

Feasibility and acceptability of HIV screening through the use of rapid tests by GPs in an area of Brussels with an important African community

A.F. Gennotte¹, P. Semaille^{1,2}, C. Ellis², C. Necsoi¹, M. Abdullatif³, N. Rungen-Chellum³, C. Evaldre³, D. Gidiuta⁴, F. Laporte³, M. Mernier³, Schellens³, K. Da Ung³, N. Clumeck¹

1. Division of Infectious Diseases CHU Saint-Pierre, Brussels
2. Department of General Medicine, Université Libre de Bruxelles –
3. Centre Free Clinic Brussels
4. Centre Africain de Promotion de la Santé – Brussels

In Belgium in 2010

- Seroprevalence is estimated to be 0.1 to 0.2 %
- 31% of HIV patients who are seeking care are of a Sub-Saharan African origin;
- Late presenters (CD4 count < 350/ μ l):
 - ▣ 32% among Belgians
 - ▣ 47% among non Belgians (mainly from Sub-Saharan Africa)
- Very late presenters (CD4 count < 200/ μ l)
 - ▣ 17% among Belgians
 - ▣ 26% among non Belgians

Objectives



To assess:

- If HIV screening with rapid tests in areas with an important African community is feasible and acceptable among GPs and among patients (Rapid HIV tests being not available in primary care)
- HIV incidence on 1 year.

The study was intended to include at least 500 patients in a 6 months period starting August 2010

Method

Multicentric prospective study among 10 trained physicians offering standard and rapid HIV tests to consecutive patients presenting in the context of:

- Multidisciplinary medical centres including a family planning and abortion centre that receive patients of mixed origin (Belgians, Europeans, HIV endemic countries) and a centre that receives patients of Sub-Saharan African origin
- Mental health centre for refugees

Inclusion criteria

Adults with unknown or negative HIV status

- HIV indicator condition as defined by HIV Indicator Diseases Across Europe Study
- Belonging to a high prevalence group: MSM, country of HIV prevalence >1%, sexworker, IV drug-user ...
- Returning from a high prevalence country
- Aids defining illness
- Recent pregnancy or abortion
- Other risks :unprotected sexual intercourse under the influence of recreational drugs/alcohol...
- Others: Partner of HIV+patient, possibility of HIV seroconversion, asking for PEP treatment

4th generation standard HIV test proposed

Accepted

Refused

Rapid HIV INSTI test proposed (whole blood)

Rapid HIV INSTI test accepted
and tests performed

Rapid HIV INSTI test refused

Indicator conditions - HIV Indicator Diseases Across Europe Study (HIDES 1 - October 2009-March 2011)

- STD :
 - gonorrhoea □ chlamydia □ syphilis
 - other ulcerative genital conditions
 - unspecified
- Malignant lymphoma
- Cervical/anal dysplasia or cancer
 - cervical dysplasia □ anal dysplasia
 - cervical cancer cervical □ anal cancer anal
 - unspecified
- Herpes zoster
- Hepatitis B or C Infection
- Ongoing mononucleosis-like illness
- Unexplained leukocytopenia or thrombocytopenia lasting at least 4 weeks
- Seborrheic dermatitis/exanthema

From August 2010 to August 2011

Patients included
224

4th Generation standard
HIV test proposed
217

Rapid HIV test proposed
217

Not performed
tests
14

Tests
performed
203

No data
2

Refused
12(6%)

Reasons not to accept a standard test

- « No social security »
- « Never had an HIV+ test »
- « Fear of losing anonymity »

Not performed
20

Tests
performed
197

No data
7

Refused
13(6%)

