

HIV AMONG INJECTING DRUG USERS IN EUROPE: INCREASING TRENDS IN THE EAST

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The human immunodeficiency virus (HIV) epidemic among injecting drug users (IDUs) shows different developments in different parts of the European region. In the countries of the European Union (EU) and the European Free Trade Association (EFTA), the rates of reported newly diagnosed cases of HIV infection in IDUs are mostly at stable and low levels or in decline. In contrast, those rates increased in 2007 in many of the other (eastern) countries in the World Health Organization (WHO) European Region, suggesting that the HIV epidemic among IDUs in Europe is still growing. In countries or regions where indicators of HIV incidence show upward trends, existing prevention measures may be insufficient and in need of strengthening. In the EU/EFTA region the larger availability of harm reduction measures such as opioid substitution treatment and needle and syringe programmes may have played a key role in containing the epidemic among IDUs.

Introduction

Human immunodeficiency virus (HIV) and hepatitis B and C infection are an important cause of mortality and morbidity among injecting drug users (IDUs) in Europe and result in high costs to society [1,2,3]. The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is monitoring HIV and hepatitis B and C among injecting drug users in the European Union (EU), in partnership with the European Centre for Disease Prevention and Control (ECDC) and the World Health Organization (WHO) Regional Office for Europe. In this contribution we describe the epidemiological situation regarding HIV among IDUs in Europe in 2007. [4,5]. Our objective is to examine trends in newly diagnosed HIV infections in IDUs reported in 2007 and in data from HIV prevalence monitoring studies among IDUs in the WHO European Region countries* which participate in the European surveillance of HIV and AIDS. We compare the European Union (EU) and European Free Trade Association (EFTA) countries with the other countries in the WHO European Region, with a focus on those countries that reported the highest rates of newly diagnosed infections in 2006-7. The data have to be interpreted with caution, given several methodological limitations, which are detailed elsewhere [5,6,7].

Trends in newly diagnosed HIV infection reported in 2007, EU/EFTA countries

Data on HIV cases attributed to injecting drug use reported in 2007 suggest that infection rates in this group are still overall falling in the EU/EFTA countries, following a peak in 2001-2, which was due to outbreaks in Estonia, Latvia and Lithuania [5]. Of the

three countries that reported a rate of IDU-related HIV infections in 2006-7 of over 50 cases per million population, Portugal and Estonia continued to report a downward trend in 2006-7, while in Latvia the rate increased again to 59 per million population in 2007. Between 2001 and 2007, no marked increase in the rate of reported HIV infection has been observed in any country of this region. A few countries reported a slight increase since 2001 (e.g. Bulgaria, Sweden, United Kingdom), and this remained below one additional case per million population per year. In Bulgaria and Sweden, however, the trend has accelerated since 2003 and 2006 respectively, suggesting the potential for an outbreak.

Trends in newly diagnosed HIV infection reported in 2007, non-EU/EFTA countries in the WHO European region

In many of the non-EU/EFTA countries in the eastern part of the WHO European region (East), the number of HIV cases in IDUs has been increasing. Even in those countries where some declines had occurred since 2001 (Russia, Belarus), new increases have been noted in more recent years [5,8]. In 2007, the rates of HIV infection per million population among IDUs varied from zero in Turkmenistan to 80 cases per million in Kazakhstan and 152 in Ukraine. For Russia, 2007 data are not available but in 2006 the rate was 78 cases per million [8] (Figure).

In the seven non-EU/EFTA countries of the central and three non-EU/EFTA countries of the western part of the WHO European Region (Centre and West), the rates remained very low at less than two cases per million, with Israel at a slightly higher rate of five cases per million.

In absolute terms, Ukraine reported the largest number of newly diagnosed cases of HIV among IDUs in 2007 with 7,087 cases, followed by Uzbekistan with 1,816 and Kazakhstan with 1,246 cases. In comparison, Russia reported 11,161 cases in 2006 [8]. Several other non-EU/EFTA countries in the East, with overall lower numbers and rates, nonetheless show an increasing trend in reported cases, suggesting that epidemics among IDUs may be taking place in the East. These include Azerbaijan, Belarus, Georgia, Kyrgyzstan, Moldova and Tajikistan.

