HIV/AIDS in the transitional countries of eastern Europe and central Asia

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ABSTRACT – In the 1990s, HIV/AIDS became a major threat to health, economic stability and human development in countries in eastern Europe and central Asia. Social, political and economic transition exacerbated the structural conditions that allowed HIV/AIDS to flourish as dramatic changes led to increasing drug injection, economic decline and failing health and healthcare systems. There is a need to address the professional and ideological opposition – even in countries considered to be fully functioning democracies – to evidence-based public health interventions like harm reduction, coupled with treating HIV/AIDS for all those in need, if countries are to provide a more effective response.

KEY WORDS: central Asia, eastern Europe, HIV/AIDS, social medicine

Introduction

In the 1990s, as countries in eastern Europe and central Asia* made the transition from command to market economies and, to varying degrees, democratic government, HIV/AIDS fast became a major threat to health, economic stability and human development.1 Rates of newly diagnosed HIV infection increased dramatically during the years of transition, mainly among injection drug users,2 so that by the end of 2004 an estimated 1.4 million people were living with HIV/AIDS.3 In some transitional countries, notably Estonia, the Russian Federation and Ukraine, estimated HIV prevalence in adults now exceeds 1%. While it is no surprise that countries as poor and underdeveloped as those in sub-Saharan Africa have been subject to dramatic death tolls due to HIV/AIDS, it is more difficult to explain why eastern Europe is now struggling with some of the highest HIV incidence rates in the world (Fig 1) and with difficulties in meeting treatment needs. Previously low AIDS incidence is now rapidly

*Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, the Republic of Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan. The three Baltic states are now part of the European Union. increasing in the region. In Ukraine, between 1996 and 2003, AIDS incidence increased from 3 to 37 cases per million and has now surpassed the western European average. AIDS deaths, with tuberculosis (TB) as the main defining disease, are also rising rapidly. This increase in TB/HIV co-infection, in turn, is associated with increased tuberculosis transmission to the general population.⁴ Here, using an ecological approach, we examine how changing economic and social environments have contributed to HIV/AIDS epidemics in the transitional countries of eastern Europe and central Asia.

Political epidemiology and ecological models

Commentators have noted that in the transitional countries of eastern Europe and central Asia, 'democracy has been good for health', with health improvements greatest in those countries that have 'embraced democracy most enthusiastically'.5 Why then has economic, political and social transition failed to protect these countries from HIV/AIDS? In some countries, the lack of democratic structures has acted as a barrier to the implementation of evidencebased public health policies,⁵ including policies to mitigate the effects of HIV/AIDS. This does not explain why countries considered fully functioning democracies, such as the Baltic countries of Estonia, Latvia and Lithuania, or countries considered to be moving towards democracy, notably Russia and Ukraine, experienced serious HIV/AIDS epidemics that emerged in 1995 after the democratic transition gathered pace.

Examining the effects of democracy on health (political epidemiology) is a relatively new discipline.⁶ Ecological models, which attribute a crucial role to the social and physical environment in determining a population's level and distribution of health⁷ and the consequent importance of structural interventions that work by altering the context within which health is produced and reproduced, ^{8,9} are longer established. However, ecological approaches have been slow to influence public health practice in terms of HIV risk behaviours and related interventions. Others have argued that researchers and theorists in general, and specific infectious dis-

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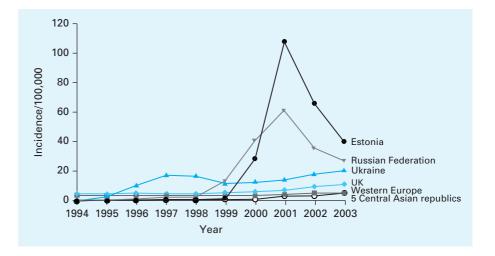
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Clin Med 2005;**5**:487–90

Fig 1. New HIV infections in Europe, reported incidence per 100,000 population. Source: WHO European Health for All Database, accessed 1 June 2005.



ease control programmes such as tuberculosis, have failed to acknowledge the importance of the contextual environment in which healthcare programmes are implemented. ¹⁰ The dominant HIV/AIDS intervention model has been to help individuals cope with risk environments by changing their attitudes and behaviours. ¹¹ This model fails to adequately address how environmental factors may influence attitudes and behaviour or how certain behaviours may in part be responses to dangerous environmental conditions. ¹² Transition exacerbated the structural conditions that allowed HIV/AIDS to flourish in the 1990s. A brief examination of changing economic and social environments provides clues as to why HIV/AIDS epidemics are rampant in the transitional countries of central Asia and eastern Europe.

