Audit on HIV Testing in patients diagnosed with a defining or related to AIDS illness and/or an indicator condition for HIV in Primary Care in Catalonia, Spain

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Objetive:

To audit the implementation of HIV testing in Primary Care in Catalonia in patients diagnosed with a defining or related to AIDS illness or an indicator condition for HIV infection.

Methods and Means:

Cross-sectional and population based study including all patients visited in Primary Care in Catalonia who have been diagnosed with an AIDS defining or related illness or an indicator condition for HIV or have a positive test result. The participating Primary Care Teams (PCT) were all managed by the Catalan Health Institute (ICS). N=285. The study subjects were all patients between 16 and 65 assigned to PCT that appear in the shared clinical database presenting at least one diagnosis of an AIDS defining or related illnesses or an indicator condition for HIV infection (ICD10) or a with a positive laboratory test result, without a previous diagnosis of HIV. The data extraction was taken from the database from January 2010 to September 2012.

Results:

Since January 2010 and September 2012, 74271 patients over 16 and under 65 years old were diagnosed with an AIDS defining or related illnesses or an indicator condition for HIV. The total number of diagnosis was 77139, 17773 (23,93%) patients were tested for HIV. The highest proportion of HIV testing was detected in patients diagnosed by first time with syphilis (73,13%), *Chlamydia trachomatis* (43,00%), gonorrhoea (42,21%), Hep B (29,66%), Hep C (28,88%) and Mononucleosis (27,48%) (Fig.1). The overall HIV infection prevalence was 1,47%. The HIV infection prevalence among patients diagnosed with an indicator condition was much higher than 0,1%: 3,17%, 2,99%, 1,30%, 1,19% and 0,90% for Hepatitis C, Herpes Zoster, Hepatitis B, STIs and mononucleosis respectively (Fig 2). Having adjusted for diagnosed disease, the OR for being tested for are 1,29 (CI95%:1,24-1,34) for men, OR:2,06 (CI95%:1,94-2,18) for patients <30 years old and OR: 1,97 (CI95%:1,87-2,08) for patients 30-49 years old versus patients >50 years old and; OR:2,45 (CI95%:2,19-2,74) for patients diagnosed with more than one disease. Taking into account only the STI diagnoses, the OR for being tested for HIV are: OR:1,42 (CI95%:1,35-1,49) for men, OR:1,55 (CI95%:1,42-1,70) for patients <30 years old and OR:1,41 (CI95%:1,29-1,54) for patients 30-49 years old versus patients >50 years old and; OR:2,31 (CI95%:1,93-2,75) for patients diagnosed with more than one disease.

