

## **Modern Illegal Drug Business in Ukraine: Multidisciplinary Study of the System of Prevention and Countermeasures Against the Legalization of Income (Money Laundering) Obtained by Criminal Means**

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**Abstract.** Established that the modern illegal drug trade is an integral part of transnational organized crime, involving the laundering of proceeds obtained through criminal activities. A comprehensive multidisciplinary study was conducted to evaluate the effectiveness of Ukraine's efforts to combat the contemporary drug trade and to analyze the international system for preventing and countering the legalization of illicit income (money laundering). This study confirmed the connection between transnational organized crime and the laundering of money derived from the illegal trafficking of banned psychoactive substances. The research emphasized the critical need to enhance the criminal and legal frameworks, improve medical and pharmaceutical support, and expand social and economic assistance. By examining the global experience in combating organized crime and drug-related offenses, the study provided valuable insights into effective strategies. Particular attention was given to forensic pharmaceutical practices related to the detection of prohibited psychoactive substances and the legalization of income from their illicit trade. To address these challenges, the study recommends increasing the criminal liability for members of organized drug trafficking gangs and suggests specific amendments to articles 115, 305, and 307 of the Ukrainian Criminal Code.

Furthermore, a detailed analysis of the European Union's roadmap and international cooperation efforts in combating the illegal circulation of prohibited psychoactive substances and the laundering of illegal profits was conducted. Normative initiatives aimed at amending Article 209 of the Ukrainian Criminal Code were developed and proposed. The study indicated the importance of implementing the EU Roadmap measures in Ukraine to foster cooperation among various private and public institutions. This collaborative approach aims to coordinate joint actions, conduct research, and organize conferences and training sessions based on the EMCDDA European prevention program and UN initiatives. The study underscores the relevance, timeliness, and practical significance of engaging the international community, including scientists, medical professionals, pharmacists, students, the public, legal experts, law enforcement, and government authorities. Through this multidisciplinary approach, the study seeks to promote a more effective and coordinated response to the challenges posed by the modern drug trade and its associated criminal activities.

**Keywords:** illegal drug business, psychoactive substances, forensic expertise, criminal law, pharmaceutical law, medical law.

**Introduction.** Modern drug business is a component of transnational organized crime, legalization of income (money laundering) obtained by criminal means [1-3]. It includes all stages of illegal circulation of psychoactive substances of various classification and legal groups (narcotics, psychotropic substances and precursors) [4]. Illegal production in drug laboratories, storage, accounting, transportation, sale of large batches, sale-street distribution (in small doses), through cafes, restaurants, bars, incl. the Internet network (bookmarks) of psychoactive substances, the use of payment systems creates a multibillion-dollar international criminal drug industry, which involves a wide range of Ukrainian citizens, both distributors and consumers, which is a threat to public health and national security [5-20].

The COVID-19 pandemic has demonstrated the speed with which criminal groups can change their "working" methods to take advantage of new opportunities to deceive and abuse the trust of individual citizens, businesses, institutions and companies, selling "goods" every day to steal millions of dollars and euros.

In Ukraine, the use of marijuana and acetylated opium remains significant, as well as the illegal cultivation of drug-containing hemp and poppy, which is the subject of increased interest of organized criminal groups. According to Vepryuk Yu.M. [21]:

- the total amount of injection drug consumption has stabilized (according to available estimates, there are 70,000 injection drug users on dispensary records), the number of abuses of pharmaceutical drugs containing opioids and amphetamine-type stimulants has increased sharply;
- according to the conclusions of international experts, the number of new registered cases of HIV/AIDS among injecting drug users in Ukraine is much higher than in other countries of the European Union.

As UN Secretary General António Guterres notes, transnational organized crime is a multibillion-dollar industry that is interconnected and encompasses [22, 23]:

- ✓ illegal financial flows, illegal trade in firearms and human trafficking;
- ✓ illegal actions with prohibited psychoactive substances, natural resources, wildlife and other goods;
- ✓ conflicts that feed each other, undermining the authority and effectiveness of state institutions, eroding the rule of law and destabilizing law enforcement structures.

The consequences of transnational organized crime are the weakening of the system of state and local government (self-government); corruption and lawlessness; open violence; increase in morbidity, disability, mortality and destruction; increased financial and economic burden on the medical and social spheres.

It should be noted that transnational organized crime in 2009 was estimated at 870 billion dollars, which is equal to 1.5% of the world's gross domestic product, which is more than 6 times the amount of official development assistance for 2009 and is equivalent to almost 7% of the world's goods export [24]. Every year, as a result of the actions of organized crime during violence, a large number of citizens die, receive physical injuries of varying degrees of severity, and their lives and health, rights and freedoms are destroyed [25].

According to experts, the drug business, which is a component of transnational crime in the world, due to the illegal circulation (production, sale, trade, etc.) of prohibited narcotic drugs and psychotropic substances, is estimated at 400 billion dollars every year, which is 8%-10% of the total world trade [26]. In turn, the organizers (leaders) of the drug business understand that they must convert the monetary gains from their illegal activities into income. Conduct money laundering operations to invest the proceeds of their illegal drug operations. Avoid detection, seizure and confiscation of their assets by law enforcement, prosecutorial and judicial authorities. There is a cause-and-effect relationship between the drug trade, the illegal circulation of prohibited psychoactive substances, the spread of corruption and the strengthening of the fight against money laundering. The influence of criminal-legal, banking-economic, medical-pharmaceutical and social-rehabilitation consequences for the development of the state and society, the activities of law enforcement and judicial bodies, the effectiveness of the work of health care institutions, pharmacies, treatment of patients with drug addiction, and drug addiction is of decisive importance, HIV/AIDS, tuberculosis, psychoneurological, oncological and other health disorders in accordance with ICD-11 [27-37].

The modern study of the problem of combating drug crime, the investigation of separate criminal proceedings related to organized crime, murders, bodily injuries of various degrees of severity, sale (illegal circulation) of particularly dangerous narcotics and psychotropic substances, hooliganism, robberies, thefts, traffic offenses etc., committed under the influence of psychoactive substances (alcohol, nicotine, psychoactive drugs), improvement of the legislation and normative legal acts of Ukraine in the field regulating the criminal-legal, medical-pharmaceutical and socio-

economic system of legal relations "criminal/patient- investigator-prosecutor-victim/patient-forensic expert (criminologist)-lawyer-judge", scientific and practical research and publications of Shapovalova V.O. were devoted to the level of medical care and pharmaceutical support of criminals-sick and victim-patients of different age groups and contingents. Khalin M.M., Galavan Z.S., Lynskii I.V., Petrenko S.L., Nikonov M.M., Sosin I.K., Kuzminov V.N., Minko O. I., Nehretskii S.M., Vasyna Y.V., Gudzenko A.O., Shapovalov V.V., Osyntseva A.O., Abrosymov O.S., Chuiiev Yu.F. etc. [38-47].

Thus, organized criminal groups that are involved in transnational organized crime – from criminal networks to rebel groups and terrorist organizations - are united by a common thread: money [48]. All of the crimes described in Global Financial Integrity's new report, Transnational Crime and the Developing World, are largely motivated by profit. The average annual retail value of transnational crime worldwide is from 1.6 trillion. up to 2.2 trillion dollars US based on 11 "industries": counterfeiting and piracy, drug trafficking, illegal logging, human trafficking, illegal mining, illegal fishing, illegal wildlife trade, crude oil, theft, small arms and light weapons trade, illegal trade organs and trade in cultural values. Transnational crime is more than the products and individuals involved in it.

Up to now, modern multidisciplinary studies of the drug-trafficking system in Ukraine based on the study of ways to prevent and counteract the legalization of income (money laundering) received by criminals for the improvement of modern criminal-legal, medical-pharmaceutical and socio-economic legislation and regulatory legal acts have not been conducted in the world. Therefore, the author of the article focused on the study of the modern drug business in Ukraine with the help of a multidisciplinary study of the system of prevention and countermeasures against the legalization of income (money laundering) obtained through criminal means.

**The purpose of the study** was to conduct multidisciplinary research on the analysis of the modern illegal drug business in Ukraine and approach the development of a comprehensive approach to the system of preventing and combating the legalization of criminal proceeds.

**Materials and methods.** Literary sources were analyzed on the topic of the research – interdisciplinary organizational and legal, criminal and legal, forensic and pharmaceutical, forensic and medical, forensic and narcological, forensic and psychiatric, forensic, financial and economic study of the level of countermeasures against the modern drug business in Ukraine. The system of preventing and countering the legalization of income (money laundering) obtained by criminal means has been studied. Systematized methods of combating the spread of disease among all strata of the population for drug addiction, drug addiction, HIV/AIDS, fatalities (suicides), bodily injuries of varying degrees of severity and other psychoneurological and concomitant diseases in accordance with ICD-11 [6-18, 23-30].

Research methods were documentary, regulatory, comparative, graphic, retrospective, systematic, tabular, and forensic pharmaceutical.

The study of the article is a fragment of scientific research works: Private Scientific Institution "Research University of Medical and Pharmaceutical Law"; Lviv Medical University on the topic "Improving the system of drug circulation during pharmacotherapy on the basis of evidentiary and forensic pharmacy, organization, technology, biopharmacy and pharmaceutical law" (state registration number 0120U105348, implementation period 2021-2026); of the Kharkiv Medical Academy of Postgraduate Education on the topics "Improvement of the organizational and legal procedure for providing drugs to patients from the standpoint of forensic pharmacy, pharmacy organization and management" (state registration number 0116U003137, implementation period 2016-2020) and "Pharmaceutical and medical law: integrated approaches to the circulation system drugs from the position of forensic pharmacy and organization (state registration number 0121U000031, implementation period 2021-2026); Luhansk State Medical University on the topic "Conceptual interdisciplinary approaches to pharmaceutical supply and availability of medicines taking into account organizational-legal, technological, analytical, pharmacognostic, forensic and pharmaceutical, clinical and pharmacological, pharmaco-economic, marketing, social and economic competences (number state registration 0123U101632, term 2023-2027).

**Results and discussion.** On the basis of multidisciplinary studies of the modern drug business

(money laundering) in Ukraine, it was established that the entire system of criminal and legal combat, medical and pharmaceutical support (treatment), social and economic assistance and prevention (laws, regulatory acts, law enforcement actions) needs improvement, forensic experts, state authorities and local governments, lawyers, etc.), namely:

- optimization of the operative search and investigative work of law enforcement agencies regarding the prevention and countermeasures against the legalization of income (money laundering) obtained by criminal means during the illegal circulation of prohibited narcotic drugs, psychotropic substances and their consequences related to the distribution;
- monitoring the effectiveness of the health care sector in general, and individual health care institutions financed from the budget of the state or local self-government bodies, regarding the level of morbidity reduction (dynamics, ratio of the number of patients, funding, drugs, work capacity, mortality, etc.);
- market analysis of modern drugs for high-quality and affordable pharmaceutical supply of all contingents of patients;
- an objective, transparent, comprehensive and complete study of the effectiveness of the methadone (buprenorphine) program in Ukraine (the ratio of the number of patients (their age, region, those who underwent treatment and those who did not, criminal unit, latency), treatment effectiveness, lethality, work capacity, etc.);
- study of proper qualifications (for example, according to Articles 307 and 208 of the Criminal Code of Ukraine) and the commission of other criminal offenses, namely: murder, theft, robbery, rape, traffic accidents, hooliganism, causing bodily injuries of varying degrees of severity, circulation of falsified medicines, etc.;
- the effectiveness of the work of state authorities and local self-government bodies at the level of regions and cities (departments (administrations), preschool, school, higher education institutions, sports sections, public organizations, law enforcement agencies in the direction of countering drug crime, the timeliness of providing medical, pharmaceutical, social and economic assistance, efficiency and availability of sports, healthy lifestyle, etc.

