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# *THE VALUE OF FORENSIC MEDICAL EXPERTISE FOR THE QUALIFICATION OF CRIMES IN THE MEDICAL ACTIVITY*

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## Abstract2

**The relevance of the forensic medical expertise in the qualification of crimes in the field of medical activity is the need to determine the mechanism of evaluation of those actions of medical personnel that may be a crime. The aim of the authors was to identify the problematic aspects of conducting forensic medical expertise in investigating the failure to provide medical care to a patient by medical staff and the improper performance of professional duties by a medical or**

**pharmaceutical worker, namely to identify a causal link between the actions of medical personnel and socially dangerous consequences. It's suggested to establish in the competence of the forensic medical expert the determination of the possibility to prevent the occurrence of grave consequences by a medical worker, which is mostly determined by the doctors and will be able to assist the investigative and judicial authorities in evaluating the actions of the medical staff.**

**Keywords: diagnosis, expertise, crime, consequence, patient, causal link, hospital.**

# INTRODUCTION

**Scientific, practical problems.**

**The problem of the liability of medical staff for their activities is increasingly discussed at the global level, because with the development of the latest technology society requires better and safer health care. Leading international organizations in the field of health are developing and improving various sectoral normative documents to standardize the activities of medical workers. However, the problem of legal regulation of health care professionals' work is relevant nowadays, especially when the issue of the involvement of a healthcare professional in committing a professional crime is being addressed. In Ukraine the public danger of such criminal acts as the failure to provide medical care to a patient by medical worker and the improper performance of professional duties by a medical or pharmaceutical worker is not**

**properly assessed, as evidenced by the high level of latency of these crimes.**

**Certain aspects of criminal liability of medical workers for committing crimes in the sphere of professional activity have been the subject of research of many domestic and foreign scientists, among them V. Balabko, V. Glushkov, O. Dudorov, I. Kirilluk, A. Paramonova, S. Stetsenko, T. Tarasevich, G. Chebotaryova, O. Yushchyk and others. These and other researchers have made significant contributions to the development of scientific thinking on this issue, but practice shows that further work is needed in this area, because law enforcement agencies can't counteract such crimes. For example, in Stetsenko's works the features of the legal evaluation of the actions of medical workers are described. He categorized various types of health care defects. However, he did not distinguish between "medical error" and "medical care defect". He also described the main problems in investigating a crime in the area of medical care. The peculiarity of all the works performed by lawyers is that they give a purely legal evaluation of the actions without forensic medical evidence. The only work since the Soviet Union, written by forensic expert Sergeyev, has given differences in the concepts of "defect", "medical error". However, the work is outdated now, does not meet the current requirements of the law and does not describe certain issues of forensic medical evaluation of the provision of medical care (including establishing causal link with the consequence).**

**The purpose of the article.**

**The purpose of the article is identification of problematic aspects of conducting forensic medical expertise in the case of criminal-law qualification of not providing assistance to a sick medical worker and improper performance of professional duties by a medical or pharmaceutical worker, namely ways of improving forensic expertise on the quality of medical care.**

**Object and Subject of the Research.**

***The object*** **of the study is to conduct a forensic examination of the activities of medical and pharmaceutical workers in order to identify, where necessary, the presence in their actions (acts or omissions) of criminal offenses of misappropriation of professional duties by these persons.** ***The subject*** **of the study is the mechanism of carrying out of forensic medical expertise in determining of such crimes as failure to provide medical care to a patient by medical worker and the improper performance of professional duties by a medical or pharmaceutical worker.**

**Research Methods.**

**The study used data from the last 10 years, namely: 98 inpatient cards in cases of differences between clinical and forensic medical diagnoses; the data of the commission forensic medical expertise, conducted in the State Institution "Main Bureau of Forensic Medical Examination of the Ministry of Health of Ukraine" for 2013-2019; statistical reporting of registered criminal offenses and the results of their investigation for 2009-2019. The study was conducted using a set of general scientific and special scientific methods. General scientific**

**and special scientific *methods:* empirical empirical (to investigate the mechanism and procedure for conducting forensic medical expertise on the quality of medical care), analytical (to evaluate the effectiveness of conducting forensic medical expertise on the quality of medical care), forensic medical (to identify the causal link between the actions of certain persons of medical personnel and socially dangerous consequences), statistical (for processing empirical material).**

