

FINANCIAL OFFENSES IN THE CIRCULATION OF MEDICINES IN THE CONTEXT OF GLOBALIZATION

Oksana Kuzmenko¹, Tetiana Matselyk², Viktoriia Chorna³

Abstract. *The aim of the article* is to study theoretical legal principles of financial offenses in the circulation of medicines in the context of globalization. *The subject of the study* is financial offenses in the circulation of medicines in the context of globalization. *Methodology.* The study is based on general scientific and special-scientific methods and techniques of scientific knowledge. The historical and legal method enabled to determine the challenges of the circulation of medicines in Ukraine. The comparative legal method enabled to compare doctrinal approaches to the differentiation of medicinal products in the pharmaceutical market in Ukraine and the EU as a whole. The system-structural method contributed to the consideration and identification of the most negative effects of the shadow circulation of medications on the Ukrainian economy. The methods of grouping and classifying were the basis for the author's approach to the identification of types of trafficking in medicines in Ukraine. The technical legal method enabled to interrogate the state of affairs in the regulatory and legal regulation of the national system of the pharmaceutical market of Ukraine and highlight the problematic issues of drug trafficking in the pharmaceutical market of Ukraine, as well as the negative trends in increasing the total medication circulation in the shadow pharmaceutical market. *The results of the study* enabled to highlight the drivers of the prosperity of drug trafficking in the pharmaceutical market in Ukraine. *Practical implications.* In the study: first, the key aspects of the definition of the concept and types of financial offenses in the circulation of medicines are outlined; second, the challenges of detection of financial offenses in the circulation of medicines in Ukraine are underlined, and scientific approaches to certain financial and legal challenges of detection, available in the special literature, are analysed and compared; third, the author's original perspective concerning potential solutions to the challenges of detection of financial offenses in the circulation of medicines in Ukraine is substantiated. *Relevance/originality.* The original author's approach to the definition of the concept, types, and challenges of detection of financial offenses in the circulation of medicines is the basis for developing the most promising areas of improvement of domestic legislation in this sphere.

Key words: corruption, public administration, financing, shadow economy, financial offenses, medicines.

JEL Classification: D73, H76

1. Introduction

The current development of Ukraine requires the introduction of globalization trends in all spheres of public administration with the aim of improving the country's economic situation, social protection of the population, raising the standard of living of citizens and the standards of medical care, the active introduction of advanced information technologies, etc. Undoubtedly, these trends concern the sphere of the circulation of medicines. To date, the issue of globalization of the circulation of medicines through the provision of adequate quality, safety, and affordability is determined as relevant and vital not only in Ukraine but in the entire international pharmaceutical industry.

In legal science, the issues of procurement of medicines were studied by domestic and foreign scientists, such as N. O. Vetiutneva, S. H. Ubohov, O. V. Kuzmenko, V. K. Kolpakov, H. H. Pylypenko, A. P. Radchenko, M. V. Rymar, O. H. Strelchenko, L. O. Fedorova, and others. However, public procurement of medicines is not considered enough, consequently, the chosen topic of the scientific article is relevant and important.

Therefore, consideration of the doctrinal approaches to public procurement of medicines becomes relevant and constructs the aim of this article. For its successful achievement, the following **tasks** should be solved: first, to outline the key aspects of financial offenses in the circulation of medicines; second, to analyse the perspectives available in the specialized literature in

Corresponding author:

¹ Vadym Hetman Kyiv National Economic University, Ukraine.

² National University of the State Fiscal Service of Ukraine, Ukraine.

³ National Academy of Internal Affairs, Ukraine.

relation to the types of medicines and the concept of the circulation of medicines; third, to propose an author's original approach to the definition of financial offenses in the circulation of medicines in Ukraine.

