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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

- 1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра. Используемый компьютерный шрифт для текста на русском и английском языках Times New Roman (Кириллица), для текста на грузинском языке следует использовать AcadNusx. Размер шрифта 12. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.
- 2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.
- 3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

- 4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).
- 5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи. Таблицы и графики должны быть озаглавлены.
- 6. Фотографии должны быть контрастными, фотокопии с рентгенограмм в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста в tiff формате.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

- 7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.
- 8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.
- 9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.
- 10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.
- 11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.
- 12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

- 1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface Times New Roman (Cyrillic), print size 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.
- 2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.
- 3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

- 4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.
- 5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles. Tables and graphs must be headed.
- 6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

- 7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.
- 8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html http://www.icmje.org/urm_full.pdf
- In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).
- 9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.
- 10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.
- 11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.
- 12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

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რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

- 1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში Times New Roman (Кириллица), ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ AcadNusx. შრიფტის ზომა 12. სტატიას თან უნდა ახლდეს CD სტატიით.
- 2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ,რუსულ და ქართულ ენებზე) ჩათვლით.
- 3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).
- 4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).
- 5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.
- 6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით tiff ფორმატში. მიკროფოტო-სურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სუ-რათის ზედა და ქვედა ნაწილები.
- 7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა უცხოური ტრანსკრიპციით.
- 8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.
- 9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.
- 10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.
- 11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.
- 12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

Содержание:

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PROTECTION OF CONFIDENTIAL MEDICAL INFORMATION IN UKRAINE: PROBLEMS OF LEGAL REGULATION

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Abstract.

Aim: The aim of the article is to analyze the legal aspects and mechanisms of confidential medical information protection about an individual in the health care sphere in Ukraine.

Materials and methods: During the scientific research, various methods of cognition of legal phenomena were used. Among the general scientific approaches, the dialectical method was primarily used, which allowed to identify trends in the development of patient information rights and formulate proposals for improving legislation in the field of medical data protection. The formal-legal method was used to provide a comprehensive characterization of the EU (European Union) and Ukrainian legislation in the sphere of confidential medical information protection. Additionally, general scientific logical methods (analysis and synthesis, comparison and analogy, abstraction, and modeling) were used in order to study the problems of information relations in the medical field and establish legal liability for violation of the confidentiality of such information.

Results: The definitions of medical data, medical information, confidential medical data, and medical confidentiality have been researched and compared. The article identified the legitimate grounds for disclosing confidential medical information about an individual in the healthcare sector. Authors revealed the gaps in Ukrainian legislation regarding the confidential medical data protection by healthcare professionals and electronic medical systems regulators. The necessity of expanding the list of subjects responsible for preserving confidential medical information has been substantiated. The study explored the case law of the European Court of Human Rights in the field of the medical data confidentiality violation. It has been outlined the potential judicial remedies and liability for violating the right to personal medical information confidentiality of an individual in the healthcare sector.

Conclusions: The legal grounds and cases of possible lawful disclosure of confidential medical information have been analyzed. Attention has been drawn to the insufficient regulation of access to medical confidentiality during martial law. It has been emphasized that the mechanism for protecting the violated right to confidentiality of medical information involves appealing to the Ukrainian Parliament Commissioner for Human Rights or to the court. The increasing role of international legal acts in ensuring the protection of medical data in the European Union and Ukraine has been highlighted.

Key words. Medical data, personal data, court, justice, disclosure of medical confidentiality, liability for disclosure of

confidential medical information, information protection.

Introduction.

Protecting confidential information about an individual in the healthcare sector is an integral part of their right to medical care. The new technologies in healthcare systems are using advanced approaches for a comprehensive transformation of the traditional medical system. The key task of the state is the rapid deployment of infrastructure for the provision of socially significant medical services [1]. Modern applications and tools simplify access to medical information for practicing doctors and patients themselves. The individual nature of the relationship between a patient and a doctor gives rise to specific aspects of using confidential information about an individual in the healthcare sector, including those related to doctor-patient confidentiality and patients privacy. At the same time, under the influence of technical and human factors, the security of medical data is a serious problem in the healthcare system. Raising awareness and proper staff training on data security and confidentiality plays a key role in strengthening the protection of medical information, including in electronic systems. Therefore, the protection of confidential medical data is a fundamental challenge that requires the development of effective legislative norms, innovative strategies to support secure transmission and processing of medical information, as well as the development and provision of methods to protect violated patient rights.

Materials and Methods.

