



Protection of a Human, Human Rights and International Practices in Counterfeiting Medicines: Management and Administration Issues in the Globalized Environment

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ABSTRACT

The article highlights the problematic issues of implementing of the best international practices in protection of a human and human rights, and counterfeiting medicines in the context of globalization. Every state exists for man, for the protection of universally recognized rights and freedoms. counterfeiting of medical products and other similar crimes require attention in any country in the world. Counterfeiting is not an exception in developed countries in Europe, such as the Netherlands, Belgium, Sweden, Switzerland, Finland, Norway, Denmark, and Austria. This problem is global for, both, legal and public administration science. It is widespread throughout the world, and the negative effects of this crime have severe consequences that affect people's lives and health. The purpose of the article is to study and summarize the best international experience in protection of a human, his rights and in the fight against counterfeiting of medicines, as well as to explore the problems of its implementation in the context of globalization. The research material is a modern international regulatory framework, which governs the struggle against counterfeiting of medicinal products, foreign and domestic scientific works of specialists. The system method, structural and functional method, techniques of logical method, method of legal statistics, legal modeling were used in writing the article. Techniques of logical method such as analysis, synthesis, deduction, and induction were also reviewed. The general theoretical characteristics of the best international experience in combating counterfeiting of medicinal products has been studied and represented. In addition, the generalization and systematization of studies of its implementation in the context of globalization have been made. Theoretical generalization and new ways of the scientific problem solving, which are manifested in the definition of the theoretical and legal foundations of the fight against counterfeiting in medicines under the conditions of globalization, are made. It is possible to do this by adopting programs for the development and support of scientific and practical work in the creation of new international normative legal acts, amendments to legislation. Because of the research, a number of theoretical generalizations, suggestions, and practical recommendations are represented.

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Medication benefits only when they are safe and of high quality, and appropriate, when their circulation and use are properly organized.

Oleksandr Alieksiev

INTRODUCTION

The development of Europe, Asia, North and South America, Africa, Australia and Oceania is currently linked with the implementation of a number of urgent reforms, including the modern transformation of crime-fighting methods. The global problem of counterfeiting in medicines is in need of immediate solution worldwide.

When a person dies because of adulteration of medicines or loses health, the consequences are deplorable. Buying medicines from pharmacies, a patient does not always pay attention to their quality. The regulation of this issue at the international level makes it possible to issue responsibility for the above-mentioned crimes in the states and stop it, or at least significantly reduce their number normatively. In the case of purchase of counterfeit medicines, a person may file a lawsuit with the administrative court to protect their rights in the field of public-legal relations in the event of inaction or unlawful decisions by the relevant authorities. Lawsuit may be filed by a person in the district administrative court in accordance with the requirements of Article 25 of the Code of Administrative Procedure of Ukraine. Concerning the appeal of individual acts, as well as the acts or omissions of the authorities, taken (committed, admitted) at the choice of the plaintiff the place of residence of this claimant or the administrative court at the defendant's location.

LITERATURE REVIEW

Counterfeit products reach the highest levels in countries with imperfect legal frameworks in the regulation of drug trafficking and lack of efficiency in regulatory oversight of counterfeit drugs. In most countries with developed regulatory framework and market control, such drugs are rarely found [1; 2, p. 29]. The World Health Organization estimates that counterfeit drug sales are about \$ 200 billion annually, equivalent to 10-15% of the global pharmaceutical market [5]. In Russia, the problem of counterfeiting of medicines, as in most countries of the world, remains urgent and needs to be addressed by amending the legislation.