**Responsibility for the provide medical care to a patient or inappropriate medical care for patients has been applied to physicians since ancient times. Some historical sources point to the cases of public executions of doctors if their unprofessional actions or inaction have killed people. Today, such acts are considered to be typical professional crimes committed in the medical field.**

**RESULTS AND DISCUSSION**

# THE FIRST TOPIC

# FUNDAMENTALS OF LEGAL REGULATION OF THE PROVIDING OF MEDICAL CARE IN UKRAINE

**Most scientists determine human health as a direct object of these crimes. According to the Charter of the World Health Organization, the term "health" means a state of complete physical, mental and social well-being, not just the absence of disease and physical defects. The basic composition of the crime in the form of the failure to provide medical care to a patient by medical worker (Part 1 of Article 139 of the Criminal Code of Ukraine) is formal, so the crime is considered complete even without consequences - grave consequences or death of the patient are signs of a qualified composition of this crime (Part 2 of Article. 139 of the Criminal Code of Ukraine). In fact, the failure to provide medical care to a patient by medical worker is expressed in the form of inaction if this inaction occurs without respectable reason. The issue of validity of reasons is not fixed at the legislative level, therefore it's decided in each case by a court.**

**In the case of improper performance of professional duties by a medical or pharmaceutical worker the objective side of the crime may be in the form of inaction or in the form of performing certain actions not in accordance with the normative documents. Compulsory element of the main composition of this crime (Part 1 of Article 140 of the Criminal Code of Ukraine) is also grave consequences for the patient,**

**and compulsory element of the qualified composition of this crime (Part 2 of Article 140 of the Criminal Code of Ukraine) - grave consequences for a minor. Accordingly, such consequences are death, grievous bodily harm, moderate bodily injury. A causal link between the act and the socially dangerous consequence is also a prerequisite.**

**An important feature of these crimes is that they can only be committed by certain persons. The current criminal law of Ukraine defines them as special subjects. This means that in addition to general features (only a natural person who has reached the age of criminal responsibility can be the subject of a crime), such persons must have certain specific characteristics. These are the presence of a professional education, compliance with the sole qualification requirements and the exercise of professional responsibilities while a criminal act. The subjective side of failure to provide medical care to a patient by medical worker (Article 139 of the Criminal Code of Ukraine) is characterized by intent, because the guilty person realizes that it's inaction can lead to grave consequences for the victim. In turn, the subjective side of improper performance of professional duties by a medical or pharmaceutical worker (Article 140 of the Criminal Code of Ukraine) is characterized by a careless form of guilt, because these acts are committed as a result of negligent or dishonest attitude of these duties.**

**In addition, an indispensable element of the compositions of the analyzed crimes is the identity of the victim - the patient. Unfortunately, the Ukrainian legislation doesn't define the identity of the patient - only in the Law of Ukraine "Fundamentals of the legislation of Ukraine on health care" we have the definition of the term "patient": this is a**

**natural person who has sought medical help and (or) to whom such assistance is provided.[279] It should be added that the use of the term "patient" is in line with current concepts developed for healthcare professionals and is broader than the term "sick", which is considered obsolete in most medical and pharmaceutical encyclopedias. The above indicates the need to improve the analyzed criminal law by replacing the term "sick" with "patient". Also, the patient, according to etymology, means the presence of a person of some disease. In turn, the patient, according to the above definition, is associated with the provision of medical care, which in accordance with the law is the activity of professionally trained healthcare professionals aimed at the prevention, diagnosis, treatment and rehabilitation of diseases, injuries, poisonings and pathologies conditions, and in connection with pregnancy and childbirth. This means that having a disease isn't a major feature, and medical care can be necessary for prevention or diagnosis the disease.**

**Statistical data show that no persons were notified of suspicion in the 198 criminal proceedings, qualified under Art. 139 of the Criminal Code of Ukraine "Failure to provide medical care to a patient by medical worker". A similar situation with the use Art. 140 of the Criminal Code of Ukraine "Improper performance of professional duties by a medical or pharmaceutical worker" by law enforcement agencies: for example, 665 such proceedings were recorded during 2019, suspicion was served in only two proceedings; in 2019, 654 such**

[279] Law of Ukraine, No. 2801-XII.

