CRIMINOLOGICAL PROFILE OF HIV/AIDS SPREAD IN UKRAINE

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ABSTRACT

Purpose: The aim of the article is to examine the spread of HIV/AIDS in Ukraine.

Methodology: The methodology of the empirical part of the study is based on general scientific methods, the main of which are the method of systemic analysis, logical and legal, comparative and legal, statistical methods.

Results of the Study: The status, structure, dynamics and geographical distribution of the infection were studied, as well as feedback mechanism between AIDS spread and antisocial, immoral behavior and criminality was considered.

Practical Implementation: The spread of AIDS in Ukraine is to some extent explained by the following factors: AIDS is more urban phenomenon than the rural one; it is closely linked to resort towns, which are characterized by the development of a "leisure industry" that increases the influx of immoral population.

Value/Originality: This Article is considered to be the first attempt to scrutinize the problem of the spread of HIV/AIDS in Ukraine.

Keywords: Spread of HIV/AIDS, Prevention, Complexity, Co-Ordination, Co-Operation, Influence Factors, Immoral Lifestyle, Crime.

INTRODUCTION

The problem of HIV/AIDS appeared before mankind in the 1980s. Currently, the disease has become a pandemic in the world and continues to gain momentum. Unfortunately, any epidemiological monitoring can determine the actual number of people living with HIV and AIDS and provide complete statistics on the prevalence of the disease in the country. Nevertheless, it is important to conduct statistical analysis of the HIV-infected population, which allows making predictions of the development of the HIV/AIDS epidemic.

Today, Ukraine ranks one of the first countries in the European region in the number of HIV-positive people (according to statistics, at the beginning of 2018 there were 244,000 HIV-positive people in the country; one in every 100 citizen of Ukraine from 15 to 49 is infected with HIV, which is one of the highest rates among the countries of the region) (Olena Pinchuk Foundation, 2019). Fortunately, there has been significant progress in the treatment of HIV-positive people over the last five years.

The spread of AIDS on the territory of Ukraine is to some extent explained by the following factors: firstly, HIV and AIDS are the problem of more urban than rural areas; secondly, the spread of AIDS is closely linked to the life of resort towns, which are characterized by the development of a "*leisure industry*" that increases the influx of immoral population. There are a lot of people among the population of these regions who are not engaged in socially useful activities and easily come into contact with visiting tourists.

The role of the theory of crime prevention is most evident in the study of related situations, which, along with other negative social consequences, are of direct criminogenic nature. In particular, it is about the study and development of crime prevention measures in some social groups, such as groups of homeless people and people who lead immoral lifestyle. The range of such people can be very diverse and also include people who deliberately spread sexually transmitted diseases and AIDS. But the main thing is that their "contribution" to criminal behavior is direct and significant. It is in the plane of marginal behavior of members of such groups that the authors see the relevance and expediency of further interdisciplinary research. This area of research combines the conditional notion of "background phenomena", which includes a set of negative manifestations accompanying human activities in society that contribute to the commission of various anti-social and illegal acts. These are such phenomena as alcoholism, drug addiction, prostitution, homosexuality, AIDS, child neglect, begging and vagrancy. We cannot solve this problem only by its attribution to the behavioral disorders and inclusion in the area of criminology. It will remain interdisciplinary and multifaceted: economic, social, medical, psychological, legal (criminological). Depending on the specific aspect of its study, one or another science will serve as research coordinator (Platt, 2018).

LITERATURE REVIEW

HIV infection continues to be a global and national health problem (Brown et al., 2017). This disease has actually invaded modern society, penetrated all social groups without exception and continues to spread uncontrollably in all regions of the world. The Security Council of Europe has identified AIDS as the threat to human security, as the future of all nations is closely linked to the development of this disease, which has negatively affected the vital values of society (Order of the President of Ukraine, 2015).