A number of international acts have been adopted in order to address the problem of counterfeiting of medicines. For example, in Ukraine, the Council of Europe Convention on Counterfeiting of Medical Products and Similar Health-Related Crimes [6] entered into force on 1 January 2016. The Universal Declaration of Human Rights [7], promulgated by the General Assembly of the United Nations on 10 December in 1948; and the Convention for the

Protection of Human Rights and Fundamental Freedoms, issued in 1950 and its number ETS No. 5 [8]; the European Social Charter, issued in 1961, ETS No. 35 [9]; the Convention on the Development of the European Pharmacopoeia (1964, ETS No. 50) [10]; and Protocol thereto 1989, ETS No. 134); the Convention on the Protection of Rights and Dignity on the application of biology and medicine; Convention on Human Rights and Biomedicine, issued in 1997, ETS No. 164) [11]; Additional Protocols, issued in 1998 ETS number 168; issued in 2002; ETS number 186, issued in 2005; CETS number 195, issued in 2008; CETS number 203; the Convention on Cybercrime issued in 2001, ETS number 185 are International instruments for governing these issues [12]. Rule makers have duly drawn attention to other relevant international legal instruments and programs. They were paid to those which were conducted by the World Health Organization and included the work of the IMPACT Group, the European Union, and the G8 (since 2014 - G7). Determined to effectively achieve the overall goal of combating crime, which includes counterfeiting of medical products and similar health-threatening crimes, in particular, by fixing new crimes and criminal penalties relating to these crimes [13].

AIMS

Studying and generalizing the best international experience in counterfeiting medicines, as well as exploring the problematic issues of its implementation in the context of globalization.

METHODS

The research material is a modern international regulatory framework governing the fight against counterfeiting of medicinal products, foreign and domestic scientific works of specialists. The system method, structural and functional method, techniques of logical method (analysis, synthesis, deduction and induction), method of legal statistics, legal modeling were used in writing the article.

RESULTS

For example, it is worth noting that Article 165 of the Criminal Code of Poland establishes responsibility for actions such as the manufacture and putting into circulation of harmful substances, foodstuffs or other public goods, as well as pharmaceuticals that do not meet the mandatory requirements, which do not meet the requirement of conditions of quality [14]. Denmark's criminal

law, for example, establishes liability for actions such as the sale of medicines that do not meet these goals and may cause harm to health [15]. In the United States, the Food and Drug Administration is the primary body responsible for monitoring compliance with pharmaceutical law. Along with the Food and Drug Administration, as a federal body, each state has its own supervisory authority [16]. In addition to the exercise of state functions in criminal investigations, the Office of Criminal Investigations also takes part in civil cases involving parties, on the one hand, subjects of pharmaceutical activity accused of violations of the law, and on the other hand, the state. For example, in October 2011, a subsidiary of pharmaceutical giant Glaxo Smith Kline was found to be guilty of four counts of counterfeit medicines. The lawsuit also considered a civil suit filed by the Office of Criminal Investigations alleging that Glaxo Smith Kline accused the Food and Drug Administration Medicaid program of misleading information about low-quality drugs of its own manufacture. The case, where Office of Criminal Investigations employees represented the State, resulted in the fine of Glaxo Smith Kline. It was fined \$ 140 million in criminal proceedings and \$ 600 million in civil proceedings [16; 17].

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the entity with the requirements of the Licensed Conditions of Business Activity in the Production of Medicinal Products "Zaporizhzhia Autogeneous Plant" and the Company", was independently eliminated by the defendant. The company [18].

DISCUSSION

Having investigated an international regulatory framework, it has been found out that in some European countries there is a possibility of imprisonment for counterfeiting medicines. There are even lifelong detention cases in the United States of America. Moreover, in China and Libya for the same crime is the death penalty. It should be noted that criminal responsibility for falsification of medicinal products in countries, where it is not sufficiently severe or even for administrative liability, should be strengthened. We believe that responsibility for such a crime should include at least 15-20 years in prison with confiscation of property. However, it should be borne in mind that in order to prevent any crime, the main factor is not the severity of the punishment, but its inevitability. Therefore, innovative methods and ways of detecting criminals should be sought in order to ensure the inevitability of punishment for drug offenses, as well as to establish continuous cooperation and communication in this aspect between different countries at the international level.

