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Public Health England

Community-based HIV testing in Europe: a systematic review

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INTRODUCTION

In 2010, the European Centre for Disease Prevention and Control (ECDC) published HIV testing guidance with the aim to inform the development, monitoring and evaluation of national HIV testing strategies and programmes in the countries of the European Union (EU) and European Economic Area (EEA).[1]

In consideration of the rapid developments in the field of HIV testing and the accumulating evidence on innovative testing approaches and novel testing technologies, ECDC launched a project in 2016 to update their testing guidance in an effort to support countries in developing and improving their national testing policies.

The objective of this systematic review was to synthesise the body of recent evidence on HIV testing strategies applied in Europe to inform the ECDC testing guidance. This poster summarises the literature on HIV testing in community sites and in outreach settings.

METHODS

Systematic searches: Embase, Medline, PsycINFO, Cochrane Library and Scopus

Search of conference abstracts (2014-2017): CROI, AIDS, IAS, EACS, HIV Drug Therapy, HEPHIV

Searches of testing guidance reference lists: WHO and HIV in Europe

Search terms covered HIV, the concept of HIV testing and Europe.

Inclusion/exclusion criteria:

- EU/EEA (30 countries)
- Published Jan. 2010 - Mar. 2017
- Adults (aged ≥15 years) being tested for or diagnosed with HIV
- Excluded studies in occupational settings
- No language restrictions

Two independent reviewers for title/abstract screening, full-text review, data extraction and quality assessment using NICE/AXIS checklists.[2,3]

Data were extracted and entered onto an online REDcap form.

The authors of conference abstracts without available full-texts were contacted for poster copies or oral presentation slides.

Results presented here on HIV community-based testing (CBT).

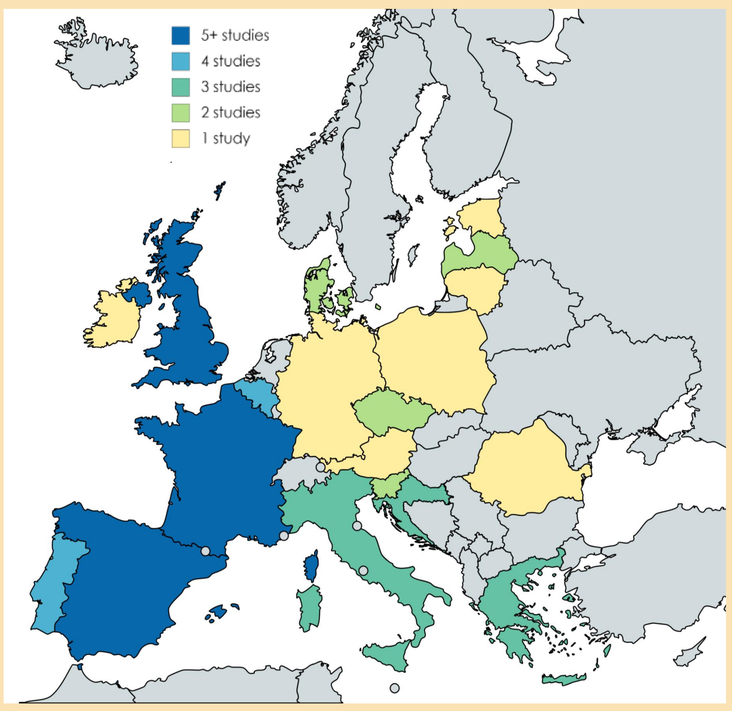
A full list of references can be found on the printed leaflet.

RESULTS

Of the 15,004 deduplicated records captured in the systematic review, 368 were included after screening and full text review. 62 studies on CBT were identified.

There were 56 studies describing the provision of CBT in the EU/EEA. Most studies were set in either Spain (n=19), the United Kingdom (n=17) or France (n=5) (Figure 1). Three studies covered multiple European countries.

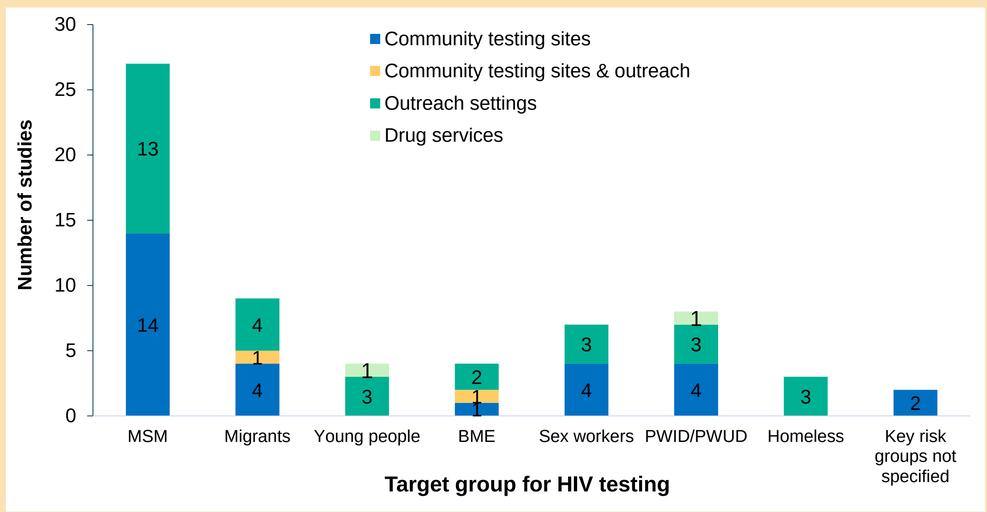
Figure 1: Geographical distribution of community-based HIV testing implementation studies (N=56)