During the scientific research, various methods of cognition of legal phenomena were used. Among the general scientific approaches, the dialectical method was primarily used, which allowed identifying trends in the development of patient information rights and formulating proposals for improving legislation in the field of medical data protection. The formal legal method was applied for a comprehensive characterization of the European Union and Ukrainian legislation. The interpretation of law was used to reveal the content of relevant legal norms and comprehend evaluative concepts. Studying legal practice helped to generalize the law enforcement practice of Ukrainian courts and the European Court of Human Rights. Additionally, general scientific logical methods (analysis and synthesis, comparison and analogy, abstraction, and modeling) were used to study the problems of information relations in the medical field and establish legal liability for violation of the confidentiality of such information.

Since legal relations in the field of personal medical data security are regulated by various branches of law: civil, criminal,

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and administrative, the materials of the article included legal acts regulating the field of medical information protection both in Ukraine and the European Union. Among them are the Universal Declaration of Human Rights, the Convention for the Protection of Human Rights and Fundamental Freedoms, the World Medical Assembly Declaration of Lisbon on the Rights of the Patient, World Medical Assembly Statement on Patient Advocacy and Confidentiality, European Union General Data Protection Regulation, case law of the European Court of Human Rights, and others. In addition, Ukrainian legislation was studied: the Constitution of Ukraine, the Civil Code of Ukraine, the Law of Ukraine "On Personal Data Protection"; scientific works of Ukrainian and foreign scholars on confidentiality in healthcare.

The aim of the article is to analyze the legal aspects and mechanisms for protecting confidential medical information about an individual in the healthcare sector in Ukraine. The main objective of the article is to study the categories of medical data, medical secrecy, and doctor-patient confidentiality, their correlation and legal regime, as well as issues of personal data processing in the medical field in accordance with domestic legislation and European norms. The authors define the mechanism for protecting the right to personal medical information confidentiality and liability for its violation by doctors and administrators of electronic medical systems.

Results and Discussion.

Categorical apparatus of the medical information regulation:

With the development of modern technologies, the role and importance of information legal relations in the medical field are only increasing. The legal relationship between a doctor and a patient arises after signing a contract between them, the terms of which are binding on both parties, as well as with the consent of the patient for further actions of the doctor [2]. By entering into a legal relationship regarding the provision of medical care, the patient exercises not only their right to receive information about their own health condition but also has the right to demand compliance with the lawful use of this information.

Proper understanding of key concepts and categories is a necessary prerequisite for effective legal regulation of information relations in the field of confidential medical information protection and ensuring the legal status of the patient. The current legislation of Ukraine, international documents, and scientific literature operate with different terms to denote information about a person's health condition, data on seeking medical care, etc. The most common are the concepts of "medical data", "personal data", and "medical secrecy". Distinguishing and clarifying the content of these concepts is essential for determining the appropriate legal regime for handling the relevant information, establishing confidentiality requirements, access restrictions, and the procedure for use and disclosure.

The Ukrainian legislation lacks a unified definition of the concepts "medical data" or "medical information". Different terms are used to denote these categories:

- "information about health condition" (Article 285 of the Civil Code of Ukraine).

- "confidentiality about health condition, the fact of seeking medical care, diagnosis, as well as information obtained during a medical examination" (Article 39-1 of the Law of Ukraine "Fundamentals of the Legislation of Ukraine on Health Care").

A broader definition of "medical information" is contained in subparagraph 8, paragraph 2 of the Procedure for the Functioning of the Electronic Healthcare System. According to it, medical information is information about the patient's health condition, their diagnosis, information obtained during a medical examination, including relevant medical documents related to the patient's health [3].

The decision of the Constitutional Court of Ukraine in the case on the official interpretation of Articles 3, 23, 31, 47, 48 of the Law of Ukraine "On Information" and Article 12 of the Law of Ukraine "On the Public Prosecutor's Office" states that medical information, i.e. evidence of a person's health status, medical history, the purpose of the proposed research and treatment measures, the forecast of possible development of the disease, including the presence of a risk to life and health, by its legal regime is confidential, i.e. information with limited access [4].

According to Article 2 of the Law of Ukraine "On Personal Data Protection", personal data is defined as information or a set of information about an individual who is identified or can be identified. The General Data Protection Regulation defines "personal data" as any information relating to an identified or identifiable natural person ("data subject"), directly or indirectly, in particular by reference to an identifier such as a name, identification number, location data, online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural, or social identity of that individual [5].

