## Law. Human. Environment

Journal homepage: https://environmentalscience.com.ua/en Law. Human. Environment, 14(3), 115-132



UDC 636.09:340.6:340.7:616-035.7 DOI: 10.31548/law/3.2023.115

## Epistemological construction doctrine of the veterinary care defect phenomenon in forensic veterinary examination

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#### Article's History:

#### Abstract

Received: 04.05.23 Revised: 11.07.23 Accepted: 11.08.23 To prove the guilt of a veterinary professional in causing harm to animal health, forensic veterinary examination plays an important role, as the expert's opinion is a source of evidence in legal proceedings that helps law enforcement agencies or the court to correctly qualify the offence and establish the compliance of certain actions of a veterinary professional with the current legislation. However, the study of the problem of defects in veterinary care is not properly covered in Ukrainian scientific sources. The research aims to formulate a definition of the concept of "defects in veterinary care", to identify the signs of this phenomenon in the aspect of forensic veterinary examination, to propose a classification of types of defects and to give their characteristics. The methodological basis of the study is a systematic approach due to the specifics of the topic of the work and involving the use of general scientific and special scientific methods, including analysis, synthesis, analogy; logical and semantic method; systemic and structural method; modelling method; comparative legal method. It is proved that a defect in the provision of veterinary care should be considered a situation where a veterinary professional performs poorly diagnostic, therapeutic, tactical, resuscitation, rehabilitation and other procedures, carries out preventive measures, and also

#### Suggested Citation:

Yatsenko, I. (2023). Epistemological construction doctrine of the veterinary care defect phenomenon in forensic veterinary examination. Law. Human. Environment, 14(3), 115-132. doi: 10.31548/ law/3.2023.115.



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performs professional duties improperly or fails to perform them, which causes or may cause negative consequences for the animal(s) in the form of a health disorder (disease, injury, mutilation, etc.) or cause death. The author's definitions of the concepts of "non-performance or improper performance of professional duties by a veterinary practitioner", "accident in veterinary practice", and "professional error in veterinary practice" are proposed and their signs are outlined. It is shown that defects in veterinary care can be caused by both objective and subjective factors. A classification of defects in veterinary care is proposed: by stages of veterinary care, elements and nature of veterinary care, and legal basis. The practical significance of the study is that it forms the basis of the methodology for determining defects in veterinary care during forensic veterinary examination

**Keywords:** forensic veterinary medicine; expert animal; professional duties of a veterinary practitioner; failure to perform/improper performance of professional duties; accident in veterinary practice; professional error in veterinary practice

#### Introduction

The negligent performance of professional duties by a veterinary practitioner is the basis for law enforcement agencies to initiate criminal proceedings and conduct an appropriate expert examination. The issues raised by the subject of the forensic examination or the subject of the involvement of a forensic expert before the Forensic Veterinary Expert Commission during the pre-trial investigation of criminal proceedings or court proceedings in other types of proceedings regarding offences, including professional offences committed by veterinary practitioners, have not yet been worked out due to the lack of a developed theoretical basis. They require systematic knowledge in the field of veterinary medicine, forensic veterinary medicine, as well as related disciplines (biology, chemistry, physics, etc.), as they are the subject of forensic veterinary expertise.

The study of the problem of defects in veterinary care has not been adequately covered in Ukrainian scientific sources. At the same time, foreign scientists are developing this scientific and practical area. J. Cohen *et al.* (2023) determined the nature of veterinary radiological errors;

C.A. Alexander-Leeder *et al.* (2022) analysed the impact of veterinary errors on the safety of sick animals; the influence of deontological factors on the occurrence of professional veterinary errors was studied by C.E. Ashton-James and A.G. McNeilage (2022).

At the same time, the problem of defects in the provision of medical care is the focus of close attention of scholars in the field of criminal and medical law, as well as forensic medicine, and is widely reflected in the works of well-known Ukrainian scholars. In particular, V. Franchuk (2018) examined the problem of medical malpractice from the perspective of forensic expert practice; I. Senyuta (2017) provided definitions of terms related to defects in the provision of medical care; K. Danchenko and Kh. Gereljuk (2020) analysed the corpus delicti of improper performance or failure to perform their professional duties by a pharmacist or healthcare professional, and identified the main gaps in the legislation; A. Serdiuk et al. (2020) developed the concept of forming a strategy for preventing defects in the provision of medical care; O. Mostovenko (2018) provided the

author's understanding of the concept, formulates the signs and provides a classification of medical errors from a doctrinal perspective; V. Khyzhniak *et al.* (2018) considered the problematic issues of forensic medical support of bringing medical professionals to criminal liability for professional crimes; Kh. Maikut (2017) revealed the problematic issues of legal qualification for medical error.