The integration processes of Ukraine into the countries of the European Union require the implementation of legislation and regulatory acts regarding the effective investigative, investigative and expert work of law enforcement officers in countering the activities of members of organized crime, preventing and countering the legalization of proceeds (money laundering) obtained through criminal means. To resolve these issues and strengthen international police cooperation, country delegates gathered at the 50<sup>th</sup> Interpol European Regional Conference (more than 140 participants from 53 countries in Europe and beyond took part). Widespread criminal threats from the trade in narcotic drugs and psychotropic substances, cybercrime was discussed [49]. It was stated at the conference that:

- organized criminal groups due to the trade in prohibited psychoactive substances increasingly pose a direct threat to the state authorities in many countries; there is evidence that the level of violence associated with these criminal networks is increasing;
- last month, Interpol announced its largest-ever firearms operation, arresting more than 14,000 suspects in Central and South America and seizing an unprecedented \$5.7 billion in illegal drugs;
- during the last five years, trade (in narcotic drugs) and their consumption have increased by an order of magnitude, Europe is one of the main transit and destination markets;
- the trend of confiscation of prohibited psychoactive substances at European borders and ports continues and the corresponding increase in violent crimes, corruption and money laundering on an unprecedented scale;
- the global scale of many organized crime networks, often spanning several continents, has highlighted that international cooperation through Interpol is often the only means for police in Europe and other regions to bring fugitives to justice or gather vital intelligence;
- in addition to illegal drug trafficking, the results of Interpol's report on global crime trends for 2022, in which the police in 195 member countries of the organization were interviewed, show



that money laundering and cybercrime are also the main problems of European law enforcement agencies;

- money laundering ranks second among the criminal trends that member countries of the region most often indicate as a "high" or "very high" threat, and financial fraud ranks very high;
- the use of online tools by criminals to carry out financial fraud schemes has also spread rapidly in recent years, especially since the COVID-19 pandemic;
- it is worrying that 76% of police respondents from Europe expect online child sexual exploitation and abuse to increase or significantly increase in the next three to five years;
- in 2022, new historical peaks were reached for records, searches and requests in Interpol databases from European member states. In the last year alone, searches in Interpol databases by European law enforcement agencies have increased by almost a third, which emphasizes the fundamental place that Interpol's capabilities occupy in the approaches of European countries to ensuring the safety of their communities.

As Jürgen Stock, Secretary General of Interpol, emphasizes in the previous report Interpol Global Crime Trend (2022, aggregated data from 195 Interpol member countries, information and detailed analysis from data of the organization and other sources), understanding and prevention of crime trends is the basis of policing, offers an unparalleled picture of the global crime landscape seen by police around the world, namely [50, 51]:

- ❖ financial and cybercrimes are the top criminal threats in the world and are also predicted to increase in the future;
- ❖ the findings, which are part of Interpol's first-ever Global Crime Trend report, showed that more than 60% of respondents rated crimes such as money laundering, ransomware, phishing and online fraud as serious or very serious threats;
- ❖ more than 70% of respondents expect the number of crimes such as ransomware and phishing attacks to increase or significantly increase in the next three to five years;
- ❖ financial crime as a service and cybercrime are invariably linked, as a significant amount of financial fraud occurs through digital technologies (making them "cyber-enabled");
- ❖ cybercriminals also depend on financial fraud to launder their illicit proceeds;
- ❖ while "cybercrime as a service" is a well-known criminal concept, the pandemic has also accelerated the emergence of "financial crime as a service", including digital money-laundering tools, which can be critical for criminals looking to get money;
- ❖ respondents named money laundering as the number one criminal threat in the Interpol report, with 67% rating it as "high" or "very high" on their list;
- ❖ ransomware was the second-ranked threat at 66%, and the threat of crime is expected to grow the most (72%);
- ❖ the trade (sale) of prohibited narcotic drugs has traditionally dominated the lists of criminal threats, in recent years financial crime related to cyberspace has increased rapidly, especially during the global pandemic of COVID-19;
- ❖ during and after the COVID-19 quarantine, the pace of digitization accelerated, professional and personal activities were carried out almost exclusively from home and on the Internet;
- ❖ crime has moved online, financial cybercrime (business email compromise, CEO fraud, e-commerce fraud, investment fraud) has increased in almost every region;
- ❖ modern ransomware attacks target "big game" targets, including large corporations, governments, and critical infrastructure;
- ❖ to maximize damage and illicit profits, strategies have shifted to techniques such as double extortion, where victims' data or files are simultaneously encrypted and made public, increasing the risks of business disruption and reputational damage.

Separately, Interpol established its Center for Combating Financial Crimes and Corruption (IFCACC) in 2022 to provide a coordinated global response to the exponential growth of transnational financial crime. The effectiveness is confirmed by the fact that just last month during an operation coordinated by IFCACC there were [52]:

- arrested 75 suspected members of West African financial crime groups in 14 countries;

- intercepted more than 1 million US dollars;
- invaluable assets were discovered and scouted.

The European Union is a pioneer in the field of issuing Directives to combat the laundering of money obtained from the cocaine trade. For example, returning dirty money to the legal economy. This is facilitated by the main European financial centers (the City of London, Italian magistrates). Such centers are considered as "states within a state" – fiscal havens for "legalized fraud" [53].

Italy's experience in the fight against organized crime resonates more and more in the Belgian city of Antwerp, which in recent years has become the new nerve center of European drug trafficking. Tens of billions of euros from the trade in prohibited psychoactive substances flow into the legal economy of European countries every year. Investigators are increasingly looking at Italy's anti-Mafia approach in the 1980s and the revival of Belgium's anti-drug strategy. As Judge Giovanni Tartaglia Polcini, a member of the scientific committee of the Italian research institute Eurispes, noted in *Le Soir* [53]:

- Italy has become a superpower in the fight against the mafia and drug trafficking;
- the "Falcone philosophy" (named after the Italian judge Giovanni Falcone, whose mission in life was to fight the mafia) is based on a multi-level approach: a systematic and unified vision of fighting the mafia phenomenon. This fight is facilitated by the exchange of information between different investigating judges, cooperation between the justice system, the customs and financial police, and an effective system of protection for those who assist the police. Those caught in the trade face extremely harsh prison terms;
- to effectively combat transnational crime and drug trafficking (the mafia phenomenon), technical assistance between European capitals has been activated. The stakes are high and the urgency of an effective preventive and repressive response from European authorities is increasingly critical. Mafias are developing and becoming stronger because criminal organizations have also realized the profit "revolution" brought about by the rise of synthetic drugs, the production of which does not depend on the sowing and harvesting cycles of coca and poppy leaves;
- the level of complexity of the processes of laundering money obtained from the circulation of prohibited psychoactive substances is increasing with the growing investments of drug cartels using cryptocurrencies and informal international payment and exchange systems;
- in Northern Europe, there is an underestimation of the mafia phenomenon, as if it is a problem only in Italy [53];
- mafias operating in Belgium or the Netherlands should no longer be considered foreign elements. They are well-structured criminal groups that are rooted in the territory, infiltrating, corrupting and relying on a network of local accomplices. These organizations thrive in times of economic crisis and have benefited from the upheavals associated with the COVID-19 pandemic [53];
- drug seizures and prison terms alone are not enough;
- the priority should be to break up the financial empires behind the drug cartels, confiscate their illegal assets and reuse the confiscated funds for social projects, as Italy is doing. This method "makes the fight against mafia organizations visible and financially "strangles" the enemy" [53].

Analyzing some characteristics of drug crime in Ukraine, Politova A.C. came to the following conclusions [54]:

- ✓ the presence of official statistical indicators, which show a decrease in the level of drug crime, does not reflect the actual state of committing crimes of this group and proves the latency of these offenses;
- ✓ the most widespread crimes in the field of illegal circulation of narcotic drugs, psychotropic substances, precursors: illegal production, manufacture, acquisition, storage, transportation, forwarding or sale of narcotic drugs, psychotropic substances, with the purpose of sale (Article 307 of the Criminal Code of Ukraine) and without the purpose of sale (Article 309 of the

Criminal Code of Ukraine), as well as planting or growing hypnotic poppy or hemp (Article 310 of the Criminal Code of Ukraine);

- ✓ the statistics of those convicted of drug-related crimes indicate the deterioration of the criminogenic situation in institutions for the execution of punishments, in which the goal of punishment is not achieved – the correction of convicts, as well as the prevention of new crimes by both convicts and other persons;
- ✓ despite the significant regulatory and legal framework for combating drug crime in Ukraine, there are no effective regional crime prevention programs in the regions with the highest concentration of drug crimes per 100,000 population;
- ✓ it is considered necessary to conduct a further study of the state of combating drug crime in Ukraine with the aim of developing a mechanism to combat this phenomenon.

Thanks to the cooperation of the government of Ukraine with the countries of the European Union and INTERPOL, the State Bureau of Investigation (SBI) was created. The SBI, in cooperation with the Prosecutor General's Office, actively opposes attempts by the drug mafia to organize channels of illegal circulation (transportation, forwarding, supply, storage, sale, advertising, etc.) of prohibited narcotic drugs and psychotropic substances in Ukraine. Special attention is paid by SBI employees to the frontline areas. Timely liquidation of the drug business means thousands of saved lives, health (prevention of disability, preservation of the gene pool, promotion of life expectancy) of the most able-bodied part of citizens, including military personnel. Thus, the analysis of the identified organized activities of criminal groups indicates that they are often assisted by representatives of Ukrainian law enforcement agencies. During 2023, SBI employees discovered, documented and neutralized several powerful drug syndicates, stopped the activities of drug laboratories for the production of prohibited psychoactive substances, and blocked the channels of entry of particularly dangerous narcotics across the state border into the territory of Ukraine. At the same time, in 2023, employees of the SBI conducted the following work on countering organized drug trafficking, namely [55-57]:

- 728 criminal proceedings were investigated on the facts of illegal drug trafficking;
- 187 indictments regarding the illegal circulation of narcotic drugs, psychotropic substances and precursors were sent to the court;
- based on the materials of the said investigations, the courts issued verdicts against 77 citizens who participated in the illegal circulation of prohibited psychoactive substances;
- 53 citizens were detained during organized procedural actions;
- 217 citizens were notified of suspicion;
- data are not provided on the initiation of criminal cases under Art. 209 of the Criminal Code of Ukraine – legalization (laundering) of property obtained by criminal means, i.e. during drug dealing;
- the following are the most high-profile criminal cases exposed by SBI employees:
- neutralized the criminal activity of 2 drug gangs in the Dnipropetrovsk region, which sold 5 million hryvnias (10 million hryvnias) worth of narcotics to Ukrainian citizens in a month. In addition, a drug syndicate operated directly in the regional center, earning at least 1.5 million hryvnias per month. for the sale of narcotics to citizens of different age groups;
- one of the organizers of an extensive drug gang was arrested directly during the sale to a citizen of 24 kg of narcotic drugs worth more than 11.4 million UAH., the criminals sold narcotic drugs in the territory of Cherkasy, Ternopil and Volyn regions;
- one of the exposed drug gangs established a large-scale production of narcotics with a monthly turnover of tens of millions of hryvnias, sold 250,000 doses of narcotic drugs worth about 70 million hryvnias to drug addicts in a month;
- a separate drug cartel, which was exposed in Prykarpattia, sold to the population 10 million hryvnias of narcotics prohibited for circulation in Ukraine every month.

In 2023, more than 179 kg of prohibited narcotic drugs and psychotropic substances (Fig. 1), precursors (33.5 kg and 9.3 liters) and 30.4 kg of potent medicinal products worth 61 million hryvnias, namely [58]: mephedrone 126 kg (70.3%); amphetamine 30 kg (16.7%); PVP substances 6 kg (3.3%);

cocaine 2.5 kg (1.4%); methadone 1.9 kg (1.2%); other prohibited psychoactive substances 12.6 kg (heroin, methadone, tramadol, poppy straw, PVP salts) - 7.1%; potent medicines 30.4 kg; precursors 33.5 kg and 9.3 liters.

