

LATE HIV DIAGNOSIS IN SPAIN: RESULTS OF THE EUROPEAN MEN TO MEN INTERNET SURVEY (EMIS)

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OBJECTIVES

To characterize people with late HIV diagnosis (LD) among Spanish men who have sex with men (MSM) reporting to be infected with HIV in the European Men to Men Internet Survey (EMIS).

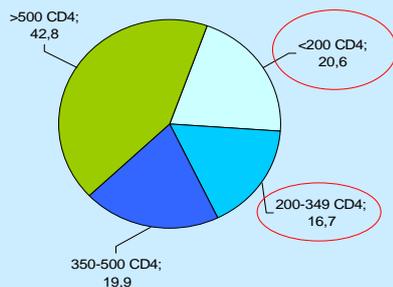
METHODS

EMIS was implemented in 38 European countries from June to August 2010. Data on demographics, risk behaviours for HIV, HIV infection, health needs and other variables were obtained using a common online questionnaire, translated to 25 languages. LD was defined as having less than 350 CD4 cells/ μ l at HIV diagnosis. The prevalence of LD, global and stratified by different variables, was calculated. In the bivariate analysis the chi-squared test was used to evaluate the association between LD and different variables.

RESULTS

In total, 13,111 subjects filled in the questionnaire. Among them, 9,612 (73.3%) reported to have been tested for HIV and 12.1% of those tested said to be infected. Out of 1,161 HIV-infected subjects, 588 (50.6% of those infected) remembered their CD4 count at HIV diagnosis, and 219 (37.2%) of these reported LD (Figure 1). Characteristics of people with and without LD are presented in Table 1.

Figure 1. CD4 count (cells/ μ l) at HIV diagnosis among HIV-infected MSM reporting this information. EMIS, Spain.



The proportion of LD increased with age (28.2%, 37.3% and 39.2% respectively in the age groups <25 years, 25-39 years and \geq 40 years) and was lower among Spaniards than among foreigners (34.6% vs. 41.3%), although neither differences were statistically significant. Differences were not found by sexual identity either (gay/homosexual: 36.3%, bisexual: 52.2%, other: 40.0%).

An inverse linear relationship was noticed between prevalence of LD and size of the place of residence, i.e. MSM living in very big cities had the smallest percentage of LD (33%) and those living in villages the highest (50%) (Figure 2, p for linear trend=0.05). Moreover, prevalence of LD was inversely related to educational level (50%, 39.2% and 34.5% respectively in low, middle and high educational level) (Figure 3, p for linear trend=0.04).

Table 1: Characteristics of HIV infected MSM with and without LD

Variables	HIV infected MSM with LD		HIV infected MSM without LD		TOTAL		p value chi-square test
	Nº	Percentage	Nº	Percentage	Nº	Percentage	
Age group (Years)							0.44
< 25	11	5.0	28	7.6	39	6.6	
25-39	146	66.7	245	66.4	391	66.5	
\geq 40	62	28.3	96	26.0	158	26.9	
Educational level							0.10
Low	23	0.6	23	6.2	46	7.8	
Middle	71	32.4	110	29.8	181	30.9	
High	124	56.6	235	63.7	359	61.0	
Unknown	1	0.5	1	0.3	2	0.3	
Place of birth							0.12
Spain	136	62.1	257	69.6	393	66.8	
Other	76	34.7	108	29.3	184	31.3	
Unknown	7	3.2	4	1.1	11	1.9	
Size of place of residence (No. population)							0.34
\geq 1,000,000	96	43.8	195	52.8	291	49.5	
500,000-999,999	26	11.9	44	11.9	70	11.9	
100,000-499,999	49	22.4	73	19.8	122	20.7	
10,000-99,999	26	11.9	40	10.8	66	11.2	
Less than 10,000	13	5.9	13	3.5	26	4.4	
Unknown	9	4.1	4	1.1	13	2.2	
Year of HIV diagnosis							0.10
2001-2005	67	30.6	90	24.4	157	26.7	
2006-2010	152	69.4	279	75.6	431	73.3	
Sexual identity							0.29
Gay or homosexual	192	87.7	337	91.3	529	90.0	
Bisexual	12	5.5	11	3.0	23	3.9	
Other	14	6.4	21	5.7	35	6.0	
Unknown	1	0.5	0	0.0	1	0.2	
TOTAL	219	100	369	100	588	100	

LD: Late diagnosis

Figure 2: Prevalence of LD by size of the place of residence

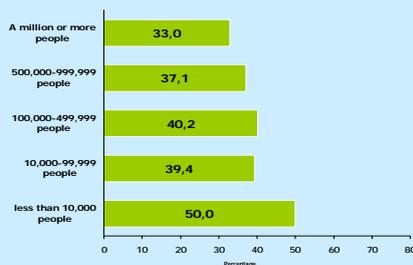
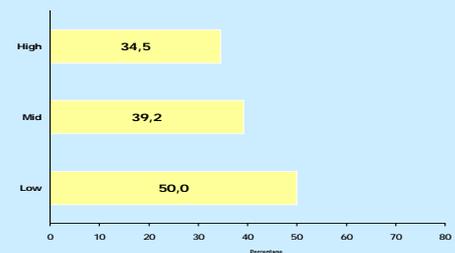


Figure 3: Prevalence of LD by educational level



CONCLUSIONS

Half the HIV-infected MSM participating in the EMIS in Spain do not remember their CD4 count at HIV diagnosis. Among those who remember, the proportion of LD is similar to that found in the regular epidemiological surveillance system. Both educational level and size of the place of residence seem to have an important effect on LD, but more in-depth analysis are needed to confirm these results. It is important to empathize the importance of CD4 count at time of diagnosis among MSM, so the response rates for this question could improve over time.

Funding: Executive Agency for Health and Consumers (EAHC); Centre de Estudios Epidemiológicos sobre los ITS i SIDA de Catalunya (CEEISCAT); Department of Health for England; Regione del Veneto; Robert Koch Institute; Maastricht University; German Ministry of Health; Finnish Ministry of Health; Norwegian Institute of Public Health; Swedish Board of Health and Welfare.