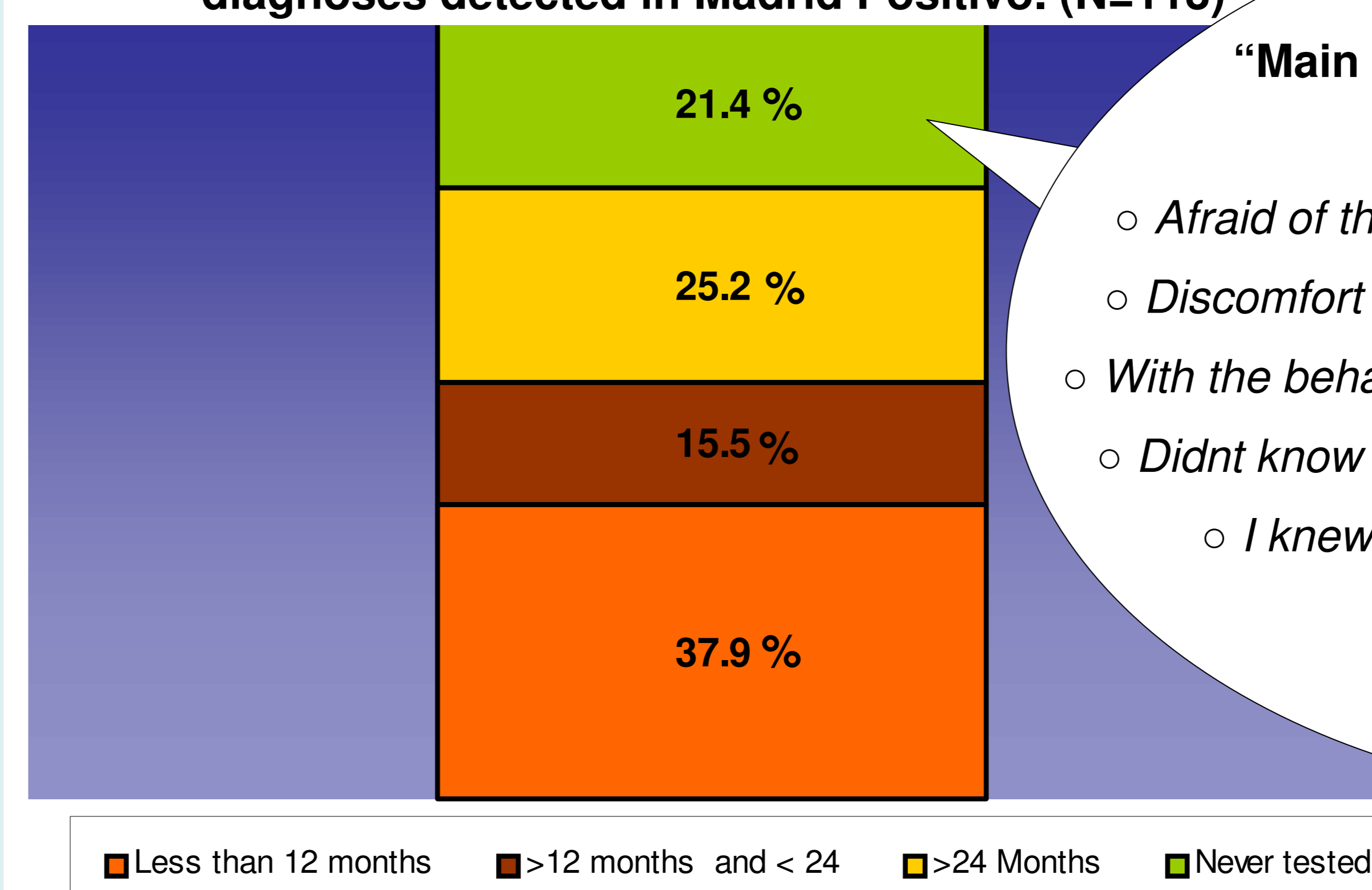
¹Only new diagnoses made during 2008 and 2009 were included; ² This category also includes n=31 transsexuals

Table 3. Follow up data and percentage of delayed diagnoses detected by Madrid Positivo

	Spanish (N=64)	Foreigner (N=51)	Total (N=115)
Confirmation result known	90.8	84.9	88.1
CD4 Count known	73.4	70.6	72.2
<350CD4	17	25	20.5

EPIHIV group: 27%
NHIVR:48.1% (39.1% in MSM)

Fig 2. History of previous voluntary HIV Testing in new diagnoses detected in Madrid Positivo. (N=113)