Medical data is a component of personal data and, accordingly, falls within the scope of personal data protection legislation. Medical data contains information about a person's health status, diagnoses, treatment, examination results, etc. This information directly relates to a specific individual (patient), allows for its identification. Therefore the information has the status of personal data. Accordingly, all the requirements and guarantees of personal data protection provided by law apply to medical data.

Personal health data should contain all data related to the health of the data subject and disclose information about the past, current or future state of physical or mental health of the data subject [5].

Legal and regulatory framework for medical data confidentiality:

Due to Article 32 of the Constitution of Ukraine, it is not allowed to collect, store, use and disseminate confidential information about a person without his or her consent, except in cases determined by law, and only in the interests of national security, economic well-being, and human rights. This constitutional provision contains a mandatory norm according to which processing of information without the person's consent is possible only if three requirements are met: a) for the interests of national security; b) for the interests of economic well-being; c) for the interests of human rights. The norm of the Constitution corresponds the fundamental international documents (Universal

Declaration of Human Rights, International Covenant on Civil and Political Rights, Convention for the Protection of Human Rights and Fundamental Freedoms) which prohibit unlawful interference with the personal and family life of an individual.

The General Data Protection Regulation (GDPR) introduces fundamental changes to the collection, processing, possession, and transfer of health data. Patients must provide consent to the use of their health data and can withdraw this consent at any time or even request the deletion of their medical data. According to the General Data Protection Regulation, a European Union citizen can ask a healthcare facility to delete medical records about him or her under certain circumstances and cannot be refused [5].

The Regulation establishes uniform rules for handling personal data for all European Union members, significantly tightens the requirements for the protection of personal data, including medical data, which is considered particularly sensitive, and introduces severe penalties for violations. The General Data Protection Regulation expands the rights of citizens regarding their personal data, requiring companies and organizations that process personal data to take additional protection measures and conduct privacy impact assessments. The Regulation has an extraterritorial effect, meaning it applies to all business entities that process personal data of European Union citizens [5].

Judgment of the European Court of Human Rights:

The Convention on Human Rights and Biomedicine recognizes that information about a person's health is part of the right to respect for private life (Article 10) [6]. This provision is also protected by Article 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms. The European Court of Human Rights officially interprets the Convention and brings the norms in line with modern realities, reveals this right to protection of confidential medical information through a dynamic interpretation of the Convention's articles. The European Court of Human Rights determines the balance of interests in each case, in particular, by contrasting the patient's personal interest and the public interest. However, according to the Regulation, the interests of the patient and society in the protecting of medical data confidentiality may be inferior to the interests of investigation and publicity of the trial if it is proved that such interests are more significant.

For example, in the case "Z. v. Finland", the European Court of Human Rights acknowledged the violation of Article 8 of the Convention with unreasonable disclosure of HIV-positive status [7]. In addition, the European Court of Human Rights determined that disclosure of medical data by an employer without a valid reason is also a violation of the right to respect for private life.

In the judgment of the European Court of Human Rights in the case "Sidorova v. Russia", it was stated that the protection of personal data, including medical information, is fundamental to ensure the right to respect for private and family life. Respect for the confidentiality of health data is of key importance to the legal systems of all contracting parties to the Convention. The disclosure of such information can have a decisive impact on a person's private and family life. It also impacts the social status and professional activities, violating them and exposing individual to the risk of ostracism [8].

In its judgment of 27.01.2017 in the case "Surikov v. Ukraine", the European Court of Human Rights noted that information related to mental health disorders is essentially very sensitive personal data, regardless of the existence of a specific medical diagnosis. The collection, storage, disclosure, or other types of processing of such information fall under Article 8 of the Convention on Human Rights [9].

Lawful disclosure of confidential medical information:

While protecting the confidentiality of medical data and patient information is a key requirement in the healthcare industry, there are certain cases where disclosure of such information is permissible and lawful. The General Data Protection Regulation and other regulations recognize that the right to confidentiality of medical data is not absolute and may be limited in certain exceptional circumstances. It is important to consider the most common cases when doctor is obliged or entitled to provide information about a patient's health status without the patient's consent, acting in accordance with the legal norms and in the prescribed manner.