Increased drug injection

The link between increasing numbers of drug injectors and HIV/AIDS epidemics is well established.¹³ The reasons for increased drug use and drug injection in eastern Europe and central Asia in the 1990s are less well understood. The number of drug injectors in the region rose rapidly in the transitional years, to an estimated 3.1 million injectors by the end of 2003.¹³

Key Points

In the 1990s, HIV/AIDS becamne a major threat to health, economic stability and human development in eastern Europe and central Asia

Political transition exacerbated the structural conditions that allowed HIV/AIDS to flourish

Dramatic social and political change led to increasing drug injection, economic decline and failing health and healthcare systems

Professional opposition to evidence-based medicine – in particular harm reduction and opioid substitution treatment – contribute to HIV/AIDS epidemics

Increases in opium production in Afghanistan, and to a lesser extent Pakistan, clearly contributed towards greater drug consumption and injection in countries bordering Afghanistan and other central Asian and eastern European countries on the new trafficking routes. ¹⁴ Changes in local patterns of drug production and consumption, increased travel and migration, the opening up of borders, failing formal economies and the growth of informal economies (including increased trade in drugs) also contributed to increased drug use and injection. However, increased drug injection in itself provides only a partial explanation for the dramatic increases in HIV infection during the transition years. Such increases should be examined mainly in the context of economic decline, failing health and failing healthcare systems.

Economic decline and failing health

During the transition years, the whole region underwent dramatic social and political change, often entailing severe economic and social decline, which had its worst impact on the most vulnerable populations. In the Russian Federation, the country with by far the largest number of reported HIV cases in Europe (318,394 by April), it is estimated that GDP fell by roughly 12% in real terms in 1991 and continued to contract until 1995, while inflation rose to treble digits over the same period.¹⁵ Increasing rates of HIV in central and eastern Europe generally correlate with declining economic trends.¹⁴ Economic decline had a major impact on living standards, dramatically increasing income inequalities and the percentage of Russians living in poverty.¹⁵ Unemployment increased, while access to housing, healthcare and social services worsened. Mortality rates in the region went up during the 1990s; mortality among Russian males aged 40-49 nearly doubled in the period 1990-94,15 as did the incidence of tuberculosis and diphtheria. Other diseases previously thought to be under control, including cholera, typhus, typhoid, whooping cough, measles and hepatitis, re-emerged during the transitional years. 15 There were also massive increases in sexually transmitted infections throughout the region.¹⁶ Meanwhile, the breakdown of the old social order, public values and social norms contributed to increased drug taking, alcohol consumption and sexual risk-taking behaviour. 17

Failing healthcare systems and public health policies

In eastern European and central Asian countries, the process of transition made failures in healthcare systems both more apparent and more acute. These failures were not only related to a lack of resources or changing priorities, but also to the ways in which healthcare systems were organised, so-called 'systemic obstacles', which are clearly illustrated in the response to communicable diseases. ¹⁸ Others have commented on how 'pretransition' healthcare systems delivered a low quality of service, were unresponsive to health needs, and had few or no mechanisms for community participation and patient empowerment; in other words, they put the client last. ¹⁹

Outdated, unresponsive and centralised systems were slow to respond to and cope with the new epidemics of HIV/AIDS and re-emerging epidemics such as tuberculosis. With regard to HIV/AIDS, population-based approaches, for example mass screening, were favoured over targeted interventions for the most vulnerable groups, such as injecting drug users (IDUs), sex workers and ethnic minorities. Vertical programming continues to dominate, with specialised and distinctly separate services for HIV/AIDS, sexually transmitted infections, other infectious diseases and, vitally for countries where HIV is predominantly transmitted by drug injection, specialised services for people with drug and alcohol problems (narcology). Old attitudes and views prevail, with a rigid demarcation of responsibilities. Narcologists rarely, if ever, get involved in HIV/AIDS work, strictly the province of AIDS specialists who, in turn, have little contact with the venero-dermatologists (the sexually transmitted infection (STI) specialists), TB specialists and so on. The prevailing philosophy is that clinical guidance is based on the opinions and instincts of senior physicians, rather than on evidenced-based medicine (eg systematic reviews of relevant scientific research including meta-analysis typified by the Cochrane Collaboration).

