Prevalence of HIV infection and acceptability of rapid HIV testing in patients attending emergency services

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Introduction:

Early detection of HIV infected people has several benefits from the point of view of the individual and from the point of view of public health. However, many infected individuals are unaware of their HIV-positive status and many of them remain undiagnosed until they present with an AIDS-related condition or a low CD4 cell count, when treatment is less effective and health outcomes less favorable.

Non-targeted HIV rapid tests screening in health cares settings has been promoted in the U.S. (following CDC recommendations) to lower the number of undiagnosed infections and to improve early detection. The U.K. and, recently, France have adopted also this strategy. However, the guidelines of the WHO / UNAIDS (2008) recommend offering the test to populations with more likely to be infected, to increase the positive predictive value of HIV testing and cost-effectiveness.

Emergency services represent an important health care source for the population, including subgroups that might not be reached in other health care settings, while being at higher risk of undiagnosed HIV infection, so is a good setting to assess non-targeted HIV-RT screening of the general population.

Having the rapid HIV test in the Emergency Services could increase the number of tests performed by making easier their realization, increasing the acceptability to the patient, and allowing the patient to know the preliminary result although he doesn't come back for the result.

Objective:

To study the acceptability of rapid testing among patients attending emergency services and to estimate the HIV infection prevalence in that population.

Methods:

Two nurses offered oral rapid HIV test to patients aged 18 to 64 years attending the emergency department (ED) of Hospital de Mataró, who were able to provide consent for HIV testing. Exclusion criteria were self-reported HIV infection and inability to provide consent. The recruitment of participants was performed by a nurse after the patient triage. The sample calculated was 3,000 patients tested.

Results:

During the first 4 months of the pilot program, 1189 patients were offered the test. Of those, 89 refused (7.5%) and 1100 were tested. None of them obtained a reactive result. One patient, who was in the window period at the moment of testing, repeated the test 3 months later in the hospital HIV service, obtaining a positive result. Almost the half of people tested was men (49.4%), the median age was 38.5, 9.0% were immigrants and 33.4% had a previous HIV test. 74.1% thought rapid test is more comfortable than conventional test, and 68,5% preferred rapid test with oral fluid than with finger stick. 94.2% would recommend the test to a friend, and 96.4% thought that offer HIV testing in ED is appropriate.

Conclusions:

The preliminary results obtained show that rapid HIV screening in ED is acceptable and feasible, but hasn't detected any positive. Therefore, these preliminary results do not support the implementation of HIV screening in emergency services.

Figure 1. Algorithm of tests offered and performed

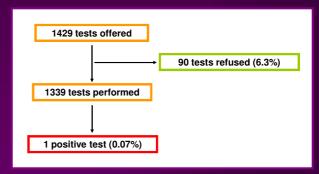


Table 1. Description of population tested.

	Total	n	%
Median age: 38,3 (SD: 12,9)			
Gender (men)	1339	645	48,2%
Immigrant	1339	192	14,3%
Previous HIV test	1339	449	33,5%
Sexual orientation	1338	1295	96,8%
Condom use in the last penetration	1194	340	28,5%
STI in the last year	1307	20	1,5%
Intravenous drug use in the last year	1335	11	0,8%
Sexual intercourse with sex worker in the last year	1191	13	1,1%
Sexual intercourse with IDU in the last year	1174	3	0,3%
Sexual intercourse with HIV positive in the last year	1148	3	0,3%

Figure 2. Patients opinions about rapid test.