Part 2 Article 7 of the Law of Ukraine "On Personal Data Protection" provides the cases when personal data may be processed for healthcare purposes, in particular for:

- 1) establishment of a medical diagnosis, provision of care or treatment, medical services, monitoring of compliance with the conditions of provision of such services, as well as for the electronic health care system; the conditions include that the processing is carried out by medical personnel, rehabilitation specialists or other staff of the health care institution, rehabilitation institution or an individual entrepreneur and their employees; the staff needs to be entrusted with the duties of supporting of personal data protection and the legislation on doctor-patient confidentiality applies, including the employees of the National and State Health Service of Ukraine, who are also responsible of ensuring the protection of personal data;
- 2) quality control of medical services provided, considering those services are carried out by employees of the Ministry of Health of Ukraine.
- 3) exchange of information on financing of medical and healthcare services, provided that such processing is carried out by employees of the Social Insurance Fund of Ukraine, Ukrainian Pension Fund, the Social Protection Fund for People with Disabilities, and the Ministry of Finance of Ukraine, who are also responsible for ensuring personal data protection.

In addition to the cases above, disclosure of medical data is possible with the consent of the subject, or if such disclosure is justified by a legitimate purpose and is provided for by the domestic legislation of the country. When legitimately disclosing medical secrecy, a healthcare professional must be aware of the legislation which determines the medical information provision and act upon a request in accordance with the procedure established by law. Let's consider the most common cases when a doctor must provide information about the patient's health status (legitimately violate on doctor-patient confidentiality).

• in the interests of national security, economic well-being, protection of human rights, territorial integrity, public order, prevention of riots or crimes, protection of public health,

protection of reputation or rights of others, prevention of disclosure of confidential information or maintenance of the authority of justice (Constitution of Ukraine).

- information about the health status of minor children must be communicated by a physician to parents, adoptive parents, guardians, trustees (Fundamentals of the Legislation of Ukraine on Health Care).
- bride and groom have the right to be mutually aware of their health status (Family Code of Ukraine).
- in case of infectious diseases spread threat, enterprises, institutions and organizations are obliged to immediately inform the sanitary and epidemiological service authorities about emergency situations that pose a threat to health, about patients carrying infections or persons who have been in contact with them (Law of Ukraine "On Protection of Population against Infectious Diseases").
- in case of emergency situations that bring a threat to public health and epidemic well-being (Law of Ukraine "On Ensuring Sanitary and Epidemic Well-being of the Population").
- notification authorized police units about domestic violence and provide information on its prevention upon request (Law of Ukraine "On Prevention Domestic Violence").
- sharing the information about a person's mental health condition and provision of psychiatric care is allowed without their consent or the consent of a representative (Law of Ukraine "On Psychiatric Care").
- information about HIV (human immunodeficiency virus) status is allowed only: to the person tested, parents/representatives; to other medical professionals for treatment of this person; to third parties by court decision (Law of Ukraine "On combating the spread of diseases caused by HIV and Legal and Social protection of people living with HIV (human immunodeficiency virus)").
- information about treatment in a drug treatment facility can be provided to law enforcement if this person is prosecuted (Law of Ukraine "Counteraction Measures against Illegal Trafficking in Drugs, Psychotropic Substances and Precursors and Abuse of Them").
- when releasing a tuberculosis patient from prison, information about their health condition, need for treatment, and disease category is provided to the tuberculosis facility at their place of residence (Law of Ukraine "About Overcoming Tuberculosis in Ukraine").
- when preparing responses to attorneys' inquiries and law enforcement requests (Article 93 of the Criminal Procedure Code of Ukraine), disclosure of doctor-patient confidentiality is allowed by court ruling in criminal proceedings (Articles 132, 159 of the Criminal Procedure Code of Ukraine).
- during judicial proceedings, when information that is a medical secrecy is required, the submitting in court a motion for retrieval for evidence is available (Article 137 of the Civil Procedure Code of Ukraine).
- information for the purpose of searching for missing persons (Law of Ukraine "On the Legal Status of Missing Persons under Special Circumstances").
- information about the citizens health for the purpose of military registration (Law of Ukraine "On Mobilization Preparation and Mobilization").

In addition, the General Data Protection Regulation highlights another category which allows the processing of personal data for public health purposes. We are talking about situations where it is necessary for public interest in the area of public health, in particular, protecting against serious cross-border health threats or ensuring high standards of quality and safety in the health sector and medicinal products or medical devices, in accordance with legislation of European Union or state law. This entails appropriate and special measures to protect the rights and freedoms of the data subject, in particular, professional secrecy [5].

