

DOI: <http://dx.doi.org/10.34069/AI/2020.28.04.13>

## Condition, tendencies, dynamics and geography of HIV/AIDS spreading in Ukraine

Состояние, тенденции, динамика и география распространения ВИЧ/СПИДа в Украине

Received: January 28, 2020

Accepted: March 23, 2020

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### Abstract

This article is considered to be the first attempt to examine the problem of HIV/AIDS spreading in detailed. The status, structure, dynamics and “geography” of the infection spreading as well as psychological mechanism of the relations between AIDS spreading in antisocial, immoral behaviour and crime are investigated in the article. The spread of AIDS in Ukraine is to some extent explained by the following points: AIDS are more urban than rural; the spread of AIDS is closely related to the life of resort towns, which characterises the development of a “leisure industry” and increases the influx of the immoral contingent. There are a lot of people in these regions who are not engaged in socially useful activities and who easily come in contact with visitors for the purpose of enrichment by their expense.

**Key words:** HIV/AIDS spreading prevention, coordination, co-operation, influence factors, criminality, crime.

### Анотация

Эта статья считается первой попыткой детально изучить проблему распространения ВИЧ/СПИДа. В статье исследуется состояние, структура, динамика и “география” распространения инфекции, а также психологический механизм взаимосвязи распространения СПИДа в антиобщественном, аморальном поведении и преступности. Распространение СПИДа в Украине в какой-то степени объясняется следующими моментами: СПИД является более городским, чем сельским; Распространение СПИДа тесно связано с жизнью курортных городов, что характеризует развитие “индустрии отдыха” и увеличивает приток аморального контингента. В этих регионах есть много людей, которые не занимаются общественно-полезной деятельностью и которые легко общаются с посетителями с целью обогащения за их счет.

**Ключевые слова:** Профилактика распространения ВИЧ/СПИДа, координация, сотрудничество, факторы влияния, преступность, преступление.

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## Introduction

The role of crime prevention theory is most evident in the study of related situations, which, along with other negative social consequences, have a direct criminogenic nature. In particular, this refers to the study and development, together with the sociology crime prevention measures in some social groups, such as groups of persons without a fixed place of residence and work, having immoral lifestyle. The range of such individuals may be diverse and may also include people who intentionally spread sexually transmitted diseases and AIDS. But the main thing is that their “contribution” to criminal behaviour can be direct and significant. The authors see the relevance and appropriateness for further interdisciplinary research in the plane of the marginal behaviour of the members of such groups. This field of research integrates the notion of “background phenomena”, which refers to the set of concomitant human activities in a society of negative manifestations that contribute to its various antisocial and unlawful acts. These are phenomena such as excessive drinking, narcotism, prostitution, homosexuality, AIDS-terrorism, child neglect, begging, and vagrancy. Only by assigning this problem to “rejected” behaviour and including it in the subject of criminology, the problem cannot be solved. It will remain multidisciplinary and multidimensional: economic, social, medical, psychological, legal (criminological). Depending on the particular aspect of its study, a particular science will act as a research coordinator.

## Methodological Framework of the Research

The methodology of the empirical part of our study is based on general scientific methods, the main of which was the method of systematic analysis, which made it possible to identify the social conditionality of the environment, which influences the level of fluctuations in the spread of HIV/AIDS, its integration with the background phenomena. The structure, dynamics, status, “geography” and social determination of HIV/AIDS as a criminal phenomenon were investigated using logical and comparative methods, the place and significance of the mechanism of combating the spread of HIV/AIDS in the general system of influence on crime have been determined.

The aim and tasks of the research is a comprehensive interdisciplinary study based on the analysis of scientific achievements of criminology, practical activities in the field of combating crime and the phenomena against

which it exists, the status, tendencies, dynamics and geography of HIV/AIDS spreading in Ukraine, with the aim of concentrating scientific efforts to develop and substantiate the most pressing issues that would help to increase the effectiveness of HIV/AIDS prevention in Ukraine.