The study of the problems of combating the spread of AIDS in the world is a very relevant research topic. The attitude of society to the criminalization of the spread of AIDS is studied (Barber, 2013). The research show that most people believe that it is wrong to expose others to the virus, but it is right to properly disclose the information about the presence of the infection to sexual partners (Burris et al., 2007).

The HIV epidemic in Ukraine has been spreading intensively for more than a quarter of a century. During this rather insignificant time in the historical context, the isolated facts of detection of HIV infection in Ukraine, which first took place in 1987 and the direct disease of AIDS, grew into a full-scale epidemic. In particular, more than 1% of the adult population is already infected with HIV in Ukraine according to independent experts (Zaporozhan & Ariaiev, 2004). Moreover, according to these experts, the decrease in the number of officially registered HIV-infected people since 1998 is primarily due to the adoption in March of the same year of a new version of the Law of Ukraine "On Prevention of Acquired Immune Deficiency Syndrome (AIDS) and Social Protection of population" (Law of Ukraine, 2010). It officially proclaimed the

principle of voluntary HIV testing, which reduced the number of studies conducted, especially among injecting drug users. Thus, the decrease in the growth rate of officially registered cases of HIV infection not only does not indicate an improvement in the epidemic situation in Ukraine, but, on the contrary, indicates its deterioration. This is confirmed by the fact that in recent years there is growing number of old cases of HIV infection in Ukraine; in particular in 2010 almost 26% of confirmed cases of HIV infection were obtained as a result of clinical examinations (Dzhuzha, 2012). According to official statistics for the period 1987–May 2019, the country officially registered 341,084 cases of HIV infection among citizens of Ukraine, including 114,487 cases of AIDS and 49,751 deaths from AIDS. As of October 01, 2019, 142,076 HIV-infected citizens of Ukraine were under medical supervision in health care facilities (336.5 per 100,000 population), including 46,987 patients diagnosed with AIDS (111.3). The highest prevalence of HIV infection was registered in Odesa (898.3 per 100,000 populations), Dnipropetrovsk (792.6), Mykolaiv (743.5), Kyiv (479.0), Kyiv (447.9), and Kherson (420.1) and Chernihiv (420.4) regions (State Statistic Service of Ukraine, 2020).

METHODOLOGY

The methodology of the empirical part of our study is based on general scientific methods, the main of which is the method of systemic analysis that allowed to identify the social conditioning of the environment that affects the level of fluctuations in HIV/AIDS spread, its integration with background phenomena. Using logical and legal method the structure, dynamics, state, geographical distribution and social determination of the spread of HIV/AIDS as a criminal law phenomenon were considered. The comparative and legal method helped to examine the place and significance of the mechanism of combating the spread of HIV/AIDS in the general system of impact on crime. The statistical method was applied when examining the spread of AIDS in the regions of Ukraine, the statistics on the rates of HIV/AIDS in Ukraine, the ways of transmitting HIVS in Ukraine

RESULTS AND DISCUSSIONS

A slowdown in the spread of HIV has been recorded for the first time in the history of Ukraine since 2012. According to the Center for Public Health of the Ministry of Health of Ukraine, the number of new HIV cases decreased by 0.52% compared to the previous year. Six years ago, in 2012, the rate of the epidemic was already declining by 2%. However, with the onset of the large-scale humanitarian crisis in 2013–2014 the situation has deteriorated dramatically. It is impossible to compare statistics with the data from the preceding years after losing control over the part of our country. In 2016, a new statistical countdown began in Ukraine to assess the rate of spread of the HIV/AIDS epidemic (Olena Pinchuk Foundation, 2019) (Figure 1).



The rates of HIV in Ukraine (incomplete data for 2014-2105 in the Republic of Crimea, Donetsk and Luhansk regions)

FIGURE 1 THE RATES OF HIV IN UKRAINE

According to the Public Health Center of the Ministry of Health of Ukraine 18,098 new cases of HIV infection were registered in Ukraine in 2018 (compared to 18,193 cases in 2017), including 2,428 children under 14 years of age. A total of 333,716 new cases of HIV infection have been officially registered in Ukraine since 1987, and 48,456 people have died of AIDS in Ukraine. Dnipropetrovsk, Odesa, Donetsk regions, as well as Kyiv are the areas most affected by HIV (Olena Pinchuk Foundation, 2019) (Figure 2).



