

## CONCERNING THE IMPORTANCE OF FORENSIC AND PHARMACEUTICAL RESEARCHES TO IMPROVE PATIENTS' ACCESSIBILITY TO MEDICINES

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**Summary.** Shown the relevance of forensic and pharmaceutical researches in Ukraine in order to improve patients' accessibility to medicines. Indicated need of creating of the department of medical and pharmaceutical law, general and clinical pharmacy in the Kharkiv medical academy of postgraduate education. Indicated the high level of scientific achievements of department's scientists in improvement of the system of medical drugs nomenclature of various nomenclature and legal groups.

**Keywords:** forensic pharmacy, medical law, pharmaceutical law, psychoactive substances, drug addiction, illegal circulation, society narcotization, falsified medicines, drug crimes.

### Introduction.

United Nations Organization and World Health Organization give great attention to the policy of the population health protection either in certain states or in all countries, introducing the policy «Health for all» regardless of the inhabitation location, country, religious beliefs, nationality, color of skin, economic and social conditions, level of life, political ideas. The health of every individual is one of the most fundamental human right and is an important factor in the humanity development. Health of all people forms the base in the achievement of security, peace and mostly depends on comprehensive, long-term, mutually beneficial cooperation of ordinary humans as well as statesmen, politicians and scholars in different areas. Because of this, makes its importance to study the causes and conditions that lead to abuses by the psychoactive substances and the occurrence of an offenses in this area. Becomes relevant to create appropriate structures with capability to help in the solvation of the mentioned problems,

improving regulations, finding innovative approaches in the pharmacotherapy of behavioral health disorders and comorbidities (addiction, alcoholism, HIV/AIDS, tuberculosis, cancer, neuropsychiatric and others) of the specific group of patients (heroin addiction, opium addiction, tramadol addiction, coxyl addiction, methamphetamine addiction, cocaine addiction etc.) [1, 2, 3, 4, 5].

Therefore, researches in the direction of "forensic pharmacy" at the Kharkiv medical academy of postgraduate education were started with the creation of the pharmaceutical and medical law department, which brings together such components as pharmaceutical law, medical law, forensic pharmacy, evidence-based pharmacy with national and universal significance within decisions and UN conventions, EU directives and international agreements of Ukraine, as well as state government bodies (Prosecutor general's office of Ukraine, Ministry of Internal Affairs of Ukraine, Security Service of Ukraine, Ministry of Healthcare of Ukraine etc.).

### Materials and methods:

The experimental data of the forensic and pharmaceutical practice, the regulatory basis for the circulation of medicinal products of various clinical, pharmacological, classification, legal and nomenclatural groups in Ukraine for the period of 1997 – 2015 were used as research materials. During the research used legal and regulatory, documentary, retrospective, comparative, forensic and pharmaceutical analysis methods.

### Results.

The basis of the department entrusted with the concept of complex scientific and methodological clarification on the application of pharmaceutical legislation in the sphere of circulation of substances and various nomenclature and classification of legal and regulatory groups, identifying shortcomings of the legal rights of patients to have access to essential, high-quality, safe, effective and economically affordable medicines, as well as harmonization of pharmaceutical and medical sector of Health of Ukraine to the European Union.

Abroad direction "forensic pharmacy" is developed, designed numerous books and textbooks [6, 7, 8, 9, 10, 11].

A study conducted by the department of pharmaceutical law aimed at prevention of the causes and conditions that give rise to violations in this area in the form of legal trusteeship – protection for specialists of pharmacy, medicine and patients who suffer from various health disorders according to ICD-10 classification, development and implementation of industrial production and medical practice new combination of drugs, as well as making appropriate legislative proposals to the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, Ministry of Health of Ukraine, Ministry of Internal Affairs of Ukraine and others.

### Discussion.

Forensic pharmacy is a component of pharmaceutical law that studies the causes and conditions that may cause offenses in the phar-

maceutical and medical sector of healthcare of Ukraine, studies illegal circulation of various nomenclature and classification of legal and regulatory groups of medicines to their prevention.

Forensic pharmacy accompanies every citizen in everyday life, because by the direction of "forensic pharmacy" the pharmaceutical law department has published over 1000 articles, monographs, scientific guidance, patents Ukraine, abstracts.

Department of pharmaceutical scientists' rights reserved more than 20 doctoral and master's research papers managers and leading pharmacy specialists, training and expert institutions: Department initiated and carried out with the I (2004) to XII (2016) International scientific-practical conferences of the series "Pharmaceutical and medical law (forensic pharmacy, medical, pharmaceutical law, evidence-based medicine, pharmacy).