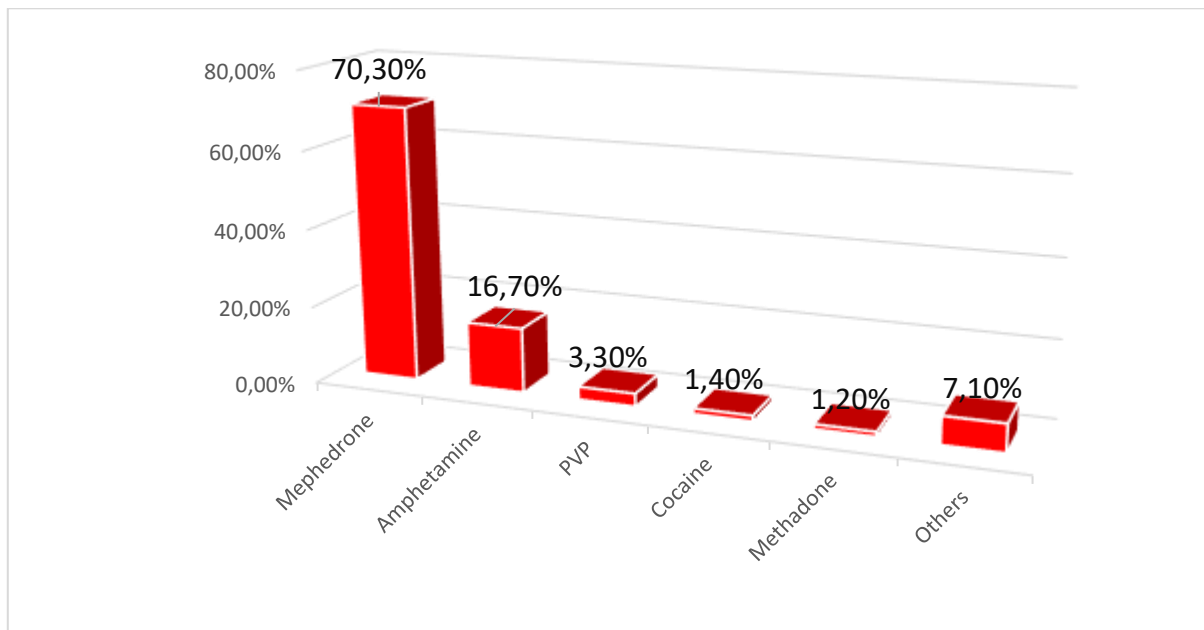


Fig. 1. Prohibited psychoactive substances removed from illegal circulation [58].

As the Minister of Internal Affairs of Ukraine, Ihor Klymenko, stated in an interview with the TV channel Rada during the all-Ukrainian telethon "One News" [59], "...in any country that has social and economic problems, drug addiction ranks first. We understand this, which is why, together with our partners, we have updated the unit of the department for combating drug crime, and its attention is directed primarily to large criminal organizations that directly affect the production and distribution of narcotics, and we conduct them, starting from the border...".

The main results of the work of the National Police of Ukraine in 2023 in combating drug crime were:

- 31,890 open criminal proceedings;
- 15,330 citizens were declared suspicious;
- more than 2.4 tons of narcotic drugs, psychotropic substances and precursors seized from illegal circulation;
- in the amount of 60 million UAH imposed arrests on the property of citizens-criminals-drug dealers;
- data are not given on initiation of criminal cases under Art. 209 of the Criminal Code of Ukraine – legalization (laundering) of property obtained by criminal means, that is, during the drug trade.

According to the results of forensic pharmaceutical research [60-73], the reduction in the level of morbidity among citizens is in the sphere of the effectiveness of the work of the SBI with the participation of operatives of the Security Service of Ukraine, investigators and forensic experts of the territorial divisions of the National Police of Ukraine under the procedural guidance of prosecutors of all levels, which is confirmed examples from forensic pharmaceutical practice (Nos. 1-6).

*Example from forensic pharmaceutical practice No. 1.* The investigator of the Shevchenkivskiy National Police Department in Kyiv, under the procedural leadership of the Shevchenkivskiy District Prosecutor's Office of the city of Kyiv, exposed and notified the suspicion of 4 citizens in the illegal acquisition and storage for the purpose of sale of particularly dangerous psychotropic substances and narcotic drugs, committed by prior conspiracy by a group of persons under part 2 of Art. 307 of the Criminal Code of Ukraine [74].



During the pre-trial investigation, it was established that on March 22, 2024, in the city of Kyiv, the operative unit of the National Police in the city of Kyiv detained a group of suspects who established a channel for the supply of narcotic drugs and psychotropic substances to the capital and organized activities for their illegal sale in small batches through Telegram channels. During the arrest and search, the investigators and operatives seized about 4.0 kg of alpha PVP salts from the criminals; 2.5 kg of amphetamine; 0.20 kg 4MM; 0.10 kg of cannabis; 50 MDMA pills; 20 "brands" of LSD; means for packaging, scales for weighing and tools for the use of prohibited psychoactive substances. The value of narcotics and psychotropic substances seized from illegal circulation is about 3.5 million hryvnias. The members of the group acted according to the plan and division of functions: the 1st suspect provided work with clients; 2nd – in his own apartment, he organized a warehouse for circulation (accounting, transportation, storage, sales) - packaging of large batches of "goods"; The 3rd and 4th criminals transported (stored, accounted, etc.) home small batches of prohibited psychoactive substances ready for sale, and then sold them to citizens suffering from drug addiction. Detainees have been notified of the suspicion and the question of choosing preventive measures in the form of detention is being resolved. Seized items and physical evidence were sent for forensic and pharmaceutical examination to the Kyiv Expert Center of the Ministry of Internal Affairs of Ukraine, in addition, other forensic expertise was assigned to the case.

*Example from forensic pharmaceutical practice No. 2.* The SBI investigator under the procedural leadership of the Sumy Regional Prosecutor's Office notified the organizer and 2 of his accomplices of the suspicion of illegal acquisition, storage for the purpose of sale, as well as illegal sale of narcotic drugs and psychotropic substances committed by prior conspiracy by a large group of persons according to part 2 of Art. 307 of the Criminal Code of Ukraine [75].

During the pre-trial investigation, it was established that on March 13, 2024, in the city of Sumy, SBU employees, in cooperation with the Security Service of Ukraine (SSU), exposed the head of a sector of one of the law enforcement agencies of Sumy Oblast, who was trying to start the sale of psychotropic substances and narcotic drugs (methadone, PVP salts), which he bought through his own channels, and after packaging, he resold the said means to drug addicts. Despite his conspiracy, the SSU and the SBU documented criminal activity and stopped plans to develop the drug business. As it was established, the law enforcement officer was helped by 2 local residents, who packed the means and substances and met with the customers. The law enforcement officer himself, the organizer of the drug trade, held a leading position in the department for combating drug trafficking; used access to official information regarding planned operational measures, which contributed and helped him to conceal (conspire) his own criminal activities; analyzed the results of the first sales (sales) to citizen-consumers of psychoactive substances, earning almost 50 thousand hryvnias, planned to increase sales volumes and receive more income from the drug business; in order to implement the plans, the law enforcement officer even began to look for a third assistant. After the sale of another batch of narcotics, a law enforcement officer and his accomplices were arrested "hot". The issue of selecting a preventive measure in the form of detention is being resolved. The investigation is ongoing.

*Example from forensic pharmaceutical practice No. 3.* SBI investigators under the procedural guidance of prosecutors of the General Prosecutor's Office detained [76]:

- the organizer of a criminal group, who has been notified of the suspicion of creating a criminal organization and leading it under Part 1 of Art. 255 of the Criminal Code of Ukraine, organization of illegal issuance of prescriptions for the right to purchase narcotic drugs under Part 2 of Art. 319 of the Criminal Code of Ukraine, organization of violations of the rules for dispensing narcotic drugs under Part 2 of Art. 320 of the Criminal Code of Ukraine, organization of legalization of property obtained by criminal means under Part 3 of Art. 209 of the Criminal Code of Ukraine, organizing the use of large amounts of funds obtained from the illegal circulation of narcotic drugs, with the aim of continuing the illegal circulation of narcotic drugs by a criminal organization under Part 2 of Article 306 of the Criminal Code of Ukraine);
- founders and directors of companies in which 24 narcological offices were registered, who were notified of suspicion of participation in a criminal organization under Part 1 of Art. 255 of the Criminal Code of Ukraine, facilitating the illegal issuance of prescriptions for the right to

purchase narcotic drugs under Part 3 of Art. 27 part 3 of Art. 28 part 2 of Art. 319 of the Criminal Code of Ukraine, legalization of property obtained by criminal means under Part 3 of Art. 209 of the Criminal Code of Ukraine);

- doctors of narcology clinics (illegally issued prescriptions for the right to purchase narcotic drug – methadone in pharmacies), who were notified of suspicion under Part 1 and 2 Art. 319 of the Criminal Code of Ukraine.

During the pre-trial investigation, it was established that on March 1, 2024, the criminal activities of the members of the organized criminal drug gang, which had been operating since 2020, and created a network of clinics – 24 "narcotics offices" and a pharmacy, were stopped in the city of Kyiv and the city of Kharkiv. In them, doctors illegally issued medical prescriptions for methadone, which is used in the substitution therapy of drug-addicted citizens. Subsequently, methadone was obtained by members of a criminal organization and sold (illegally sold) to drug-addicted citizens through their own pharmacy, which documented the receipt of funds from the illegal circulation of narcotic drugs in the amount of more than UAH 5 million. In addition, it was established that over 10 kg of methadone in tablets were sold during the period of activity of the criminal organization, for which doctors issued more than 15,000 illegal prescriptions. During court-sanctioned searches, the following was discovered and seized from members of a criminal drug gang:

- ❖ significant sums of funds received from illegal activities;
- ❖ recipes and accounting journals;
- ❖ methadone tablets;
- ❖ cars purchased with funds from illegal business.

During operations of an investigative nature, on the instructions of the investigator, 2 managers of narcological offices who tried to escape from justice were detained. Currently, the question of the suspect's selection of preventive measures and seizure of seized property is being resolved. Forensic pharmaceutical and other examinations have been ordered for the case. The investigation is ongoing.

*Example from forensic pharmaceutical practice No. 4.* Under the procedural leadership of the prosecutor of the Odesa Regional Prosecutor's Office, the SBI investigators completed the pre-trial investigation, the indictment was approved and the case was sent to court, regarding 3 law enforcement officers of the city of Odesa and the head of the post office, who are accused of theft. demanding and receiving an unlawful benefit under Part 2, Part 3 of Art. 146, Part 2, Part 3 of Art. 365, Part 4 of Art. 189, Part 5 of Art. 185, Part 3 of Art. 368 of the Criminal Code of Ukraine [77].

During the pre-trial investigation, it was established that in 2023 in the city of Odesa, 3 active and 1 former employee of law enforcement agencies organized an illegal money-making scheme and involved in the scheme the head of one of the district post offices, who provided information about customers who may receive narcotics in shipments. After receiving the package, law enforcement officers were already waiting for the citizen at the exit, who tracked down drug dealers, detained them, seized drug paraphernalia and money, without officially registering criminal proceedings. In the future, the police, threatening to prosecute for illegal possession and sale of narcotic drugs, demanded money from the detained citizens for "Solution of the issue", which cost the detainee up to 10,000 US dollars. In some cases, the victims of the perpetrators were citizens who received in parcels not narcotics prohibited for circulation in Ukraine, but ordinary electronic cigarettes. However, the police threatened the mentioned citizens that they would still be able to bring them to criminal responsibility for the distribution (illegal circulation) of narcotic drugs and psychotropic substances. In other cases, the police took a citizen with a parcel to her house, where they illegally entered, conducted an illegal search and, in addition to a bribe, took the money they found. This is confirmed by one of the episodes where, in addition to the "ransom" of 10,000 US dollars, the police stole almost 100,000 US dollars from the man. During the investigation, 5 episodes of extortion from citizens for not being prosecuted for illegal drug trafficking and theft of money from citizens during the illegal search and house search were documented and established. The former law enforcement officer, who participated in the crimes, is currently on the international wanted list, the materials of the criminal proceedings against him are allocated to a separate criminal proceeding, which is being investigated, and after his arrest, the case will be sent to court.

*Example from forensic pharmaceutical practice No. 5.* Criminal proceedings are being carried out by SBI investigators under the procedural guidance of the prosecutor of the General Prosecutor's Office, in which currently, depending on the degree of participation in the committed crimes, the members of the criminal organization have already been notified of suspicion under Part 2 of Art. 255, Part 4 of Art. 28 part 3 of Art. 307, Part 4 of Art. 28 part 3 of Art. 313, Part 4 of Art. 28 part 2 of Art. 317, Part 4 of Art. 28 part 3 of Art. 313, Part 4 of Art. 28 part 2 of Art. 317 of the Criminal Code of Ukraine, the employee of the law enforcement agency was notified of suspicion under Part 2 of Art. 255, Part 2 of Art. 317 of the Criminal Code of Ukraine [78].