It is important to distinguish between medical data as a type of personal data and confidential medical information. Personal data is always information about living individuals or legal entities. Information concerning, in particular, medical information of the deceased is confidential, but the Law of Ukraine "On Personal Data Protection" does not apply to it. These legal relations are subject to legal protection in accordance with the Law of Ukraine "On Burial and Funeral Business", Article 7 of which guarantees the confidentiality of information about the deceased.

Thus, medical data by its nature is personal data, which, due to the need for enhanced legal protection, is classified by the legislator as confidential information. At the same time, impersonal medical data collected, for example, for scientific or statistical purposes, do not fall under the legislation on personal data protection. It is the possibility of identifying a specific person (directly or indirectly) that underlies the distinction. Personal medical data is considered to be sensitive personal data that requires an enhanced confidentiality regime and special requirements for its processing in accordance with the law.

We suggest defining medical information as confidential information with restricted access, which includes any documented information about the diagnosis, treatment or prevention of the patient's diseases, unrecorded confidential medical information, data on the personal and family life of the patient, as well as other information that became known to medical professionals during the provision of various types of medical care, including psychological care.

Only authorized medical professionals have access to confidential medical information [5]. However, due to the ambiguity of domestic legislation, not every doctor has sufficient information about what information is considered medical secrecy. Often, doctors and medical staff are not aware of the procedures and peculiarities of secrecy. The International Code of Medical Ethics of 1949 states the duties of a doctors in relation to patients, stating that a doctor must keep everything he or she knows about his or her patient in absolute secrecy, even after the latter's death [10]. The obligation to maintain doctor-patient confidentiality is also contained in the Oath of the Doctor of Ukrainian [11]. However, the observance of doctor-patient confidentiality is not only a matter of morality and professional ethics. This obligation of physicians also has a clear legal basis provided by a number of legislative acts that establish liability for its violation. Thus, maintaining doctorpatient confidentiality is a complex obligation for Ukrainian healthcare professionals, which has both moral and legal aspects. According to the current version of the Law of Ukraine

"Fundamentals of the Legislation of Ukraine on Health Care", doctor-patient confidentiality covers all confidential information about a patient that becomes known to health care professionals and other persons in the course of their professional or official duties [12]. This includes information about a person's health status, the results of medical examinations and tests, as well as intimate and family details of their life. The disclosure of such information by medical workers is inadmissible, with the exception of cases provided for by the legislation of Ukraine.

When using confidential data constituting a doctor-patient confidentiality for educational or research purposes, in particular in scientific publications, the absolute anonymity of the patient must be ensured. No identifying information that could reveal the patient's identity should be disclosed.

Doctor-patient confidentiality is a complex medical, legal, and socio-ethical concept that represents the prohibition for a medical professional to disclose information about a patient to third parties. When considering the relationship between the concepts of "medical confidentiality" and "doctor-patient confidentiality", certain terminological inaccuracies are noticeable. In our opinion, the term "doctor-patient confidentiality" is narrower in meaning and does not fully cover the obligation to maintain the confidentiality of the entire complex of information about a person's health. The concept of "medical confidentiality" has a broader meaning, as it relates to the field of medicine in general, and not only the duty of a doctor not to disclose information about a patient obtained during diagnosis and treatment.

The guarantee of doctor-patient confidentiality is the witness immunity provided for by the provisions of the Civil Procedure Code and the Criminal Procedure Code of Ukraine. These legislative acts state those healthcare professionals and other persons who, in connection with the performance of their professional or official duties, have become aware of an illness, medical examination, examination and their results, intimate and family life of a person – of information constituting doctor-patient confidentiality cannot be interrogated as witnesses [13,14].

According to the General Data Protection Regulation, there are three types of personal data that are particularly relevant to the healthcare sector:

- 1) health data: any information relating to a person's physical or mental health, including information about medical care received.
- 2) genetic data: any information that may reveal details of a person's physiology or health, as well as the results of genetic tests.
- 3) biometric data: any information related to certain physical or behavioral characteristics of a person that can be used to identify him or her (e.g., facial images, fingerprints) [5].

In the healthcare sector, the main sources of the personal data are documents issued in the name of a person, documents signed by the person, and information provided by the person. All this data about a person in the healthcare sector is confidential information.

The subject of medical data confidentiality is the information about the fact of treatment in a medical institution; illness and diagnosis; treatment methods and their results; intimate aspects (inclinations, habits, preferences, beliefs, relationships), as well as family and close environment. This list may vary depending on the specifics of the relationship between the patient and the healthcare professional [15].