FIGURE 2 THE SPREAD OF AIDS IN THE REGIONS OF UKRAINE

The prevalence of AIDS is the highest in Odessa (291.9 per 100 thousand), Dnipropetrovsk (266.1), Mykolaiv (141.3), Kyiv (131.4) and Chernihiv (104.0) regions. The high level of AIDS is also in the Donetsk region (120.4 per 100 thousand). The information is provided without taking into account the Autonomous Republic of Crimea and Sevastopol, which do not provide data on epidemic statistics since April 2014. There are also no data on some months from Donetsk and Luhansk regions, since starting from summer of 2014 the data from these regions are not fully available. Ukraine remains the leader in Europe in the scale of the spread of HIV. UNAIDS expert's estimate that up to 240,000 people live with HIV in Ukraine, and only every second person knows about his (her) diagnosis. 144,633 HIV-positive patients are registered in Ukraine as at October 1, 2018 (State Statistic Service of Ukraine, 2020).

Ukrainians have been most often infected through unprotected sex since 2008. If 33% of people became infected through sexual contacts in 2005, in 2012 this percentage rose to 51%. In 2018, this indicator was 66 percent. Most cases of HIV infection in Ukraine are recorded among young people between the ages of 15 and 30 (Figure 3).



The ways of transmission of HIV (2018)

Sexual / homosexual From mother to the child Through blood Sexual / heterosexual

FIGURE 3 THE WAYS OF TRANSMISSION OF HIV (2018)

The number of HIV-positive people in Ukraine has been growing every year, but since 2005 the increase in new HIV cases (accelerating the epidemic) has been decreasing annually: in 2005+15.6% (compared to 2004), and in 2011+3.4% (compared to 2010).

In 2012, the HIV/AIDS epidemic slowed down for the first time in the history of Ukraine (according to official statistics); in 2012 the rate of HIV infection (number of new HIV cases) was lower than in 2011. This is the result of national programs for working with vulnerable groups and large-scale information campaigns on HIV/AIDS prevention.

Due to the reduction of AIDS programs in 2013-2017, the epidemic began to grow again. According to the experts, the epidemic situation in our country has deteriorated rapidly since 2014. One of the main indicators of the epidemic is the number of new HIV cases. This indicator increased by 6.6% in 2017 compared to 2016–this is in line with the dynamics of the epidemic,

which it was about 10 years ago. For the first time, the epidemic rate decreased (by 0.52%) in 2018, according to the new statistical base (i.e. excluding data from the Crimea and the areas of Donetsk and Luhansk regions, which currently are not under control of Ukraine).

Let us note that all this is happening against the background of a critical decrease in the population of our State, which was: in 1995–51 728 000, in 2007–49 430 000, in 2017–45 778 000, in 2018–45 633 600 (State Statistic Service of Ukraine, 2018), i. e. an annual population decline in Ukraine is, on average, from 200 000 to 370 000 people per year (Oleniuk, 2017).

It should be noted that the current trend of the increasing rate of HIV infection is inextricably linked with the moral degradation of society, its stratification, leveling the role of moral principles, exacerbation of social conflicts, worsening of the living conditions of a large part of the population and, consequently, a significant increase in marginal part of the population. Thus, despite the fact that the main "*destructive force*" of the HIV epidemic has been injecting drug use since the mid-1990s, the HIV environment among drug users has gradually spread to their sexual partners, which lead to an increase in the number of infected among pregnant women and their children (Zaporozhan & Ariaiev, 2004).

