**EPIDEMIOLOGY**

**Article 1: Global epidemiology on injecting drug use and HIV among people who inject drugs: a systematic review**

**Objectives**

The HIV virus contributes a great deal to mortality in today’s world. The virus is transmitted from one person to another through many ways, one of which is injecting drug use (IDU). IDU has over the years become rampant in countries in Eastern Europe, South America and east and south-east Asia. This article was compiled after a survey aimed at systematically searching and critiquing peer and non-peer-reviewed literature that reports on epidemiology due to IDU. This article further provides specific estimates in terms of countries, regions and the entire globe on the number of people who inject drugs and how many of them may be living with HIV.

**Methodology**

The study that amounted to this article was done through thorough searches of peer reviewed databases such as Medline, EmBase. Only these were used. An expert in these database searches was brought in to help the research team. Additionally searched were 44 online resource and database searches, 14 surveillance systems, 3 prison databases and 33 drug control agency databases. Ministry of health websites were also gained access to and gone through thoroughly. 2267 documents were gone through with information being obtained from 783 of them. Emails were also sent to UN staff to request for additional information on IDU and HIV infection. Responses that were obtained were 62.

**Results**

IDU was reported in 39 out of 41 countries in the considered countries, that is, Latin America, the Middle East and North Africa. A total of 148 countries were considered. The three countries with the largest of drug injecting populations were China, the USA and Russia. These nations are among the most populated around the globe. China is the first, USA the third and Russia the ninth. Further on to HIV infections among those who injected drugs, these were in 128 (86%) of the 148 countries. Only 8 countries had no recorded infections. HIV prevalence within the three noted countries was prevalent in different proportions within the country regions. An example is China where seven of the country’s provinces had HIV infection prevalence.

A more concrete record not in terms of countries but people is that there are about 16 million individuals worldwide who inject drugs, with 3 million of them living with HIV. Syringes are shared among such drug users, which increases the spread of HIV among them. It was notable from the research that this number is increasing day by day as the number of drug injectors increases.

**Limitations**

There is discrepancy between definitions of drug injectors in different literature, which makes it hard to compare literature. Further, it is difficult to reach the populations that are drug-injecting. Such numbers are only reached through arrest accounts which may not exactly capture all drug users as not all of them are caught. Some literature was also not available in English and some of it was looked over by small teams over a short period of time.

**Conclusion**

Researchers recommended more research in countries to get to know the root causes of prevalent drug use. Availing of needles is also a consideration for registered drug users. This will help reduce HIV spread.

**Article 2: Global overview of injecting drug use and HIV infection among injecting drug users**

**Objectives**

This article was compiled after a team of concerned people did a survey on prevalence of HIV infections on drug injecting individuals. IDU has indeed become rampant in countries that are still coming up. More and more young people are sadly being tangled up in the web of drug use. 90% of HIV patients are from developing countries according to surveys by the United Nations. This paper aims at providing global estimates on relation of IDU and HIV prevalence for developing and transitional countries.

**Methodology**

Research methods in this case included obtaining information from different organizations; UNAIDS, World Health Organization, UN Office on Drugs and Crime and the European Centre on Drugs Control. Information was gotten from only reports that were recent, from 2005 onwards. Countries were grouped as developing countries and these include Asian and African countries. IDU prevalence was calculated using the countries’ adult population as the denominator. Adults are those between the ages of 15 to 64 years old. Countries that had no recent reports on IDU numbers had old reports on these numbers used. Information on developing countries was compared to that of developed countries which was gotten from secondary sources. Such comparison is important to making recommendations for developing countries.

**Results**

Researchers in this article found approximately 13.2 million IDU. They however missed data for 119 countries so this statement must be treated cautiously. 130 countries were studied and found with IDU numbers. Only 78 were associated for HIV. Information on developing countries IDU was however hard to find as compared to that in developed countries. Different countries had different prevalence percentages, with more industrialized countries having a higher prevalence.

**Limitations**

These include the limited information in developing as opposed to developed countries. Analysing the information also took time as the researchers say. . IDU populations are also hidden and not easy to access.

**Conclusion**

Researchers stressed on the available information being of poor quality. IDU populations are also hidden and not so easy to access. Efforts are in place to improve the accuracy of information systems. Organizations such as the UNAIDS are being contacted to help with gathering more information on IDU to help with the situation in developing countries.

**Comparison of the two articles**

The two articles have both established that IDU is on the increase today. Consequently, HIV infections from shared needles is also on the rise. Developing countries have more recorded cases, mostly because they have a higher population. These include countries in Africa, most parts of Asia and Latin America. These countries are ‘yet to get there’ in terms of so many issues, one of them being health. Health is actually a major problem in such countries, considering it has to do with the wellbeing of the people of a nation. The availability of IDU information is however lower in developing countries as opposed to developed ones. Some developed countries even have registration for drug-injectors so that amenities such as needles can be provided to curb HIV spread. Rehabilitation is also better in such countries as opposed to their developing counterparts.

Methodology has an overlap in the two articles as literature is what was considered. In both cases, organizations such as the UNAIDS were brought in to help with their databases and previous reports they compiled after conducting reports. The IDU populations were also contacted to hear their own side of the story. However, the first research methodology is superior in my opinion. This is because they had a wide range of considerations; even the ministry of health was contacted. Databases and websites offer more information than just reports from organizations, which is what the second article’s researchers used. I am more likely to believe the first article for these reasons. The first article indeed has a firmer basis as compared to the second. The results of the first one are also comprehensive as they deal first with a country-based analysis then to an actual population analysis. Methodology could be improved using questionnaires and even face-to-face interviews. HIV infection is a pandemic and so many people would have opinions and facts concerning its spread. These suggestions could be a consideration next time.

Developing countries need to step up in caring for the IDU. Provision of needles and rehabilitation is a good starting point. There should also be investing in research so that more methods are realized to help counter the IDU that is disturbingly on the rise.

**References**

Central and Eastern European Harm Reduction Network (CEEHRN), Injecting Drug Users, HIV/AIDS Treatment and Primary Care in Central and Eastern Europe and the Former Soviet Union. Results of a Region-wide Survey. Vilnius (Lithuania): CEE-HRN; 2002.

EMCDDA. 2002.

Annual Report on the State of the Drugs Problem in the European Union and Norway. Lisbon EMCDDA; 2002.

EMCDDA. The State of the Drugs Problem in the Acceding and Candidate Countries to the European Union. Annual report 2003.

Karapetyan AF, Sokolovsky YV, Araviyskaya ER, Zvartau EE, Ostrovsky DV. Syphilis among intravenous drug-using population: epidemiological situation in St. Petersburg, Russia. Int J STD & AIDS 2002; 13:618–623.Lisbon EMCDDA; 2003.

UNAIDS, AIDS Epidemic Update. Geneva: UNAIDS; 2003.

UNAIDS, Health Canada, The Open Society Institute & The Canadian International Development Agency. The Warsaw Declaration: A Framework for Effective Action on HIV/AIDS and Injecting Drug Use. Second International Policy Dialogue on HIV/AIDS, Warsaw (Poland), November 12–14, 2003.

UNAIDS, Report on the Global HIV/AIDS epidemic. Geneva: UNAIDS; 2002.

United Nations, Declaration of Commitment on HIV/AIDS. United Nations General Assembly Special Session on HIV/AIDS. 25– 27 June 2001.

WHO. Case Study Report - Moscow, Russia. Doljanskaia N (coordinator), 2001. Odessa. Internal report.