**proceedings were recorded, suspicion was only served in three cases.[280] Such information indicates that law enforcement agencies face some difficulties in investigating this actions. The problem of determining the degree of culpability of a health care professional in adverse consequences for the patient has no territorial boundaries – in many countries this issue remains unresolved.**

**Every year 7,000 to 9,000 people die in the United States as a result of a so-called "medical error". The total cost of patient care for medical errors exceeds $ 40 billion annually.[281] The main consequence of treatment errors is a decrease in patient satisfaction and increased mistrust in the healthcare system.[282] In Ukraine, such data aren't officially published or even silenced, and individual cases are made known to the public only through the media.[283]**

**In order to objectively and accurately evaluate the provision of medical care to forensic medical experts it's necessary to carefully study all the intricacies of this assistance at each stage, taking into account the requirements of the current legislation of Ukraine, in particular the Criminal Procedure Code[284] and the Criminal Code of Ukraine.[285] In**

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[280] Prosecutor General's Office of Ukraine, 2020.

[281] Tariq, Scherbak, April 28, 2019.

[282] Millenson, November 27, 2019.

[283] Facts, February 8, 2019.

[284] Criminal Procedure Code of Ukraine. Law of Ukraine, No. 409-IX.

[285] Criminal Code of Ukraine. Law of Ukraine, No. 418-IX.

**order to resolve the issues of medical care in Ukraine by conducting forensic medical expertise in the framework of criminal proceedings and civil cases, the volume, tactics, completeness and timeliness of the patient's medical-diagnostic measures should be analyzed in dynamics at each stage. The basic principles of forensic medical expertise are regulated by the relevant Law "On Forensic Expertise",[286] "Instruction on Forensic Medical Expertise",[287] and assessment of the severity of injuries, including those caused by poor medical care – "Rules of Forensic Medical Evaluation of the Severity of Injuries".[288]**

[286] On Forensic Expertise. Law of Ukraine, No. 294-IX

[287] Ministry of Health of Ukraine (MHU). (1995a). Instruction on conducting forensic expertise. Order, No. 254/790.

[288] Rules of forensic determination of severity of injuries. Order, No. 255/791.

# THE SECOND TOPIC

# FORENSIC MEDICAL EVALUATION OF MEDICAL CARE IN UKRAINE. DEFECTS OF MEDICAL CARE

**A. Pletenetskaya (forensic medical expert) examined 98 inpatient hospital records in cases of differences of clinical and forensic medical diagnosis (according to the main diagnosis and complications) to identify the main causes of misdiagnosis according to the multidisciplinary hospital of emergency medical care for the current 7 years. The patients were treated at the toxicological, neurosurgical and polytrauma departments. Data processing and analysis were performed in OpenOffice (Base, Calc, Writer, Draw, Math), GNU Octave software packages with source documents in the format .doc, .xls. In the treatment of patients with the same diagnoses in different departments the complex of analyzes, additional studies and examinations of specialists was different in all cases, which confirms the lack of a unified approach to the diagnosis of pathological conditions. On the other hand, the minimal amount of research was due to the following reasons: 1) short time of hospital stay in patients with severe pathologies; 2) delays in conducting examinations for unknown reasons in the presence of testimony. The diagnoses in different departments were divided into three groups: disease, trauma and poisoning. The coincidence of clinical and forensic medical diagnoses (disease-disease, trauma-trauma, poisoning-poisoning) totaled 3 (3.1%), incomplete coincidence – 15 (15.3%), inconsistency – 80 (81.6%).**

**In the department of toxicology 53.9% of patients were diagnosed with "poisoning", while the cause of death was disease (53.9%). The most common clinical diagnoses were alcohol and unknown substance poisoning (a total of 9 cases, 69.2%), which was the direct cause of death in only 2 cases. In other cases, the immediate cause of death were pancreatic necrosis, cirrhosis and hypothermia. When evaluating treatment, it should be noted that it is usually consistent with the clinical diagnosis. However, at pancreatic necrosis patients also needed surgical intervention, and at liver lesions - prescription of hepatotropic drugs, which was not done. As for the actual cause of death from hypothermia, the treatment wasn't chosen correctly, and was aimed only at detoxification. It should be noted that out of 13 cases in this department doctors were diagnosed with the same diagnosis in 6 cases (46.2%), but only in 2 cases of them the clinical diagnosis coincided with forensic medical diagnosis -poisoning and disease. In the other cases, doctors made 2 or more diagnoses, and in most cases (61.5%) the diagnosis was still not correct.**