During the pre-trial investigation, it was established that during 2023, in the city of Zhytomyr and other regions of Ukraine, SBI employees in cooperation with operational units of the National Police of Ukraine conducted a large-scale special operation to expose and stop the activities of an organized criminal drug gang, 10 members of the group were detained, including organizers, chemists - enforcers and other specialists, as well as the head of one of the subdivisions of one of the regional law enforcement agencies, who was part of a criminal organization and covered its activities, who acted in the following way:

- ✓ criminals sold (sold) prohibited narcotics to wholesale customers and retail in most regions of Ukraine;
- ✓ the annual amount of hemp grown by the high-tech method of hydroponics amounted to more than 1,000 kg, and the net profit of the members of the drug gang amounted to more than 500,000 US dollars;
- ✓ criminals organized the operation of a number of drug laboratories in the Dnipropetrovsk, Kirovohrad, Kyiv, Poltava, Kharkiv and Cherkasy regions;
- ✓ to legalize the income received from the drug business, the organizer and accomplices bought movable and immovable property;
- ✓ the activities of the drug gang were "covered up" by law enforcement officers.

Under the court's sanction, the SBI employees conducted more than 50 searches in various regions of Ukraine during which the following were discovered and seized:

- more than 10 kg of a narcotic drug ready for sale (sale) and consumption;
- 2 drug laboratories in specially equipped hidden premises disguised as farms;
- separate equipment for the operation of drug laboratories and other material evidence;
- funds and weapons.

Criminals were chosen by the court to be remanded in custody.

First priority urgent investigative actions and investigative measures aimed at identifying all citizens involved in criminal activity are ongoing, forensic and pharmaceutical, forensic, forensic and medical, forensic and narcological, forensic and psychiatric examinations were scheduled.

*Example from forensic pharmaceutical practice No. 6.* On December 20, 2023, the prosecutor of the Zhytomyr Regional Prosecutor's Office approved the indictment and sent the criminal case to court, which was investigated by the SBI investigator and completed the pre-trial investigation of three members of an organized criminal group under Part 3 of Art. 27, Part 3 of Art. 307 of the Criminal Code of Ukraine [79].

During the pre-trial investigation, it was established that during 2023, on the territory of the State Institution "Berdychiv Correctional Colony" in the city of Berdychiv, Zhytomyr region, members of an organized criminal group, which included the head of one of the colony's departments – a major of the penitentiary service; a prisoner; a minor boy; organized a scheme of illegal acquisition and sale of narcotics in places of imprisonment with the involvement of a minor, committed by an organized group (which illegally sold (distributed) narcotics. For example, a minor citizen bought narcotics over the Internet, handed over (stored, accounted for) them to an official of a correctional institution, and he brought them to the territory of the colony and gave them to the prisoner, who sold (sold) the drug to other convicts, and the perpetrators divided the proceeds among themselves. Deliveries took place on average 1-2 times a month "according to previous orders" of convicts who were ill drug addiction and mental health disorders. The operatives exposed the official of the colony

"in the heat of the moment" when he once again brought narcotic drugs to the State Institution "Berdychivska Penitentiary".

According to A.V. Karpenko and E.S. Nazimko, a significant social problem for Ukraine is crime, in particular, related to the circulation of prohibited psychoactive substances with a number of features [80]:

- criminological – additional indicators are used (level, coefficient, dynamics, structure, geography, cost of crime, latency of crimes), which reflect the existence of a real situation in the country;
- accounting – latent crime remains; according to all-Ukrainian monitoring data, the total number of people who abuse prohibited psychoactive substances is 3-5 million people. According to experts, the real number of illegal users of narcotic drugs in Ukraine, taking into account their latency, is much more than the specified number;
- sociological – they testify that the number of people who consume prohibited psychoactive substances exceeds the official statistics by 8-10 times;
- abuse – the prevalence of the use of prohibited psychoactive substances in the age group of 15-64 years was not conducted;
- non-interference of law enforcement officers in the process of encroachment for criminals is a mandatory condition for achieving a criminal result and avoiding punishment. This contributes to the formation of a stereotype of impunity in the minds of criminals, the basis for committing new criminal offenses;
- lack of reliable methodology – makes it possible to obtain unreliable data, approximate indicators in statistics;
- reproduction of the real situation in the country, region, region, city.

Improving the quality of studying the real state of crime seems possible only through the combination of three data systems: 1) official statistics; 2) sociological data; 3) expert evaluations.

A generalized picture of forensic and pharmaceutical practice according to the topic of the study is presented in Table 1.

**Table 1.** Qualification under Articles 209, 305, 307 of the Criminal Code of Ukraine [81].

No.	Article of the Criminal Code of Ukraine under which a criminal case has been initiated	Name of narcotic drug, psychotropic substance, precursors	The number of members of organized criminal drug gangs	The number of victims-citizens suffering from drug addiction recorded during the investigation of the case	The number of victims-citizens suffering from drug addiction who were provided with free medical, pharmaceutical and social assistance (UAH)
1.	Part 2 of Art. 307	2.5 kg of amphetamine; 0.20 kg 4MM; 0.10 kg of cannabis; 50 MDMA pills; 20 "brands" of LSD. The cost is UAH 3.5 million	4 criminals	No data	No data
2.	Part 2 of Art. 307	methadone; PVP-salts. Sales 50k UAH/month	3 criminals	No data	No data

3.	Part 1 of Art. 255, Part 2 of Art. 319, Part 2 of Art. 320, Part 3 of Art. 209, Part 2 of Art. 306	methadone in tablets 10 kg for the amount of UAH 5 million	27 criminals	No data	No data
4.	Part 3 of Art. 146, Part 3 of Art. 365, Part 4 of Art. 189, Part 5 of Art. 185, Part 3 of Art. 368	\$110k	5 criminals	5 victims	No data
5.	Part 2 of Art. 255, Part 4 of Art. 28, Part 3 of Art. 307, Part 3 of Art. 313, Part 2 of Art. 317, Part 3 of Art. 313, Part 2 of Art. 317	1,000 kg of hemp was grown \$500k per year	10 criminals	No data	No data
6.	Part 3 of Art. 27, Part 3 of Art. 307	No data	3 criminals	No data	No data

Forensic pharmaceutical practice indicates the need to improve the regulatory framework for the research topic.

Improvement of the system regarding the correct qualification of crimes (example No. 1) and methods of investigation of crimes under Art. 305-321 of the Criminal Code of Ukraine (completeness, objectivity, comprehensiveness). Identification of all victim-citizen patients who were sold narcotics in the case. Granting the status of a victim to citizens who are consumers (buyers) of narcotic drugs. Conducting eye tests with the participation of victims-citizens. Reproduction of the situation and circumstances of the event. Appointment of forensic medical, forensic narcological, forensic pharmaceutical examinations. Compensation for treatment and provision of social and economic assistance at the expense of the state:

- Analysis of the number of identified sick citizens (victims) of drug addiction during the proceedings.
- Analysis of the number of sick citizens (victims) of drug addiction who were provided with free medical-pharmaceutical and social assistance at the expense of state authorities and local governments;
- Improvement of the Law of Ukraine "On measures to counter the illegal circulation of narcotic drugs, psychotropic substances and precursors and their abuse" [82], Resolution of the Cabinet of Ministers dated 17.08.1998 No. 1303 "On regulation of free and preferential dispensing of drugs according to doctors' prescriptions in the case of outpatient treatment individual population groups and by certain categories of diseases" [83]. Responsible participation of state authorities and local self-government bodies in this process and their compliance with the norms of the Law of Ukraine "On Psychiatric Care" [84] and the Constitution of Ukraine.



- Termination of the "methadone" program as ineffective in the system of substitution therapy and urgent development of the program "Treatment of patients with drug addiction and toxic addiction" for the period 2024-2030 at the expense of additional state funds.

Initiation before the Verkhovna Rada of Ukraine to consider a proposal to introduce into the Criminal Code of Ukraine [81] increased criminal liability of members of organized criminal drug gangs and make the following editorial changes:

- ☑ to Part 2 Art. Article 115 of the Criminal Code of Ukraine (Intentional murder) to include the qualifying sign: with the use of narcotic and narcotic drugs, psychotropic, potent, poisonous, explosive, caustic, flammable substances, precursors or drugs that have psychoactive properties.
- ☑ to Part 3 Art. 305 of the Criminal Code of Ukraine (Smuggling of narcotic drugs, psychotropic substances, precursors or falsified medicinal products) shall be introduced: punishable by imprisonment for a term of 15 to 25 years or life imprisonment, with confiscation of property.
- ☑ to h. 3 ct. 307 of the Criminal Code of Ukraine to introduce: punishable by imprisonment for a term of 15 to 25 years or life imprisonment, with confiscation of property.

At the same time, specialists, investigators, prosecutors and operatives often forget, as Mavrellis S. emphasizes, that many groups engaged in transnational crime consider their actions to be business [85].

They are organized commercial organizations. They provide goods or services to consumers. These goods and services are illegal or obtained illegally. Some of these groups are so well organized and well financed that they rival legitimate multinational corporations. They are an association of transnational crime [85].

There is a consistent model of criminal entrepreneurship in all investigated criminal markets. They carry out the drug trade from the cultivation and production of cannabis, cocaine, heroin and methamphetamine to their distribution around the world [85]. Diversification into other criminal activities (illegal mining, illegal logging, theft of crude oil) [85]. Traditional law enforcement actions have had limited success, especially in the fight against drugs. Often these efforts focus on capturing participants and products. One of the popular tactics of law enforcement agencies is the pursuit of leaders or heads of criminal organizations (beheading technique). There are many cases of criminal gangs, particularly gangs in Latin America, whose leaders have been imprisoned with minimal influence on the group's activities. Law enforcement agencies also pursue low-level participants (street vendors, poachers, informal miners). Transnational crime is a systemic problem.

Global Financial Integrity emphasizes that "...crimes motivated by profit require a profit-oriented response". What is often glossed over is that, like legitimate businesses, members of organized crime groups also reinvest their profits back into their businesses, improving and expanding operations, and diversifying into other illegal activities.

State governments should ensure the enforcement of strict laws and regulations to combat money laundering and terrorist financing. We need to step up our efforts to fight the global shadow financial system that is used for all transnational crimes.

Advocating for tough AML/CFT laws, collecting information on beneficial owners, strengthening control over secret jurisdictions, monitoring cross-border trade for invoice fraud, and increasing interagency data sharing should be the new rallying cry [85].

Modern studies of the illegal circulation of prohibited narcotic drugs and psychotropic substances at the international level revealed that [86]:

- weak capacity of law enforcement agencies and corruption play an important role in maintaining the stability of the illegal drug market;
- corruption exists throughout the chain of illegal circulation (supply, transportation, forwarding, sale) of prohibited psychoactive substances;
- monitoring the cash flows of the drug market turned out to be one of the most effective approaches to combating the illegal circulation of prohibited psychoactive substances;

- the World Bank and the International Monetary Fund emphasize that corruption contributes to the spread of poverty, disease and crime, hindering foreign investment and increasing the level of income inequality among citizens;
- strengthening international cooperation in the field of prevention and combating money laundering also helps to reduce or eliminate potential negative social and economic, medical and pharmaceutical, criminal and legal consequences of illegal activities.

The above is confirmed by I. Klymenko, who believes that the fight against drug crime is a long process [87]:

- it is possible and necessary to minimize the distribution of prohibited psychoactive substances as much as possible by implementing legislative initiatives;
- improving the work of the police, which became more difficult to detect criminal connections between group members, as drug dealers minimized personal contact with clients. On average, in just one day, the income from illegal activities related to the sale of drugs through the Internet is almost UAH 7 million (in a month – about UAH 210 million);
- increasing the level of operational and investigative work will contribute to the process of documenting the drug gang.

Drug trafficking and money laundering are often closely related, because large sums of profits from the sale of illicit psychoactive substances are illegal and must be laundered to appear as legitimate entrepreneurs [88]. Money laundering involves the process of disguising income from illegal activities as legal funds. This allows criminals to use their illegal funds for legitimate purposes and avoid detection by law enforcement agencies. Drug traffickers use various methods to launder their proceeds, investing in legitimate businesses (such as pharmacy businesses), buying and selling real estate, and using financial institutions to transfer funds. Criminals can also use complex webs of shell companies, offshore accounts and intermediaries to hide the true source of their funds.

In order to combat the illegal circulation of prohibited psychoactive substances and money laundering, the governments of countries have introduced laws and regulations that require financial institutions and other businesses to take measures to detect and prevent money laundering. These measures include due diligence on customers, monitoring transactions and reporting suspicious activity to law enforcement.

The three main stages of money laundering in the illicit drug trade include the following activities: placement, layering, and integration.