## Review of the Literature

HIV continues to be a global and national problem in the field of health protection (Brown, Serovich & Kimberly, 2017; Stephens, Braithwaite & Tiggs, 2004). The aforementioned disease has in fact overwhelmed modern society, penetrated to all social groups without exception, and continues further rampant spread throughout the world. The Security Council of Europe has identified AIDS as a threat to human security, since the future of all nations is closely related to the development of this disease, which has adversely affected the vital values of society (National Security Strategy of Ukraine).

The study of AIDS in the world is a relevant research topic. The attitude of society to the criminalization of AIDS is being investigated (Barber, 2013; Collica, 2007; ). Studies show that most of people find it wrong to inoculate other people with virus and properly disclose information on infection to their sexual partners (Burris, Beletsky, Burleson, & Case, 2007).

The HIV epidemic in Ukraine has been widespread for over a quarter of a century. Due to this rather small historical context, the time of single cases of the detection of HIV infection in Ukraine, which first occurred in 1987 (Zaporozhan & Aryaev, 2004) and the direct AIDS disease, has grown into a full-scale epidemic. In particular, as noted in the specialized medical literature, according to independent experts’ estimation more than 1% of adults are infected with HIV in Ukraine (Zaporozhan & Aryaev, 2004). Moreover, according to experts conclusions, the decrease of the number of officially registered HIV-positive persons since 1998 is due, first of all, to the adoption of the revised version of the Law of Ukraine “On Prevention of Acquired Immunodeficiency Syndrome (AIDS) and Social Protection of population” (2001) in March of that year, the new version of which officially proclaimed the principle of voluntary testing for HIV infection, and consequently reduced the number of conducted researches, especially among injecting drug users. Thus, according to

the conclusions (Zaporozhan & Aryaev, 2004), the decrease of the rate of increase of officially registered cases of HIV not only does not indicate an improvement of the epidemic situation in Ukraine, but, on the contrary, indicates its worsening. This is confirmed by the fact that in recent years there has been an increasing number of older HIV cases in Ukraine, including, in 2010, almost 26% of confirmed cases of HIV infection were obtained from clinical examinations (Zapadniuk, Striltsiv & Halan, 2012). According to official statistics for the period 1987 – May 2019, 341 084 cases of HIV infection are officially registered in the country, including 114 487 cases of AIDS and 49 751 cases of death from AIDS-related diseases. Arkusha, Korniienko & Berendieieva, 2019 claim that nearly all types criminal activity have corruption orientation, either directly or indirectly. The problem of the spread of HIV / AIDS is also relevant for people who are in a conflict (Oyague, Barrera & Landinez, 2009).

## Results and discussion

For the first time since 2012, and for the second time in the history of Ukraine, there has been a decline in the rate of HIV infection. According to the Public Health Centre of the Ministry of Health of Ukraine, in 2018, there were 0,52% fewer new cases of HIV than in the previous year. Six years ago, in 2012, the epidemic rate was already declining – by 2%. Beginning from 2016, a new statistical countdown has been launched in Ukraine to estimate the rate of spread of the HIV/AIDS epidemic (AIDS in Ukraine, 2019).

In 2018, according to the Public Health Centre of the Ministry of Health of Ukraine, 18 098 new cases of HIV infection were registered in 2018 (compared with 18 193 cases in 2017), of which 2 428 were children under 14 years of age. In total, 333 716 of new cases of HIV have been officially registered in Ukraine since 1987, and 48,456 people have died from AIDS in Ukraine. The most affected HIV-infected regions are Dnipropetrovsk, Odesa, Donetsk regions, as well as Kyiv (AIDS in Ukraine, 2019).