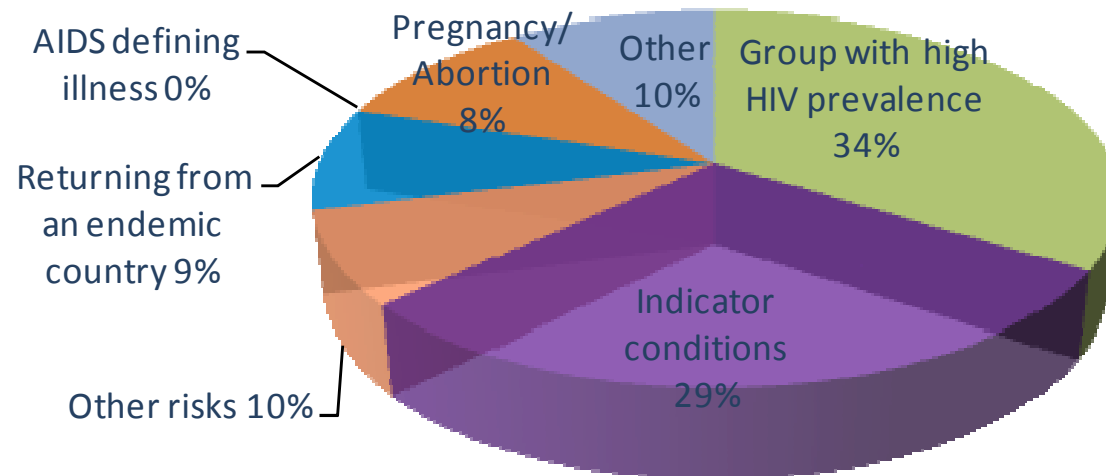
Reasons not to accept a rapid test

- « Too stressful »
- « Not ready to get the result immediately »

Characteristics of the 224 patients at the time of inclusion

- 51%♀, 48%♂
- 45% Caucasians, 46,5% Africans , 8.5 % others
- age 21% (20-24) , 20%(25-29), 12%(30-34), 8% (>50)

Inclusion criteria (multiple criteria allowed)



Belonging to a group with high HIV prevalence patients 75		
From HIV endemic country	32	14%
Multiple sexual partners	24	11%
MSM	9	4%
IV druguser	4	2%
sexwork	2	0,90%

Indicator conditions 65 patients		
STDs	42	18,70%
Dermatitis	13	6%
Hepatitis	4	2%
Herpes zooster	3	1%
Cervical dysplasia	1	0,50%
Mononucleosis-like illness	1	0,50%
Leukopenia/thrombocytopenia	1	0,50%

2/203 HIV + confirmed by Western Blot



45 years old black man with belgian nationality with dermatitis .

Travel in Mauritania in April 2010.

Never HIV/HBV/HCV tested before the study CD4 =171 at the time of testing.

(=very late presenter)

40 years old black man from RDC.

No recent travel in an HIV endemic country.

Said before being tested that he has never been tested before for HIV/HBV/HCV but when confronted by a positive rapid test result said he knew he was HIV positive.

HIV incidence

1 new HIV+/203 HIV standard tests	Incidence = 0,49%
1 new HIV+/197 HIV rapid INSTI tests	Incidence = 0,51%

HIV incidence varies from:

- Type of centres

- ▣ 0 – 0,5% for medical centres that receive a « mixed » population
- ▣ 5,5% for the centre that receives patients coming from Sub-Saharan Africa

- Ethnic origin

- ▣ 0% among Caucasians
- ▣ 2,25% among Africans

- Criteria of inclusion

- ▣ 1.54% among patients with indicator conditions

INSTI™ HIV-1 & HIV-2: Rapid Antibody Test

INSTI Principle: Immunofiltration HIV1 (gp41) and HIV2 (gp36) recombinant proteins

Results : under five minutes

	4th generation ELISA + and WB+	4th generation ELISA -	Total
INSTI HIV +	2	0	2
INSTI HIV -	0	194	194
INSTI HIV indeterminate	0	1	1
INSTI HIV invalid	0	0	0
Total	2	195	197