**In the department of neurosurgery 77.8% were diagnosed with trauma, while the cause of death was disease (77.8%). The most common clinical diagnoses of these were closed traumatic brain injury (39 cases out of 54) of various forms-72.2%; in 23.1% among them the immediate cause of death was cerebrovascular disease, and 17.9% - hypothermia. In other cases, forensic medical diagnoses were diverse. When evaluating treatment, it should be noted that in cases of cause of death from cerebrovascular disease in the presence of a clinical diagnosis of traumatic brain injury the therapeutic and diagnostic**

**tactics were generally chosen correctly. As for the other cases, the therapeutic and diagnostic measures were chosen according to the established diagnoses, which didn't correspond to the pathology actually present in the patients. It should be noted that in all cases there were 2 or more diagnoses in this department by doctors, and no diagnosis completely coincided with the forensic medical one.**

**In the department of polytrauma, 83.9% were diagnosed with trauma, while the cause of death was disease (87.1%). The most frequent clinical diagnoses of these were closed chest and abdominal trauma (a total of 19 cases from 31 to 61.3%) with a variety of immediate causes of death, most of which were pancreatic necrosis (36.8%). In the evaluation of treatment, therapeutic and diagnostic measures were selected according to established diagnoses, which did not correspond to the actual pathology present in patients. It should be noted that out of 31 cases in this department, single diagnosis was made by doctors in 1 case. In the other cases, doctors made 2 or more diagnoses, and in most cases (90.7%) the diagnosis was still not correct.**

**In cases of coincidence of diagnoses of clinicians and forensic medical diagnosis treatment corresponded to established diagnoses. In cases of incomplete coincidence of forensic medical and clinical diagnoses, treatment was generally assigned according to one or two of the clinicians' established diagnoses. As for those cases where there were more diagnoses, the treatment was, in fact, also aimed at 1-2 pathologies and did not concern the other diagnoses at all. If the feasibility of treatment is assessed, although it was not contraindicated, it could not significantly alleviate the patient's condition. In cases of**

**inconsistencies of diagnosis treatment was selected by doctors tactically right only in cases of death from cerebrovascular pathology (clinical diagnosis was traumatic brain injury).**

**Thus, in all departments, doctors were predominantly diagnosed with trauma (or poisoning) when the cause of death was disease. At the same time, considering the lack of necessary studies to confirm traumatic genesis, we point out that such diagnoses are made by doctors unreasonably.**

**Treatment prescribed to patients was etiopathogenetically selected only in a few cases: cases of complete coincidence of diagnoses, as well as incomplete and inconsistencies coincidence in cases of cerebrovascular pathology (with a clinical diagnosis closed traumatic brain injury) and partially - in poisoning. This can be explained by the fact that the treatment of the pathology established by the clinicians was almost indistinguishable from that actually presented pathology.**

**In the statistical analysis of the forensic medical expertise conducted by A. Pletenetska in the State Institution "Main Bureau of Forensic Expertise of the Ministry of Health of Ukraine" for 2013 -2019, with the subsequent statistical processing of standard methods of descriptive statistics it was found that the total number of forensic examinations increased from 2013 (633 expertise) to 2016 (752 expertise), and for the next 2 years it decreased to 446 examinations in 2019. However, the percentage of expertise in the framework of proceedings for improper performance of professional duties by a medical or pharmaceutical worker steadily continued to grow since 2013, when it stood at 23.5%, reaching in 2019 already 34.3%. In relation to the total number of**

**medical expertise, the percentage of forensics in cases of determining the quality of obstetric and gynecological care increased almost twice from 16.8% in 2013 to 30.7% in 2019; 15.2% in 2013 to 27.5% in 2019.**

**When examining cases with negative consequences from the provision of obstetric and gynecological care, it was found that there was an incorrectly chosen tactic of birth, and in most cases (65.3%) - late provide or failure to provide medical care. The reason for the wrongly chosen tactics of childbirth was the under-examination of pregnant women, the underestimation of the survey data (for example, in case of the physiologically narrow pelvis doctor obstetrician-gynecologist decided to "give by physiological births"), which caused the death of the baby and grave effects to the mothers. When evaluating the provision of medical care at different stages, it was found that at the pre-hospital stage (in the clinic) defects were allowed in 65.5%, and in the hospital - in 72.8%, of which 38.7% during resuscitation.**