In addition, the problem of defects in the provision of medical care is actively discussed in foreign scientific publications, in particular, by N. Kozan et al. (2020) analysed commission forensic medical examinations on professional errors of surgeons; V. Grenon et al. (2023) systematised the causes of negligence in the diagnostic medical field; L. Lehmann et al. (2022) analysed medical errors in dermatology, and T. Enzmann and K. Albrecht (2023) - in urology; A. Ünal and Ş. Seren Intepeler (2022) evaluated global studies of medical error reporting using bibliometric analysis; N. Aghighi et al. (2022) investigated the influence of various factors that lead to medical errors; deontological aspects of defects in the provision of medical care were considered by K.R. Amlaev et al. (2022), K.C. Brimhall et al. (2023), C. J. Li et al. (2023).

Given the ever-increasing requirements for the quality of expert activity, there is an urgent need for forensic veterinary science and practice to develop a holistic scientific concept and build unified methodological approaches to the organisation and performance of forensic veterinary examinations related to professional offences by veterinary practitioners. The solution to this problem will be possible if a comprehensive scientific study is carried out to identify problems, and doctrinal gaps and outline specific ways to optimise the conduct of forensic veterinary examinations regarding the negative consequences of veterinary care.

The research aims to identify the elements of the conceptual and categorical apparatus of the phenomenon of veterinary care defect and build its doctrinal epistemological construction for use in forensic veterinary examination; to propose amendments to the veterinary legislation of Ukraine.

The methodological basis of the study is a systematic approach, determined by the specifics of the topic under study and associated with the use of general scientific and special scientific methods, including analysis, synthesis, and analogy, to determine the essence of the categorical apparatus of defects in the provision of veterinary care. The logical and semantic method made it possible, from the point of view of modern forensic veterinary expert practice, to clarify the essence and formulate the interpretation of the terms "defect in veterinary care", "non-performance or improper performance of professional duties by a veterinary worker", "accident in veterinary practice", "professional error in veterinary practice" and unify them for use in forensic veterinary examination, identify gaps and other shortcomings in the current legislation of Ukraine, and submit proposals for its improvement. The systematic and structural method was used to systematise and structure the tasks of a forensic veterinary expert in assessing the quality of veterinary care and determining the type of its defect; the methods of modelling and forecasting were used to develop the problem of forensic veterinary detection of defects in the provision of veterinary care; the comparative legal method was used to analyse and compare the legal provisions governing the activities of veterinary medicine professionals.

# Defects in veterinary care as a separate legal institution and their signs

In cases of negligent performance of professional duties by a veterinary officer or unsuccessful veterinary treatment and diagnostic intervention, resuscitation, preventive or rehabilitation

measures and negative consequences for the health or even life of an animal, complaints, and claims from dissatisfied animal owners regarding these measures naturally arise (Oxtoby, 2019; Whipple *et al.*, 2020; Low & Wu, 2022). All this serves as a basis for law enforcement agencies to open criminal proceedings, within which a commission forensic veterinary examination is mandatory since it is the expert's opinion that helps to correctly qualify the offence, establish compliance with the current legislation of certain actions of a veterinary professional and prove his or her guilt (Munro, 2022; Yusupoy, 2023).

Defects in veterinary care are a separate legal institution that is closely related to the legal institution of liability for cruelty to animals and intentional damage to other people's property, since if the causal link between defects in veterinary care and damage to animal health in the form of bodily injury, mutilation or even death is confirmed, the question of bringing veterinary professionals who provided veterinary care to liability may arise. Assessment of defects in the provision of veterinary care involves determining the type of defect, as each of them has different legal consequences and different legal liability for each of them. Defining the definition of "defect in veterinary care" is necessary to understand the nature, content, and construction of this veterinary and legal phenomenon for the correct and objective statement of factual data during forensic veterinary examination and qualification by law enforcement agencies and the court of actions of veterinary professionals in the event of negative consequences of veterinary care.

The Large Explanatory Dictionary of the Modern Ukrainian Language (Busel, 2009) defines a defect as a flaw or a shortcoming. The Medical Encyclopaedia states that a "defect is a flaw, deficiency, fault, damage" (Cherviak, 2012).

Thus, "defect" means insufficiency, or error of something and is synonymous with the word "deficiency". S. Stetsenko (2019) considers a defect in the provision of medical care to be the improper diagnosis, treatment of a patient, and organisation of medical care, which led to or could have led to a negative outcome of medical intervention. I. Senyuta (2017) defines a defect in medical care as the poor quality of diagnosis, treatment, prevention, and rehabilitation, as well as the organisation of their provision, when a medical professional has improperly performed or failed to perform his or her professional duties, which has led or could have led to negative consequences for patients. The list of defects in medical care includes A. Zavalniuk et al. (2009) also includes behavioural deficiencies of healthcare professionals. It follows from the studied scientific sources that there is no unanimity among medical professionals regarding the content of the concept of "defect in medical care", although there are common features of this concept in the author's definitions.

Having summarised and systematised the opinion of scientists and our forensic practice, it is possible to state that the system of signs of a defect in veterinary care is as follows:

- 1) improper (low-quality) performance by a veterinary professional of diagnostic, therapeutic, tactical, resuscitation, rehabilitation and other procedures and improper organisation of preventive measures or their absence at all;
- 2) the fact that defects in veterinary care have caused or are likely to cause negative consequences for the animal(s) in the form of a health disorder (disease, injury, mutilation, etc.) or death;
- 3) the existence of defects in veterinary care in a direct and necessary causal relationship with the improper or proper performance or non-performance by a veterinary professional of professional duties.