1. Placement. Revenues from the drug trade are channeled into the financial system. This can include depositing cash into bank accounts, buying money orders or traveler's checks, or investing in assets such as real estate or businesses.
2. Stratification. It involves layering or masking the source of funds through a series of complex transactions. This may include transferring funds between bank accounts in different countries, using front companies to hide the source of the funds, and engaging in other forms of financial transactions to conceal the illicit origin of the funds.
3. Integration. It provides for the integration of laundered funds back into legal sectors of the economy (real estate, luxury items, etc.).

Members of organized criminal drug gangs have devised a variety of methods during money laundering to hide the huge sums of money earned from illegal drug trafficking. To avoid currency reporting requirements, one option, structuring, involves dividing large amounts of cash into transactions totaling less than \$10,000. Other scams include casinos, diamonds, precious metals, wire transfers and cash smuggling out of the country. Due to the enormous profitability of the drug trade, criminals can benefit from the balloon effect of the global illicit trade. Criminals change methods, industries, geographic routes, brokers, technologies, etc. as soon as law enforcement discovers and begins to crack down on one laundering method. Drug syndicates employ specialists, lawyers, advocates, scientists, doctors, government officials and law enforcement, and use advanced technology, innovation, intelligence and strategies, including buying influence in smaller countries, to stay one step ahead of law enforcement.

International organizations for combating the illegal circulation (trade, sale, transportation, etc.) of narcotic drugs in relation to money laundering are controlled by various agencies: the United Nations Office on Drugs and Crime (UNODC), Interpol, the FBI, the World Customs Organization (WCO), the Office for the Fight against Narcotics (DEA), the Organization of American States (OAS), the Federal Reserve, and the Treasury. For example, FinCEN, a division of the United States Treasury Department, uses artificial intelligence technology to evaluate all Currency Transaction Reports (CTRs) that individuals must file with the United States government when they receive cash payments of more than \$10,000, as well as Suspicious Transaction Reports. activity (SAR). filed by banks, thrift banks, credit unions, and commercial and law enforcement database systems.

It should be noted that various national, regional and global agreements and organizations are aimed at preventing money laundering. Many countries have established Financial Intelligence Units (FIUs), similar to FinCEN, to obtain and process information about financial statements and to assist in anti-money laundering operations.

The G7 countries (in 1989) created the Financial Action Task Force (FATF), which issued 40 recommendations or guidelines to combat money laundering. In 2000, the United States invited the FATF to produce a report that named 15 "non-cooperative nations and territories" (NCCTs) and indicated that if they did not cooperate adequately within one year, they would face countermeasures. In fact, almost immediately, the United States and other FATF members forced financial institutions to increase scrutiny of NCCT transactions, resulting in preventing or, in some circumstances, effectively barring most transactions from some of these countries.

Combating drug trafficking with AML methods and technologies includes several ways in which anti-money laundering methods and technologies can be used to combat the illicit trafficking of narcotic drugs, psychotropic substances and precursors, namely:

- ❖ Customer Due Diligence (CDD) – Financial institutions and other businesses may implement CDD measures to verify the identity of their customers and assess their risk profile. This can help identify potential money laundering activities and suspicious drug-trafficking transactions.
- ❖ Transaction Monitoring – Financial institutions can use transaction monitoring systems to detect suspicious activity related to drug trafficking. These systems may flag transactions that are not consistent with the customer's normal business, involve large amounts of cash, or involve transfers to high-risk countries.
- ❖ AML Check – prospects are checked by all financial institutions throughout the onboarding process. On the other hand, the conventional single or limited attribute matching mechanism provides a high rate of false positives. By combining important information about an object with external data, a multidimensional algorithm can improve the efficiency of matching results.
- ❖ Risk assessment – financial institutions can use risk assessment models to identify customers and transactions that pose a higher money laundering risk. This can help focus resources on high-risk areas and drug-trafficking activities.
- ❖ Artificial Intelligence (AI) and Machine Learning (ML) – AI and ML technologies can be used to analyze large amounts of financial data to identify patterns and anomalies that may indicate drug money laundering.

It is important to realize the extent of the threat of drug trafficking and drug business, money laundering and their spread in the countries of the world, which requires a tough response [89].

In Ukraine, it is possible to implement the adopted EU Roadmap for combating illegal trafficking of prohibited psychoactive substances and organized crime. The impact of criminal networks engaged in illegal activities requires a collective, coordinated response from governments, law enforcement agencies and private individuals in key sectors.

The EU roadmap defines actions in the following priority areas:

1. Increasing the resilience of logistics centers against drug trafficking and criminal infiltration. Creation of an alliance of European ports to mobilize all relevant actors working in ports (customs, law enforcement agencies, private structures). The port alliance includes:

- mobilization of customs authorities in ports against the illegal circulation of prohibited psychoactive substances;
- strengthening of law enforcement operations in the ports of the world by mobilizing the actions of member states, the Commission, Europol, Eurojust, the European Public Prosecutor's Office (EPPO) and the European Multidisciplinary Platform against Criminal Threats (EMPACT);
- creation of a public-private partnership against drug smuggling;
- strengthening actions to eliminate criminal networks; creation and maintenance of technical and administrative barriers; promotion of best practices to combat crime and illicit traffic in illicit psychoactive substances and precursors in the manufacture of designer drugs.

International cooperation remains fundamental to the development of comprehensive solutions to transnational threats. The response of the EU countries to the fight against illicit traffic of prohibited psychoactive substances and organized crime is outlined in the EU Strategy on Combating Organized Crime for 2021-2025 and the EU Drug Strategy and Action Plan for 2021-2025. At the legislative level, the Commission has already put forward several political initiatives and legislative proposals to strengthen EU legislation to combat criminal networks. They include:

- Pursuing criminals' money by strengthening the Asset Recovery and Confiscation Directive to ensure that ill-gotten gains cannot be used to further finance criminal activity and amending existing rules to allow competent authorities to access centralized bank account registers to facilitate financial investigations.

- Reforming the EU Customs Union to strengthen the customs' ability to stop the importation of dangerous or illegal goods into the Union. The customs reform proposal also aims to further improve the monitoring of trade flows, data-based risk management, real-time information exchange and general cooperation through the creation of an EU customs authority, an EU customs data center and a full EU analytical capacity.

- Strengthening the capacity of law enforcement agencies through the Code of Police Cooperation to improve cross-border operations.

- Strengthening the judicial response to organized crime by amending and improving the rules on cross-border access to electronic evidence and the work of the European Public Prosecutor's Office (EPPO).

- Strengthening the powers of key actors in the fight against the illicit traffic of illicit psychoactive substances with the creation of a new EU Agency for Drugs.

- Development of a European drug alert system to quickly notify national authorities of new dangerous psychoactive substances entering the market.

At the operational level, the EU has strengthened support for law enforcement agencies of member states. Strengthening the European Multidisciplinary Platform Against Criminal Threats (EMPACT). Developing cooperation through @ON Network funding against organized crime groups. Support of the Maritime Analytical and Operations Center – Narcotics (MAOC-N). At the international level, the Commission works to strengthen cooperation with its international partners. The features of the Schengen Information System, which was updated in March 2023, help ensure that criminals and terrorists do not enter and move around the EU undetected. The updated SIS includes new categories of alerts, biometric data such as palm prints, fingerprints and DNA records to allow correct identification of persons traveling under false names, as well as information about the cars or other facilities they use. New background checks allow authorities to collect targeted information about suspects in serious or organized crime or terrorism.

The EU Roadmap facilitates the use by Member States of the tools available to them in the Schengen Information System (SIS) to combat serious and organized crime. In particular, it is crucial that Member States send alerts related to members or activists of high-risk criminal networks in the system and report matches to Europol. The use of SIS will be combined with several other actions to eliminate high-risk criminal networks:

- mapping of criminal networks that pose the greatest threat to society;



- creation of a network of specialized prosecutors and judges to destroy criminal networks to establish connections, trust and overcome practical obstacles to conducting cross-border investigations;
- promoting and supporting the use of digital and financial investigations;
- cooperation with Member States, the European Parliament, EU agencies and bodies and other relevant stakeholders to explore ways to strengthen the legal framework against organized crime and improve its implementation.

In response to growing concerns about the production and distribution of synthetic drugs in Europe, the Commission is stepping up its action against the distribution of synthetic illicit psychoactive substances. For example, the EU Agency for Drugs, which is due to start work in July 2024, will conduct an assessment of the threats to the health and safety of citizens from the abuse of prohibited psychoactive substances. Studies the use of precursors for the production of new synthetic designer psychoactive substances. Creates a network of forensic and toxicological laboratories for the analysis of new psychoactive substances. The fight against synthetic drugs must be conducted globally to block the routes of trafficking in precursors and synthetic drugs. Therefore, the Commission strives to strengthen multilateral cooperation with the United States and other countries.

Further directions of research on the topic of the work:

- facilitation and strengthening of administrative response, which mobilizes local authorities to fight organized crime. It is important to ensure that appropriate procedures are put in place to close down businesses, carry out checks before granting permits, tenders and subsidies, and put in place other obstacles such as checks that prevent criminals from committing crime;
- promoting measures to prevent the recruitment of children and youth by criminal organizations by involving local communities, families, schools, the social welfare sector, civil society, law enforcement, the judiciary, penitentiary authorities and the private sector;
- taking measures to combat the spread of precursors for the production of designer psychoactive substances;
- improvement of public safety and health care of citizens affected by the abuse of prohibited psychoactive substances and drug crime.

As Director General Ghada Waly noted, the Security Council and the UN system must take action against the destructive impact of organized crime [90]. Support and invest in improved data collection to better predict and monitor the dynamics of human trafficking and organized crime for early response. Integrate measures against organized crime into peace and security interventions and resolutions. Promote the inclusion of the issue of prevention of organized crime in the framework of cooperation for sustainable development. Continue to focus on the critical threat of transnational organized crime. UNODC is committed to providing reliable data and analysis and maintaining operational capabilities on the ground to ensure an informed and effective response.

International bodies, the United Nations, the United States, and Interpol pay due attention to combating organized drug crime and money laundering. It is important to consider Article 209 of the Criminal Code of Ukraine, which regulates criminal liability for the legalization (laundering) of property obtained through criminal means as a result of the sale (trafficking) of narcotics, but needs to be brought up to date with the requirements of the EU countries. Based on the results of the study, an addition to Art. 209 of the Criminal Code of Ukraine "legalization (laundering) of property obtained through criminal means" – add "drug business", "participation of a law enforcement officer" (Table 2).

**Table 2.** Normative initiatives under Art. 209 of the Criminal Code of Ukraine.

Part	The current edition of Art. 209. Legalization (laundering) of property obtained through criminal means	The proposed version of Art. 209. Legalization (laundering) of property obtained by crime
1.	Acquisition, possession, use, disposal of property, in respect of which the factual circumstances indicate that it was obtained	Acquisition, possession, use, disposal of property, in respect of which the actual circumstances testify to its obtaining by



	<p>by criminal means, including carrying out a financial transaction, committing a transaction with such property, or moving, changing the form (transformation) of such property, or committing actions aimed at concealment, masking of the origin of such property or its possession, rights to such property, sources of its origin, location, if these actions were committed by a person who knew or should have known that such property was directly or indirectly, wholly or partially, obtained through criminal means, -</p> <p>shall be punished by deprivation of liberty for a term of three to six years, with deprivation of the right to hold certain positions or engage in certain activities for a term of up to two years, and with confiscation of property.</p>	<p>criminal means, drug business, including the implementation of a financial transaction, the execution of a transaction with such property, or the transfer, change of form (transformation) of such property, or the commission of actions, aimed at concealing, disguising the origin of such property or its possession, rights to such property, sources of its origin, location, if these actions were committed by a person who knew or should have known that such property was directly or indirectly, wholly or partially, obtained through criminal means, -</p> <p>shall be punished by deprivation of liberty for a term of three to six years, with deprivation of the right to hold certain positions or engage in certain activities for a term of up to two years, and with confiscation of property.</p>
2.	<p>The actions provided for in the first part of this article, committed repeatedly or by prior collusion by a group of persons, or in a large scale, -</p> <p>shall be punished by deprivation of liberty for a term of five to eight years, with deprivation of the right to hold certain positions or engage in certain activities for a term of up to three years, and with confiscation of property.</p>	<p>The actions provided for in the first part of this article, committed repeatedly or by prior collusion by a group of persons, or in a large scale, -</p> <p>shall be punished by deprivation of liberty for a term of five to eight years, with deprivation of the right to hold certain positions or engage in certain activities for a term of up to three years, and with confiscation of property.</p>
3.	<p>Actions provided for by the first or second part of this article, committed by an organized group or on a particularly large scale, -</p> <p>shall be punished by deprivation of liberty for a term of eight to twelve years with deprivation of the right to hold certain positions or engage in certain activities for a term of up to three years and with confiscation of property.</p>	<p>Actions provided for in the first or second part of this article, committed by an organized group, <i>with the participation of a law enforcement officer</i> or in a particularly large scale, -</p> <p><i>shall be punished by imprisonment for a term of 15 to 25 years or life imprisonment with confiscation of property.</i></p>
<p>Note.</p> <p>1. Legalization (laundering) of property obtained through criminal means is recognized as having been committed in a large amount, if the subject of the crime was property in an amount exceeding six thousand tax-free minimum incomes of citizens.</p> <p>2. Legalization (laundering) of property obtained through criminal means is considered to have been committed in a particularly large amount, if the subject of the crime was property in the amount exceeding eighteen thousand tax-free minimum incomes of citizens.</p>		

It is important to note the position highlighted by Kapatadze A. [9]. Corruption and organized crime should be seen as a whole. Recognize that in some cases organized crime can operate within the official state. At the political level, corruption and organized crime should be seen as two sides of the same coin, and solutions to both problems should be synchronized and integrated accordingly.