30–35% of virus carriers are the persons belonging to the privileged classes of society, the representatives of intelligentsia and the army; however, 20–25% are unemployed, i.e. vagrants, people who lead a parasitic lifestyle, 15-20% are alcoholics, drug addicts; 10% are people who lead immoral lifestyle, are engaged in prostitution and homosexuality, more than 10% suffer from various blood diseases and hemophilia. These individuals are single or from broken families (in 90% of cases). The largest number of this category of people is childless and almost twice less those who have children (compared to law-abiding citizens). Most often such persons have secondary education; with the increase in the level of education, decreases the percentage of HIV-infected people.

A significant percentage of virus carriers (over 75–80%) are males and only 20–25% is females. Analyzing the age of people who spread AIDS, it can be noted: in most cases these are people between the ages of 26 to 39 (63%); of 40 to 49 (25%), of 50 to 59 years (7%). Older people account for only 2%. As one can see, the pronounced risk group is mainly people in the most productive age between 20 and 50 (over 90%). Physicians have called this phenomenon the "age of potential danger" (Whiteside, 2016). And the most vulnerable age group is people between 18 and 25 (50–60%). Children living with HIV / AIDS account for 10-12%.

Comparing the data on the infection with HIV virus of people working in various sectors of the economy, we can see a significant proportion of such persons (up to 35%) in the area of consumer services and trade. Large industrial centers and port cities hold the primacy among the places of residence of these persons.

The great public danger is the spread of sexually transmitted diseases through prostitution. According to the study, 30.5% of surveyed prostitutes suffered from sexually transmitted diseases, with 23.9% of them–twice or thrice, and 4.7%-more than three times. Only 39.4% of patients knew who infected them (Belovolchenko, 2017). The results of the study show that about half of the respondents had sexually transmitted diseases, and about 2/3 of them suffered from syphilis (Habyany & Manuylskyi, 2017).

More than 350,000 men are infected by prostitutes every year. According to the researchers, about 30% of prostitutes have sex twice or thrice a week, 11% –daily, and 5% – several times a day. And this, in turn, increases the social danger of the sex business and the possibility of the spread of HIV (Antonian & Eminov, 2015).

In total, 85% of those infected are injecting drug users. About 10% of persons became infected through sexual contacts; 2.3% are HIV-infected children born from HIV-infected mothers. 574 HIV-positive children under the age of 12 were registered in 2018, of which 487 were born to an infected mother. The number of HIV-infected pregnant women is growing: 12 pregnant women were diagnosed in 1987–1994; 207 in 2005–2007; 344 in 2018 (WHO, 2019).

Around the half of all infections occur in the 15 - 24 age groups, according to WHO. However, in almost all parts of the world, the peak age of infection is lower for the girls than for the boys. 60% of all new HIV infections in many countries occur between the ages of 15 and 24, with the ratio of women to men being 2 to 1. The analysis of AIDS data from some African and Asian countries shows that young people women under the age of 25 represent almost 30% of AIDS cases for women and young men represent approximately 15% of male AIDS cases (WHO, 2019; Dzhuzha & Ivashchenko, 2000). Women of this age category are most frequently involved in sex business. Studies have shown that sex workers are several times more likely than other people to have sexually transmitted diseases and AIDS. The first victim of AIDS, a resident of former Leningrad, was engaged in prostitution. The large number of partners of only one prostitute dramatically increases the risk of infection both for her and for those who have sexual intercourse with her, which, given the rapid spread of the disease, is only a matter of time. In Greece, for example, 88% of surveyed prostitutes and 28% of their clients are infected (Dzhuzha & Ivashchenko, 2000). In Kinzas (Zaire) 27% of prostitutes are infected, Nairobi (Kenya)-66%, Butari (Rwanda)-28%. At the same time, in such countries as Hong Kong and Singapore, the rate of HIV infection does not exceed one case per thousand (WHO, 2019). About 30% of prostitutes between 13 and 19 (many of whom are engaged in forced prostitution) in Cambodia are infected. Up to 80% of African and up to 40% of American prostitutes are already infected with the deadly virus, according to official figures. Besides, some prostitutes have their own families and children, who are also at risk. Studies show that many of them work as nurses in preschools, in trade and catering systems, and in other areas of public service. They also put a wide range of people at risk of infection in these institutions, not counting sexual partners.