These signs of a defect in the provision of veterinary care may be manifested in various combinations: all at the same time or in a certain combination, as well as with the dominance of some over others. For a correct understanding of the general signs of a defect in the provision of veterinary care in law enforcement and forensic practice, it is necessary to analyse them in detail, which will allow the formulation of a definition of the concept of "defect in the provision of veterinary care".

The first sign of a defect in the provision of veterinary care is the improper (poor) conduct of diagnostic, therapeutic, tactical, resuscitation, rehabilitation, and other procedures by a veterinary professional, as well as the organisation of their preventive measures. Following clause 132 of Article 1 of the Law of Ukraine "On Veterinary Medicine" (2021), veterinarians are doctors and veterinary assistants who have a relevant diploma and carry out activities related to the prevention, rehabilitation, diagnosis and treatment of animals, veterinary and sanitary examination, or other veterinary activities. Diagnostic procedures include a system of clinical, technical, instrumental and laboratory methods for examining sick animals, the technique and sequence of their application to detect symptoms and the main ways of recognising diseases. Therapeutic and tactical procedures are a process, aimed at alleviating, relieving, or eliminating symptoms and manifestations of a disease, pathological condition, or other vital activity disorder, normalising disturbed vital activity processes and recovery. Resuscitation procedures are a set of actions or means aimed at restoring severely impaired or lost vital functions of the animal's body. Rehabilitation procedures are a set of measures that include ways to accelerate recovery, stimulate reparative and regenerative processes, identify, and strengthen compensatory mechanisms, and correct the body's overall

resistance and immunity to restore the animal's independence, physical functions, and adaptation to new restrictions. Preventive veterinary measures are an officially established procedure for the implementation of sanitary and hygienic measures aimed at preventing diseases and eliminating risk factors. According to clause 124 of Article 1 of the Law of Ukraine "On Veterinary Medicine" (2021), the risk is the possibility of a negative event (biological and economic consequences of a negative impact on animal and/or human health or the environment), as well as the likely extent of its consequences over a certain period.

The second criterion is the fact that defects in veterinary care cause or are highly likely to cause negative consequences for the animal(s) in the form of a health disorder (disease, injury, mutilation, etc.) or death (Yatsenko et al., 2021; Yatsenko & Parilovsky, 2022). The term "negative" means "bad in terms of properties, qualities, purpose, etc., which does not cause approval but deserves condemnation; the opposite of positive; unfavourable; opposite to expected and usual" (Dictionary of the Ukrainian Language, 1970-1980). In veterinary practice, the negative consequences of defects in the provision of veterinary care may include the following: deterioration of veterinary and epizootic welfare, bodily injuries, and mutilations; development of diseases and pathological conditions of animals, as well as their death.

The third feature is the presence of negative consequences of veterinary care in a direct necessary causal relationship with the improper performance or non-performance by a veterinary professional of professional duties. Direct causation is understood to mean such a necessary connection between phenomena (action or inaction) when one exists (the cause) and is inevitably followed by another phenomenon (the negative consequence of veterinary care). Many factors

can act at the same time, but only one causes the effect. If the negative consequences do not occur due to the unlawful behaviour of a veterinary professional, but for other reasons beyond control (for example, due to a violation of the dietary regime, intervals, and dosage of veterinary drugs or due to individual characteristics of the sick animal's body), the legal liability of the veterinary professional is excluded.

Thus, a defect in veterinary care is the poor performance by a veterinary professional of diagnostic, therapeutic, tactical, resuscitation, rehabilitation and other procedures, poor implementation of preventive measures, as well as their organisation, associated with improper or proper performance or non-performance by a veterinary professional of his or her professional duties, which caused or could have caused negative consequences for the animal(s) in the form of a health disorder (illness, injury, mutilation, etc.) or death.

## Objective and subjective factors that cause defects in veterinary care

An analysis of our forensic practice has shown that defects in the provision of veterinary care can be caused by both objective and subjective factors. The objective factors include the following:

- 1) lagging behind the development of veterinary science from the needs of veterinary practice at a certain stage, in particular, the use of undeveloped or imperfect, imperfect, limited methods and techniques for diagnosis, treatment, prevention, rehabilitation, etc. It takes a long time from the development and testing of the latest technical solutions in the field of veterinary medicine to their implementation in practice, so the methods and ways of providing veterinary care quickly become outdated and anachronistic;
- 2) the dynamism of veterinary concepts, postulates, and provisions in theoretical and

clinical veterinary medicine causes variability in approaches to veterinary care, updating of veterinary guidelines, etc;