2. Main material

To describe the category "globalization in the circulation of medicine", it should be noted that the term "globalization" (from English "globe") is used in several meanings:

- a prolonged process of integration between the world national economies to solve the global problems of mankind;
- a complex phenomenon of economies interdependence, arising out of the exchange of goods and services and flows of capital;
- the process, due to which the achievements, decisions, and activities of people in one part of the globe affect significantly individuals and their communities in all parts of the world (*Hlobalizatsiia ta hlobalni problemy liudstva*);
- process of world economic, political, and cultural integration and unification (Pashkov, June 17, 2013);
- the objective social process of the growing interconnectedness and interdependence of national economies, national political and social systems, national cultures, as well as the humanity and environment interaction. The basis of globalization is the development of world markets for goods, services, labour, and capital (*Hlobalizatsiia ta hlobalni problemy liudstva*).

It must be emphasized that globalization is not limited to socio-economic changes only, that is, in spreading a market model of a neoliberal pattern throughout the planet. Globalization also promotes the spread of the neoliberal economic doctrine in the world, which puts a free market exchange in the basis of all human relations, completely liberalizes economic life, and exempts capital from state and society control. The most orthodox model of neo-liberalization excludes the state interference in the economy at all. According to the Strategy of Ukraine's innovative development in 2010-2020 under the challenges of globalization, market reforms in the new post-Soviet countries, including Ukraine, were carried out on this model. By removing the state from direct participation in the economic process, neoliberalism has caused not only the separation of the financial system from material production and the transfer of competition from it into the sphere of financial transactions, but also created the conditions for its exploitative behaviour in relation to the sphere of production, the speculative component growth in the economy. While at the beginning of neo-liberalization, 90% of international financial transactions belonged to the real economy and only 10% were speculative, by the mid-1990s, this ratio has changed to the opposite. Finally, neoliberalism contributes to the strengthening of the capitalization of innovation and inhibits their socialization (*Stratehiia innovatsiinoho rozvytku Ukrainy na 2010-2020 roky v umovakh hlobalizatsiinykh vyklykiv*).

Objectively, neo-liberalism increases the risk of the crisis in innovative economic development. This crisis is specific to countries with different stages of economic development. For countries with a developed economy, the crisis occurs due to the dominance of the financial factor in economic growth; for less developed ones, due to the gradual destruction of their innovative potential. The latter is fully applicable to Ukraine.

The tools of globalization enable 15% of the planet's population, the so-called "safe countries" of Europe and the United States, to consume 75% of all resources extracted by all humanity, while 85% of the remaining population obtain 25% of resources (Ospishchev, Lukianchenkova, 2011). According to WHO estimates, human health is 70% dependent on lifestyle and nutrition and only 15% on the medical service and genetic features (Zotova, Krikun, Latyk, 2006).

It should be noted that the concentration of economic power on the part of individual entities could reach extreme parameters, without formal violation of the legislation on economic competition. This problem can be acute if foreign companies, in particular multinational corporations reach such a level of economic power (Zadykhailo, 2006). In addition, the growth of expansion of transnational corporations can adversely affect the development of national economies through the creation of conditions, under which national producers are not in a position to compete with powerful companies and are forced to give up their interests to sustain their market position (Peshko, 2006). Therefore, in Ukraine, an expansion of foreign producers displaces domestic producers from their own markets (Nazarenko, Reshetniak, 2011). These circumstances make domestic producers use various kinds of economic malpractice, including corruption, financial offenses to maintain the economic growth rates of their own pharmaceutical companies, as well as for their own enrichment.

It should be noted that the pharmaceutical market is among the five most profitable branches of the international economy (Hladkykh, 2015). All this indicates that medicines are of constant need and the demand for them grows. In addition, the world pharmaceutical market purposefully demonstrates the growth of this demand in almost all stages. The statistical dynamics of the growth of the international pharmaceutical market supports this trend. Therefore, according to the estimates of the Institute of Information Security of Health, the total world circulation of medicines in the pharmaceutical market, compared to 2017, will increase from \$1.1 trillion dollars to \$1.4 trillion by 2020 (*Statystychna informatsiia Derzhavnoi sluzhby statystyky Ukrainy*).