It was found in the course of our own research that despite the fact that the proportion of offenses that fall under the signs of the Articles 130, 131, 132 of the Criminal Code of Ukraine is relatively insignificant and averages 1.5% in the general structure of crime. The study confirmed their increased criminogenic role. Most often it is manifested:

- 1. In the social and moral degradation of the person (alcoholism, drug use, prostitution, committing offenses, severing social ties, etc.);
- 2. In the commission of other dangerous crimes (as a rule, these are crimes against morality, life and health of citizens; they account for more than 20–25% of all crimes);
- 3. In a negative impact on other unstable members of society;
- 4. In a careless, dishonest attitude to the performance of the official duties;
- 5. In violation of basic human rights, which consist in the lack of confidentiality both in relation to virus carriers and AIDS patients, and in relation to their relatives and friends?

The composition of crime enshrined in Art. 130 of the Criminal Code of Ukraine (infection with human immunodeficiency virus or other incurable infectious disease) is the dominant in the structure of the above crimes; its ranges from 45.5% to 55%.

The incidence of HIV in Ukraine increased until 2013, when the country registered the largest number of HIV-infected people (21,631). A further significant decrease in the incidence of HIV infection in 2014 and 2015 is primarily due to the lack of statistics on the Autonomous

Republic of Crimea and part of the territory of the anti-terrorist operation. The number of cases of HIV infection increased in subsequent years in the country (from 15,869 cases in 2015 to 18,194 in 2017), the incidence rate in 2017 was 42.8 per 100 000 population, which is 7% more than in 2016.

The differentiation of regions according to the rates of HIV infection allowed classifying the regions of AIDS prevalence as follows: the first group includes the regions of Ukraine where HIV-infected people have not yet been identified. These are the ones that belong to the Northwest Economic Region, the most safe in criminal matters; the second group includes the areas with a low level of HIV infection (0.5-0.83), which are the part of the North-Western and Dnieper economic regions; the third region includes areas with the average level of HIV infection (1.22–1.93), which are located in the Donetsk-Dnieper and Western regions; the fourth group are the most criminogenic unfavorable areas with a high rate of HIV infection (5.33–5.77). These are the city of Kyiv, the Southern Economic Region, some territories of the Donetsk-Prydniprovsky region. There is a wide network of resorts, ports, rest homes in these regions. Kyiv is one of the largest industrial centers, where many cultural and educational, administrative and diplomatic institutions are situated. These areas are crossed by railways and highways of national importance, and therefore the risk of HIV transmission is increasing, to which special attention should be paid. At the same time, the regions located far from the large industrial centers of Ukraine with a predominantly rural population (the so-called non-urbanized agricultural areas), today have a more favorable epidemiological situation regarding HIV infection.

CONCLUSION

The spread of AIDS on the territory of Ukraine is to some extent explained by the following factors: firstly, HIV and AIDS are the problem of more urban than rural areas; secondly, the spread of AIDS is closely linked to the life of resort towns, which are characterized by the development of a "*leisure industry*" that increases the influx of immoral population. There are a lot of people among the population of these regions who are not engaged in socially useful activities and easily come into contact with visiting tourists.

The differentiation of regions of Ukraine according to HIV infection rate of citizens makes it possible to determine the oblasts with the largest number of persons infected with the virus. These are Odesa, Mykolaiv, Kharkiv, Lviv, Zakarpattia regions, Kyiv and the Republic of Crimea. The difficult epidemiological situation of AIDS in these regions is due to the interaction of the following factors: firstly, these are regions where the tourism is developed, in particular intourism and active migration processes. Besides, they are the centers of mass gathering of people due to the development of trade with other countries; secondly, Odesa, Mykolaiv, Zakarpattia, Kharkiv and Lviv regions and, especially the Republic of Crimea, are in the forefront in terms of the number of people who use drugs; thirdly, through a developed network of ports, resorts, rest homes, entertainment establishments, these regions become places of concentration of criminogenic elements and people who lead immoral lifestyle; and fifthly, there is the best anonymous HIV testing, better identification of people from "high-risk groups" (homosexuals, prostitutes, drug addicts, etc.) in Kyiv and Odesa.