- 3) insufficient regulation of professional veterinary activity means that in veterinary medicine, unlike humane medicine, there are no standards of veterinary activity, or animal treatment protocols, which allows a veterinary specialist to use treatment algorithms at their discretion, the evidence of which is often questionable, as well as outdated regulations and rules that do not consider the modern realities of the veterinary medicine industry;
- 4) the growing specialisation in veterinary medicine is since multidisciplinary veterinary activities require specialised veterinary knowledge in a narrow profile area. That is why such sciences as veterinary oncology, dentistry, traumatology, laboratory diagnostics, imaging diagnostics, dermatology, nephrology urology, etc. are being separated into independent areas of medical care. The lack of narrow specialisation leads to a significant limitation of medical thinking and makes it impossible to have a holistic approach to veterinary care;
- 5) In most cases, the material and technical base of veterinary institutions and farms is weak, which complicates the diagnosis and treatment of sick animals, leads to misdiagnosis and incorrect or insufficient treatment;
- 6) unfavourable conditions or circumstances of veterinary intervention (for example, a veterinary specialist is often forced to provide veterinary care in an unequipped room, without sufficient lighting and proper instrumentation, laboratory facilities, directly on a livestock farm, etc;
- 7) provision of veterinary care in the absence of other veterinary specialists from whom professional advice could be obtained;
- 8) provision of veterinary care by a veterinary worker who does not yet have sufficient

practical experience of veterinary activity in a particular area of veterinary medicine;

- 9) special condition of the sick animal, for example, aggression, neglected treatment, rapid or acute course of the disease, senile age of the animal and layering of chronic pathologies; individual abnormalities of body structure and functioning of individual organs, non-standard reactions of the animal's body to the effects of veterinary medicines or veterinary procedures (defects occur regardless of the professionalism of the actions of a veterinary officer in the absence of intent), atypical development of diseases; allergic reactions that could not be foreseen during veterinary intervention, etc;
- 10) the imperfection of the current veterinary legislation leads to shortcomings and defects in the organisation and management of the veterinary industry, inadequate social protection of veterinary professionals, etc;
- 11) engaging in illegal veterinary activities, i.e., without a special permit, carried out by a person who does not have a proper veterinary education.

The subjective factors of defects in the provision of veterinary care, which depend on the activities of a veterinary professional (unreasonable deviation from the established rules, negligence, and self-confidence), degree of professional training and deontological qualities, are as follows:

- 1) the level of professional training (poor theoretical training, in particular in educational institutions, and insufficient practical skills);
- 2) insufficient diagnosis of a sick animal (incomplete clarification of the animal owner's complaints regarding the vital activity of the sick animal, failure to take into account anamnestic data, imperfect clinical examination due to physical impossibility of using the latest methods and diagnostic techniques, inadequate assessment of the results of clinical and laboratory tests);

- negligent surgical intervention or other medical and preventive measures;
- 4) unjustified professional veterinary risk, which does not belong to the category of force majeure and is considered an aggravating case with inevitable negative consequences for the health and life of the animal;
- 5) unsatisfactory organisation of various stages of veterinary care, both at the outpatient and inpatient stages of its provision, including negligent document management;
- 6) deontological, caused by negative moral qualities of a veterinary specialist (disorganisation, negligence, overconfidence and inattention, arrogance, tactlessness, overestimation of self-esteem, inadequate communication with colleagues and animal owners, rejection of criticism and comments, low professional level, indifference, conflict, authoritarian style of work, which lead to the fact that a veterinary worker departs from the humanistic nature of the profession.

## Types of defects in veterinary care and their characteristics

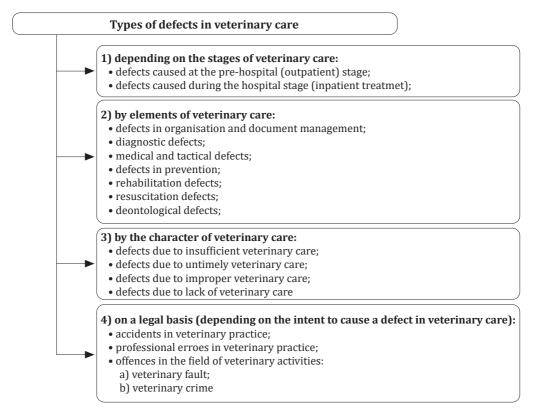
The proposed epistemological construction of the defect in veterinary care will facilitate the development and implementation into forensic practice of methods for determining each type of defect in veterinary care, and forensic veterinary examination of animals with negative consequences of veterinary intervention. Currently, the current Law of Ukraine "On Veterinary Medicine" (2021) does not define the concept of "veterinary care". Given this, it is worth proposing our definition of the concept: "a set of diagnostics, therapeutic and restorative (rehabilitation) measures aimed at establishing a clinical diagnosis, eliminating or reducing the manifestations of a disease or pathological condition of an animal for which veterinary care is provided, which helps to

improve or restore the health and normalise the animal's vital activity".

To assess the effectiveness of veterinary care, it is necessary to define its limits, in particular, "necessary" (minimum) and "sufficient" (maximum). "Necessary" (primary) veterinary care should be understood as the minimum amount of care that will only stabilise the animal's body and remove it from a life-threatening condition At the same time, "sufficient"

veterinary care should be understood as care that provides for its maximum amount (instrumental and laboratory diagnostic methods, therapy, including resuscitation, by generally accepted principles and treatment algorithms based on their pathophysiological justification) and ensures maximum.