Counterfeit drugs cause both social and economic harm to society according to V. Pashkov, A. Soloviov, A. Olefir. Counterfeit and substandard medicines should be distinguished. Although there are recommendations for patients to identify counterfeit drugs, the law is essential in counteracting their circulation. Opposite actions can be carried out at the level of general rules, as well as through specific regulatory requirements. The latter can be divided into economic (setting rules for market participants, how to detect and remove counterfeit medicines) and those, imposing penalties for offenses. In all European Union countries studied, the use of counterfeit medicines is strictly prohibited and administrative liability is envisaged for such actions. At the same time, there is no single approach to criminal liability as defined by national governments [19, p. 848].

Ukrainian scientist Khromykh A.G. conducted an expert survey to determine the main factors affecting the adulteration of medicines by developing a questionnaire with more than 150 experts. Therefore, according to experts, the most important factors influencing the circulation of counterfeit medicines are identified as follows: a developed system of selling medicines through the global Internet information network and mail that does not allow the control bodies to check their quality; high cost of imported medicines, which

makes the sale profitable; etc. These practices and the review of scientific sources have made it possible to identify also the most promising at the present stage of the technology of protection of pharmaceutical products from adulteration [3], namely: their origin through electronic registration. This form of protection allows you to protect movement Counterfeit Remedies reliably: For Radio Frequency Identification (MDF) manufacturers of technologies, they create unique opportunities for prompt receipt of data at all stages of the manufacturing process, from the receipt of substances and materials to the warehouse and to the shipment of finished medicines [3].

Being studied the regulatory framework and the work of international scientists; it is fair to point out that the leading countries in the development of the digital economy are Great Britain, Japan, Singapore, New Zealand, Estonia, United Arab Emirates, Israel and more.

It is important to give a theoretical characterization of the term "digitization", which comes from the English "digitalization" and in translation means "digitization", "digitization", or "digitization". At the same time, nowadays domestic scientists are increasingly using this term, based on the requirements of practical transcription, and therefore the terms "digitization" or "digitization" have become widespread. This approach has several advantages, since the term "digitization", by the right remark of K. Lapina-Kratasyuk, covers a wider range of meanings than its synonym "digitization". This is due to the fact that it is in European and American research traditions that the effects of the transition from analogue to digital type of information encoding have been studied not only as technological but also as social, cultural, and anthropological processes [21; 20]. According to K.O. Kuprina and D.L. Khazanova, digitization is the way of bringing any kind of information into digital form [21; 22; with. 259]. The Polish Government [23] adopted the Digital Government for 2014-2020. Digitization in the country is developing quite actively. Special Ministry of Digitization or Digitization - Ministerstwo Cyfryzacji is engaged in the introduction of new technologies.

Having conducted research of scientific sources, it is right to emphasize that scientists Vasylieva T. A., Lieonov S. V., Rubanov P. M., Vasilyeva TA, note that the digitization of the economy is considered to be a fundamental factor of economic growth, innovation and competitive environment, job creation and social progress in general [24; 25]. The social effects of digitizing the economy are increasing the availability of financial services, improving the quality of health care by digitizing patient data, and more. Analyzing scientific sources,

it is reasonable to believe that in the countries of the world, counterfeiting of medical products, illegal transportation is an urgent problem that needs to be addressed. In Russia, there is a law on the circulation of medicines, in which the terminology has been successfully developed, for example, the concept of pharmaceutical activity, etc. [27], which, for example, is absent in the Law of Ukraine on Medicines, is enshrined. Pursuant to Article 9 of the Law, medicinal products are allowed to be used in Ukraine after their state registration, except in cases provided for by the Law. Registered by the competent authority of the United States of America, Switzerland, Japan, Australia, Canada, a medicinal product registered by a competent authority of the European Union under a centralized procedure for use in the territories of those countries or Member States of the European Union, only materials on methods of quality control of medicinal product are added. Materials of the registration dossier and samples of the packaging of a medicinal product, labeled in a language for the labeling of medicinal products, instructions for the use of a medicinal product in a language must be in accordance with the requirements of this Law; document confirming payment of the registration fee are added too [13]. This makes it possible to regulate this issue legally and avoid crimes in Ukraine, since the person, his life and health, according to Article 3 of the Constitution of Ukraine, is of the highest legal value [28].

