

Individual independent veterinary expert opinions. Trends of 25 years in forensic veterinary expertise

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Summary

This study presents a comprehensive analysis of 25 years of forensic veterinary expert opinion-making (2000-2024) with a special focus on independent veterinary expert opinions. A total of 166 individual, independent expert opinions were studied and discussed. The types of individual opinions were determined. The large role of the civil law in veterinary opinions was indicated from the perspective of both the commissioning entities and topics of opinions. Similarities and differences in relation to earlier works on veterinary expert opinions were demonstrated. A growing trend in the number of opinions issued and their diversity was confirmed. Individual, independent expert opinion-making was proven to be a vital part of forensic activities and veterinary services for the public.

Keywords: veterinary forensic medicine, veterinary law, expert, specialisation

The specialisation and expertise of veterinarians are not just theoretical concepts, but have practical implications in the veterinary profession. The scientific consensus underscores their significant value, progressive “speciation”, increasing complexity, and the increasing number of animal species under veterinary expert evaluation. Notably, veterinary evaluation is also affected by the increasing legal awareness of entities that commission expert opinions (3, 6, 10, 12, 16, 17, 19-21, 28, 30). Our research aims to bring these practical implications to the forefront.

However, veterinary opinion-making has not been adequately studied in science. The existing literature (1-4, 17, 18, 20, 29) summarizes opinions issued by scientific/educational and laboratory/research units, but there are no analyses of veterinary opinions issued by independent veterinarians. Thus, only part of this subject has been adequately studied, while the scale of the latter group – equally important – remains unknown. This analysis aims to fill this gap.

A further aim of this study is to determine the social, territorial and thematic scope of the veterinary expert opinion-making of an individual expert. The analysis summarises 25 years of work of an individual veterinary expert and opinions that he issued.

Different types of opinions are defined, entities commissioning them are shown, and the method of action of the expert and the subject of the opinion are described (taking into account the animal species and the characteristics of the material being reviewed).

This makes it possible to determine trends in the current veterinary expert opinions and to compare them with the previous achievements of science concerning veterinary expert opinions in Poland.

In addition, observations and conclusions from this study highlight the errors that individuals and institutions commissioning veterinary expert opinions frequently commit. As a result, this study will help avoid mistakes that disrupt the opinion process or prevent the effective use of opinions issued.

Material and methods

The research material consists of 166 individual, independent, veterinary expert opinions written over 25 years, between 2000 and 2024. Therefore, the independent, non-institutional form of implementation is a decisive and essential factor for this study. All the opinions examined are original and constitute an additional veterinary service activity. It should be noted that they do not exhaust the entire scope of expert

activity, because collective and institutional opinions were also developed in the same period.

The opinions were subject to formal and material classification and examination. Different types of opinions were assigned according to criteria and terminology developed earlier by the author (10).

The opinions were also divided according to the species of animals they concerned and the contracting entities, while maintaining the fundamental dichotomy between private entities (opinions commissioned by individuals and private legal entities, i.e. companies) and public entities (including all opinions issued at the request of courts and official authorities of different kinds, such as the police, prosecutors, and professional veterinary organisations). The research criteria also included the nature of the expert's opinion and observations, whether the questions were correctly formulated, and whether it was possible to answer them based on the materials provided. In addition, the research material was divided according to the scope of the subject matter. On this basis, several primary topics were selected that characterise the issues analysed. Thus, the relationships between the contracting entities, animal species and the subject matter of the opinions were also demonstrated.

Percentage values were rounded to 0.5%.

Results and discussion

In the quarter-century from 2000 to 2024, 166 written veterinary expert opinions were issued in 117 cases. These were independent, individual opinions, i.e. opinions issued by experts (authors of this article) regardless of the experts' place of employment (such as a scientific institution, research institute, or laboratory).

The primary division criterion used in this study is the commissioning entity (Tab. 1). It was found that over the 25 years, 112 judicial opinions, 41 official opinions (including 18 for the police, 16 for the prosecutor's office, 6 for veterinary professional organisations, and 1 for a local administrative authority), and 13 private opinions were issued.

Although all the material examined was in written form, all the primordial opinions and some supplementary opinions issued in court cases were basically

Tab. 1. Independent individual veterinary opinions in 2000-2024 according to the commissioning entity criterion

Commissioning entity		Number of opinions	
Court		112	
Official authorities	Police	18	41
	Prosecutor	16	
	Veterinary professional organisation	6	
	Local administrative authority	1	
Private clients		13	
Total sum:		166	

of a mixed nature in light of the typology adopted here because the theses and conclusions were also presented at court hearings. This is closely related to the oral nature of the Polish court procedure (17). However, the oral elements of the opinions were not examined because they were not recorded or archived by the authors.

Of all the expert opinions issued, 117 were primary (main) ones, and 49 were partial (supplementary). It is worth noting one complex opinion issued with an expert in zootechnics and one individual opinion based on an inspection conducted jointly with another expert (it was not a joint opinion as each expert issued their own opinion).

All opinions were found to be facultative because mandatory ones do not occur in the Polish legal regime. For the same reason, there is no super-expertise. No accessory, provisional or preliminary opinion was revealed. In addition, it was found that, according to the adopted typology, the content of all opinions should be described as *sensu largo* (10).