Before describing certain types of defects in veterinary care, it is worth considering their classification according to various criteria (Fig. 1).



**Figure 1.** Types of defects in veterinary care

**Source:** developed by the author

It is necessary to describe each type of defect in the provision of veterinary care.

- 1) Types of defects depending on the stages of veterinary care:
- defects caused at the pre-hospital (outpatient) stage (for example, in the case of veterinary care provided at the animal owner's home);

- defects caused during the hospital stage (in the case of veterinary care provided in the inpatient facilities of a veterinary medicine clinic or a livestock facility, in the case of productive animals).
- 2) Types of defects by elements of veterinary care:
- ✓ organisational defects errors in the organisation of the provision of certain types of veterinary care, the creation of the necessary conditions for the functioning of a veterinary medical institution, its structural units, etc;
- defects in document management are due to inadequate veterinary records;
- ✓ diagnostic defects consist of improper technical compliance or failure by a veterinary professional to perform clinical, technical, instrumental and laboratory methods of examination of sick animals, violation of the technology of their application, which caused negative consequences for the health or life of the animal(s);
- ✓ therapeutic and tactical defects consist of improper technical performance or non-performance by a veterinary professional of veterinary medical procedures to alleviate, relieve or eliminate symptoms and manifestations of a disease, pathological condition or other disorder of the body's vital functions, normalise disturbed vital processes and recover a sick animal, which has caused negative consequences for the health or life of the animal(s);
- ✓ defects in prevention consist of improper performance or failure to perform by a veterinary professional of the officially established procedure for the implementation of sanitary and hygienic measures aimed at preventing diseases and eliminating risks, which has caused negative consequences for the health or life of the animal(s), as well as deterioration of veterinary, sanitary and epizootic welfare;

- ✓ rehabilitation defects consist of improper implementation or non-implementation by a veterinary professional of a set of measures covering ways to accelerate recovery, stimulate reparative regeneration of processes, identify and strengthen compensatory mechanisms, correct the general resistance of the body and immunity to restore the animal's independence, physical functions and adaptation to new restrictions caused by negative consequences for the health or life of the animal(s);
- ✓ defects of resuscitation consist of improper performance or non-performance by a veterinary professional of a set of actions or nonuse of means aimed at restoring severely impaired or lost vital functions of the animal's body, which caused negative consequences for the health or life of the animal(s);
- deontological defects often associated with negative personal qualities of the veterinary professional.
- 3) Types of defects by the nature of veterinary care:
- ✓ defects due to insufficient veterinary care. The Dictionary of the Ukrainian Language (1970-1980) explains that the term "insufficient" means "less than required, than necessary; inadequate; not meeting certain requirements; unsatisfactory, bad";
- ✓ defects due to untimely veterinary care. The Dictionary of the Ukrainian Language (1970-1980) interprets the term "untimely" as "occurring, being carried out not when it is necessary, not in due time":
- ✓ defects due to improper veterinary care. The term "wrong" means "not conforming to certain norms, rules, requirements; not corresponding to the truth, to what is in reality; false, erroneous; not as it should be; not leading to the desired consequences" (Dictionary of the Ukrainian language, 1970-1980);
  - defects due to lack of veterinary care.

Further, it is advisable to characterise the defects of veterinary care by their legal qualification depending on the intent of the veterinary specialist. Such defects include accidents in veterinary practice, professional errors in veterinary practice and offences in the field of veterinary activity.

#### Accidents in veterinary practice

An accident in veterinary practice, or mishap, is a controversial, i.e., disputable, debatable, ambiguous defect from both legal and veterinary perspectives. It occurs due to an unfavourable combination of various circumstances, accidents that do not depend on the actions of a veterinary professional, as there is no way to predict and prevent them. The peculiarity of an accident in veterinary practice is that this concept is not regulated in the regulatory framework and is not defined by legal boundaries. In this regard, professional mistakes of veterinary practitioners or even professional offences (crimes and misdemeanours) are often presented as accidents to avoid liability for the veterinary practitioner. At the same time, the legislative regulation of this term would make it possible to clearly outline its features and formulate a complete definition of this legal construct.

Typical accidents in veterinary practice include the death of an animal during infusion of blood substitutes, blood transfusion; death from embolism; reflex cardiac arrest during surgery with proper anaesthetic and resuscitation support; anaphylactic shock during administration of veterinary medicines to an animal; death from pain shock with proper blocking, etc. Scientific medical and legal sources contain different definitions of the term "accident". In particular, I. Senyuta (2017) notes that this is "a type of defect in the provision of medical care related to the proper performance by a medical professional of professional duties following regulations and the

provision of medical care following healthcare standards and local protocols, which is caused by a sudden, unforeseen, insurmountable and inevitable set of circumstances that caused harm to the patient's health or death". Such a definition of the concept of "accident" should be considered meaningful, complete, and profound, but given the peculiarities of regulatory and legal regulation of veterinary activities, it cannot be applied in veterinary medicine, veterinary law, and forensic veterinary examination, since, unlike humane medicine, it still lacks standards and local protocols.