Fig 1. Proportion of patients with an HIV test by the first disease diagnosed

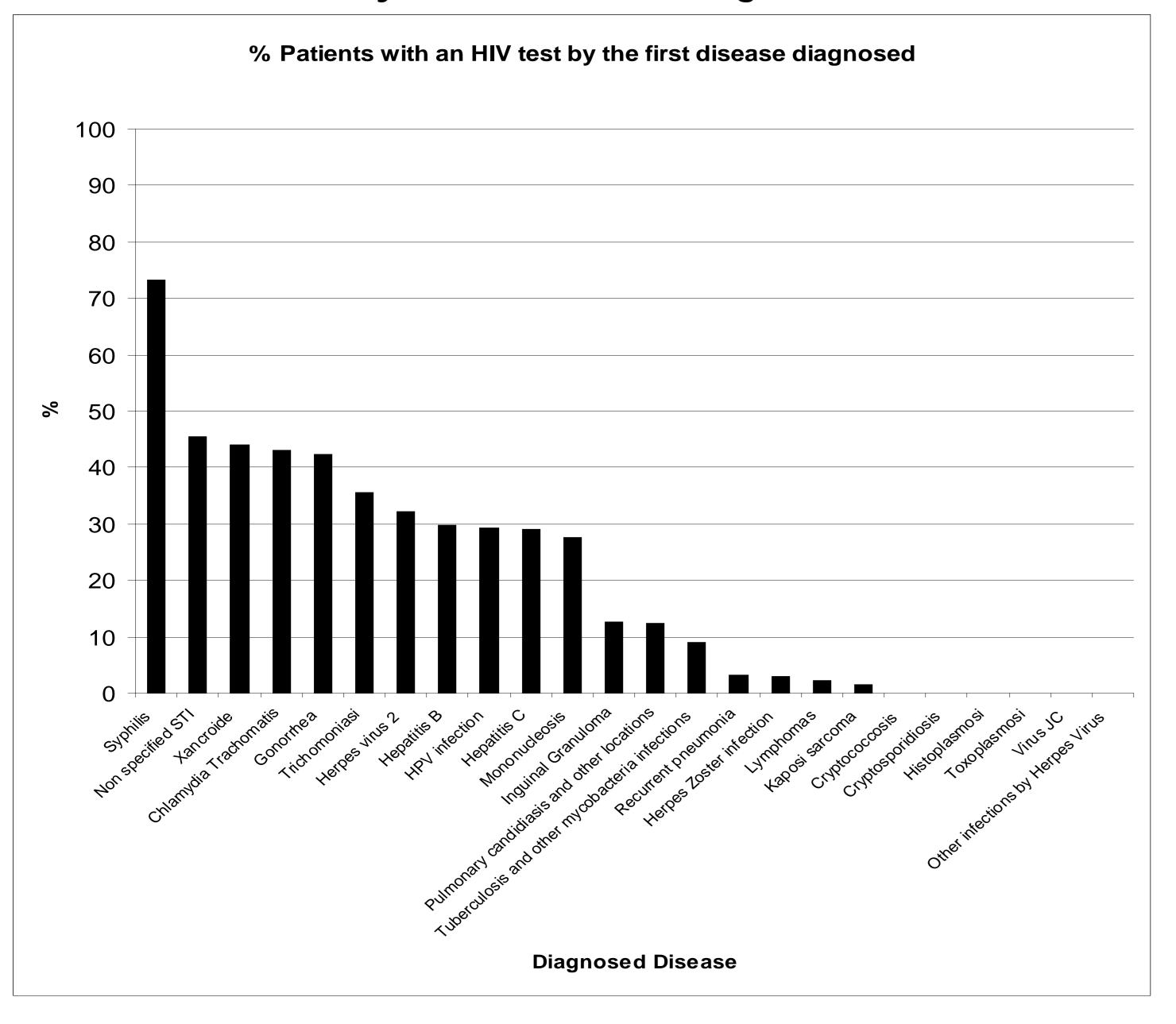
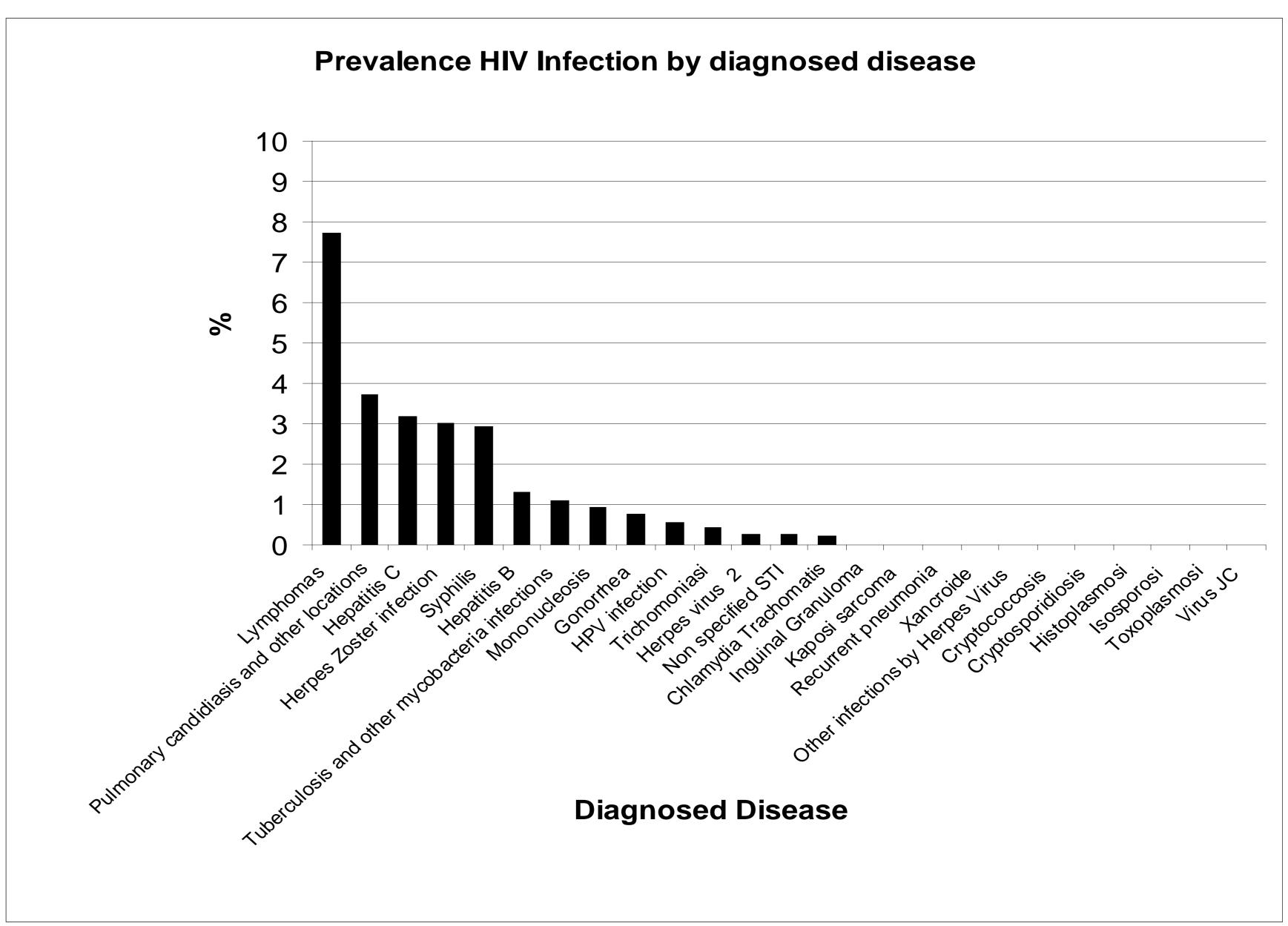


Fig 2. Prevalence of HIV infection by diagnosed disease



Conclusion:

Clinical HIV screening criteria are underutilized in Primary Care. It is necessary to promote them and eventually to add alerts in computerized medical records. Their systematic incorporation is sensitive for the detection of HIV. Should be incorporated into clinical practice guidelines, especially in primary care.

The HIV diagnosis rate of 1,47% reported is well above the cost-effectiveness threshold of 0.1% suggested for HIV screening in general population and suggests that the indicator conditions employed in this study would improve early diagnosis of HIV in Primary Health care in Spain. Their systematic incorporation is sensitive for the detection of HIV. Should be incorporated into clinical practice guidelines, especially in primary care.

In the Catalan context the targeted screening for HIV testing in Primary Care is probably more feasible and cost-effective than universal screening for this infection. It is necessary to to collect more representative data and to establish comparisons with other screening alternative or complementary strategies.