In Ukraine, the main change [92, 93] is a radical transformation of the approach to the work of the prosecutor's office and the entire criminal justice system. The focus is on protection of life and health, rights and freedoms of citizens. A comprehensive strategic plan for reforming law enforcement agencies has been developed, which includes the following:

- ✓ creation of a coordination center for the support of victims and witnesses;
- ✓ improvement of methods of working with victims;
- ✓ implementation of standards of justice;
- ✓ strengthening the fight against corruption and organized crime;
- ✓ coordination and unification of all pre-trial investigation bodies and operational units (SSU, NABU, SBI, National Police, BES, operational units of the State Border Service).

The implementation of international legal norms will contribute to the implementation by law enforcement agencies of Ukraine of international norms of criminal, pharmaceutical and medical law (UN, Interpol, experience of the EU and the USA) in countering the legalization of income (money laundering) obtained by criminal means during the illegal circulation of narcotic drugs, psychotropic substances and precursors. The consequences will be the improvement of medical and pharmaceutical care for all categories of patients, and an increase in the level of public safety. In order to implement the measures of the EU Roadmap in Ukraine, it is proposed to initiate the establishment of cooperation between the Private Scientific Institution "Scientific and Research University of Medical and Pharmaceutical Law" (<https://srumpl.org/main.html>) and The United Nations Office on Drugs and Crime (UNODC) (<https://www.unov.org/unov/en/unodc.html>), the European Monitoring Center for Drugs and Drug Addiction (EMCDDA) ([https://www.emcdda.europa.eu/index\\_en](https://www.emcdda.europa.eu/index_en)) and EMPACT (<https://www.europol.europa.eu/crime-areas-and-statistics/empact>) to rebuild joint actions and conduct research, conferences and trainings based on the EMCDDA European prevention program and UN programs.

It is necessary to invite the international community, scientists, doctors, pharmacists, students, the public, lawyers, employees of law enforcement and expert institutions, state authorities and local governments to participate on November 14-15, 2024 in the XXI International Multidisciplinary Scientific and Practical Conference "Medical and pharmaceutical law of Ukraine: organization and economics of pharmaceutical and medical business, circulation of drugs, technology, safety, efficiency, quality control, general, forensic, evidential and clinical pharmacy and medicine, pharmacotherapy of health disorders", which will be held in Lviv, Kyiv and Tallinn with the participation of Lviv Medical University Medical University (Lviv), Estonian Scientific Publishing House SSP OÜ (Tallinn), All-Ukrainian Pharmaceutical Chamber (Kyiv), East Ukrainian National University named after Volodymyr Dahl (Kyiv), State University "Institute of blood pathology and transfusion medicine of the National Academy of Medical Sciences of Ukraine" (Lviv), PNU "Research University of Medical and Pharmaceutical Law".

**Conclusions.** A multidisciplinary study of the level of combating the modern drug business in Ukraine and the international system of preventing and countering the legalization of income (money laundering) obtained through criminal means was conducted. It has been proven that the modern drug business is a component of transnational organized crime, the legalization of proceeds (money laundering) obtained through criminal means. It has been determined that transnational organized crime is associated with money laundering from illegal trafficking of prohibited psychoactive substances. The necessity of improving the system of criminal and legal struggle, medical and pharmaceutical support, social and economic assistance is substantiated. The work of Interpol is analyzed according to the topic of the article. The experience of the countries of the world in the fight against organized crime and drug crime has been studied. The experience of Ukrainian law enforcement agencies to identify the organized activities of criminal groups is summarized. Forensic pharmaceutical practice regarding the detection of prohibited psychoactive substances and the legalization of income from their illegal circulation is analyzed. It is proposed to increase the criminal liability of members of organized criminal drug gangs and make editorial changes to articles 115, 305, 307 of the Criminal Code of Ukraine. Transnational crime has been studied. There are three main stages of money laundering in the trade of prohibited psychoactive substances (placement,

stratification, integration). The EU Road map and international cooperation in the fight against the illegal circulation of prohibited psychoactive substances and the laundering of illegal profits have been studied in detail. Further directions of research on the topic of the work are presented. Normative initiatives to Article 209 of the Criminal Code of Ukraine have been developed and proposed. The importance of the implementation of EU Roadmap measures in Ukraine to establish cooperation between the Private Scientific Institution "Scientific and Research University of Medical and Pharmaceutical Law" and UNODC is substantiated, EMCDDA and EMPACT in order to rebuild joint actions and conduct research, conferences and trainings based on the EMCDDA European prevention program and UN programs. The relevance, timeliness and practical significance of the invitation to the international community, scientists, doctors, pharmacists, students, the public, lawyers, law enforcement and expert institutions, state authorities and local self-government bodies to participate on November 14-15, 2024 in the work of the XXI International Multidisciplinary of the scientific and practical conference "Medical and pharmaceutical law of Ukraine: organization and economics of pharmaceutical and medical business, circulation of drugs, technology, safety, efficiency, quality control, general, forensic, evidential and clinical pharmacy and medicine, pharmacotherapy of health disorders" (Lviv-Kyiv-Tallinn with the participation of Lviv Medical University (Lviv, Ukraine), Estonian Scientific Publishing House SSP OÜ (Tallinn, Estonia), State University "Institute of Blood Pathology and Transfusion Medicine of National Academy of Sciences of Ukraine" (Lviv, Ukraine), Scientific and Research University of Medical and Pharmaceutical Law (Kyiv, Ukraine) and other institutions, organizations and institutions.

**Conflict of interest.** The authors confirm that they are the authors of this work and approve it for publication. The authors also certify that the obtained data and research were conducted in compliance with the requirements of moral and ethical principles based on medical and pharmaceutical law, respectively, and in the absence of any relationships that could be interpreted as conflict and/or potential conflict of interest.

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### References.

1. Transnational Organized Crime: Let's Put Them out of Business. *UNODC*. 2024. URL: <https://www.unodc.org/centralasia/en/news/transnational-organized-crime-lets-put-them-out-of-business.html>.
2. Transnational Organized Crime. *Rowan University*. 2024. URL: [https://chss.rowan.edu/centers/inter\\_majors/interdisciplinary\\_programs/internationalstudies/global\\_security\\_resource/global-security-problems-folder/transnational-organized-crime.html](https://chss.rowan.edu/centers/inter_majors/interdisciplinary_programs/internationalstudies/global_security_resource/global-security-problems-folder/transnational-organized-crime.html).
3. Caparini M. Transnational organized crime: A threat to global public goods. *Sipri*. 02.09.2022. URL: <https://www.sipri.org/commentary/topical-backgrounder/2022/transnational-organized-crime-threat-global-public-goods>.
4. Resolution of the Cabinet of Ministers of Ukraine dated May 6, 2000 No. 770 "On approval of the list of narcotic drugs, psychotropic substances and precursors." Verkhovna Rada of Ukraine. Editorial from 03/11/2022. URL: <https://zakon.rada.gov.ua/laws/show/770-2000-%D0%BF#Text>.
5. Law of Ukraine "On National Security of Ukraine". Information of the Verkhovna Rada. 2018. No. 31. Article 241. Edition of 31.03.2024. URL: <https://zakon.rada.gov.ua/laws/show/2469-19#Text>.
6. Shapovalov V. Interdisciplinary Legal, Forensic and Pharmaceutical, Forensic and Chemical, Forensic and Narcological, Forensic and Toxicological, Criminal and Legal Study of the Illegal Trafficking of Amphetamine. *SSP Modern Law and Practice*. 2023. 3. 3. P. 1-14. DOI: <https://doi.org/10.53933/sspmlp.v3i3.108>.
7. Shapovalov V. Illegal drug laboratories: forensic and pharmaceutical, forensic and expert, forensic and toxicological, forensic and chemical, criminal and legal examination to combat drug

- trafficking, illegal circulation of prohibited psychoactive substances, morbidity. *SSP Modern Law and Practice*. 2023. Vol. 3. No. 2. P. 1-19. URL: <https://doi.org/10.53933/sspmlp.v3i2.100>.
8. Shapovalov V., Samorodov A. Illegal Narcotics Circulation During the Coronavirus Disease Pandemic: Forensic Pharmacy, Pharmaceutical Business Organization and Criminal Law as a Foundation for the Interdisciplinary Study of Smuggling. *SSP Modern Law and Practice*. 2023. Vol. 3. No. 1. P. 1-19. DOI: <https://doi.org/10.53933/sspmlp.v3i1.80>.
  9. Shapovalova V., Zakharchenko I. Organizational and legal approaches to reforming of the law enforcement system of Ukraine: illegal circulation of psychoactive substances and addictive dependence. 2021. *SSP Modern Law and Practice*. Vol. 1. No. 1. P. 1-22. DOI: <https://doi.org/10.53933/sspmlp.v1i1.20>.
  10. Shapovalov V. Forensic pharmacy, organization of pharmaceutical business, drug technology, medical, pharmaceutical and criminal law: the state system of combating the illegal circulation of narcotic drugs and psychotropic substances and their abuse in pandemic condition. *SSP Modern Law and Practice*. 2022. Vol. 2. No. 3. P. 1-35. DOI: <https://doi.org/10.53933/sspmlp.v2i3.66>.
  11. Shapovalov V., Bondarenko V., Shapovalova V. Forensic pharmacy: expert providing of quality of psychoactive substances which are return from non-legal turn. *Farmatsevtichnyi Zhurnal*. 2008. No. 2. P. 54-58. URL: <https://pharmj.org.ua/index.php/journal/article/view/1171>.
  12. Shapovalov V., Shapovalova V., & Malinina N. The forensic-pharmaceutical characteristic of control-allowing system concerning a turn precursors. *Farmatsevtichnyi Zhurnal*. 2008. No. 4. P. 37-40. URL: <https://pharmj.org.ua/index.php/journal/article/view/1116>.
  13. Shapovalov V., Shapovalova V., Vasina Y. Proving pharmacy and forensic pharmacy: features of polinarcomania among young people. *Farmatsevtichnyi Zhurnal*. 2008. No. 5. P. 51-56. URL: <https://pharmj.org.ua/index.php/journal/article/view/1096>.
  14. Shapovalova V., Ukhta L., Shapovalov V. Forensic and pharmaceutical analysis of holders of license for circulation of controlled medicinal products in Ukraine. *Farmatsevtichnyi Zhurnal*. 2008. No. 6. P. 41-47. URL: <https://pharmj.org.ua/index.php/journal/article/view/1073>.
  15. Shapovalova V., Shapovalov V., Abrosimov A. et al. Pharmaceutical adm of favourable contingent on example of victims ot consequences of failure on CHNPP. *Farmatsevtichnyi Zhurnal*. 2009. No. 1. P. 50-53. URL: <https://pharmj.org.ua/index.php/journal/article/view/1039>.
  16. Vasina J., Shapovalov V., Shapovalova V. Judicial-pharmaceutical study of problem of forming of aggressive conduct for young people under act of psychoactive substances. *Farmatsevtichnyi Zhurnal*. 2009. No. 2. P. 64-69. URL: <https://pharmj.org.ua/index.php/journal/article/view/1006>.
  17. Shapovalov V., Shapovalova V., Vasina Y. Organization-low and forensyc-pharmaceutical aspects of application of antipsychotic medications for treatment of addikthion of disorders of health. *Farmatsevtichnyi Zhurnal*. 2009. No. 3. P. 40-45. URL: <https://pharmj.org.ua/index.php/journal/article/view/980>.
  18. Shapovalov V., Shapovalova V., & Malinina N. The forensic pharmacy, as component part of the state checking after violations and removal of reasons and terms which are instrumental in violations system, is related to illegal turn of precursors. *Farmatsevtichnyi Zhurnal*. 2009. No. 5. P. 61-66. URL: <https://pharmj.org.ua/index.php/journal/article/view/915>.
  19. Shapovalova V.A., Shapovalov V.V. etc. Medicines in narcopsychopharmacology. Kharkiv: Flag. 2002. 592 p.
  20. Shapovalov V.V., Shapovalova V.O., Agapov D.O. Forensic pharmacy: studying the problem of distribution of psychoactive substances through the Internet. Ukrainian Herald of Psychoneurology. Volume 20. Issue 2 (71). P. 94-96. URL: <https://uvnpu.com.ua/arkhiv-nomeriv/2012/tom-20-vipusk-2-71/sudova-farmats-ya-vivchennya-problemi-rozpovsyudzhennya-psihoaktivnikh-rechovin-cherez-merezhu-nter>.
  21. Vepryuk Yu.M. Ways of combating drugs and their distribution in Ukraine. Bukovyna State Medical University. 28.06.2018. URL: <https://www.bsmu.edu.ua/blog/6842-shlyahi-borotbi-z-narkotikami-ta-ih-rozpovsyudzhennyam-v-ukraini/>