In addition to doctors, researchers identify the following range of subjects who can access confidential medical information:

- 1) healthcare professionals who perform medical procedures (e.g., nurse).
- 2) healthcare professionals who combine medical practice with administrative activities (heads of departments, doctors on duty, heads of medical units, chief physicians, and their deputies, etc.).
- 3) healthcare workers who perform only administrative functions (heads of regional and district departments, healthcare departments, specialists of the mentioned institutions, employees of the Ministry of Health).
- 4) representatives of auxiliary services of medical institutions (human resources, financial and legal departments, computer support, registry, etc.).
- 5) students at medical schools.
- 6) employees of the system of mandatory and voluntary health insurance (mandatory and health insurance funds, insurance companies, etc.).
- 7) employees of law enforcement, control, and supervisory bodies (internal affairs, prosecution, sanitary and epidemiological service, etc.) [16-18].

We recommend expanding this list. Thus, according to the Codes of Ethics for Pharmacists (FIP) established in 2014, pharmacists are also obliged to maintain medical secrecy. In section 4.3, it is stated that the pharmacist must maintain the confidentiality of the information obtained during professional activities and the pharmacist-patient relationship, except when the law requires or allows its disclosure [17].

According to Article 286 of the Civil Code of Ukraine, employers and educational institutions do not have the right to demand the disclosure of detailed information about a person's state of health, diagnosis or treatment methods [18]. Fields for indicating the diagnosis are provided in the sick leave (hospital) sheets, but they are filled in only at the request of the patient himself. In other cases, these fields are left blank. At the same time, the name and location of the health care facility must be indicated in the sick leave certificate, which is confirmed by the appropriate stamp and seal. This requirement is necessary for the registration of hospitalization, but it contradicts the patient's right to medical confidentiality in cases where a person does not want to disclose the fact of applying to specialized institutions, for example, psychiatric hospitals or tuberculosis dispensaries.

The problem of medical information confidentiality of employees who undergo medical examinations and keep personal medical records in accordance with their professional activities also remains unresolved [19]. The personal medical record is provided to the employer, who is not obliged to keep the information in it confidential, as there are no formal rules governing this issue.

The mechanism for protecting the violated right to medical information confidentiality:

Certain security issues relate to private electronic medical systems. When using systems that are not certified by the

Ministry of Health, there is a threat of unlawful dissemination of personal data of patients, as well as the use of this information for illegal purposes. Uncertified systems may have data protection vulnerabilities, insufficient encryption and access control mechanisms, which creates risks of leakage of sensitive medical information. In addition, the use of unlicensed software increases the likelihood of malware and hacker attacks on systems, which can lead to the compromise of patients' personal data. The lack of proper audit and accountability in such systems also makes it difficult to detect cases of unauthorized access or disclosure of confidential information.

Protection of legitimate interests on confidential information about an individual in the field of healthcare is a system of measures aimed at preventing violation of legitimate interests in the field of healthcare by enshrining these interests in legislation, establishing liability for violation of such interests, inadmissibility of arbitrary interference in an individual's personal life and limiting access to such data [20].

Such protection mechanism is based on the principle of inadmissibility of arbitrary interference in the personal life, as well as special rules establishing legal regulation of non-property rights aimed at protecting personal life and corresponding legal obligations. In addition, it includes rules that provide for certain restrictions and special measures to protect these rights. The creation of additional guarantees for the preservation (non-disclosure) of confidential information about an individual in the field of healthcare is one of the key tasks of the mechanism for protecting the relevant legitimate interests.

By the Decree of the President of Ukraine no. 64/2022, adopted February 24, 2022, martial law was imposed in the country. According to paragraph 3 of this Decree, for the period of martial law, constitutional rights and freedoms of a person and citizen, in particular the right to respect for private and family life, as provided for in Article 32 of the Constitution of Ukraine, may be temporarily restricted.

The issue of temporary access to personal data during martial law is legislatively regulated but does not fully comply with the principles of the rule of law. Article 615 of the Criminal Procedure Code of Ukraine regulates investigative actions under martial law but does not cover temporary access to things and documents [13]. However, this investigative action has also undergone changes due to the Transitional Provisions. According to the new rules, the prosecutor, in agreement with the head of the prosecutor's office, may authorize temporary access to medical secrecy. Making such changes to another section allows bypass restrictions set forth in Article 615 of the Criminal Procedure Code. Thus, the prosecutor may authorize temporary access in any case, not only when the investigating judge is objectively unable to perform his or her functions. The decision-making procedure has also been changed – now the prosecutor makes the decision and then coordinates it with the head of the prosecutor's office. In addition, there is no obligation to notify a higher-level prosecutor or the court of the decision.