At present, pharmaceutical companies are increasing marketing costs (about \$27 billion); accordingly, the share of financing for the creation of new medications is decreasing, which reduces the development of the pharmaceutical industry. Meanwhile, functioning and the competitiveness of any pharmaceutical company require

releasing a number of new original medications (brands). Accordingly, even large corporations cannot create such brands that need about 10 years of research and hundreds of millions of dollars a year to be manufactured. Consequently, large corporations are united into even larger structures whose budgets reach between \$1 billion and \$8 billion annually (Myronyshyna, 2007). For example, the top 10 largest international pharmaceutical corporations that have been merged by another one, are: acquirers: Actavis, Amgen, Valeant Pharmaceuticals, Perrigo, McKesson, AstraZeneca, Shire, Forest Laboratories, Salix Pharmaceutica, and target companies merged with larger corporations: Onyx, Bausch & Lomb, Forest Laboratories, Elan Corp, Celesio, BMS Diabetes, Viro Pharma, Aptali, Santras.

Globalization in the circulation of medicine in Ukraine has significantly affected the industrial production of medications. Thus, for today, industrial production of medicines is carried out by such enterprises as InterChem SLC, Arterium Corporation, Biopharma, Borshchagov Chemical and Pharmaceutical Plant, Darnitsa PrJSC (Pharmaceutical Firm), Enzym PrJSC, TM Vishpha (Zhitomir Pharmaceutical Factory), Indar PrJSC, Medicines of Ukraine UC, Lubnyfarm JSC, Farmak JSC, which synthesize pharmaceutical substances, create original medicines, provide Ukraine with them, and export abroad. The Ukrainian pharmaceutical industry produces more than 1,400 medications, half of which are sold on the domestic market. Domestic manufacturers are developing analogues of imported medicines, but they cannot fully meet their needs. An acute problem is the provision of vital and essential medications, on which the life of patients depends (Importozamishchennia: pohliad vitchyznianskykh vyrobnykiv).

However, under challenges of globalization, Ukrainian producers are forced to lose their pharmacological markets and progressively commit financial frauds and corruption crimes against financial reporting to protect their own companies from destruction. They do not shun the development and supply of counterfeit medicinal products to the market. Therefore, according to the State Medical Service, in Ukraine, during the establishment of criminal responsibility for counterfeit medicines or their circulation, total fraudulent medications increase, since over the last five years, this central executive authority has issued 310 resolutions on banning the circulation of 326 series of 183 names of fraudulent medicines. During this period, the State Medical Service sent 440 service letters to the law-enforcement bodies, such as the Ministry of Internal Affairs of Ukraine, the National Police of Ukraine, the Security Service of Ukraine and their territorial units, with relevant materials regarding detected facts of fraudulent medicines. Meanwhile, 141 criminal proceedings were registered by the investigating authorities of the Ministry of Internal Affairs of Ukraine (from November 2015, National Police of Ukraine) in the Uniform Register of Pre-

trial Investigations (7 in 2012; 55 in 2013; 20 in 2014; 27 in 2015; 32 in 2016; 46 in 2017) according to Art. 321 of the Criminal Code of Ukraine ("Counterfeiting of Medicines or Circulation of Counterfeit Medicines") indicate a negative dynamics and an acute problem of the circulation of counterfeit medicines in Ukraine and the need to improve regulatory and legal mechanisms to counteract this phenomenon (Melnychuk, 2011).

Such indicators are due to the low purchasing power of citizens, in addition, the cheapness of local medicines makes "white" counterfeiting disadvantageous for them; therefore, the "black" counterfeiting of rather expensive local drugs, for example, antibiotics replaced by cheap analogues, is becoming increasingly common. Such fraudulent medicines are made within the country because uncontrolled production and outlets, as well as the import of "in bulk" (it remains only to pack and stick labels), exist. Another way is to attract an administrative resource and funds to develop new ways of producing and selling counterfeit medicines that do not fall under the concept of a criminal offense and thus provide an opportunity to implement illicit schemes for enrichment in the pharmaceutical market of the state. For example, business entities could be created, such as legally operating firms officially registered, which have appropriate licenses, but under the guise of legal activities, sell counterfeit medicines; legally operating distribution companies created with the participation of domestic producers of medicines that illegally produce foreign medications; one-day firms created by executives of other types of firms that sell counterfeit medicines, which are for one or two transactions and function using false documents (registration and permits). The counteraction to the illegal activities of these entities is complicated by their use of contactless schemes and the Internet, leading to counterfeiters' commission of a criminal offense under Art. 190 of the Criminal Code of Ukraine (Fraud) (Kryminalnyi kodeks Ukrainy).