The problem of counterfeiting of medical products and other similar crimes require attention in every state, because the negative consequences of this crime have serious consequences that affect the lives and health of people. The introduction of positive foreign experience makes it possible to legally secure the responsibility for the aforementioned crime in international countries and stop it.

CONCLUSION

Because of the conducted research, we propose strengthening of legal responsibility for falsification of medicines in the countries of the world, the legislation of which provides insufficiently severe criminal penalties or even administrative liability. We believe that the manufacture and trade (both domestic and export) of counterfeit medicines should be a particularly serious crime, for which criminal liability in the form of imprisonment for 15-20 years with confiscation of property should be provided. The rights of individuals should be protected by an administrative court in the sphere of public-legal relations when appealing against decisions, actions (inaction) of state bodies. However, in the first place, it is necessary to create the appropriate conditions for the effective fight against counterfeit medicines at the international

level. This requires the use of innovative digital technologies already in use in the leading countries of the world, including the European Union. It is necessary to create in each country a unified electronic system for the identification of goods, including medicines that would be publicly available on the Internet for everyone, including every consumer of medicines. When buying these products from their smartphone, they will be able to open the program, take an electronic ID photo, and verify the authenticity of the medicinal product, obtain information about the manufacturer, date and place of manufacture, etc. Such programs should also be used by business entities to prevent counterfeiting. At the same time, both the persons who manufactured the product and the guilty officials of the economic entities that sell them must be prosecuted. Legal entities and entrepreneurs must be subject to considerable administrative liability - € 100,000, such as in Spain.

A significant aspect of the problem of drug identification is its global, international level. The worldwide locomotive of digitization in counterfeiting of counterfeit medicines should be the World Health Organization, which is already taking care of these problems. To counteract the counterfeiting of medicines globally, it is necessary to develop an international program coordinated by WHO. Authoritative intergovernmental associations, such as the European Union, the Eurasian Economic Union and other trans-state entities, should be involved in the development and implementation of this program. At the national level, such work should be undertaken by relevant health ministries through the creation of appropriate structures of their own subordination or through interaction with national digitization bodies. In the positive experience of Poland, it is appropriate to create special ministries (or other authorities) that would develop modern technologies.

In the future, a global database of certified medicinal products should be created for use of any citizen of any country in the world in the age of the pharmaceutical market globalization. And also give access to such a court system.

Thus, the implementation of the proposed approach will significantly reduce the number of counterfeit drugs in the world, as the inevitability of criminal punishment for such crimes will become evident.

REFERENCES

1. (n.d.) Боротьба з контрафактом: фахівці США діляться досвідом з українськими колегами/ Borotba z kontrafaktom: fakhivtsi SShA diliatsia dosvidom z ukrainskymu kolehamy /Retrieved from: <http://www.apteka.ua/article/83498>
2. Melnychuk S.M (2017n.d.)Кримінальна відповідальність за фальсифікацію

лікарських засобів або обіг фальсифікованих лікарських засобів в Україні/ Kryminalna vidpovidalnist za falsyfikatsiiu likarskykh zasobiv abo obih falsyfikovanykh likarskykh zasobiv v Ukraini/: Natsionalna akademiia vnutrishnikh sprav. Kyiv. 273 p.

