

# Medical and psychosocial aspects of injecting drug use by patients with HIV infection

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There are a complex medical and social problem which cardinally changes the quality of life and social functioning of a drug addict due to the development of mental and somatic-neurological disorders and severe social consequences exceeding the direct effect of drug use, and is often combined with HIV infection. It should be noted that drug addiction is difficult to correct because of an irresistible craving for drugs.

Drug dependence is a complex clinical condition that includes physical and psychosocial components and is accompanied by severe concomitant diseases and a high risk of death. This is a complex medical and social problem which cardinally changes the quality of life and social functioning of a drug addict due to the development of mental and somatic-neurological disorders and severe social consequences exceeding the direct effect of drug use, and is often combined with HIV infection. It should be noted that drug addiction is difficult to correct because of an irresistible craving for drugs. As a chronic relapsing disorder, it forces a drug addict to use drugs even under the threat of serious social consequences and the loss of health [8].

It is necessary to pay attention to the fact that drug use is not only a painful state of a drug addict, but also has an influence on human well-being and the Public health system in general, especially when it is a question of injecting

drug use. The threat of drug addiction and HIV infection induces international organizations and governments all over the world to develop preventive programs to study the influence of various social processes on their spreading. The scientific approach to the formulation of public policy to struggle against the spreading of drug abuse and HIV infection is impossible without an exact knowledge of the characteristics of the epidemic process [5].

Belarus is among the countries of Eastern Europe with one of the fastest growing epidemics of HIV infection. The first case of HIV infection in the country was registered in 1987. The epidemic starting point is the year 1996 when the transmission of HIV through injecting drug use has become the dominant way of its transfer on most administrative areas of the country. On 01.01.2009, the cumulative number of HIV-infected people in Belarus is 9618 persons (an infection rate – 99,3 per 100 thousand of the population). It is obvious that the real number of HIV-infected people is 2-3 times higher than official statistics and can be about 28000 persons now [1].

A High proportion of HIV-infected people is those who inject drugs. This depends on many risk factors: syringe sharing, the general capacity for the intake of narcotic substances, violation of elementary rules of disinfection, i.e. creating the conditions for the spreading of HIV infection among injecting drug users.

According to the cumulative statistics of the Republican Center of Hygiene, Epidemiology and Public Health, the leading cause of HIV-infection of people is injecting drug use (5576 cases – 53,9%). At the same time, since 2005 there has been an increase in HIV cases due to sexual intercourse: 2005 – 57,2%, in 2006 – 63,4%, in 2007 – 66,8%, in 2008 – 75%. For eight months of 2009 – 75,5% (549 cases) were sexually infected. The overwhelming number of HIV-positive is young people aged from 15 to 29 years. The total number of cases in this age group is 6998 (its share in the overall structure of HIV-infected people is 67,7%). The proportion of women from the total number of HIV-infected is 37% (3822 persons), men – 63% (6514 persons). The spread of HIV infection among women leads to an increase in the number of children born by HIV-infected mothers. In general, during the period from 1987 to 01.09.2009 HIV-infected mothers have given birth to 1433 children, during eight months of 2009 – 141 children. The diagnosis of HIV infection has been confirmed in 148 children, and eight children have died [1]. Among the group of HIV-infected people there should be distinguished the following groups: the unemployed (43,9%) and the prisoners, who make 21,9%. The highest proportion of HIV-infected at the time of detection in different age groups were typically individuals aged 20-24 years (32,2%), 25-29 years (26,6%), 30-34 years (16,1%), 35-39 years (7,4%). It should be noted that teenagers (15-19 years old) make 9,4% of

HIV-positive people while people over 40 make only 3,7%. For the whole period of the survey, there were registered 1757 fatal cases, including 225 cases recorded during the eight months of 2009.

Injecting drug users (IDUs), also to HIV infection, have some medical and social problems associated with drug consumption. The most common health disorders include: blood-borne viral infections, including hepatitis B, C and D (delta), bacterial infections (tuberculosis, bacterial pneumonia, endocarditis, septicemia), drug poisoning (overdose), alcohol dependence and alcoholic liver disease, combined dependency, various mental disorders [7].

Some IDUs have psychiatric disorders that are not identified and as a result of this do not receive specialized medical care. Mental disorders often occur in IDUs as a result of alcohol or drug abuse or are aggravated by them. Sometimes drugs are used for self-treatment of symptoms of mental disorders, or as a substitute of the effective medication therapy. There was noted a significant increase of the frequency of depressive disorders and suicides among HIV-infected IDUs, especially in patients with advanced HIV infection and AIDS [2, 3, 6]. Sometimes IDUs have deep vein thrombosis and pulmonary embolism; limited lesion of soft tissues and blood vessels, including cutaneous abscesses and thrombophlebitis, increased the risk of respiratory and smoking-related diseases and chronic liver diseases.

Many IDUs, patients with HIV often face social problems such as social instability, poverty, problems of mental health, human rights violations, lack of understanding of the medical staff, stigmatization, discrimination, low social status, homelessness, unemployment, dysfunctional families and social life, criminal behavior and imprisonment. Also to HIV infection, drug use is a common source of stigma, discrimination and, as a rule, self-stigmatization. Associated with drug use, often intensified by the lack of legal protection of IDUs, the lack of understanding that the use of drugs is illegal, stigma is hidden. The fear of being subjected to discrimination leads many IDUs with HIV infection to rarely apply to healthcare, and when forced to address, they hide their drug addiction from the professionals who provide assistance when HIV/AIDS occurred, which increases the risk of diagnostic errors and drug interactions between designated ARV and drugs [4].

Many IDUs abandoned by family live beyond the bounds of accepted social and economic norms. The risk of becoming drug consumers is unusually high in people who are especially vulnerable to poverty and diseases, do not have the proper education and job. Social issues including stigma and discrimination associated with drug use and HIV-positive status, in turn, increase craving for drugs.

Thus, injecting drug users remain one of the groups with a risk of developing HIV infection. Other vulnerable groups include people involved in prostitution, prisoners, young people aged 15—19 years and women of reproductive age. In these circumstances, problems of social functioning and quality of life of IDUs with HIV infection are essential for understanding the causes of development, type of course and prognosis of outcomes of comorbid diseases. They should also be taken into account during adjunct therapy (drug treatment, HAART), psychotherapeutic and psychological treatment of injecting drug consumers with HIV infection.

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