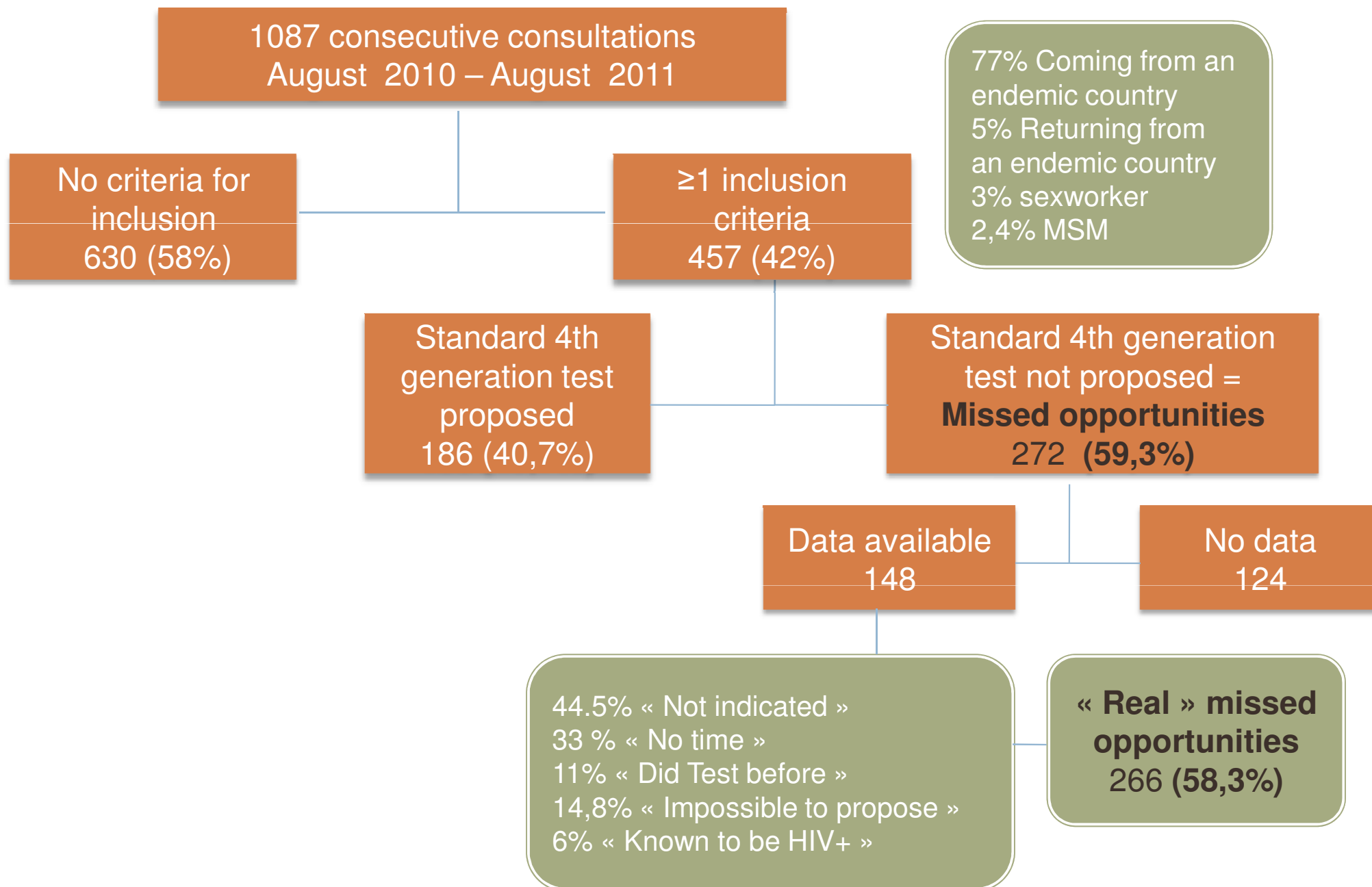
Sensibility and specificity:100%

Difficulties of enrollment



- Because of doctor's incapacity and/or unwillingness to enroll patients during the first few months of the study, we asked the doctors to record information about a larger number of consultations, this was in order to survey the actual number of proposed HIV tests during that period.

Proposition of HIV tests among 1087 consecutive consultations



Difficulties encountered by the GPs during the study

- Individual difficulties: lack of time required for pre-test and post-test counselling, perceived lack of skills specially when rapid tests are performed.
- Fear of being perceived as racist or homophobic when proposing an HIV test to migrants or gaymen.
- At the level of institution (scepticism/perplexity/hostility of non participants colleagues or other staff members)
- Administrative difficulties: « overwhelmed by papers », burden of the ethical process (informed consent to be signed)

Encouraging aspects during and after the study

- ❑ Felt more comfortable to address risk assessment, sexual practices and to propose an HIV test to new and « old » patients and very interested with the concept of specific medical indicators conditions. Ready to participate to HIDES 2 study.
- ❑ +107% (26 to 266%) more tests performed by the doctors in one of the medical centres.
- ❑ 94% of patients came back for the result when Rapid test was also performed versus 79% when the standard test was done alone.
- ❑ During the first months of the study, doctors needed an extratime of 20 minutes to discuss and perform an HIV test versus 7-10 minutes after 12 months (it was the reason why the use of an « ultrarapid » test was felt to be mandatory).

Conclusions



- Standard and rapid tests are well perceived by patients and doctors but difficult to prescribe by trained doctors mainly because of time constraint and staff barriers.