At the very beginning of the forensic pharmacy development researches were conducted to the historical ways of development expert investigations in pharmacy. There were substantiated objects, exercises and directions and also elaborated scientific and practical bases in organization and carrying out of forensic chemical-pharmaceutical expert [12].

Further forensic and pharmaceutical researches were devoted to create scientific ground of young people's drug addiction by psychoactive substances with the purpose to improve organizational and low measures for prevention of young people's drug addiction. The forensic and pharmaceutical monitoring of illegal consumption of psychoactive substances in firstly made among young people. The features of poly drug addiction were studied among the youth environment. Control regime for psychoactive substances which are or can become abused among the youth environment were given. The forensic and pharmaceutical monitoring was firstly made among publicly dangerous acts and illegal actions as a result of the inefficient use or abuse among young people. Charts were worked out of medicinal therapy for

disorders of health, which come from the using of alcohol among young people. The accessible socially oriented combination of medications (halopril+enterosgel) as method of therapy for the hard drinking at alcoholic dependence was proposed. Normative measures were offered in order to prevent young people's drug addiction [13].

On the next stage of forensic and pharmaceutical researches firstly established the tendency of increasing the number of underage consumers of psychoactive substances in different regions of Ukraine. Identified the main causes and symptoms of substance abuse among persons under 18 years of age. Investigated types of delinquency and provided them characteristic. The lists of psychoactive drugs, and for the first time a definition of abuse of 4 degrees. First isolated a new form of addictive dependence in the minors – «coaxyl dependence» and developed an algorithm for its personalized pharmaceutical correction with hepatoprotections, which was confirmed by patent of Ukraine. Developed a two-tier system of forensic and pharmaceutical measures to prevent the spread of addictive pharmaceutical dependence (first level) and juvenile (second level) among juveniles. Proposed rule-making activities on improving the existing legislation which have been approved at the Cabinet of Ministers of Ukraine [14].

In certain periods, forensic and pharmaceutical researches were devoted to development of measures in order to increase state control for precursors' circulation in Ukraine on basic forensic and pharmaceutical analysis of offences in illegal precursors circulation sphere from positions of pharmacists and doctors' laws. Scientific and methodical recommendations for pharmaceutical correction of addictive illnesses after non-medical using of precursors on example of evaporative solvents were firstly developed. These recommendations were included into the way of combined toxic addiction treatment by diagnostic codes (F17 and F18) of ICD-10, that was patented in Ukraine. Normative measures for improvement of pharmaceuti-

cal legislation of Ukraine were offered. Projects of typical internal instructions concerning organizational and law procedure of precursors' circulation on different stages were developed. Achieved scientific results allowed for the first time to systematize procedure of working rules with precursors for educational establishments of Ministry of healthcare of Ukraine and Ministry of education and science of Ukraine, controlling bodies and enterprises of industry of different of ownership [15].

Also, there were forensic and pharmaceutical researches concerning the scientific justification and the development of measures to strengthen state control over the circulation of drugs with psychoactive properties to improving pharmaceutical legislation and implementation of socially oriented approaches to the pharmaceutical correction of the drug addicted patients on the basis of forensic pharmacy. The results of the forensic and pharmaceutical studies on the effects of violations of psychoactive substances circulation and irrational use of psychoactive drugs proved growth in countryside of the crossing to some illegal drugs (lexon, spazmoleks, kodofemol, pentalhin-B, cyto-deyin) and the number of offenses committed under the influence of psychoactive substance alcohol, which led to the rationale for the development of first and further development of research regional level by the example of the Kharkov region. Using socially oriented approaches obtained the further development of the availability of antidepressants by the forensic and pharmaceutical criteria "control regime", which enabled recommend drugs with sertaline for the pharmaceutical correction for the patients with alcohol withdrawal syndrome, where scientific innovation is protected by the patents of Ukraine N 61742 (2011). The studies in the forms of the patent of Ukraine, the evidence of the State intellectual property service of Ukraine on registration of copyrights, textbooks by the Ministry of education and science of Ukraine, normative measures, instructions and guidance documents developed by the regulation, schemes and algorithms of the pharmaceutical correction

for the drug addicted patients with alcohol dependence have scientific basis to improve pharmaceutical legislation in strengthening state control over the circulation of drugs with psychoactive properties of two nomenclature and legal groups and implemented in practice entities of all forms of ownership and the learning process a number of pharmaceutical and medical educational institutions of Ukraine [16, 17].