Trends in HIV prevalence

Prevalence data are available from 27 EU/EFTA countries over the period 2002-6 [4,6,8]. In 18 of those countries, HIV prevalence remained unchanged during the period. In four countries

(Bulgaria, Germany, Spain and Italy) prevalence showed statistically significant decreases (chi square test for trend, $p < 0.05$), all based on national data, although regional increases were also reported in Bulgaria and Italy. In Lithuania an increase was observed at the national level. Finally, in the remaining four countries (Belgium, Czech Republic, United Kingdom and Slovenia), there was at least one sub-national sample indicating an increasing trend, despite that as far as available the national trends appeared stable and most prevalence levels remained low.

Some indications of recent HIV transmission among IDUs in the EU/EFTA region are given by reports of high prevalence levels (over 5%) among young IDUs (samples of 50 or more IDUs under age 25) in several countries: Spain (national data, 2005), Portugal (national data, 2006), Estonia (two regions, 2005), Latvia (national and in two cities, 2002-03), Lithuania (one city, 2006) and Poland (one city, 2005).

Data on HIV prevalence in IDUs for the non-EU/EFTA countries in the eastern part of the WHO European region are only available to a limited extent [8,9]. However, they suggest that prevalence in tested IDUs increased ($p < 0.05$) between 2002 and 2006 at national level in Azerbaijan, Belarus and Ukraine, as well as in two cities in Tajikistan. Data for the Russian Federation suggest a decline in prevalence between 2002 and 2004 followed by a stabilisation between 2004 and 2006.

Discussion

Caution is warranted in interpreting these data, given a lack of information on possible changes in testing and case reporting, completeness of reporting, and inherent difficulties in using trends in case reporting or prevalence data as indicators of incidence. However, the situation regarding HIV in IDUs in the eastern part of the WHO European Region is worrying. Data on reported HIV cases in IDUs suggest increasing incidence of HIV infection among people who inject drugs. In 2007, IDUs accounted for 57% of

newly diagnosed HIV infections reported in this region. Public health measures that are currently in place to contain the epidemic among IDUs are likely insufficient and need to be reinforced. A general worsening of the already serious situation regarding HIV in IDUs in the East can pose a severe threat to the general population, due to sexual transmission from infected IDUs and, potentially, subsequent independent sexual transmission [10].

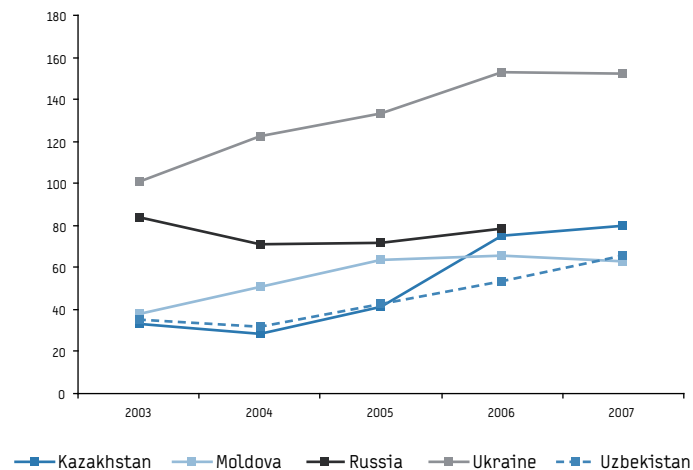
In the EU/EFTA countries, rates per million population of newly diagnosed reported cases of HIV infection among IDUs have been generally low in the recent years. In 2007, the overall rate of newly diagnosed reported infections among IDUs in the 27 EU Member States is estimated at five cases per million population. The EU compares relatively positively in a global context regarding HIV in IDUs, and especially if set against its neighbouring countries in Eastern Europe [5,11]. This may partly follow from the increased availability of prevention, treatment and harm-reduction measures, including opioid substitution treatment and needle and syringe programmes [12,13,14,15]. Other factors, such as the decline in injecting drug use that has been reported in some western countries [4,16,17], may also have played an important role. However, recent large outbreaks (e.g. in Estonia) show that vigilance cannot be lowered and explosive spread among IDUs is still possible. Also, in some of the EU countries (Estonia, Portugal, Latvia) that have experienced large epidemics among IDUs, the data suggest that HIV transmission among IDUs may still have continued at relatively high rates in 2006 and 2007. This underlines the need to ensure the coverage and effectiveness of HIV prevention practices including harm reduction and treatment for IDUs.

