Generalitat de Catalunya
Departament de Salut

Late presentation of HIV infection among adults in Catalonia, Spain: 2001-2010

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INTRODUCTION

Early diagnosis of HIV infection results on an increased survival and reduced HIV transmission due to modification of risky behaviors. Country specific risk analyses are important to effectively guide public health interventions.

OBJECTIVES

The aim of the present study is to asses prevalence, describe trends and identify factors associated with late presentation of HIV infection in Catalonia (Spain) during the period 2001-2010.

METHODS

Adults older than 13 years of age with available information on CD4 cell count, notified between January 2001 and December 2010 to Voluntary HIV Surveillance System, were entered in the study.

Factors associated with late presentation (CD4 count < 350 cell/µl or clinical AIDS) were assessed using descriptive statistics and multivariable logistic regression models.

RESULTS

Out of 7136 notified HIV cases, CD4 count was available in 5975 (83,7%). Of 5975 cases, 78.3 % were male. No changes in the sex ratio among newly diagnosed patients were observed over the study period. Median age at diagnosis was 35 [interquartile range, IQR 29.0-43.0], with no significant difference over time.

The proportion of subjects born abroad increased from 23.4% in 2001 to 42.1 % in 2010 (P<0.001). The proportion of intravenous drug users (IDU) decreased over time, from 21.5% in 2001 to 7.9% in 2010 (P<0.001). An increase in the proportion of men who have sex with men (MSM) was observed during the study period, from 27.2 % in 2001 to 50.5% in 2010 (P<0.001). The proportion of patients infected through heterosexual risk remained constant (from 44.6% in 2001 to 34.6% in 2010). Average CD4 cell count was 310 cells/µl [IQR 113-531] with a significant increasing trend (P<0.001) from 252 in 2001 to 364 in 2010.

Globally, late presentation decreased from 60.3% in 2001 to 48.4% in 2010 (p<0.001). This trend was only observed among MSM, not among heterosexual or IDU men and women (**Figure**).

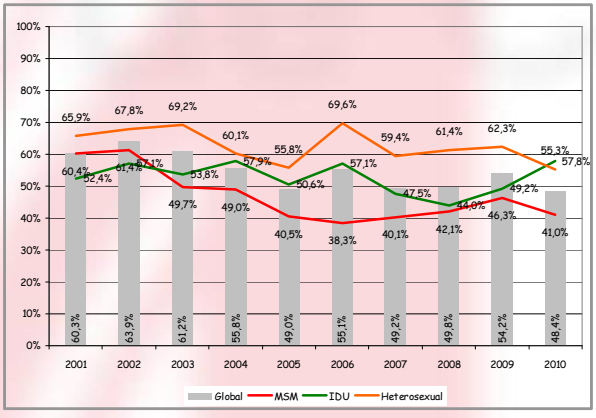
In the multivariable logistic regression model (**Table**), being a man (OR = 1.61; 95% CI: 1.53-2.41), older than 25 (OR = 1.61; 95% CI: 1.36-1.91), heterosexual exposure category (OR= 2.11; 95% CI: 1.79-2.50), an IDU (OR= 1.66; 95% CI: 1.36-2.03), or born in Latin American and Caribbean (OR= 1.44; 95% CI: 1.21-1.72) or in Sub-Saharan Africa (OR= 1.76; 95% CI: 1.39-2.21) were factors associated with late presentation of HIV infection.

CONCLUSIONS

The number of late presenter in Catalonia remains high. It's necessary to normalise the offer of HIV testing in primary health centres or emergency health care facilities to all persons with social and behavioural risk factors, as well as those presenting with one of the HIV associated conditions, as a mean to improve early diagnosis of HIV infection.

Table . Risk factors associated with late diagnosis of HIV (multivariable logistic regression model). Catalonia, 2001-2010

	New HIV diagnosis	Late diagnosis (%)	OR	95% CI
Year of diagnosis				
2001	585	60.3	1	
2002	599	63.9	1.20	0.94-1.53
2003	541	61.2	1.05	0.81-1.34
2004	593	55.8	0.84	0.66-1.07
2005	584	49.0	0.63	0.49-0.80
2006	642	55.1	0.78	0.61-0.99
2007	616	49.2	0.64	0.50-0.81
2008	647	49.8	0.64	0.50-0.81
2009	598	54.2	0.80	0.63-1.02
2010	570	48.4	0.64	0.50-0.82
Sex				
Dona	1298	52.4	1	
Home	4677	55.2	1.62	1.40-1.88
Age				
14-25	557	33.6	1	
25-34	2259	47.3	1.81	1.48-2.21
35-44	1934	58.4	2.82	2.29-3.47
45-49	470	65.5	3.96	3.02-5.19
>=50	755	75.5	6.32	4.90-8.15
Country of birth				
Spain	3780	53.0	1	
North and West Europe	249	49.0	1.11	0.85-1.45
Eastern Europe	169	49.7	1.45	1.04-2.00
Latin American and Caribbean	994	56.0	1.63	1.40-1.90
Sub-Saharan Africa	606	65.7	1.79	1.46-2.19
Others/Unknown	1649	54.8	1.09	0.79-1.50
Exposure categories				
MSM	1688	46.0	1	
IDU	622	55.8	1.51	1.27-1.80
Heterosexual	2096	64.1	2.06	1.78-2.39
Unknown	245	53.5	1.36	1.08-1.73
Total	**5975**	**54.6**		



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