**When considering defects in the provision of medical care for a surgical profile, an isolated underestimation of the survey data was 16.7%, a combination of reasons: a) an underestimation of the examination data in combination with an underestimation of additional research data - 16.7%; b) underestimation of the survey data in combination with the negligent attitude to the patient who had an unkempt appearance (homeless person, bad body odor, odor of alcohol, etc.) - 6.7%. Imperfect knowledge of their professional skills (tactically incorrectly selected treatment, mechanical and other errors in conducting surgical interventions), as well as ignorance of their duties, job descriptions occurred in 16.7%. In assessing the timing of medical**

**care, it should be noted that untimely medical care was provided to patients with such urgent conditions, acute blood loss and severe traumatic brain injury, more than a third of cases.**

**Thus, the main reason for the poor quality of care was it's delay, even with the correct diagnosis and treatment tactics.**

**In the case of departmental inspections by representatives of Health Departments, the results of their findings coincide with the findings of the Main Bureau commissions, less than a third of cases (30.2%). According to Part 2, Art. 84 of the Criminal Procedure Code of Ukraine, "Expert Opinion" is a procedural source of evidence, so the court and the limits of the pre-trial investigation mostly refer to the data of the "Expert Opinion" and not to other documents. However, the presence of these contradictions on the part of the forensic medical and clinical evaluation of the treatment and actions of individual health care providers is still misleading and complicates the work of the investigative and judicial bodies, which is obviously one of the reasons for the extremely low level of crime detection on Articles 139 and 140 of the Criminal Code of Ukraine.**

**It should be noted that forensic medicine on the quality of care is one of the most difficult types of expertise. First of all, it's due to the imperfection of a single algorithm of expert actions, which would be clearly stated in the relevant document. In addition, unlike other examinations, the list of questions that can be answered by an expert is not formally specified in any legal act used by experts. The forensic medical expertise of the quality of care is also complicated by the negligent and incomplete completion of the medical records of the**

**victim; lack of necessary medical documentation that could accurately reflect the state of health before the development of the pathological condition; the absence of some health care protocols that could facilitate the forensic medical assessment of health care delivery in certain circumstances. It should also be noted that not all international standards and clinical protocols meet the needs and capabilities of Ukrainian medicine. At the same time, there is an increase in the number of private clinics and laboratories, the results of treatment and examination of which are in the electronic database, in particular, and in the so-called "personal cabinet" of a user who has access to his information online in the presence of individual password. In the case of electronic document flow, there is a free opportunity to change the data and falsify it by persons with free access to it. In such cases, the question arises about the procedural peculiarities of the withdrawal of such medical documentation by law enforcement representatives and its legal evaluation for forensic medical examination.**

**Thus, the level of medical care in Ukraine is extremely low, which is due, first of all, to the lack of coordinated and organized work of health care workers at both pre-hospital and hospital stages.**

**According to data from the reports on criminal offenses of the Prosecutor General's Office of Ukraine 2009 to September 2019, for the reporting period, most of the criminal proceedings (92.3%) were closed under Part 1, item 2 of Art. 284 of the Criminal Procedure Code of Ukraine (finding no criminal offense). In the statistical analysis of the commission of forensic medical examinations, conducted at the State Institution «Main Bureau of Forensic Medical Expertise of the Ministry**

**of Health of Ukraine», it was found that the share of expertise in the provision of medical assistance increased from 23.53% in 2013 to 34.3% in 2019. Expertise on the quality of care is complex and diverse. Often, the condition that required medical assistance didn't arise from the disease, but from another person's injury. Thus, among the 1100 expert reports on "medical cases" conducted from 2013 to 2019 at the Main Bureau, the examinations in cases of preliminary injury to victims amounted to 42.8%[289]. In such cases, the issue of qualification of several crimes is raised before the investigative bodies: causing injuries by one (several) persons and providing medical assistance to medical professionals. So each person must be legally responsible for an individual article. Law enforcement agencies, in turn, need to gather evidence in order for the crime to be complete. This is the purpose of forensic medical expertise, during which the experts answer the questions raised, in particular and determine the presence or absence of a causal link between the adverse effect and the causing of bodily injury, as well as the subsequent provision of medical care.**

**Analyzing the objective side of the crimes provided for in Articles 139 and 140 of the Criminal Code of Ukraine, it should be noted that criminal liability for them arises only in the presence of three elements that characterize the objective side: the action (inaction) of the subject, the occurrence of consequences and causation, a consequential connection between them, and for Art. 139 of the Criminal Code of Ukraine and additionally the lack of a valid reason for a medical**

[289] Pletenetskaya, Kondratenko, Legedza, 2019, pp. 98-101.