22. Guterres A. Global cooperation critical to combat transnational organized crime, UN Secretary-General and UNODC Executive Director tell Security Council. *UN*. 02.12.2023. URL: <https://www.unodc.org/unodc/en/frontpage/2023/December/global-cooperation-critical-to-combat-transnational-organized-crime--un-secretary-general-and-unodc-executive-director-tell-security-council.html>.
23. Shapovalova V.O., Musoev S.M., Shapovalov V.V. Pharmaceutical law: the United Nations Convention on Narcotic Drugs of 1961 in the improvement of the international system of control over narcotic drugs. *Ukrainian Herald of Psychoneurology*. 2012. Volume 20. Issue 2 (71). P. 111-114. URL: <https://uvnpu.com.ua/arkhiv-nomeriv/2012/tom-20-vipusk-2-71/farmatsevtichne-pravo-dina-konvents-ya-oon-pro-narkotichn-zasobi-1961-roku-v-udoskonalenn-m-zhnarodn>
24. Estimating illicit financial flows resulting from drug trafficking and other transnational organized crimes. Research Report. *United Nations Office on Drugs and Crime (UNODC)*. 2011. 139 p. URL: [https://www.unodc.org/documents/data-and-analysis/Studies/Illicit\\_financial\\_flows\\_2011\\_web.pdf/](https://www.unodc.org/documents/data-and-analysis/Studies/Illicit_financial_flows_2011_web.pdf/)
25. Transnational organized crime: the globalized illegal economy. *UNODC*. 2024. URL: <https://www.unodc.org/toc/en/crimes/organized-crime.html>.
26. What is Drug Trafficking? *Sanction Scanner*. 2024. URL: <https://sanctionscanner.com/knowledge-base/drug-trafficking-547>
27. Shapovalova V.O., Shapovalov V.V., Shuvera O.V. Forensic pharmaceutical monitoring of offenses in the field of illegal trafficking of psychoactive substances at the regional level. *Ukrainian Herald of Psychoneurology*. 2012. Volume 20. Issue 2 (71). P. 114-118.
28. Shapovalov V.V., Shapovalova V.O., Malinina M.G. Forensic pharmaceutical analysis of the illegal circulation of a medicinal product, which includes a precursor. *Ukrainian Herald of Psychoneurology*. 2008. Volume 16. Issue 2 (55). P. 108-110.
29. Shapovalova V. Forensic and pharmaceutical risks in the organization of pharmacotherapy of covid, post-covid and long-covid disorders. COVID-19 and vaccination practice standards. *SSP Modern Pharmacy and Medicine*. 2022. Vol. 2. No. 4. P. 1–24. URL: <https://doi.org/10.53933/ssppmpm.v2i4.69>
30. Shapovalova V. The ICD-11 for the twenty-first century: the first view from the organizational, legal, clinical and pharmacological aspects. *SSP Modern Pharmacy and Medicine*. 2022. Vol. 2. No. 1. P. 1-13. DOI: <https://doi.org/10.53933/ssppmpm.v2i1.37>.
31. Shapovalov V.V.(II), Shapovalova V.O., Shapovalov V.V. Experience of Great Britain in organization of healthcare system for pharmaceutical provision with medicines for privileged categories of citizens. *Health of society*. 2019. Vol. 78. No. 1. P. 36–40. URL: <https://health-society.zaslavsky.com.ua/index.php/journal/article/view/188>
32. Shapovalov V.V.(II), Gudzenko A.A., Shapovalova V.A. et al. Experience of the USA concerning and organization of healthcare system for the pharmaceutical provision for privileged categories of citizens. *Annals of Mechnikov Institute*. 2019. No. 1. P. 81–87. (doi: 10.5281/zenodo.2639521). URL: <https://zenodo.org/records/2639521>
33. Shapovalov V.V.(II), Gudzenko A.O., Shapovalova V.A. et al. Experience of Poland concerning and organization of healthcare system for the pharmaceutical provision for privileged categories of citizens. *The International scientific conference «Advance of Science»*. Czech Republic, Karlovy Vary: Skleněný Můstek – Ukraine, Kyiv: MCNIP, 2019. P. 16-22.
34. Shapovalov V. (II), Shapovalova V., Shapovalov V. et al. Analysis of healthcare expenditures in countries of the world. *Recipe*. 2019. Vol. 22. No. 5. P. 712-719.
35. Shapovalov V.V., Gudzenko O.P., Shapovalova V.A. et al. General characteristic of pharmaceutical provision for privileged categories of citizens in Ukraine. *The 10th International conference “Science and society”*. Hamilton, Canada. 2019. P. 90-96.
36. Shapovalov V. Multidisciplinary study of medical errors in the system of legal relations between "Doctor-Patient-Pharmacist-Advocate" during the circulation of drugs. *SSP Modern Pharmacy and Medicine*. 2023. Vol.3. No.2. P.1-11. URL: <https://doi.org/10.53933/ssppmpm.v3i2.88>



37. Ryshchenko O., Shapovalov V., Shapovalova V. et al. Organizational and legal implementation World Health Organization recommendations for pharmaceutical correction of patients with chronic pain syndrome the principles of medical and pharmaceutical law. *Ukrainian herald of psychoneurology*. 2015. Vol. 23. Iss. 2(83). P. 100–104. URL: <https://uvnnpn.com.ua/upload/iblock/769/769b5b807ade2a923624a1594b6562e2.pdf>
38. Shapovalova V.A., Sosin I.K., Butenko H.M. Pharmaceutical law in narcology. Kharkov: «Fact». 2004. 800 p.
39. Shapovalova V.O., Shapovalov V.V., Negretsky S.M. Forensic-pharmaceutical study of the problem related to drug addiction prevention and medical-pharmaceutical and church rehabilitation of drug addicts. *Ukrainian Herald of Psychoneurology*. 2012. T. 20. Issue 4. P. 74-78. URL: <https://uvnnpn.com.ua/arkhiv-nomeriv/2012/tom-20-vipusk-4-73/sudovo-farmatsevtichne-vivchennya-problemi-shcho-pov-yazana-z-prof-laktikoyu-narkoman-ta-mediko-farm>.
40. Shapovalov V.V., Gudzenko A.A., Shapovalova V.A. et al. Forensic and pharmaceutical analysis of addictive morbidity because of the use of psychoactive substances in Ukraine. *Klin. inform. telemed*. 2020. Vol. 15. Iss. 16. P. 129-132. DOI: <https://doi.org/10.31071/kit2020.16.02>.
41. Shapovalov V.V., Linsky I.V. Forensic pharmacy, forensic narcology: scoring method of the predisposing to psychical and behavioral frustrations health by reason of psychoactive substances abusing. *Farmatsevtichnyi zhurnal*. 2010. Issue 1. P. 36-41. URL: <https://pharmj.org.ua/index.php/journal/article/view/864>.
42. Shapovalov V., Linsky I. Forensic and pharmaceutical study of the pharmacotherapy of opioid withdrawal syndrome among patients-offenders with different levels of opium addiction on a base of evidence-based pharmacy. *Farmatsevtichnyi Zhurnal*. 2012. No. 1. P. 20-27. URL: <https://pharmj.org.ua/index.php/journal/article/view/546>.
43. Shapovalova V.O., Mykhaïlov V.S., Shapovalov V.V. [The characteristics of the development of cataleptic phenomena during the action of a new Ukrainian neuroleptica butyrophenone derivative-in experiments on mice]. *Fiziol. Zh.* 1999. Vol. 45. No.3. P.114-117. URL: <https://pubmed.ncbi.nlm.nih.gov/10439301/>.
44. Shapovalova V.O., Shapovalov V.V. [Spasmophilia in children and the anticonvulsant properties of a new Ukrainian preparation containing a pyrimidine derivative]. *Fiziol. Zh.* 1998. Vol. 44. No.5-6. P.102-105. DOI: <https://doi.org/10.1049/ir:19980309>
45. Shapovalova V.O., Chernykh V.P. The physiological properties of the action of a new analgesic and antipyretic preparation. *Fiziol. Zh.* 1997. Vol. 43. No.1-2. P. 117-121. URL: <https://pubmed.ncbi.nlm.nih.gov/9221112/>.
46. Shapovalova V.O. Paracetamol pharmacokinetics in the blood plasma of sexually immature rabbits with the use of the new Paravit preparation. *Fiziol. Zh.* 1995. Vol. 41. No.5-6. P. 57-60. URL: <https://pubmed.ncbi.nlm.nih.gov/9026394/>.
47. Shapovalova V.O. The effect of Val'kofen tablets for children on the function of the gastrointestinal tract and liver in an experiment. *Fiziol. Zh.* 1995. Vol. 41. No. 5-6. P. 111-116. URL: <https://europepmc.org/article/med/9026383>.
48. Mavrellis C. The Business of Transnational Crime. *Global Financial Integrity*. 11.04.2017. URL: <https://gfintegrity.org/business-transnational-crime/>
49. Europe: drug trafficking, organized crime increased by "order". *INTERPOL*. 08.05.2023. URL: <https://www.interpol.int/News-and-Events/News/2023/Europe-Drug-trafficking-organized-crime-increasing-by-an-order-of-magnitude>
50. Financial and cybercrimes top global police concerns, says new INTERPOL report. *INTERPOL*. 19.10.2022. URL: <https://www.interpol.int/News-and-Events/News/2022/Financial-and-cybercrimes-top-global-police-concerns-says-new-INTERPOL-report>.
51. Interpol steps up its fight against financial crime and corruption. *Infobae*. 15.03.2022. URL: <https://www.infobae.com/en/2022/03/15/interpol-steps-up-its-fight-against-financial-crime-and-corruption-2/>
52. The centre will focus on complex money laundering schemes and the use of virtual assets to follow the financial trails of organized crime. *INTERPOL*. 15.03.2022. URL:

<https://www.interpol.int/News-and-Events/News/2022/INTERPOL-launches-centre-against-financial-crime-and-corruption>