Taking into account the above features, it is possible to formulate the author's definition of the concept of "accident in veterinary practice" as a type of defect in the provision of veterinary care associated with the proper performance by a veterinary professional of professional duties following regulatory acts and the provision of veterinary care following animal health standards, disease treatment protocols, instructions on measures for the prevention and control of infectious diseases of animals, as well as other regulatory documents, but caused by a sudden, unforeseen, insurmountable and inevitable set of circumstances that caused damage to the health of the animal or its death.

Thus, an accident in veterinary practice has the following characteristics:

- 1) it is a type of defect in the provision of veterinary care; actions of a veterinary professional that occurred during a veterinary intervention justified by veterinary science and practice, with awareness of the danger of such intervention;
- 2) occurred in the case of proper and timely performance by a veterinary professional of professional duties, provided that in a particular case, everything necessary was done to prevent negative consequences from the point of view of the principles of veterinary science;

- 3) the provision of veterinary care by a veterinary professional is qualified following the regulations, and standards in the field of animal health, treatment protocols for sick animals, instructions on measures to prevent and control infectious diseases of animals, as well as other regulatory documents (it should be noted that although there are still no treatment protocols for sick animals and no standards in the field of animal health in the field of veterinary medicine, this study is aimed at the future);
- 4) suddenly occurring "which took place, came unexpectedly, unforeseen" (Dictionary of the Ukrainian language, 1970-1980), unpredictable "which was not foreseen, not expected, not hoped for" (Dictionary of the Ukrainian language, 1970-1980), insurmountable "which cannot be overcome, which cannot be resisted" (Dictionary of the Ukrainian language, 1970-1980) and inevitable "which cannot be averted, which cannot be prevented from happening" (Dictionary of the Ukrainian language, 1970-1980) by a coincidence;
- 5) there is a direct and necessary causal link between the provision of veterinary care and the damage caused to the animal's health or death;
- 6) an unsuccessful outcome of a veterinary intervention does not depend on defects in veterinary care, including errors of a veterinary professional, but arises due to the characteristics of the animal's body, the complexity of the case, and the unfavourable environment in which veterinary care is provided;
- 7) the legitimacy of the actions of a veterinary professional and the absence of the criterion of error in actions, but in terms of the resultant factor, it is a defect in the provision of veterinary care;
- 8) absence of legal liability based on the results of legal qualification of the act.

An accident in veterinary practice, or mishap, in law enforcement and forensic veterinary

examination, must be differentiated from negligence, error, ignorance, or overconfidence. In the event of a veterinary care accident, there are no unlawful acts or faults of the veterinary professional, and therefore no grounds for legal liability.

# Professional error in veterinary practice and key problems of detecting a defect in veterinary care

The most common type of defect in the provision of both medical and veterinary care is a professional error in veterinary practice, which is similarly called a "medical error" in humane medicine. The term "mistake" in the Dictionary of the Ukrainian Language (1970-1980) means "incorrectness, inaccuracy in any mechanism, device, scheme, map, etc.". However, it should be noted that there is still no statutory definition of this concept in both human and veterinary medicine.

To create a terminological construction of the definition of "professional error in veterinary practice", it is necessary to analyse scientific sources that contain different definitions of the concept of "medical error" as one of the defects in the provision of medical care. Ya. Radish *et al.* (2008) state that a medical error is "an erroneous action or inaction of medical personnel, manifested in the incorrect provision (failure to provide) care, diagnosis of diseases and treatment of patients (victims) and actually worsened the patient's condition or caused damage to the health or life of a person, characterised as bona fide neglect in the absence of signs of negligence, malicious or reckless misconduct and criminal ignorance".

O. Onishchenko and V. Yerzaulova (2013) synonymise the concepts of "medical error" and "medical" fault, defining them as actions or omissions of a medical professional that led to negative consequences for the patient's health or life caused by objective factors, and therefore exclude the possibility

of legal liability. The same definition of "medical error" is given by R. Tytykalo and T. Handziy (2014), adding subjective factors to the factors that cause negative consequences for the patient.

The position of V. Stebliuk and A. Pletenetska (2015), who define "medical error" as a defect in the provision of medical care associated with the wrong actions of medical personnel, characterised as a bona fide error in the absence of signs of intentional or reckless crime. The position on the legal construction of the concept of "medical error" is also reflected by I. Senyuta (2018) and is that it is "a type of defect in the provision of medical care, which is the improper performance (non-performance) of professional duties by a medical professional as a result of a subjective or objective error, not related to a negligent and dishonest attitude, which caused harm to the patient's health".

Therefore, the view of scientists regarding the good faith of a medical professional in the event of a "medical error" is dominant, and therefore there are no signs of guilt in these actions. To summarise, it is possible to formulate the author's definition of the term "professional error in veterinary practice" (which is analogous to the concept of "medical error"), which is that it is "a type of defect in the provision of veterinary care, associated with the improper performance or non-performance by a veterinary professional of professional duties as a result of an objective or subjective error, but not related to a negligent and dishonest attitude, which caused damage to the health of the animal or even led to death".