**professional, whose presence is established by the court.[290] If the causal link between the act and the consequence is not established, the objective side of the crime with the material composition is absent due to the absence of such a binding feature as the causal link. Therefore, in every criminal case, in order to have an objective side of a crime with material composition, it is necessary to establish (study, learn) not only the act, but also the socially dangerous consequence, as well as the causal link between the act and the consequences as phenomena of real reality.[291]**

[290] Dunaevskaya, 2012.

[291] Kurilo, Mikhailov, Yara, 2006.

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# THE THIRD TOPIC

# FORENSIC MEDICAL APPROACH TO ESTABLISHING CAUSAL LINK BETWEEN DEFECT IN MEDICAL CARE AND ADVERSE CONSEQUENCE

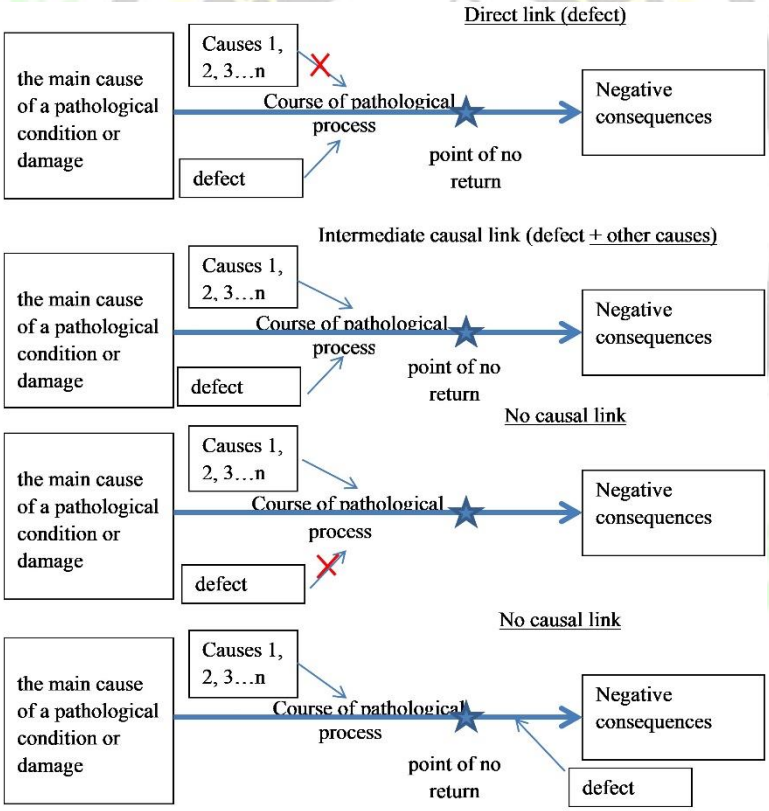
**When analyzing expertise in cases of the failure to provide medical care to a patient with injuries, it's often the case that experts mistakenly identify the various links, thereby establishing a direct link between the consequence and the injury and denying such a link between the consequence and the defect in the provision of care. Consequently, forensic medical experts, without realizing it, are destroying the composition of one of the crimes, which is the reason for closing the criminal proceedings.**

**In establishing causal links, forensic experts should first and foremost follow the laws of formal logic.[292] Therefore, if there are several reasons that influence the consequences (defect + concomitant pathology, severity of the condition, etc.) - indirect connection, and the immediate cause of the development of a serious condition of the patient (between it and the consequence is always direct connection). Such causal links cannot be identified. Attachment of the defect or other causes occurs during the course of the pathological condition. For example, a stab-and-stab injury with a major blood vessel injury**

[292] Vermel, Solokhin, 2006.

**without medical care can lead to death. In this case, the stab-wound injury is directly causally related to death, while the defective medical care is also directly causally related to death. In such cases, the questions of the decree should also be formulated correctly: is there a causal link between the defects and the consequence? Is there a causal link between the injury (pathological condition) and the consequence? (Fig. 1).**