3. Khromykh A.H. (2013.), Актуальні аспекти захисту інтегрованих фармацевтичних логістичних ланцюгів від потрапляння фальсифікованої фармацевтичної продукції., Aktualni aspekty zakhystu intehrovanykh farmatsevychnykh lohistrychnykh lantsiuhiv vid potrapliannia falsyfikovanoi farmatsevychnoi produktsiiu Ukrainskyi medychnyi almanakh..16,2.P.151-154. Retrieved from : [Users/User/Downloads/Uma_2013_16_2_51.pdf](https://zakon.rada.gov.ua/laws/show/994_2013_16_2_51.pdf)
4. Копутін Д.А, (2012). Борьба с фальсифицированными лекарственными препаратами в Европейском Союзе и в России. /Bor'ba s fal'sificirovannymi lekarstvennymi preparatami v Evropejskom Sojuze i v Rossii/ 9.P. 8-13.
5. (n.d.) Growing threat from counterfeit medicines.
6. Retrieved from: <https://www.who.int/bulletin/volumes/88/4/10-020410/en/>.
7. (07.06.2012). Про підроблення медичної продукції та подібні злочини, що загрожують охороні здоров'я: Конвенція Ради Європи ратифікація від / Pro pidroblennia medychnoi produktsii ta podobni zlochyny, shcho zahrozhuut okhroni zdorovia: Konventsiiia Rady Yevropy ratyfikatsiia vid 07.06.2012./№ 4908-VI Retrieved from : https://zakon.rada.gov.ua/laws/show/994_a91.
8. (n.d.) Загальна декларація прав людини/Zahalna deklaratsiia prav liudyny/ від 10.12.1948/ Retrieved from: https://zakon.rada.gov.ua/laws/show/995_015.
9. (n.d.) Конвенцію про захист прав людини і основоположних свобод/ Konventsiiu pro zakhyst prav liudyny i osnovopolozhnykh svobod/ від 02.10.2013.
10. Retrieved from: https://zakon.rada.gov.ua/laws/show/995_004.
- 11.(n.d.) Європейська соціальна хартія (ETS N 35)/ Yevropeiska sotsialna khartiia / від 03.05.1996. Retrieved from : https://zakon.rada.gov.ua/laws/show/994_300.
- 12.(n.d.) Конвенцію про розробку Європейської фармакопеї від 16.10.2012 / Konventsiiu pro rozrobku Yevropeiskoi farmakopei /