53. Belgium looks to Italian anti-mafia tactics to tackle drug trade. *The Brussels times*. 11.04.2023. URL: <https://www.brusselstimes.com/450625/belgium-looks-to-italian-anti-mafia-tactics-to-tackle-drug-trade>
54. Politova A.C. The current state of combating drug crime in Ukraine. *Legal journal of Donbass*. 2018. No. 3(64). P.136-145. URL: <https://ljd.dnuvs.ukr.education/wp-content/uploads/2022/01/20-politova.pdf>.
55. Mykhaylov D. In 2023, the SBI investigated 728 criminal cases related to drug trafficking. *Public*. 28.12.2023. URL: <https://suspilne.media/649314-u-2023-roci-dbr-rozsliduvano-728-kriminalnih-sprav-pro-obig-narkotikiv/>
56. Since the beginning of the full-scale invasion, the SBI has been actively fighting the drug mafia and seizing large batches of "potions" worth millions of hryvnias (INFOGRAPHIC). *State Bureau of Investigation*. 28.12.2023. URL: <https://dbr.gov.ua/news/vid-pochatku-povnomasshtabnogo-vtorgnennya-dbr-aktivno-protidie-narkomafii-ta-viluchae-veliki-partii-zillya-na-miljoni-griven?fbclid=IwAR23Wrpvc8Ua1vdcDtidtKLYj9BUswGeNoFjN1cEAzVbPFflxV7mFclAk/>
57. In 2023, the SBI investigated almost 71,000 criminal proceedings (INFOGRAPHIC). *State Bureau of Investigation*. 27.12.2023. URL: <https://dbr.gov.ua/news/u-2023-roci-dbr-rozsliduvano-majzhe-71-tisyachu-kriminalnih-provazhen>
58. In 2023, the SBI investigated 728 cases of illegal drug trafficking. 77 defendants received sentences. *TSN*. 28.12.2023. URL: <https://tsn.ua/ukrayina/u-2023-roci-dbr-rozsliduvano-728-provazhen-za-faktami-nezakonnogo-obigu-narkotikiv-77-obvinuvachenih-otrimali-viroki-2481325.html>.
59. Units of the National Police of Ukraine seized more than 2.4 tons of narcotic drugs and psychotropic substances in 2023. *Ministry of Internal Affairs of Ukraine*. 15.10.2023. <https://mvs.gov.ua/news/pidrozdili-nacionalnoyi-policiyi-ukrayini-vilucili-ponad-24-tonni-narkoticnix-zasobiv-i-psixotropnix-recovin-u-2023-roci>
60. Shapovalov V.V., Linsky I.V. Forensic pharmacy: the study of disposition to health addictive disorders of the drug addiction patients with deviant behavior. *Farmatsevtychnyi zhurnal*. 2011. Iss.6. P.30-34. URL: <https://pharmj.org.ua/index.php/journal/article/view/564>.
61. Shapovalov V.V. (Jr.), Linsky I.V. Evidence-based pharmacy: definition of the control regime for the medicines in the pharmaceutical correction schemes of the opioid dependence. *Pharmaceutical Zhurnal*. 2013. No.3. P.35-40. URL: <https://pharmj.org.ua/index.php/journal/article/view/399>.
62. Shapovalova V.A., Shapovalov V.V., Shapovalov V.V. et al. Forensic and pharmaceutical assessment of polydrug addiction at combined use of psychoactive substance. *Likars'ka sprava*. 2018. No.1-2(1146). P.171-177. DOI: [https://doi.org/10.31640/JVD.1-2.2018\(29\)](https://doi.org/10.31640/JVD.1-2.2018(29)).
63. Shapovalov V., Bondarenko V., & Shapovalova V. Forensic pharmacy: expert providing of quality of psychoactive substances which are return from non-legal turn. *Farmatsevtychnyi Zhurnal*. 2008. No.2. P.54-58. URL: <https://pharmj.org.ua/index.php/journal/article/view/1171>.
64. Shapovalov V., Shapovalova V., & Malinina N. The forensic-pharmaceutical characteristic of control-allowing system concerning a turn precursors. *Farmatsevtychnyi Zhurnal*. 2008. No.4. P.37-40. URL: <https://pharmj.org.ua/index.php/journal/article/view/1116>.
65. Shapovalov V., Shapovalova V., & Vasina Y. Proving pharmacy and forensic pharmacy: features of polinarcomania among young people. *Farmatsevtychnyi Zhurnal*. 2008. No.5. P.51-56. URL: <https://pharmj.org.ua/index.php/journal/article/view/1096>
66. Vasina J., Shapovalov V., Shapovalova V. Judicial-pharmaceutical study of problem of forming of aggressive conduct for young people under act of psychoactive substances. *Farmatsevtychnyi Zhurnal*. 2009. No.2. P.64-69. URL: <https://pharmj.org.ua/index.php/journal/article/view/1006>

67. Shapovalov V., Shapovalova V., Malinina N. The forensic pharmacy, as component part of the state checking after violations and removal of reasons and terms which are instrumental in violations system, is related to illegal turn of precursors. *Farmatsevychnyi Zhurnal*. 2009. No.5. P.61-66. URL: <https://pharmj.org.ua/index.php/journal/article/view/915>.
68. Shapovalov V., Shapovalova V., Kuryzheva O. et al. The need to increase state control over the circulation of medicinal plants, which has psychoactive properties (on the basis of forensic pharmacy). *Farmatsevychnyi Zhurnal*. 2010. No.5. P.16-20. URL: <https://pharmj.org.ua/index.php/journal/article/view/721>
69. Shapovalov V., & Negretskiy S. Forensic and pharmaceutical research of the cannabinoid addiction spreading in the Kharkiv region of Ukraine. *Farmatsevychnyi Zhurnal*, 2010. No.6. P.9-11. URL: <https://pharmj.org.ua/index.php/journal/article/view/740>
70. Shapovalova V., Zakharchenko I. Organizational and legal approaches to reforming of the law enforcement system of Ukraine: illegal circulation of psychoactive substances and addictive dependence. *SSP Modern Law and Practice*. 2021. Vol. 1. No.1. P. 1-22. DOI: <https://doi.org/10.53933/sspmlp.v1i1.20>.
71. Ivanishyn-Hayduchok, L., Shapovalova, V., & Shapovalov, V. ICD-11: Organizational and Legal, Medical and Pharmaceutical, Social and Economic Issues of Implementation of the Program of State Guarantees of Medical Care in 2022 in Ukraine, Based on The Fundamental Principles of the European Union. *SSP Modern Pharmacy and Medicine*. 2022. Vol.2. No.2. P.1-14. DOI: <https://doi.org/10.53933/ssppmp.v2i2.53>.
72. Shapovalova V. Monkeypox Virus – New Challenges of Modernity: Experimental Organizational and Legal, Clinical and Pharmacological Studies. *SSP Modern Pharmacy and Medicine*. 2022. Vol.2. No.3. P.1-15. DOI: <https://doi.org/10.53933/ssppmp.v2i3.54>.
73. Shapovalov (Jr.) V., Shapovalova V., & Shapovalov V. Development of forensic and pharmaceutical researches within the organization of pharmaceutical business, drug technology and pharmaceutical law in Ukraine concerning the turnover of controlled drugs and substances. *Health of Society*. 2021. Vol. 10. No. 3. P. 98-106. URL: <https://doi.org/10.22141/2306-2436.10.3.2021.246351>.
74. A drug and psychotropic sales channel worth UAH 3.5 million was liquidated in Kyiv - four drug dealers were notified of suspicion. *Kyiv City Prosecutor's Office*. 22.03.2024. [https://kyiv.gp.gov.ua/ua/news.html?\\_m=publications&\\_c=view&\\_t=rec&id=356283](https://kyiv.gp.gov.ua/ua/news.html?_m=publications&_c=view&_t=rec&id=356283)
75. In Sumy, the SBI detained a law enforcement officer who was developing a drug sales network. *State Bureau of Investigation*. 13.03.2024. <https://dbr.gov.ua/news/u-sumah-dbr-zatrimalo-pravoohoroncya-yakij-rozvivav-merezhu-z-prodazhu-narkotikiv>
76. The SBI eliminated a powerful network of drug sales through a specially created pharmacy and drug clinics. *State Bureau of Investigation*. 01.03.2024. <https://dbr.gov.ua/news/dbr-likvidovalo-potuzhnu-merezhu-prodazhu-narkotikiv-cherez-specialno-stvorenu-apteku-ta-narkologichni-kabneti>.
77. Law enforcement officers who "earned" hundreds of thousands of dollars from drug dealers will be tried in Odesa based on the materials of the SBI. *State Bureau of Investigation*. 21.12.2023. <https://dbr.gov.ua/news/na-odeshhini-za-materialami-dbr-suditimut-pravoohoronciv-yaki-zarobili-na-narkodilkah-sotni-tisyach-dolariv>
78. The SBI exposed an extensive network of drug dealers who earned at least half a million US dollars from drugs. *State Bureau of Investigation*. URL: 19.10.2023. <https://dbr.gov.ua/news/dbr-vikrilo-rozgaluzhenu-merezhu-narkotorgovciv-yaki-zaroblyali-na-zilli-shhonajmenshe-pivmiliona-dolariv-ssha>
79. Members of the criminal group who sold drugs in the Berdychiv colony will appear before the court. *State Bureau of Investigation*. 20.12.2023. URL: <https://dbr.gov.ua/news/pered-sudom-postanut-chleni-zlochynnoi-grupi-yaki-prodavali-narkotiki-u-berdichivskij-kolonij>
80. Karpenko A.V., Nazimko E.S. To the issue of latency of criminal offenses in the sphere of drug trafficking. Actual issues of the activity of criminal police units: a collection of materials of the All-Ukrainian scientific and practical conference (Kropyvnytskyi, April 14, 2023). Kropyvnytskyi:

- DonDUVS. 2023. P. 73-75. [https://dnuvs.ukr.education/wp-content/uploads/2023/12/zbirnyk\\_materialiv\\_konferencij\\_ord\\_ta\\_ib\\_14\\_04\\_2023-1.pdf](https://dnuvs.ukr.education/wp-content/uploads/2023/12/zbirnyk_materialiv_konferencij_ord_ta_ib_14_04_2023-1.pdf).
81. Criminal Code of Ukraine. Information of the Verkhovna Rada of Ukraine. 2001. No. 25-26. Article 131. Editorial office dated 03/28/2024. URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text>
82. The Law of Ukraine "On measures to counter the illegal circulation of narcotic drugs, psychotropic substances and precursors and their abuse". Information of the Verkhovna Rada of Ukraine. 1995. No. 10, Article 62. Edition of 31.03.2024. URL: <https://zakon.rada.gov.ua/laws/show/62/95-%D0%B2%D1%80#Text>.
83. Resolution of the Cabinet of Ministers dated 17.08.1998 No. 1303 "On regulation of free and subsidized dispensing of medicines according to doctors' prescriptions in the case of outpatient treatment of certain groups of the population and for certain categories of diseases." Information of the Verkhovna Rada of Ukraine. Editorial from 04.05.2023. URL: <https://zakon.rada.gov.ua/laws/show/1303-98-%D0%BF#Text>.
84. Law of Ukraine "On psychiatric care". Information of the Verkhovna Rada of Ukraine. 2000. Edition of 01.01.2024. URL: <https://zakon.rada.gov.ua/laws/show/1489-14#Text>.
85. Mavrellis C. The Business of Transnational Crime. *GFI*. 11.04.2017. <https://gfintegrity.org/business-transnational-crime/>.
86. Drug trafficking. *UNODC*. 2024. URL: <https://www.unodc.org/e4j/zh/organized-crime/module-3/key-issues/drug-trafficking.html>
87. Klymenko I. Closed circle and organized pyramid of the Ukrainian drug business. *IA Interfax-Ukraine*. 31.08.2020. URL: <https://interfax.com.ua/news/blog/684492.html>.
88. Drug Trafficking Meaning and Its Connection with Money Laundering. *Tookitaki*. 15.03.2024. URL: <https://www.tookitaki.com/glossary/drug-trafficking#:~:text=Drug%20trafficking%20refers%20to%20the,to%20make%20them%20appear%20legitimate>.
89. Questions and Answers on the Communication on the EU Roadmap to fight Drug Trafficking and Organised Crime. *Brussels: European Commission-Questions and answers*. 18.10.2023. URL: [https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_23\\_4983](https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_4983).
90. Waly G. UN Security Council Open Debate on Transnational Organized Crime. *UN Office on Drugs and Crime*. 07.12.2023. URL: <https://www.unodc.org/unodc/en/speeches/2023/un-security-council-briefing-on-toc-071223.html>.
91. Kupatadze A. Beyond conventional boundaries: Examining the Intricate Interplay between Corruption and Organized Crime in the Global South. *World Affairs*. 2023. Vol. 186. No.3. P. 747-775. DOI: <https://doi.org/10.1177/00438200231178852>
92. Prosecutor General Andriy Kostin on the results of 2023. *Office of the Prosecutor General*. 30.12.2023. URL: <https://www.gp.gov.ua/ua/posts/genprokuror-andrii-kostin-pro-pidsumki-2023-roku/>
93. The Prosecutor General took part in a professional discussion on reforms in the sphere of the rule of law. *Office of the Prosecutor General*. 16.04.2024. URL: <https://www.gp.gov.ua/ua/posts/genprokuror-vzyav-ucast-u-profesiinii-diskusiyi-shhodo-reform-u-sferi-verxovenstva-prava>.