It should be noted that in the circulation of medicine in Ukraine, a range of unresolved problems occurs. For example, in the circulation of medicine, along with various bans on the sale and storage of certain medicines (for example, ATF-long, Cratal), offenders buy these drugs and illegally transport to the former ATO area (today JFO). That is, an uncontrolled distribution of drugs goes. The other side of the coin concerning the use of ATP-long is ineffectiveness in tablet form, as proven by Ukrainian researchers of medications. However, these medicines are actively used (offered) by certain Ukrainian medics, who profitably cooperate with pharmaceutical companies, and are prescribed to patients by now. Such medicines are distributed not only in Ukraine but also sold in foreign markets: Belarus, Armenia, Albania, Kazakhstan, Kyrgyzstan, Russia, etc.

Another problem is taxes. For example, conducting tax audits at pharmacological enterprises, such as the Borshchagov Chemical and Pharmaceutical Plant, where

from 2016 to 2018, together with other companies, fraudulent firms were created to cover the illegal converse of non-cash funds in cash, as well as to execute sales transactions. This scheme serves to reduce tax payments. In the course of the electronic reporting analysis, the tax authorities found that offenders recorded only a portion of the purchased goods while selling medicines to the companies of the real economy on a completely different nomenclature. Directly, the official documentation reflected selling some medications (for example, polypladone, kavomax) to the address of: Kyiv Vitamin Factory JSC, Kusum Pharm, Farmiko Ltd., etc. In addition, in April 2016, the management and employees of the plant were accused of large-scale fraud. That time, through 58 individuals, they tried to withdraw more than 11 million hryvnias. The management and employees faced from 3 to 8 years imprisonment (Yak Borshchahivskiy).

A separate and rather significant problem in the circulation of medicine is the offshore accounts of former company executives. For example, this topic can be considered in case of the Borshchagov Chemical and Pharmaceutical Plant. Therefore, in fact, the main stake is held by the family of the former head of the Borshchagov Chemical and Pharmaceutical Plant. To date, the largest stake is held by dismissed executives, their family, relatives, members of the supervisory boards and the accountant. For example, the Borshchagov Chemical and Pharmaceutical Plant's shares are nominally held by the entire management, up to 2.6%, but because of the offshore registration in the Virgin Islands (Lenik Group and Beldor Group), they actually own 41.5% of the company. The second largest stake, up to 29.9% of the shares, previously belonged to the city of Kyiv, but in 2016, they were bought by the Pharmaceutical Firm "Darnitsa," which was among the top three "players" in the pharmaceutical market. Up to 26% of the shares are still on the account of 300 current and ex-employees of the plant. Accordingly, the change of management will be ineffective, because the "former" still have control over the company, since more than 40% of the shares are owned by only 2 companies apparently that are located not in Ukraine. Therefore, a "chunk" of the plant is owned by two offshore offices of the plant management, up to 41.5%. The first is the Lenik Group S.A., which is located on the Virgin Islands and has 20.3169% stake in the plant and Beldor Group S.A., which has 21.2636% of the shares, located there too (Yak Borshchahivskiy).

Moreover, the fraudulent conspiracy of doctors and pharmaceutical companies is problematic, because with the consent of health officials, they prescribe certain medications to patients, advising to buy them in certain pharmacies. For "services provided" doctors received money, as well as tourist trips to foreign countries, from representatives of pharmaceutical companies. For example, doctors try to prescribe as many medicines as possible to patients, including those with several months before the expiration date.