Signs of professional error in veterinary practice include the following:

- 1) it is a type of defect in the provision of veterinary care;
- 2) a defect that caused damage to the animal's health;

- civil liability based on the results of legal qualification of the act;
- 4) the nature of the error is not related to a negligent and dishonest attitude to the performance of professional duties;
- 5) defects in veterinary care in the form of action (active form of behaviour) or inaction (passive form of behaviour) of a veterinary professional in the performance of professional duties;
- 6) a fine line with professional offences (misconduct and crimes);
- 7) a veterinary professional commits an act contrary to the requirements of animal health standards and protocols, instructions, making a mistake due to subjective (low level of qualification, underestimation or overestimation of the consulting opinion, results of the consultation, etc.) or objective (severity of the condition of the sick animal, lack of necessary veterinary technical and instrumental support, etc.

Discussing the results of the presented theoretical research, which are fully based on practical forensic veterinary expert activity, it should be emphasised that the problem of forensic veterinary examination for defects in veterinary care has not been fully resolved because forensic veterinary examination itself is still a fairly young field of forensic expert activity in Ukraine. However, the issue of defects in medical care is actively discussed in specialised medical journals (Franchuk, 2018; Grenon *et al.*, 2023; Enzmann & Albrecht, 2023), and legal publications (Senyuta, 2017; Maikut, 2017; Danchenko & Gereljuk, 2020).

The number of criminal proceedings regarding defects in veterinary activities is increasing every year. Thus, from the expert practice of the author of this paper, it is known that in 2019 (after the opening of the forensic veterinary examination at the Ministry of Justice of Ukraine), only 1 forensic veterinary examination was conducted

regarding a defect in the provision of veterinary care, in 2020 there were 2 such forensic examinations, in 2021 – 4, and 2023 – 5. At present, the use of specialised veterinary knowledge to identify a defect, and its type and, accordingly, to establish a causal link between a defect in veterinary care and negative consequences for the health and life of an animal is quite limited.

To outline the range of all the problems that arise the way of forensic veterinary research of various defects in veterinary care, it is still necessary to study the issue of forensic veterinary examination as a means of evidence in the investigation of criminal offences or crimes, which are also a type of defects in veterinary activities, by identifying the elements of the conceptual and categorical apparatus of "veterinary fault" and "veterinary crime", as well as indicating their signs; to characterise the defects in the organisation and implementation of veterinary and sanitary measures, especially in the event of outbreaks of acutely contagious infectious diseases, and to develop a methodology for conducting forensic veterinary examination in criminal proceedings initiated in connection with defects in veterinary activities.

To summarise, it should be noted that the experience of law enforcement and forensic assessment of defects in the provision of veterinary care shows that, in particular, it is necessary to address this problem:

- ✓ initiate the development of veterinary standards and animal treatment protocols based on the latest achievements of science and technology;
- develop a system of compulsory veterinary insurance that will encourage control over defects in the provision of veterinary care;
- ✓ introduce the definitions of the following concepts into the terminological construction and consolidate them in the legislation: "defects in veterinary care", "non-performance or improper

performance of professional duties by a veterinary practitioner", "accident in veterinary practice", "professional error in veterinary practice", and outline the criteria for their distinction;

- ✓ to complement Art. 1 of the Law of Ukraine "On Veterinary Medicine" (2021) with new definitions of the concepts of "veterinary care", "diagnostic procedures", "medical and tactical procedures", "resuscitation procedures", formulating them in the author's wording;
- ✓ to supplement Article 1 of the Law of Ukraine "On State Control over Compliance with the Legislation on Food Products, Feed, Household Products of Animal Origin, Animal Health and Welfare" (2017) with definitions of the concepts of "defect in veterinary care", "non-performance or improper performance of professional duties by a veterinary practitioner", "accident in veterinary practice", "professional error in veterinary practice", formulating them in the author's wording;
- ✓ to develop a methodology for forensic veterinary determination of defects in the provision of veterinary care and defects in the organisation of veterinary and sanitary measures for the effective organisation and conduct of forensic veterinary examination in this area, which will enable courts and law enforcement agencies to correctly qualify veterinary offences and provide an objective criminal law assessment of the illegal activities of veterinary professionals.

#### **Conclusions**

The study for the first time formulated the definition of the concept of "defect in veterinary care", the meaning of which is that it is the poor performance by a veterinary professional of diagnostic, therapeutic, tactical, resuscitation, rehabilitation and other procedures, implementation of preventive measures, as well as their organisation, associated with improper or proper performance or

non-performance by a veterinary professional of professional duties, which caused or could have caused negative consequences for the animal (animals) in the form of a disorder

The system of signs of a defect in the provision of veterinary care is outlined, which are as follows: poor performance of diagnostic, therapeutic, tactical, resuscitation, rehabilitation and other procedures by a veterinary practitioner, poor organisation of preventive measures; the fact of actual causing or high probability of causing by defects in veterinary care of negative consequences for the animal (animals) in the form of health disorders (disease, injury, mutilation, etc.) or death; the presence of defects in veterinary care in a direct necessary causal relationship with improper or proper performance or failure to perform These signs of a defect in the provision of veterinary care may be manifested in various combinations: all at the same time or in a certain combination, as well as with the dominance of some over others. Defects in the provision of veterinary care may be caused by both objective and subjective factors.