It is necessarily to note the importance of the forensic and pharmaceutical researches concerning the development of preventive and prophylactic measures in counteraction of abuse of especially dangerous narcotic drugs using the forensic and pharmaceutical researches in conception of national safety of Ukraine. Within the framework of the forensic and pharmaceutical monitoring the features of offences, related to the illegal appeal of especially dangerous narcotic drugs on the example of plants of kind a poppy is somnolent (poppy straw) are investigational, plants of family hems (cannabis, marijuana), opium, heroin. The forensic and- pharmaceutical estimation of psychoactive medications which are used in criminal aims with the purpose of making of especially dangerous narcotic drugs is given. Investigational mode of control of tranquilizers of somnolent and calming action, that enabled to develop protected the patent of Ukraine method of pharmaceutical correction of patients with opium addiction. The results of the conducted researches as improvement measures of state control and instructional methodical documents on counteraction of illegal appeal of especially dangerous narcotic drugs are inculcated in activity of medicinal and pharmaceutical, law and enforcement structures and instrumental in the increase of national safety of Ukraine [18].

On the next stage of the forensic pharmacy development was conducted scientific motivation and development of the organizational and legal measures to improve pharmaceutical legislation in counteracting of negative influence by the drug industry environment on the pharmaceutical sector development using forensic and pharmaceutical approaches. Using the results of

conducted forensic and pharmaceutical research of the drug industry in Ukraine its definition, signs and elements were proposed. Proved, that organized criminality is very involved into the illegal psychoactive substances' circulation. Complex scoring of the elements of the psychoactive substances regulators in the pharmaceutical sector of Ukraine's economics was made. Obstacles for development of economical sector of Ukraine were defined. Using the social oriented approaches search and research of control regime for analgesic medicines was made for abstinence syndrome correction in opium drug addiction and nicotine addiction states. Results of conducted researches in the forms of patents, methodical recommendations found their place in the practical work of the pharmaceutical, medical structures, law enforcement bodies and educational institutions [19, 20].

An important role in the forensic pharmacy given to illegal circulation of counterfeit medicines. The study was brought about development of motivated by science practical recommendations on improvement of state's counteraction, prevention and detecting system for falsified medicines' circulation. Falsified medicines' circulation spread was researched. Reasons and effects link between falsified medicines' circulation and state's economic losses were revealed and worked out. Interaction mechanisms between law-enforcement bodies and territorial inspections of quality control for medicine's quality and other state organs concerning guarantees of quality medicines provision and falsified medicines' circulation reluctance were introduced. Instruction for pharmacy specialist while investigating offenses in pharmaceutical sector of economics by reason of falsified medicines' circulation was developed for the first time. Research results as legislative initiative and also measures normative and law counteraction and prevention of falsified medicines' circulation were introduced in practical activity and educational process [21, 22].

Also, made forensic and pharmaceutical research about organizational and legal approaches to creation of combined medicines

based on psychoactive substances using complex approach for drug addiction treatment. Reason and effect links between spreading of drug addiction, toxic addiction, HIV/AIDS and crime were worked out. In format of generalization of extemporal composition in drugstores and treatment organizations perspectives of various law-classified groups' psychoactive substances combination was chosen and concept of integrated approach to creation of new wide action spectrum combined medicines was motivated. Need of new combined medicines' creation for treatment of patients with drug addiction was validated. Research's results in a view of 3 new combined medicines and legislative initiative of counteraction and prevention of drug addiction spreading were introduced into practical activity and studying process [23].

However, in the resolutions Ukrainian scientific-practical conferences with international participation «Slobozhansky chytannya» resocialization and rehabilitation of people with the condition dependence of different origin "noted the need to improve judicial pharmacy in conducting scientific, theoretical and applied and basic research in the public system response anesthesia all segments of the population, and in the fight against the youth using drugs with psychoactive properties and is used to modify the illicit circulation in Ukraine of the especially dangerous narcotic drugs and psychotropic substances particularly hazardous [24, 25, 26].

The scientific novelty and theoretical significance of organizational, legal, forensic and pharmaceutical researches confirmed by 13 patents of Ukraine: No. 52855 (2010), No. 53586 (2011), No. 56682 (2011), No. 60001 (2011), No. 61065 (2011), No. 61742 (2011), No. 62662 (2011), No. 66161 (2011), No. 67959 (2012), No. 67963 (2012), No. 81199 (2013), No. 85018 (2013), No. 93334 (2014).

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tration 0108U009172), «Improving of the organizational and legal procedure of provision with medicines for patients with positions of forensic pharmacy, organization and management of pharmacy" (state registration 0116U003137) of the Kharkiv medical academy of postgraduate education.

#### **Conclusion.**

The necessity of carrying out forensic and pharmaceutical researches for improving of the legal regulation of the circulation of medicines of various classification, legal and nomenclature groups in Ukraine was grounded. Generalized the forensic and pharmaceutical practice of offenses during the circulation and inappropriate use of medicines in Ukraine on a retrospective scale. Analyzed the types of addictive dependences in the abuse by psychoactive drugs in different patients' contingents.

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