This violates the rule of law, and the balance of human rights guarantees and state interests, creates conditions for abuse of power by prosecutors due to the lack of mandatory judicial control and accountability, and leads to excessive interference in the private life of citizens.

Access to legal aid is a key criterion for ensuring access to justice [21]. In legal science, remedies are defined as material and legal means determined by law or contract aimed at restoring (recognizing) violated (disputed) rights and legal influence on the violator. The Application Practice Analysis of the Article 16 of the Civil Code of Ukraine, carried out by the Supreme Court of Ukraine, contains a definition of the concept of "methods of protection of civil rights and interests" is determined as a mechanism of material and legal means of protection civil rights and interests determined by law, which is brought into effect by a court decision in case of their violation or real danger of such a violation [22].

Violation of the right to medical information confidentiality may be manifested in various forms of unlawful disclosure of information with direct or indirect intent constituting medical secrecy. This may include verbal communication of data during a conversation, including a telephone conversation, disclosure of information on the Internet, reports, public speeches, lectures, as well as dissemination through television, radio, or periodicals. In addition, disclosure is considered to be the provision of an opportunity for unauthorized persons to familiarize themselves with confidential medical data without proper reasons.

Compliance with personal data protection legislation is monitored by the Ukrainian Parliament Commissioner for Human Rights and the courts. The Commissioner conducts inspections of compliance with the law following complaints from citizens or within their own initiative. Based on the results of the inspection, the Commissioner may issue binding instructions to eliminate violations, impose administrative penalties and send materials to the court.

The judicial method of protecting the violated right to medical information confidentiality involves court appealing to protect right to secrecy about personal health condition and the fact of seeking medical care. This refers to such measures:

- filing a lawsuit to protect the right to privacy in case of unlawful disclosure of medical information.
- demanding a refutation of false information about the state of health disseminated by third parties.
- claim for compensation for moral and financial damage caused by unlawful disclosure of confidential information.
- appealing against unlawful actions or inactions of medical institutions employees, who have leaked confidential data.

Court proceedings make it possible to objectively assess the legality of medical secrets disclosure and ensure the restoration of violated rights in case of detecting law violations.

At the same time, the personal data subject also has the right to submit to the confidential medical information processor claims against the unlawful processing of their data, correction, or destruction of the data, and to withdraw consent to processing the data. By law, the subject has the right to receive any information about themself from the owner or manager within 30 days after the relevant request. Therefore, before applying the claim to the Commissioner or to the court, it is recommended to first send a written complaint directly to the personal data processor.

Appealing to the Commissioner does not deprive of the right to judicial protection, but the Commissioner suspends consideration of the complaint after the commencement of the court proceedings. Controllers/processors of personal data may

be held administratively and criminally liable for violations of personal data legislation [23].

Civil liability in the field of medical activities is a type of legal liability arising from the violation of property or personal non-property rights of citizens in the field of healthcare. It mainly determines the need to compensate the damage caused and to refute or disseminate information. Civil liability serves as a means of ensuring the protection of patients' personal non-property rights, including the right to life and health, during the provision of medical care.

Disciplinary liability is related hospital management actions. The health care organization management may bring an employee who violates medical information confidentiality to disciplinary liability in the form of a reprimand or dismissal [24]. The employer must obtain explanations from the perpetrator or record the fact of refusal to provide them. The basis for disciplinary liability is an internal investigation by the employer, which is initiated based on complaints from patients, employees' memos or notes and other evidence of patient rights violations.

Administrative liability is mostly imposed on the healthcare institution itself. Regulatory authorities may impose administrative sanctions on healthcare institutions that allow unauthorized disclosure of confidential medical information.

Criminal liability is the most severe type of legal liability for healthcare professionals offenses committed during professional activities. The Criminal Code of Ukraine determines responsibility for intentional disclosure of medical secrecy (Article 145) and for information disclosure about medical examination for HIV (human immunodeficiency virus) or other incurable infection (Article 132) [25].

Conclusion.

Preserving the confidentiality of medical information is an integral part of the human right to health care, medical assistance, and medical insurance. Despite the existence of legal acts regulating the protection of personal medical data about an individual, there are still gaps and inconsistencies in this area in Ukraine. Medical information in the broad sense is defined as confidential information with restricted access, which includes any documented information about the diagnosis, treatment or prevention of the patient's diseases, unrecorded confidential medical information, data on the personal and family life of the patient, as well as other information that became known to medical professionals during the provision of various types of medical care, including psychological care.