The author's definitions of the concepts of "non-performance or improper performance of professional duties by a veterinary practitioner", "accident in veterinary practice", and "professional error in veterinary practice" are proposed and their signs are outlined. Proposals are made to supplement criminal and veterinary legislation in terms of defects in veterinary care.

It is advisable to classify defects in the provision of veterinary care: by the stages of veterinary care (defects caused at the pre-hospital/outpatient stage and defects caused at the hospital stage, during the provision of veterinary care in the inpatient hospital of a veterinary medicine clinic; by elements of veterinary care (defects in the organisation, diagnosis, treatment and tactical, prevention, rehabilitation, resuscitation, deontological

defects); by the nature of veterinary care (defects in connection with insufficient, untimely, incorrect veterinary care, defects in connection with the failure to provide veterinary care); by the legal basis, i.e. depending on the intent to cause a defect in veterinary care (accidents in veterinary practice, professional errors in veterinary practice, veterinary crimes and veterinary misconduct).

A comprehensive epistemological approach to the phenomenon of a defect in veterinary care can have a positive impact on the efficiency and effectiveness of forensic veterinary examination, the provision of a well-grounded and objective expert opinion in a categorical form, as well as a qualitative legal analysis and qualification of the negative results of veterinary intervention by law enforcement agencies or the court.

The research novelty is based on the fact that for the first time in world practice, the author of this work has proposed an epistemological construction of the phenomenon of veterinary care defect in the aspect of forensic veterinary examination. Prospects for research on the chosen topic are to study the issue of forensic veterinary examination as a means of proof in the investigation of criminal offences or crimes regarding defects in veterinary activities.

#### Acknowledgements

The author expresses her gratitude to Ella Simakova-Yefremian, Doctor of Law, Professor, Honoured Worker of Science and Technology of Ukraine, Deputy Director for Scientific Work of the National Scientific Centre "Bokarius Institute of Forensic Expertise" for her advisory assistance in the preparation of the article.

#### Conflict of Interest

The author declares no conflict of interest. The study is of initiative character and was not funded.

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### Доктрина гносеологічної конструкції феномену дефекту ветеринарної допомоги в судово-ветеринарній експертизі

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#### Анотація

Для доведення винуватості працівника ветеринарної медицини в заподіянні шкоди здоров'ю тварини важливе місце відводиться судово-ветеринарній експертизі, оскільки висновок експерта – це джерело доказів у судочинстві, яке допомагає правоохоронним органам чи суду правильно кваліфікувати правопорушення та встановити відповідність чинному законодавству певних дій працівника ветеринарної медицини. Проте дослідження проблеми дефектів ветеринарної допомоги належно не висвітлене на шпальтах українських наукових джерел. Мета роботи – сформулювати дефініцію поняття «дефекти ветеринарної допомоги», виокремити ознаки цього феномену в аспекті судово-ветеринарної експертизи, запропонувати класифікацію видів дефектів та дати їхню характеристику. Методологічна основа дослідження – системний

підхід, зумовлений специфікою теми роботи й пов'язаний з використанням загальнонаукових і спеціально-наукових методів, серед яких аналіз, синтез, аналогія; логіко-семантичний метод; системно-структурний метод; метод моделювання; порівняльно-правовий метод. Доведено, що дефектом надання ветеринарної допомоги необхідно вважати ситуацію, коли працівник ветеринарної медицини неякісно виконує діагностичні, лікувально-тактичні, реанімаційні, реабілітаційні та інші процедури, здійснює профілактичні заходи, а також виконує в неналежний спосіб або не виконує свої професійні обов'язки, що спричиняє або може спричинити негативні наслідки для тварини (тварин) у вигляді розладу здоров'я (хвороби, ушкодження, каліцтва тощо) або заподіяти смерть. Запропоновано авторські дефініції понять «невиконання чи неналежне виконання професійних обов'язків працівником ветеринарної медицини», «нещасний випадок у ветеринарній практиці», «професійна помилка у ветеринарній практиці» та окреслено їхні ознаки. Показано, що дефекти ветеринарної допомоги можуть бути зумовлені як об'єктивними, так і суб'єктивними чинниками. Запропоновано класифікацію дефектів ветеринарної допомоги: за етапами надання ветеринарної допомоги, елементами та характером ветеринарної допомоги, правовою підставою. Практичне значення проведеного дослідження полягає в тому, що воно покладене в основу методики визначення дефектів ветеринарної допомоги під час проведення судово-ветеринарної експертизи

**Ключові слова:** судова ветеринарна медицина; підекспертна тварина; професійні обов'язки працівника ветеринарної медицини; невиконання/неналежне виконання професійних обов'язків; нещасний випадок у ветеринарній практиці; професійна помилка у ветеринарній практиці