

HIV testing in Europe: how can primary care contribute?

Werner Leber,¹ Jane Anderson,² Chris Griffiths¹

Undiagnosed HIV infection is a major challenge in the quest to achieve an AIDS-free world. Undetected HIV and late diagnosis are associated with ill health, increased risk of death from HIV/AIDS and onward viral transmission, constituting a substantial burden to public health budgets worldwide. Roughly half of the 2.2 million people with HIV in Europe are undiagnosed.¹ These figures are mirrored in the UK and the USA, where almost one-quarter of >100 000 and one-sixth of 1.1 million people with HIV remain undiagnosed, respectively.²⁻³ Unacceptably high proportions (up to 53%) of patients are diagnosed late (CD4 cell count <350 cells/ μ L).⁴ Expansion of HIV testing is therefore key to improving HIV outcomes.

Early diagnosis followed by immediate antiretroviral treatment reduces HIV-related illness and death. Recent data from both the Strategic Timing of AntiRetroviral Treatment and TEMPRANO ANRS 12136 trials have unambiguously shown that these benefits also extend to patients diagnosed at CD4 of $\geq 500/\mu$ L.⁴⁻⁵ Timely diagnosis and treatment have additionally been shown to reduce onward transmission at both individual and population levels, indicating that treatment and prevention are inextricably linked,⁶ and routine HIV testing is considered cost-effective even when combining one-time HIV screening for the whole population with more frequent testing in subpopulations at risk.⁷

Given these facts, why is Europe (and indeed the USA) performing so poorly in terms of undiagnosed HIV and what can be done to tackle this situation?

General practice is an ideal place to offer HIV testing and diagnosis. For most patients, general practice is the initial point of access to care for routine health screening and management of their long-term conditions, and serves as a gateway for referral to specialist services. Nevertheless, uptake for HIV testing in primary care has

remained low and many opportunities of early diagnosis of HIV in primary care are being missed.⁸ In this edition, Joore *et al* used a case-control design elegantly to show that patients attended general practice more frequently during the year preceding diagnosis and had significantly more blood tests than a matched control group. Indicator conditions were also significantly more common in HIV patients compared with control in up to 5 years preceding diagnosis. The implications of this study for general practice could be profound as it strengthens the case for more testing in primary care: in addition to offering testing according to the known risk categories, general practice teams (general practitioners (GPs), nurses and healthcare assistants) should be offering HIV testing to patients who start seeking care more frequently, and in particularly to those who require a blood test for further investigation.

Given the mounting evidence of the benefits of testing in primary care, why are not general practices testing more? Reasons for this lie at systemic, organisational and personal levels. Variations in dynamics of national epidemics,⁶ in public health policy and organisation of healthcare systems,⁹ and shrinking healthcare budgets have hampered establishment of a uniform programme across Europe. The contribution of primary care to national testing also varies from playing a key role (eg, the Netherlands and France), to little involvement (eg, the UK), to not doing any HIV testing at all (eg, Slovakia and Italy).¹⁰ Primary care centres are diverse spaces with variations in skill mix of staff, organisational structure and management style, preventing integration of a uniform HIV testing guidance into clinical practice.¹¹ Furthermore, even in countries such as the Netherlands (where primary care is considered an equal partner in the national sexual health policy) and the UK (that has national guidelines promoting universal testing in primary care settings located in high prevalence areas), testing activity in practices has remained low.¹²⁻¹³

Factors such as anxiety and stigma, exceptionalism to testing and lengthy pre-test counselling have been identified as barriers to testing among practitioners.¹¹⁻¹²⁻¹⁴

However, these data are in stark contrast

to the attitudes of patients who are likely to accept a test being offered.¹²⁻¹⁵

So, what can be done to better promote testing in primary care? First of all, let us spread the good news: recent advance in treatment and specialist care should encourage the general practice teams to confidentially offer HIV testing to their patients, opening windows for early diagnosis and timely treatment. For most patients, testing in primary care is an opportunity both to receive a clean bill of sexual health and key sex education advice. More education and training for GPs is needed to make clinicians aware of the large numbers of people living with HIV (PLHIV) that remain undiagnosed and are likely to be well when attending primary care services. As shown recently, HIV testing can be easily integrated into routine registration checks, increasing both numbers diagnosed and early diagnosis.¹⁵ GPs should seek every opportunity to offer HIV testing to those starting to attend more frequently or with indicator conditions. Last but not least, there is a stark contrast between evidence-based, disease-focused discourse of specialists and the general practice narratives focusing around patient stories and individual care, hampering translation of specialist guidance into primary care.¹⁶ Therefore, any guidance should be adapted to the realities of primary care (eg, by highlighting indicator conditions common in this setting), and training should focus on communication skills and reflect the narratives of the local population.

Primary care is well established in most of Europe and is likely to play a greater role in providing care for PLHIV in the future. Integration of routine HIV testing into primary care will invariably increase GP awareness and knowledge about HIV, and expand access to care for patients that have remained yet undiagnosed. For the majority of patients, however, testing in primary care is a great opportunity to learn about their own status and how to keep healthy, further contributing to the de-stigmatisation and normalisation of the infection.