In conclusion, the HIV epidemic among IDUs continues to diverge between different parts of Europe. In the East the HIV epidemic shows no signs of slowing down. Countries across the European region might collaborate to better understand the driving forces of this epidemic, and the specific barriers and opportunities

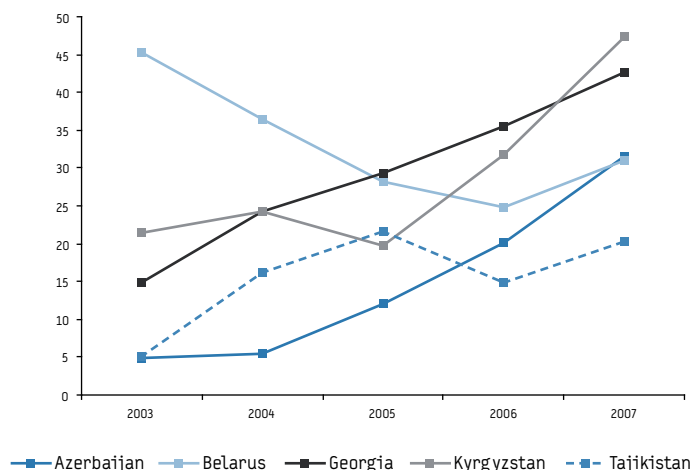
FIGURE

Newly diagnosed reported HIV infections among injecting drug users, rate per million population, non-EU/EFTA countries in the eastern part of the WHO European region, 2003-2007

East: Countries with over 50 cases per million in 2006-2007



East: Countries with 10 to 50 cases per million in 2006-2007



Note: Data for the Russian Federation were taken from [8].

for improving prevention in IDUs. Epidemiological surveillance and research focused on IDUs are important to guide the implementation of effective prevention strategies and interventions. Harm reduction measures such as opioid substitution treatment and needle and syringe programmes may have played a key role in reducing HIV transmission among IDUs in the EU/EFTA region. International guidance on a comprehensive package of measures aimed at reducing the harms of HIV and other infections in IDUs is available and needs to be implemented [18].

*The WHO European Region comprises:

The West, 23 countries: Andorra, Austria (EU, data for 2007 missing), Belgium (EU), Denmark (EU), Finland (EU), France (EU), Germany (EU), Greece (EU), Iceland (EFTA), Ireland (EU), Israel, Italy (EU, data for 2007 missing), Luxembourg (EU), Malta (EU), Monaco (data for 2007 missing), the Netherlands (EU), Norway (EFTA), Portugal (EU), San Marino, Spain (EU, data not national), Sweden (EU), Switzerland (EFTA), United Kingdom (EU).

The Centre, 15 countries: Albania, Bosnia and Herzegovina, Bulgaria (EU), Croatia, Cyprus (EU), Czech Republic (EU), Hungary (EU), the Former Yugoslav Republic of Macedonia, Montenegro, Poland (EU), Romania (EU), Serbia, Slovakia (EU), Slovenia (EU), Turkey.

The East, 15 countries: Armenia, Azerbaijan, Belarus, Estonia (EU), Georgia, Kazakhstan, Kyrgyzstan, Latvia (EU), Lithuania (EU), Republic of Moldova, Russian Federation (data for 2007 missing), Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

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