AIDS prevalence is also the highest in Odesa (291,9 per 100 thousand of population), Dnipropetrovsk (266,1), Mykolaiv (141,3), Kyiv (131,4) and Chernihiv (104,0) regions. The high rate of AIDS spread in Donetsk region is also 120.4 per 100 thousand. The information is given without taking into account the Autonomous Republic of Crimea and Sevastopol, which do not provide data on epidemic statistics since April 2014. Also, there are no data for some months from Donetsk and Luhansk regions, since

summer 2014 data from these regions are not fully received. Ukraine still is Europe's leader in the HIV spreading. According to UNAIDS experts, there are up to 240,000 people living with HIV in Ukraine. And only one from two knows about their diagnosis – there are 144,633 HIV positive patients (State Statistics Service of Ukraine) registered in Ukraine on October 1, 2018.

Since 2008, Ukrainians are most often infected through unprotected sex. While 33% of people with HIV were infected through sexual contact in 2005, in 2012 this percentage rose to 51. For the first time, more than half of new HIV cases of transmission of infection occurred through unprotected sex. In 2018, the index was 66 percent. Most cases of HIV infection in Ukraine today are registered of young people between the ages of 15 and 30.

Every year, the number of HIV-positive people in Ukraine has increased, but since 2005 the increase of new HIV cases (epidemic acceleration) has been decreasing annually: in 2005 compared to 2004 is – + 15,6%, and in 2011 compared to 2010 – is already + 3,4%.

In 2012, for the first time in the history of Ukraine, the HIV / AIDS epidemic slowed down – according to official statistics, in 2012 the rates of HIV infection (the number of new HIV cases) were lower than in 2011. This was the result of national programs for vulnerable groups and large-scale informational awareness campaigns on HIV/AIDS preventive measures.

Due to the reduction of AIDS programs in 2013–2017, the epidemic rate started to rise again. According to experts' estimation, the epidemic situation in our country has been rapidly deteriorated since 2014. One of the main indicators for the epidemic is the number of new cases of HIV infection. In 2017, this index increased by 6,6% compared to 2016, which is in line with the dynamics of the epidemic, which was about 10 years ago. In 2018, the epidemic rate for the first time was recorded (by 0,52%) already on a new statistical basis – without taking into account data from Crimea and Ukraine's non-controlled regions of Donetsk and Luhansk regions.

It should be noted that all this is happening against the background of the critical decrease of the population of our country, which was: in 1995 – 51 million 728 thousands of people, in 2007 – 49 million 430 thousands, in 2017 – 45 million 778 thousands, 2018 – 45 633,6 thousands (State Statistics Service of Ukraine),

that is, on average, the annual natural decrease of the population of Ukraine for a long time is from 200 to 370 thousand people per year.

The spreading of sexually transmitted diseases through prostitution is a great public danger. According to the study, 30,5% of surveyed prostitutes had sexually transmitted diseases, moreover 23,9% from them twice or thrice, and 4,7% more than three times. Only 39,4% of patients knew who they were specifically infected with (Awkward Problem, 2017). The results of the study (Gabiani & Manuilsky, 2017) indicate that about half of those who were surveyed had sexually transmitted diseases, besides with two-thirds from them had syphilis. Since the spreading of syphilis is less than that of gonorrhoea, he believes that many patients with gonorrhoea concealed this fact, which explains the very high proportion of people who have had syphilis.

Over 350,000 men are infected by prostitutes every year. According to the researchers, about 30% of prostitutes have sexual contacts twice or thrice a week, 11% – daily, and 5% – several times a day. Thus, in the Trans Carpathian region, a 16-year-old prostitute infected 27 drivers with syphilis in a short time (Bouquet from a stranger, 2014). According to (Antonian & Eminov, 2015), about 30% of prostitutes have sex with two or more men during the day. And this, in turn, increases the social risk of sex business and the possibility of HIV infection spreading.