Contributors All three co-authors contributed to writing this manuscript.

Competing interests JA reports fees and non-financial support from Bristol-Myers Squibb, grants and personal fees from Gilead Sciences, personal fees from Viiv, personal fees from Merck Sharp & Dohme, grants from Janssen, and personal fees from AbbVie, outside the submitted work.

Funding The research was funded by the National Institute for Health Research (NIHR) Collaboration for Leadership in Applied Health Research and Care North Thames at Barts Health NHS Trust. The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health.

¹Centre for Primary Care and Public Health, Queen Mary University of London, London, UK; ²Homerton Sexual Health Services, Homerton University Hospital NHS Foundation Trust, London, UK

Correspondence to Dr Werner Leber, Centre for Primary Care and Public Health, Queen Mary University of London, London, E1 2AB UK; w.leber@qmul.ac.uk

Provenance and peer review Commissioned; internally peer reviewed.



CrossMark

To cite Leber W, Anderson J, Griffiths C. *Sex Transm Infect* 2015;**91**:464–465.

Received 12 August 2015

Accepted 17 August 2015



► <http://dx.doi.org/10.1136/sextrans-2015-052073>

Sex Transm Infect 2015;**91**:464–465.

doi:10.1136/sextrans-2015-052229

REFERENCES

- 1 European Centre for Disease Prevention and Control. HIV testing: increasing uptake and effectiveness in the European Union. 2014. http://ecdc.europa.eu/en/publications/Publications/101129_GUI_HIV_testing.pdf (accessed July 11, 2015).
- 2 Centers for Disease Control and Prevention. *Diagnoses of HIV Infection in the United States and Dependent Areas*. HIV Surveillance Report 2013;25.
- 3 Public Health England. Addressing Late HIV Diagnosis through Screening and Testing: An Evidence Summary, 2014.
- 4 INSIGHT START Study Group. Initiation of Antiretroviral Therapy in Early Asymptomatic HIV Infection. *N Engl J Med* 2015;**373**:795–807.
- 5 TEMPRANO ANRS 12136 Study Group. A Trial of Early Antiretrovirals and Isoniazid Preventive Therapy in Africa. *N Engl J Med* 2015;**373**:808–22.
- 6 Jones A, Cremin I, Abdullah F, *et al*. Transformation of HIV from pandemic to low-endemic levels: a public health approach to combination prevention. *Lancet* 2014;**384**:272–9.
- 7 Yazdanpanah Y, Perelman J, DiLorenzo MA, *et al*. Routine HIV screening in Portugal: clinical impact and cost-effectiveness. *PLoS ONE* 2013;**8**:e84173.
- 8 Ellis S, Curtis H, Ong EL. HIV diagnoses and missed opportunities. Results of the British HIV Association (BHIVA) National Audit 2010. *Clinical Medicine* 2012.
- 9 UNAIDS. *Global report*. UNAIDS report on the global AIDS epidemic 2013, 2013.
- 10 Mounier-Jack S, Nielsen S, Coker RJ. HIV testing strategies across European countries. *HIV Med* 2008;**9**(Suppl 2):13–19.
- 11 McMullen H, Griffiths C, Leber W, *et al*. Explaining high and low performers in complex intervention trials: a new model based on diffusion of innovations theory. *Trials* 2015;**16**:242.
- 12 Elmahdi R, Gerver SM, Gomez Guillen G, *et al*. Low levels of HIV test coverage in clinical settings in the UK: a systematic review of adherence to 2008 guidelines. *Sex Transm Infect* 2014;**90**:119–24.
- 13 Trienekens SC, van den Broek IV, Donker GA, *et al*. Consultations for sexually transmitted infections in the general practice in the Netherlands: an opportunity to improve STI/HIV testing. *BMJ Open* 2013;**3**:e003687.
- 14 Thornton AC, Rayment M, Elam G, *et al*. Exploring staff attitudes to routine HIV testing in non-traditional settings: a qualitative study in four healthcare facilities. *Sex Transm Infect* 2012;**88**:601–6.
- 15 Leber W, McMullen H, Anderson J, *et al*. Promotion of rapid testing for HIV in primary care (RHIVA2): a cluster-randomised controlled trial. *Lancet HIV* 2015;**2**:e229–e35.
- 16 Greenhalgh T, Howick J, Maskrey N, *et al*. Evidence based medicine: a movement in crisis? *BMJ* 2014;**348**:g3725.



HIV testing in Europe: how can primary care contribute?

Werner Leber, Jane Anderson and Chris Griffiths

Sex Transm Infect 2015 91: 464-465
doi: 10.1136/sextrans-2015-052229

Updated information and services can be found at:
<http://sti.bmj.com/content/91/7/464>

These include:

References

This article cites 11 articles, 4 of which you can access for free at:
<http://sti.bmj.com/content/91/7/464#BIBL>

Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:
<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:
<http://group.bmj.com/subscribe/>