

The spread of HIV in Europe

Hidden epidemics and other barriers to universal access to prevention, treatment and care

Jeffrey V. Lazarus

Abstract

Introduction

An estimated 2.4 [1.8–3.2] million people in the WHO European Region now live with HIV, and none of the Region's 53 countries have been spared. The epidemic is spreading most rapidly in western Europe among migrants and men who have sex with men, and in eastern Europe among male injecting drug users – and increasingly their sexual partners. This doctoral research investigates several aspects of HIV epidemiology and treatment in the European Region that inform the global commitment to provide universal access to HIV prevention, treatment, care and support services. Concretely, it aims to:

- assess two migrant populations' knowledge of and attitudes towards HIV/AIDS (Paper I), and evaluate the equity of injecting drug users' access to HIV treatment in the Region (Paper II);
- track the Region's two principal HIV coinfections, hepatitis C (Paper III) and tuberculosis (Paper IV);
- analyse the effect of health care reforms on potential HIV health care providers in Estonia, the country with the highest HIV prevalence in the European Union (Paper V); and
- measure the impact of individual and societal factors on condom use in young people across the Region (Paper VI).

Methods

The methods utilised included logistic regression, semi-structured interviews and a nominal group technique (I, V), multi-country data collection, descriptive epidemiology and policy analysis (II, III, IV) and multilevel analysis (VI).

Results

The six papers illuminate a range of equity, policy, knowledge and health systems issues.

- Paper I found that in the migrant populations studied, general knowledge about HIV/AIDS, and condom use specifically, particularly among women, was especially deficient.

- Paper II showed that for injecting drug users, access to antiretroviral treatment was inequitable, particularly in eastern Europe.
- Paper III revealed that, in countries where the HIV epidemic is driven by injecting drug use, coinfection with hepatitis C ranges from 10% to 80%. It noted that, overall, access to hepatitis treatment is still very limited in Europe due to poor surveillance, high costs and countries' failure to recognise hepatitis as a critical health issue.
- Among TB patients tested in 25 countries, Paper IV found that 3.3% were HIV-positive. The male-to-female ratio of the coinfecting group was 2.7:1, with the largest percentage of coinfections being reported in people aged 25–34 (48%). Though recommended TB/HIV policies have been implemented in many European countries, the paper emphasised that what is needed most is strengthened coordination between TB and HIV programmes.
- In Estonia, Paper V showed that the health sector reforms of the 1990s did not take advantage of its many midwives to address the major HIV epidemic that was emerging.
- Paper VI demonstrated correlations between a variety of individual and contextual variables – such as alcohol use, predominant national religion and socioeconomic indicators – and young Europeans' condom use.

Conclusions

In Europe, where HIV/AIDS is often a high priority and the means to combat it are widely available, transmission patterns remain misunderstood and the epidemiology has many gaps. That there still exist “hidden” epidemics, hidden HIV issues and inequitable responses in the European Region today reflects, in part, the status of the groups most at risk and the poor state of surveillance – of HIV, AIDS and their comorbidities such as hepatitis and tuberculosis. This, in turn, impedes effective prevention, treatment, care and support efforts. Research that exposes such blind spots – whether in epidemiology, policy or implementation – can identify key challenges in responding to this epidemic and suggest concrete ways to address them.

List of original publications

This doctoral dissertation is based on the following six papers, which will be referred to in the text by their Roman numerals.

- I. Lazarus JV, Himedan HM, Østergaard LR, Liljestrand J. HIV/AIDS knowledge among Somali and Sudanese immigrants in Denmark. *Scandinavian Journal of Public Health*, 2006;34(1):92–99.
- II. Donoghoe MC, Bollerup A, Lazarus JV, Nielsen S, Matic S. Access to highly active antiretroviral therapy for injecting drug users in the European Region, 2002–2004. *International Journal of Drug Policy*, 2007;18(4):271–280.
- III. Lazarus JV, Shete P, Eramova I, Merkinaitė S, Matic S. HIV/hepatitis coinfection in eastern Europe, and new pan-European approaches to hepatitis prevention and management. *International Journal of Drug Policy*, 2007;18(5):426–432.

- IV. Lazarus JV, Olsen M, Ditiu L, Matic S. TB/HIV coinfection: policy and epidemiology in 25 countries in the European region. *HIV Medicine*. Accepted
- V. Lazarus JV, Liljestrand J, Rasch V. Midwifery at the crossroads in Estonia: attitudes of midwives and other key stakeholders. *Acta Obstetricia et Gynecologica Scandinavica*, 2005;84(4):339–348.
- VI. Lazarus JV, Moghaddassi M, Godeau E, Ross J, Vignes C, Östergren PO, Liljestrand J. A multilevel analysis of condom use among adolescents in Europe. *Submitted*.