The most important obstacles to health-promoting public policies include opposition by government and the medical profession to evidenced-based interventions such as harm reduction, eg opioid substitution treatment, for IDUs. The best hope to contain the epidemic and to reduce vulnerability to HIV infection is by expanding targeted interventions for vulnerable groups, particularly IDUs, their sexual partners and sex workers. Targeted interventions, in particular harm reduction programmes, are woefully inadequate in scale and coverage in eastern Europe. Interventions to reduce the sexual risk behaviour of drug injectors are also critically important to the future patterns of HIV transmission. Evidence from many western European countries indicates that by dramatically reducing HIV incidence in drug injectors, generalised epidemics can be avoided. There is also strong evidence that where targeted HIV prevention programmes are implemented on a sufficiently large scale, it is possible to avert epidemics of HIV among populations

of injecting drug users.²⁰ The UK, for example, contained potentially serious HIV epidemics in drug injectors at low levels in the late 1980s,²¹ and to date incidence and prevalence have remained low, while equally democratic countries that were slow to embrace harm reduction approaches in western Europe, for example France and Italy, experienced more severe HIV epidemics among drug injectors. In some central European countries, where evidenced-based HIV interventions have, to varying degrees, been adopted, HIV epidemics have been controlled or averted. In Poland, by mounting a strong national response, including broad-based programmes and targeting interventions at injecting drug users, the Government successfully contained the epidemic among IDUs²² and, to date, have averted more widespread epidemics in non-injecting populations. In the Czech and Slovak republics and Slovenia, well-designed national HIV/AIDS programmes are thought to have contributed to low prevalence among IDUs and low incidence in non-injecting populations.²² Countries of eastern Europe and central Asia that have been slowest to learn these lessons and those countries most opposed to harm reduction and opioid substitution treatment, notably Russia and Ukraine, have experienced the most severe HIV epidemics.

Future prospects

With increasing financial resources now available for HIV prevention and treatment (for example, the worst affected countries in the region have received to date US \$83.6 million in funds from the Global Fund to Fight AIDS, Tuberculosis and Malaria),²³ lack of funds can no longer be cited as the sole reason for the failure to prevent and treat HIV. The lessons from the transitional countries of Europe are that neither democracy nor financial resources alone protect against HIV. Systemic obstacles to HIV/AIDS prevention and treatment need to be challenged, particularly in those countries experiencing the most severe epidemics. In the meantime, HIV continues to spread in all countries of the region, though access to treatment is increasing rapidly in most of them, indicating that the gravity of the situation has been recognised as treatment offers new opportunities as well as new imperatives for strengthening HIV prevention.

For the first time, the promise of increased access to antiretroviral treatment for people in need allows for the development of a comprehensive public health response to the epidemic that fully integrates prevention, care and treatment. Evidence from the Caribbean, Africa and elsewhere indicates that introducing treatment in affected communities can reduce the fear, stigma and discrimination that surround HIV/AIDS, increase demand for the uptake of HIV counselling and testing and reinforce prevention efforts. Highly active antiretroviral therapy also reduces the level of HIV in the body to undetectable levels in many patients. Although the virus is never eliminated (and no-one is cured), the risk of a person on effective treatment transmitting HIV is greatly reduced. This therapy, therefore, coupled with strategies to promote safer behaviours of those in treatment, will have considerable impact and accelerate HIV prevention.

The next steps for these countries is to set treatment targets

and simultaneously ensure that access to treatment is equitable – which means reaching out to HIV-positive injecting drug users, instead of shutting them out, or imprisoning them. In the region as a whole, 80% of HIV cases with a known route of transmission are due to injecting drug use.² Punitive measures such as incarcerating drug users who seek testing or treatment, or violations of patient–provider confidentiality, will only serve to drive those with HIV further into the margins.

The authors' perspective

All three authors have worked for many years with HIV/AIDS and related issues in the transitional countries of eastern Europe and central Asia. Drawing on peer-reviewed articles, UN reports and WHO data, we take an ecological approach to the current situation, which reflects our own experiences from working at the World Health Organization (MD, JVL, SM), Open Society Institute (MD and SM) and the International Planned Parenthood Federation (JVL), both at the secretariat and in the countries themselves. The approach also reflects the multidisciplinary approach to HIV/AIDS advocated at Lund University and by all three authors.

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