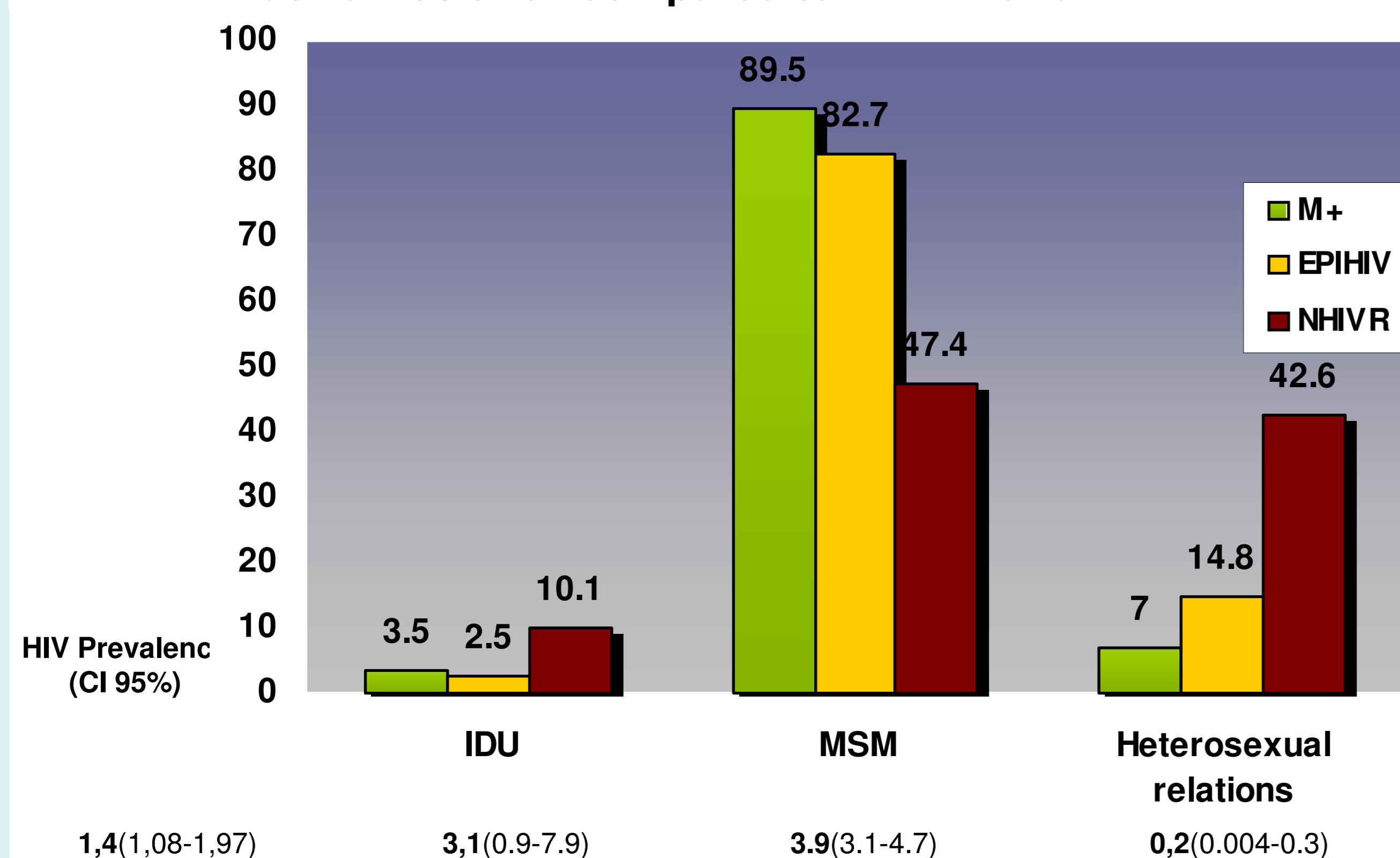
"Main reason for not testing until today"

- I felt very healthy: 50%
- Afraid of the consequences of a positive result: 22,2%
- Discomfort when answering intimate questions: 11,1%
- With the behaviours that I had, I couldn't be infected: 5,6%
- Didn't know were to go without being recognized: 5,6%
- I knew I had to wait quite a few days before knowing the results: 5,6%

► Rapid test results:

120 reactive tests: 102 confirmed as HIV+
3 confirmed as HIV-
15 unknown

Fig 1. Distribution of new diagnoses by transmission group: "Madrid Positivo" compared to EPIHIV and NHIVR*



*NHIVR: Only new diagnoses made during 2008-2009-2010 are included

Conclusions

The programme showed a good capacity of detecting new diagnoses within heavily affected subgroups (MSM, Immigrants) in an early stage of infection, having little impact in subgroups with a lower prevalence but with a higher presence of late diagnosis (heterosexual men). Sociodemographic and behavioural characteristics are similar to the ones in the specific diagnostic centres and, given their high educational level and testing history, they would have probably sought testing in normalized services more sooner than later.

References

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