The majority of CBT utilised rapid HIV testing (n=41) and was targeted to groups at higher risk for HIV (n=40), including men who have sex with men (MSM) (n=27), migrants (n=9), people who use or inject drugs (PWUD/PWID) (n=8) and sex workers (n=7) (Figure 2).

Twenty-four studies implemented HIV testing through fixed community testing sites (Figure 2); outreach testing activities were run through community mobile units (street-based (n=9), event-based (n=6) and university-based (n=2)) and in saunas (n=6), gay venues (n=3), brothels (n=2), homeless services/hostels (n=2) and migrant venues (n=2).

Figure 2: Setting and target population of community-based testing implementation studies (N=56)



Where presented, reactivity/positivity varied by target group (MSM: 0%-11%, black and minority ethnic groups (BME)/migrants: 0%-6.2%, people who use and/or inject drugs (PWUD/PWID): 2.5%-32%, sex workers: 0.9%-2.1% and the general population 0%-3.2%) (Table 1).

Table 1: Setting and target population of community-based testing implementation studies (N=56)

Target population	Testing venue	Number of tests performed	% Testing coverage	Positivity rate
MSM	Community testing sites	9-14,453	16%-74%	0.9%-4.3%
	Outreach	7-2,955	10%-78%	0.0%-11%
BME/migrants	Community testing sites	302-4,219		2.1%-3.6%
	Outreach	26-5,676	18%	0.0%-6.2%
PWUD/PWID	Community testing sites	323		1.9%
	Outreach	141-7,113	97%	2.5%-32%
Sex workers	Community testing sites	923-1,969		0.9%-2.1%
	Outreach	112		0.9%
Homeless	Outreach	58-110	45%	0.0%
Young people	Outreach	27-512	19-100%	0.0%
Multiple high risk groups	Community testing sites	341-12,261		0.6%-3.9%
	Outreach	186-8,923	42%-95%	0.0%-2.5%
General population	Community testing sites	1,849-71,465		1.3%-3.2%
	Outreach	188-95,575	5.8%-98%	0.0%-2.2%

BME=black and minority ethnic groups; MSM=men who have sex with men; PWUD=people who use drugs; PWID=people who inject drugs

Thirteen studies presented other strategies aimed at increasing CBT including: education/training to those administering the tests (n=4), campaigns to raise awareness (n=7) and text and online communication of test results (n=2). One study aimed to increase testing through creation of a national testing network of community organisations working with key risk groups.

The feasibility and acceptability of CBT was explored in 31 studies (Table 2). Overall, HIV testing was found to be acceptable to people offered testing across community (65%-99%) (n=4) and outreach settings (90%-100%) (n=3). CBT also attracted high proportions of first time testers (Table 2).

Table 2: Feasibility/acceptability of community-based HIV testing (N=31)

Testing venue		Selection of feasibility/acceptability indicators
Community testing sites		Community testing acceptable: 65%-70% Community testing recommendation to a friend: 75% Rapid testing in the community acceptable: 90%-96% Same-day confirmatory testing in the community comparable to lab confirmatory results: 96% Same-day confirmatory testing results in 90 minutes: 91% First time testers: 12%-43% First time accessing any health service: 55%
Outreach services	Sauna	Sauna outreach clinics were well attended and feedback from users was positive, particularly valuing the convenience and confidentiality of the service First time testers: 13%-37%
	Mobile unit	Outreach service acceptable: 90%-99% Self-testing in outreach acceptable: 82% Ability to interpret self-test results correctly: positive result: 96%; invalid result: 94%; negative result: 95% First time testers: 18%-95% First time testers who would have not otherwise tested: 40%
	Hostels	Testing in hostels acceptable: 100%
	Drug services	Testing in harm reduction services easy or very easy to do (staff): 100% Confidence in test results from tests performed in harm reduction services (staff): 60% First time testers: 18%
	Other	Self-sampling cost effective in outreach settings (positivity rate >0.1%) First time testers in brothels: 25%

DISCUSSION

CBT is an acceptable, effective strategy for reaching populations at higher risk of HIV that may not be accessing testing in healthcare settings.

The studies captured in this review demonstrate the wide variety of CBT programmes being implemented in the EU/EEA; though, geographical coverage was limited, with most studies set in Northern and Western Europe.

Close coordination between CBT sites and healthcare facilities is important to ensure successful linkage to HIV care and treatment after a positive test result.

Few studies reported before/after data, making it difficult to evaluate the improvement in test coverage. Another limitation of this review is that almost half (47%; 29/62) of the literature included was not published nor peer reviewed (i.e. conferences or reports).

ACKNOWLEDGEMENTS

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