In total, 85% of infected are injecting drug users. About 10% – are persons who were became infected during sexually contacts; 2,3% are HIV-infected children born from HIV-positive mothers. In 2018, there were 574 children under the age of 12, 487 of whom were born by an infected mother. The number of HIV-infected women among pregnant women is increasing: in 1987-1994, 12 pregnant women were identified, in 2005-2007 – 207; 344 have already been identified for 2018 (Woman and AIDS, 2019). According to WHO estimations, half of all cases are 15-24 year old persons. However, the peak age of infection in girls is lower than in boys in almost all parts of the world. In many countries, 60% of all new HIV infections occur in the 15-24 age groups, with a female to male ratio of 2 to 1. Analysis of AIDS data from some African and Asian countries indicates that young women under the age of 25 make almost 30% of women's AIDS cases, and for young men, about 15% of men's cases (Women and AIDS, 2019), (Dzhuzha & Ivashchenko, 2000). Most often women of this age category are involved in the

sex business. Studies have shown that sex workers have more often than other persons have sexually transmitted diseases and AIDS (Platt, Grenfell, Meiksin, Elmes, Sherman, Sanders et al., 2018). The first AIDS victim, a resident of former Leningrad, was involved in prostitution. A large number of partners with only one prostitute dramatically increase the risk of infection with both her and those who have sexual contacts with her, which in the conditions of rapid spread of the disease is only a matter of time. In Greece, for example, 88% of surveyed prostitutes and 28% of their clients were infected (Dzhuzha & Ivashchenko, 2000). In Kinshasa (Zaire), 27% of prostitutes are infected, Nairobi (Kenya) – 66%, Butari (Rwanda) – 28%. At the same time, in countries such as Hong Kong and Singapore, the HIV infection rate does not exceed one case in a thousand (Woman and AIDS, 2019).

In the course of our own research it was found that despite of the fact that a big number of crimes fall under the signs of Art. 130, 131, 132 of the Criminal Code of Ukraine in the overall structure of crime is relatively small number is 1.5%. The study confirmed their increased criminogenic role. Most often, it manifests itself: 1) in the social and moral degradation of a person (drunkenness, drug use, prostitution, committing offenses, breaking socially useful links, etc.); 2) in committing other dangerous crimes (as a rule, crimes against morality, life and health of citizens, up to AIDS-terrorism, they account for more than 20-25% of all crimes); 3) in the negative impact on other unstable members of society; 4) in a negligent, dishonest manner in the performance of their duties; 5) in violation of basic human rights, which are in lack of confidentiality both with regard to virus carriers and AIDS patients, as well as with their relatives.

## Conclusions

The spread of AIDS on the territory of Ukraine is to some extent explained by the following points: first, HIV and AIDS are more urban than rural; secondly, the spread of AIDS is closely linked to the life of urban resorts, a feature of which is the development of a “leisure industry” that increases the influx of the immoral contingent. There is quite a large number of people who are not engaged in socially useful activities and who easily come in contact with newly arrived casual workers for the purpose of enrichment by their expense among the population of these regions.

Differentiation of regions of Ukraine by the HIV infection rate makes it possible to identify the areas with the highest number of people infected



with the virus. These are Odesa, Mykolaiv, Kharkiv, Lviv, Trans Carpathian regions, Kyiv and the Republic of Crimea. The complex epidemiological situation of AIDS in these regions is due to the interaction of the following factors: firstly, these are the regions where tourism, in particular foreign tourism is developed, and there are active migration processes. Today, due to the development of trade with other countries, they are the centres of great mass of people; secondly, Odesa, Mykolaiv, Trans Carpathian, Kharkiv and Lviv oblasts, and especially the Republic of Crimea, are the first in terms of the number of drug users; thirdly, through a developed network of ports, resorts, place of resorts, leisure establishments, these regions become places of concentration of criminals and those who have an immoral lifestyle; and lastly, Kyiv and Odessa have the best organization of anonymous HIV screening, better identification of persons from “high-risk groups”: homosexuals, prostitutes, drug addicts, etc.

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