13. Retrieved from: https://zakon.rada.gov.ua/laws/show/994_32_8
14. (n.d.) Конвенцію про захист прав і гідності людини щодо застосування біології та медицини: Конвенцію про права людини та біомедицину від 25.01.2005 / Konventsiiu pro zakhyst prav i hidnosti liudyny shchodo zastosuvannia biolohii ta medytsyny: Konventsiiu pro prava liudyny ta biomedytyny /
15. Retrieved from : https://zakon.rada.gov.ua/laws/show/994_33_4
16. (n.d.) Конвенцію про кіберзлочинність від 07.09.2005 / Konventsiiu pro kiberzlochynnist / Retrieved from: https://zakon.rada.gov.ua/laws/show/994_57_5
17. (1996), Про лікарські засоби:Закон України від 04.11.2018, *Відомості Верховної Ради України* / Pro likarski zasoby:Zakon Ukrainy vid 04.11.2018, *Vidomosti Verkhovnoi Rady Ukrainy* /, 22
18. Retrieved from: <https://zakon.rada.gov.ua/laws/show/123/96-вр>
19. (n.d.) Уголовный кодекс Республики Польша : Закон Республики Польша від 06.06.1997 / Ugolovnyj kodeks Respubliki Pol'sha/
20. Retrieved from: <http://law.edu.ru/norm/norm.asp?normID=1246817>.
21. (2001).Уголовный кодекс Дании. Научное редактирование и предисловие С.С. Беляева, канд. юрид.наук (МГУ им. М.В. Ломоносова); пер. с датского и английского канд. юрид. наук С.С. Беляева,А.Н. Рычевой. СПб.: Издательство «Юридический центр Пресс»,/ Ugolovnyj kodeks Danii. Nauchnoe redaktirovanie i predislovie S.S. Beljaeva, kand. jurid.nauk (MGU im. M.V. Lomonosova); per. s datskogo i anglijskogo kand. jurid. nauk / 230 p.
22. Aleksieiev O. H. (2012), Міжнародний досвід боротьби з правопорушеннями у фармацевтичній сфері на прикладі діяльності органів державного контролю лікарських засобів Росії та США. Європейські перспективи./ *Mizhnarodnyi dosvid borotby z pravoporushenniamy u farmatsevtichnii sferi na prykladі diialnosti orhaniv derzhavnoho kontroliu likarskykh zasobiv Rosii ta SShA. Yevropeiski perspektyvy. /* 2(1). P. 108-113.
23. U.S. Food and Drug Administrations. – офіційний сайт Управління по контролю за харчовими продуктами та лікарськими засобами США. / ofitsiyni sait Upravlinnia po kontroliu za kharchovymy produktamy ta likarskymy zasobamy SShA.
24. Retrieved from: <http://www.fda.gov/ICECI/CriminalInvestigations/ucm123041.htm>.
25. (2018), Рішення Запорізького окружного адміністративного суду (вступна та резолютивна частини) від 26 листопада 2018 року Справа № 808/708/18, м. Запоріжжя./ *Rishennia Zaporizkoho okruzhnoho administratyvnoho sudu (vstupna ta rezoliutyvna chastyny) vid 26 lystopada 2018 roku Sprava № 808/708/18, m. Zaporizhzhia./*
26. Retrieved from : <http://reyestr.court.gov.ua/Review/78224200>.
27. Pashkov Vitalii, Soloviov Aleksey, Olefir Andrii, (2017), Legal aspects of counteracting the trafficking of falsified medicines in the European Union. *Wiadomości Lekarskie*; 4: 843-849. 20. *magazine/2015/02/03/vocabulary-digitalisation (05.05.2017).*
28. Retrieved from: <http://www.strelka.com/ru/>
29. Teteriatnyk V. S (2017.), Діджиталізація та діджиталізація в контексті віртуалізації господарської діяльності. Інноваційна система та інформаційні технології в сучасній науці. / *Didzhytyzatsiia ta didzhytalizatsiia v konteksti virtualizatsii hospodarskoi diialnosti /B. С. Тетерятник // - Kharkiv:Pravo, P.180-184.*
30. Kupryna K. A., (2016.), Диджитализация: понятие, предпосылки возникновения и сферы применения *Вестник научных конференций. Качество информационных услуг: по материалам международной научно-практической конференции 31 мая 2016 г./ Dydzhytalyzatsiia: poniatye, predposylky voznyknoveniia y sfery pryumeneniia Vestnyk nauchnykh konferentsyi. Kachestvo ynformatsyonnykh usluh: po materyalam mezhdunarodnoi nauchno-praktycheskoi konferentsyy 31 maia 2016 h./ Tambov. 5-5 (9). P. 259-262.*
31. (2014, January, 08). Operational Programme Digital Poland for 2014-2020.Version 4.0. Retrieved from: https://www.mir.gov.pl/fundusze/Fundusze_Europejskie_2014_2020/Documents/POPC_4_0_8_01_14_ost_10012014.pdf [in English]
32. (n.d.) Digital Agenda for Europe. Access mode: <http://ec.europa.eu/digitalagenda/>
33. Vasyliieva T. A., Lieonov S. V., Rubanov P. M. (2017), Трансформація обігових фінансових інструментів в умовах цифровізації фінансового сектору економіки *Вісник СумДУ. Серія "Економіка"/ Transformatsiia obihovykh finansovykh instrumentiv v umovakh tsyfrovizatsii finansovoho sektoru ekonomiky Visnyk SumDU. Seriia "Ekonomika"* Konstytutsiia Ukrainy vid 28 chervnia 1996 roku/, 3'

34. Retrieved from: http://fem.sumdu.edu.ua/images/2018/pdf/vasilieva_rubanov.pdf
35. (n.d.) Europa-2020. A European strategy for smart, sustainable and inclusive growth [Electronic resource].-Access mode: Retrieved from: <http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>
36. (n.d.) ,Об обращении лекарственных средств: Закон Российской Федерации от 12 апреля 2010 / Российская газета от 14.04.2010. Об обращении лекарственных средств: Закон Российской Федерации от 12 апреля 2010 /61, ФЗ. – Российская газета от 14.04.2010.
37. (n.d.) , Конституція України від 28 червня 1996 року/ Конституція України від 28 червня 1996 року /
38. Retrieved from: <https://zakon.rada.gov.ua/laws/show/254к/96-вр>