**Fig. 1.** ***Scheme of determination of causal link between the defects and the consequence.***



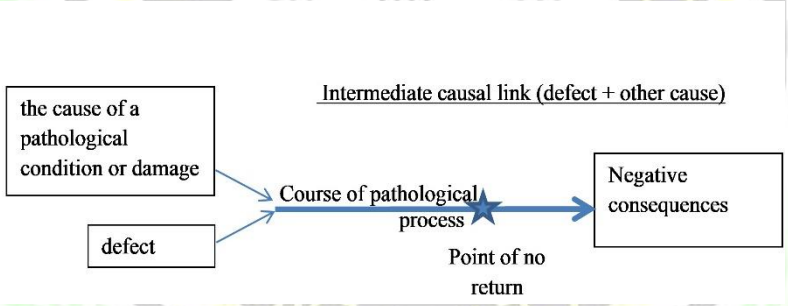

**Source. Authors.**

**When establishing a causal link between a defect and a consequence, it is necessary to find a so-called "point of no return", after which any measures, even if properly implemented, would not be able to affect the course of the process, and the adverse event would in any case occur. In this case, even in the presence of a defect in assistance, it will not be causally related to the consequence. This should be remembered especially in urgent situations, when untimely measures doom a patient to death. The timeliness of providing medical care in such cases is determined by considering the possibility of providing this help (for example: the patient was not provided medical care if it was possible – the defect is in direct causal link with the consequence; the patient was not provided medical care if it wasn't possible (for example, he went to the hospital late) - the defect is not in causal link). This should not be confused with adverse effects in case of incorrectly performed (or unfulfilled) medical measures if there is an inevitable result. In such cases, the defect in the provision of medical assistance should be mentioned. For example, a patient with an incurable illness comes with an injury, etc., to an institution where medical personnel make defects, resulting in the death of the patient or other grave consequences.**

**Another situation is when a pathological condition or injury alone could not have led to an adverse event in its normal course, and a defect in the provision of medical care contributed to the occurrence of such an effect. In this case, the cause of the pathological condition or the injury will not be the main one and, therefore, will not be in direct causal link to the consequence. The cause and defects should be**

**considered as single level factors. For example, a patient with an infectious disease (which by itself in clinical course should not have caused the onset of death) experienced a decrease in immunity or allergy, while treatment at the hospital worsened the patient's condition and caused additional health damage. In such a case, such a reaction to treatment was due to the presence of some pathology, that is, the so-called "synergism" of causes, each of which could not in itself have caused such a consequence. In this case, a direct causal link should be established between the defect and the consequence. This case is a typical example of iatrogenic. (Fig. 2.)**

**Fig. 2.** ***Scheme of determination of causal link between the defects and the consequence in case of iatrogenic.***

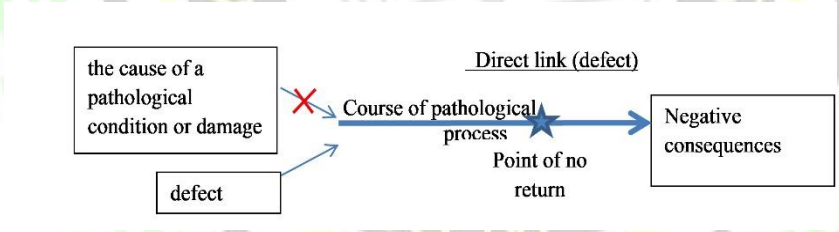



**Source. Authors.**

**A distinction should be made between a specified situation and an accident in which the defect in the provision of medical care is absent at all, when the measures were implemented correctly, in full and on time, but the occurrence of a negative consequence was caused by a random coincidence of circumstances, each of which could not in itself cause the**

**occurrence such a consequence. In this case, the medical professional cannot and should not anticipate the occurrence of an adverse effect. In the above situation, there is a defect, which is usually caused by a lack of examination of the patient, insufficient knowledge of the health care provider, etc., which did not take into account the possibility of the consequence in the presence of a pre-existing factor – pathological process or injury. The second case of iatrogenic, of course, should also be considered a situation where the so-called "synergism" of factors is absent, that is, even in the absence of treatment, the patient would recover, and the defect in the form of improper treatment was the main one in the occurrence of an adverse effect. (Fig. 3.)**

**Fig. 3.** ***Scheme of determination of causal link between the defects and the consequence in case of iatrogenic.***




**Source. Authors.**

**Thus, incorrect establishment of causation in the course of expertise leads to the fact that one of the subjects of the crime (the person who caused the injury or the medical professional who incorrectly provided medical care) avoids criminal liability, which increases the criminalization of our society and undermines the authority of law enforcement.**