REFERENCES

- Antonian, Y.M., & Eminov, V.Y. (2015). The identity of the offender: Criminological and psychological study: monograph. Moskow: Norma, Infora-M.
- Barber, B. (2013). *Knowledge and attitudes toward HIV/AIDS and HIV law among probationers and parolees in Alabama*. Master's thesis. University of Alabama Libraries.
- Belovolchenko, H. (2017). Inconvenient problem: What we need to do with prostitution in Ukraine (survey). Dyvys.info. Retrieved April 26, 2020 from https://dyvys.info/2017/03/15/nezruchna-problema-shho-varto-robyty-z-prostytutsiyeyu-v-ukrayini-opytuvannya/
- Brown, M., Serovich, J., & Kimberly, J. (2018). Perceived intentional transmission of HIV infection, sustained viral suppression and psychosocial outcomes among men who have sex with men living with HIV: A crosssectional assessment. Sex Transm Infect, 94(7), 483–486.
- Burris, S., Beletsky, L., Burleson, J., & Case, P. (2007). Do criminal laws influence HIV risk behavior? An empirical trial. *Arizona State Journal*, *39*(1), 467–520.
- Dzhuzha, O.M. (2012). Drug abuse treatment: Textbook. Kyiv: KNT.
- Dzhuzha, O.M., & Ivashchenko, V.O. (2000). *The problems of combating sex business (forensic and criminal law aspects): A scientific and practical guide*. Kyiv: National Academy of Internal Affairs.
- Habyany, A.A., & Manuylskyi, M.A. (2017). The price of love (examination of prostitutes in Georgia). *Sociological research*, *6*(1), 61–62.
- Law of Ukraine. (2010). On prevention of Acquired Immune Deficiency Syndrome (AIDS) and social protection of population of December, 23, no. 2861-VI. Retrieved April 26, 2020 from https://zakon.rada.gov.ua/laws/show/2861-17#Text
- Law of Ukraine. (2012). Criminal code of Ukraine of April 05, no. 2341-III. Retrieved April 30, 2020 from https://zakon.rada.gov.ua/laws/show/2341-14#Text
- Olena Pinchuk Foundation. (2019). *AIDS in Ukraine: Statistics*. Retrieved April 23, 2020 from http://www.antiaids.org/ukr/news/aids_stat.html
- Oleniuk, L. (2017). *How many people died of AIDS in Ukraine: Horrible statistics?* 24 Health. Retrieved April 25, 2020 from https://24tv.ua/health/snid_v_ukrayini_statistika_skilki_lyudey_pomerlo_vid_vilu_n896213
- Order of the President of Ukraine. (2015). *National security strategy of Ukraine of May 26, 2015 no. 287/2015*. Retrieved April 23, 2020 from https://zakon.rada.gov.ua/laws/show/287/2015
- Platt, L. (2018). Associations between sex work laws and sex workers health: A systematic review and metaanalysis of quantitative and qualitative studies. *PLoS Med*, 15(12), 1-11.
- State Statistic Service of Ukraine. (2020). *Demographic and social statistics/Population and migration*. Retrieved April 25, 2020 from http://www.ukrstat.gov.ua/
- Whiteside, A. (2016). HIV & AIDS: A very short introduction. Oxford: Oxford University Press.
- WHO. (2019). *HIV/AIDS: Fact-sheet*. Retrieved April 26, 2020 from https://www.who.int/ru/news-room/fact-sheets/detail/hiv-aids
- Zaporozhan, V.M., & Ariaiev, M.L. (2004). HIV-infection and AIDS. Kyiv: Zdorovia.