(From the sale of such medicines, doctors receive 10% per one preparation from 50 UAH (1.5 USD) and 20% per drug from 80 UAH (3 USD) (Yak Borshchahivskiy).

Facts of fraud in the circulation of medicine are also often manifested in free release at inflated prices and in large batches of medicinal products subject to release on the special Prescription form no. 3, which must contain a medical stamp, a personal seal and a physician's signature, resulting in the illicit narcotic drug trafficking.

It should be noted that the problem of financial offenses in the circulation of medicine does not bypass any country. For example, in the United States, the most common medical actions that can entail large fines and sometimes even criminal liability: overstatement of medical services bills; conducting of procedures in the absence of clinical indicators; kickbacks; abuse in relations with the industry (Ovcharenko, Rieznik, 2017).

At the same time, the United States introduces effective methods of countering financial offenses in the circulation of medicine. In this country (and in other European countries), a health insurance system operates to ensure transparency of payment and all payment transactions, conducted by doctors and transferred to a health facility. It serves as the guarantor of the free provision of a certain amount of medical services upon the occurrence of the insured event (health problem).

In Japan, the regulation of healthcare differs slightly. In this country, the priority is the continuous improvement of medicine. This is manifested in investment activity: in Japan nowadays, health care costs make up 8.1% of GDP. Moreover, the contributions to technical equipment are made: there are no multi-volume paper manuscripts in the country; patient service is based on the latest advances in technology and computer technology, which facilitates the work of health staffs as a more progressive reporting method (Ovcharenko, Rieznik, 2017).

3. Conclusion

Therefore, in order to reduce financial offenses in the circulation of medicine in the context of globalization, it is necessary:

First, to standardize treatment by introducing standards for each clinical case, determining further doctor's actions.

Second, to reform the system of remuneration for medical personnel by raising the rate of official salaries.

Third, to introduce public control institutes, in the form of a voluntary association of independent medical specialists involved in the verification in the circulation of medicine.

Fourth, to conduct information campaigns targeted at different social groups to promote the elimination of a tolerant attitude towards corruption in the medical sphere, to develop a conviction of financial offenses in the circulation of medicine, to improve cooperation between authorities and citizens in this area through active public policy on preventing or stopping criminal acts in this area.

References:

- Hlobalizatsiia ta hlobalni problemy liudstva [Globalization and global problems of humanity]. *Mizhnarodni ekonomichni vidnosyny*. Retrieved from: https://pidruchniki.com/1256060753395/ekonomika/globalizatsiya_globalni_problemi_lyudstva (in Ukrainian)
- Pashkov, V. M. (June 17, 2013). Hlobalizatsiia farmatsevychnoho rynku yak zahroza ekonomichnoho suverenitetu Ukrainy [Globalization of the pharmaceutical market as a threat to the economic sovereignty of Ukraine]. *Apteka*, 24(895), 2. (in Ukrainian)
- Stratehiia innovatsiinoho rozvytku Ukrainy na 2010-2020 roky v umovakh hlobalizatsiinykh vyklykiv [Strategy of innovation development of Ukraine for 2010-2020 in the context of globalization challenges] (Resolution of the Verkhovna Rada of Ukraine no. 2632-VI of October 21, 2010). Retrieved from: <http://zakon1.rada.gov.ua/laws/show/2317-17> (in Ukrainian)
- Ospishchev, V. I., Lukianchenkova, V. Ye. (2011). Antyhlobalizatsiia i intehratsiia z Rosiieiu – shliakh vykhodu z kryzy [Anti-globalization and integration with Russia – the way out of the crisis]. Proceedings from *International Scientific and Practical Conference on Actual Problems of the Development of Branch Economy and Logistics* (pp. 41-42). Ministry of Health of Ukraine; Ministry of Education and Science, Youth and Sports of Ukraine; KH.: NPhU. (in Ukrainian)
- Zotova, O. O., Krikun, O. I., Latyk, V. V. (2006). *Riven zhyttia naseleennia Ukrainy* [The level of life of the population of Ukraine]. K.: Consultant. (in Ukrainian)
- Zadykhailo, D. V. (2006). Pravovyi hospodarskyi poriadok v Ukraini: desiatorychnyi dosvid konstytutsiyno-pravovoho zabezpechennia [Legal economic order in Ukraine: Ten-year experience of constitutional and legal provision]. *Visnyk Pravovykh nauk Ukrainy*, 3(46), 143-153. (in Ukrainian)
- Peshko, A. (2006). Protsesy hlobalizatsii ta yikh vplyv na natsionalni ekonomiky [Processes of globalization and their influence on national economics]. *Visnyk. Natsionalnoi akademii derzhavnoho upravlinnia pry Prezydentovi Ukrainy*, 2, 133-138. (in Ukrainian)
- Nazarenko, O. V., Reshetniak, N. B. (2011). Pytannia ekonomichnoi bezpeky Ukrainy [Issues of Economic Security of Ukraine]. Proceedings from *International Scientific and Practical Conference on Actual Problems of the Development of Branch Economy and Logistics* (pp. 34-36). Ministry of Health of Ukraine; Ministry of Education and Science, Youth and Sports of Ukraine; KH.: NPhU. (in Ukrainian)
- Hladkykh, D. Ye. (2015). Tendentsii rozvytku svitovoho khimiko-farmatsevychnoho rynku v umovakh hlobalnoi kryzy [Trends in the development of the world chemical and pharmaceutical market in a global crisis]. *Naukovyi visnyk mizhnarodnoho humanitarnoho universytetu*. Retrieved from: <http://www.vestnik-econom.mgu.od.ua/journal/2015/11-2015/08.pdf> (in Ukrainian)
- Statystychna informatsiia Derzhavnoi sluzhby statystyky Ukrainy [Statistical information of the State Statistics Service of Ukraine]. Retrieved from: <http://www.ukrstat.gov.ua/> (in Ukrainian)
- Myronyshyna, O. V. (2007). Hlobalizatsiia farmatsevychnoi industrii: naslidky vplyvu dlia ukraïnskoï ekonomiky [Globalization of the pharmaceutical industry: Impacts on the Ukrainian economy]. *Visnyk Donetskoho universytetu*, 2, 153-168. (in Ukrainian)
- Importozamishchennia: pohliad vitchyznianskykh vyrobnykiv [Importation substitution: The view of domestic producers]. Retrieved from: <http://www.sphu.org/uk/news/371-2011-04-22-16-21-40>
- Melnychuk, V. M. (2011). Kryminalna vidpovidalnist za falsyfikatsiiu likarskykh zasobiv abo obih falsyfikovanykh likarskykh zasobiv v Ukraini [Criminal responsibility for counterfeiting of medicines or circulation of counterfeit medicines in Ukraine] (Dissertation Abstract of PhD in specialty 12.00.08). Kyiv. (in Ukrainian)
- Kryminalnyi kodeks Ukrainy [Criminal Code of Ukraine] (Law of Ukraine no. 2341-III of April 05, 2001, Art. 131). *Vidomosti Verkhovnoï Rady Ukrainy*, 25. (in Ukrainian)
- Yak Borshchahivskyi KHFZ obmaniuie kliientiv ta spivrobotnykiv [How Borshchagov Chemical and Pharmaceutical Plant deceives clients and employees]. Retrieved from: <https://www.obozrevatel.com/ukr/health/digest/borschchahivskij-hfz-ofshori-mahinatsii-z-podatkami-i-neepektivni-preparati.htm> (in Ukrainian)
- Ovcharenko, N. M., Riezniak, O. M. (2017). Zapozychennia dosvidu podolannia koruptsii u sferi medytsyny dlia Ukrainy na prykladi providnykh krain svitu: SShA, Yaponii ta Nimechchyny [Borrowing of experience in overcoming corruption in medicine for Ukraine on the example of the leading countries of the world: the USA, Japan and Germany]. *Pravo i suspilstvo*, 3(2), 236-241. (in Ukrainian)