**The complexity of the issue of quality of care is also that for lawyers, the term "improper care" means that it is not fully provided, while "the lack of care" it's completely absence of this care. Thus, from a legal point of view, the failure to provide and improper provision of medical care is characterized only by the extent of implementation of measures. However, from a medical point of view, not all medical measures (medical, diagnostic, etc.) are equivalent. For example, it is not entirely clear to define a "superficial, formal examination of a sick person" unless the scope of the examination is clearly regulated by protocols or other documents. If we rely on current legislation (Clinical protocols and standards of care, job descriptions, etc.), only failure to comply with all the points mentioned in them can be considered as non-provision of medical care.**

**In O. Dudorov's comment to Art. 139 of the Criminal Code of Ukraine states that "failure to provide medical care to the patient can be expressed both in complete refusal to provide it, and in failure to provide assistance to the extent necessary in a particular situation". However, it is necessary to clearly distinguish between measures that were badly needed by the victim, such as those performed on a vital basis, and those that were prescribed by the protocol, but their non-implementation was not of paramount importance in this particular case. Therefore, in cases where the patient is even in a hospital and receiving treatment, but a certain measure shown to the victim on the vital indicators has not been carried out and led to death, it is necessary to state the lack of medical care. In addition, in Part 1 of Art. 139 of the Criminal Code of Ukraine states: "failure to provide without medical**

**reasons assistance to a sick medical professional who is obliged, in accordance with established rules, to provide such assistance, if he is aware that it can have grave consequences for the patient", that is, the composition of the crime is a formal it is considered to be completed from the moment of failure to provide medical care to the patient by medical worker even without serious consequences.**

**Thus, when conducting forensic medical expertise on "medical cases" it is necessary to carefully examine the tactics of treatment chosen by the doctor, to analyze the situation of the patient, as well as to assess how they corresponded to the nature and severity of the underlying pathology that led to the occurrence of an adverse effect that may affect for re-qualification of a crime from Art. 140 on Article 139 of the Criminal Code of Ukraine.**

**An example is the case of an indictment against a trauma doctor who was found guilty of committing a crime, the composition of which is provided in the disposition of Part 2 of Art. 139 of the Criminal Code of Ukraine, and sentenced to 3 (three) years of imprisonment. According to the results of the forensic medical expertise neurosurgeon "... and did not perform the patient a CT scan of the brain that was necessary to establish the nature and extent of the traumatic brain injury, while he needed a complete diagnostic examination, namely a computerized tomographic examination of the brain to clarify the nature of the traumatic brain injury, only then to appoint a treatment that would meet the established clinical form". That is, there was a defect in the form of non-provision of medical care, since the specified diagnostic procedure was shown to the victim according to vital signs, and failure**

**to do so caused incorrectly established treatment of the patient and led to the death of the latter.**

**At the same time, the investigative bodies should clearly state the expert's questions, namely, what caused the adverse effect: actions (improper performance of medical care) or inactivity (failure to provide medical care), and at what stage of diagnosis and treatment? Although some scholars argue that the concepts of action and inaction are purely legal concepts, we have found no evidence of this in our analysis of the literature. Moreover, the notion of "severity of injuries" is purely legal, but its definition is only within the competence of a forensic medical expert.**

**It should also be noted that, although the responsibility of the forensic medical expert is not to impose guilt, such concepts as the ability to prevent serious consequences (which may be determined by doctors rather than lawyers) can assist the investigative and judicial authorities in the correct assessment of medical personnel's actions.**

# CONCLUSIONS

**1. The problem of criminal liability of medical workers is intersectoral. The questions of the criminal legal qualification of their acts should always be based on the data of the forensic medical expertise.**

**2. Forensic medical expertise on the quality of medical care requires the development and implementation of procedurally fixed foundations that would help experts clearly answer the questions posed by the investigation.**

**3. Given that the forensic medical legal norms are outdated and don't correspond to modern procedural needs, it's necessary to introduce the "Rules for conducting forensic medical expertise in cases of assessing the provision of medical care", which will indicate the expert's actions in such cases, criteria for evaluating treatment, defects in the provision of medical care and establish causal link with an unfavorable outcome. Such uniform rules for the entire forensic medical service of Ukraine will help to unify the approach when conducting forensic medical examinations regarding the quality of medical care.**

**4. In turn, this would help to improve approaches to the qualification of acts in the field of medical care and reduce the risk of criminal prosecution of innocent persons and more clearly and correctly formulate the charges of those who committed a crime in the field of medical care.**

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