The authors analyze the legal grounds and cases of possible lawful disclosure of confidential medical information, in particular in the interests of national security, public order, public health protection, etc. The paper examines the judgments of the European Court of Human Rights in cases concerning confidential medical information protection. Attention is paid to issues of confidentiality protection in electronic medical systems and requirements for secure data processing in the digital environment. The authors identify the cases of insufficient access regulation of medical secrecy during martial law. The mechanism for protecting the violated right to medical information confidentiality involves appealing to the Ukrainian Parliament Commissioner for Human Rights or to the court.

It is reasoned that judicial proceeding makes it possible to objectively assess the legality of medical information disclosure and to ensure the restoration of violated rights if violations of confidentiality legislation are detected. The authors emphasize that judicial protection is an important guarantee of the right to medical information confidentiality about an individual in the health care. The article highlights the increasing role of international legal acts for ensuring the protection of medical data in the European Union and Ukraine.

REFERENCES

- 1. Teremetskyi V, Myronova G, Batryn O, et al. Legal Guaranteeing for Providing Socially Significant Medical Services during Martial Law and Post-War Recovery of Ukraine. Journal of Law and Sustainable Development. 2023;11:1-15.
- 2. Teremetskyi V, Muzychuk O, Salmanova O, et al. Strengthening of Contractual Principles within Legal Relations between a Patient and a Medical Institution While Reforming the Health Care System in Ukraine. Georgian Medical News. 2018;11:155-159.
- 3. Procedure for the Functioning of the Electronic Healthcare System: Resolution of the Cabinet of Ministers. 2018.
- 4. Decisions of the Constitutional Court of Ukraine in the case on the official interpretation of Articles 3, 23, 31, 47, 48 of the Law of Ukraine "On Information" and Article 12 of the Law of Ukraine "On the Public Prosecutor's Office" (case of K. Ustimenko). 1997.
- 5. On the Protection of Natural Persons with regard to the Processing of Personal Data and on the Free Movement of Such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation): Regulation of the European Parliament and of EU Council. 2016.
- 6. Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (Convention on Human Rights and Biomedicine): EU Council Convention. 1997.
- 7. Case Z. v. Finland: Judgment of the European Court of Human Rights. 1997.
- 8. Sidorova v. Russia: Judgment of the European Court of Human Rights. 2019.
- 9. Surikov v. Ukraine: Judgment of the European Court of Human Rights. 2017.
- 10. International Code of Medical Ethic: World Medical Association Code. 1949.
- 11. On the Oath of the Doctor of Ukrainian: Decree of the President of Ukraine. 1992.
- 12. Fundamentals of the Legislation of Ukraine on Health Care: Law of Ukraine. 1992.
- 13. Criminal Procedure Code of Ukraine: Law of Ukraine. 2012.
- 14. Civil Procedure Code of Ukraine: Law of Ukraine. 2004.
- 15. Balynska O, Teremetskyi V, Zharovska I, et al. Patient's Right to Privacy in the Health Care Sector. Georgian Medical News. 2021;12:147-153.
- 16. Shchyrba M. Signs of patient's information confidentiality. Legea și Viața. 2017;301:187-190.
- 17. Codes of Ethics for Pharmacists (FIP): FIP Council Statement. 2014.

18. Civil Code of Ukraine: Law of Ukraine. 2003.

and Regulatory Issues. 2021;24:1-11.

- 19. Law on the Protection of the Population from Infectious Diseases: Law of Ukraine. 2000.
- 20. Khodakivskyi M. On the problem of legal regulation of confidential information about an individual in the field of health care. Law Review of Kyiv University of Law. 2023;4:159-165.
 21. Teremetskyi V, Duliba Y, Drozdova O, et al. Access to Justice and Legal Aid for Vulnerable Groups: New Challenges Caused by the COVID-19 Pandemic. Journal of Legal, Ethical
- 22. The Application Practice Analysis of the Article 16 of the Civil Code of Ukraine (extract). Bulletin of the Constitutional Court of Ukraine. 2014;8:17-34.
- 23. On Approval of Documents in the Field of Personal Data Protection: Order of the Ukrainian Parliament Commissioner for Human Rights. 2010.
- 24. The Labor Code of Ukraine: Law of Ukraine. 1971.
- 25. Criminal Code of Ukraine: Law of Ukraine. 2001.