In 119 of the 166 opinions, the expert's conclusion or justification was categorical, and in 11, it was not. The content of the expert's conclusion or justification was partial in 36 cases.

Considering the type of material upon which opinions were based, it was found that 14 opinions were exclusively or partially theoretical and abstract (including 7 in which the material was based on an analysis of the literature). In 101 opinions, the primary material was case files (including 67 – veterinary medical documentation and 9 – documentation of state veterinary authorities). Only 9 opinions involved an inspection and examination of the animal or the place where it was kept. Moreover, in 4 cases, the expert refrained from inspection or examination requested by the commissioning entity and justified his refusal in the opinion.

A division was made according to the species of animals whom the opinions and cases in which they were issued concerned. It is presented in Table 2.

Six opinions in 4 cases did not specifically concern any animal species and, therefore, were not included

Tab. 2. Independent individual veterinary opinions in 2000-2024 according to the animal species criterion

Animal species	Number of opinions	Number of cases
Dog	66	51
Cow	30	16
Horse	27	16
Chicken	17	14
Cat	12	8
Sheep	6	4
Pig	5	5
Turkey	2	2
Geese	1	1

in Table 2. Most of them can be described as legal-pharmaceutical opinions, as they concerned the norms of using veterinary drugs on farms and maintaining pharmaceutical documentation. They included violations of the pharmaceutical law in the trade of veterinary medications as well as the legal and commercial qualification of pharmaceuticals. In addition, one of them assessed the impact of chemical substances from a phosphogypsum heap on animal feed.

As shown, most opinions were devoted to single animal species. However, six multi-species opinions were also identified: two opinions concerned dogs and cats, and one opinion each concerned cows and sheep; cows and pigs; dogs and goats; dogs, sheep and cats; dogs, sheep and Vietnamese pigs. It should be noted that opinions referring to more than one animal species were treated in the table as several separate units (one for each species). Hence, the total value of Table 2 data is higher than that of the general data.

In addition, Figure 1 shows the relationship between the number of opinions and cases analysed over the 25 years. There were significant gaps in which the independent opinions were not issued for animal species for which the total numbers are highest. There are no opinions for dogs before 2010, in the period of 2011-2014 and in 2016; for cats before 2018; for horses in the period of 2002-2016; for cows before 2009 and in the period of 2010-2016; and for chickens in the years 2007-2009, 2011-2016, 2020-2021.

In addition to the opinions of a legal and pharmaceutical nature presented above, which constitute a coherent group, the research made it possible to identify and select several further primary groups of topics characterising the issues analysed and to classify opinions and cases into these groups.

The most significant thematic group consisted of opinions concerning physical latent defects of animals sold. This topic was covered by as many as 53 opinions, including 24 opinions on dogs and 17 on horses. Eight opinions covered physical latent defects of sold feed.

Another relatively large group identified were opinions regarding animal cruelty ($n = 38$) in a broad sense, i.e. all acts prohibited by the Polish animal protection law (22). It should be noted that provisions contained in this statutory act do not only concern abuse as such, but primarily a failure to provide living, housing and nutritional conditions under legal regulations, as well as unauthorised killing. Therefore, this topic also includes two cases of accidental shooting of dogs (18) and two cases of illegal euthanasia.

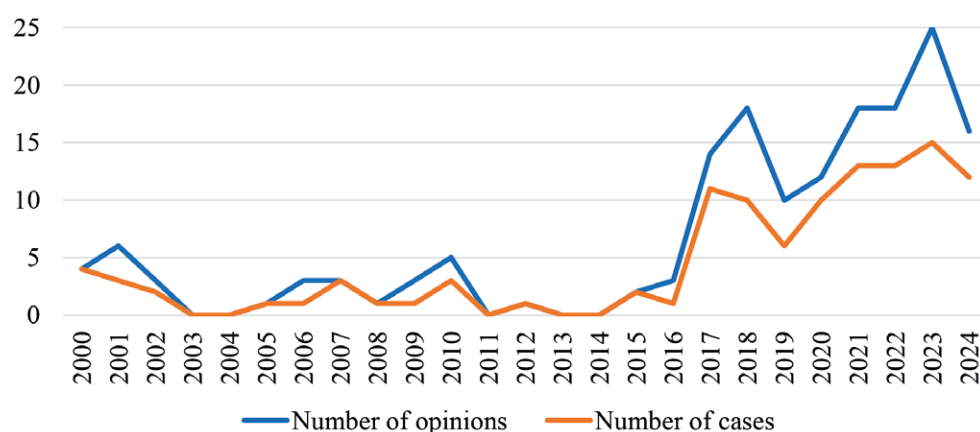


Fig. 1. Number of opinions and cases of veterinary individual independent expertise in the years 2000–2024

The correctness of veterinarians' conduct, and, especially, errors in veterinary art were the subject of 35 opinions, including 17 related to the diagnosis and therapy of dogs. Additionally, one of these opinions concerned illegal actions of a veterinary technician (3, 26, 27), and in another case, in addition to the malpractice, the veterinarian was also accused of violating ethical principles (25).

A total of 15 opinions (including eight for dogs) dealt with the correctness and legality of actions of various persons and entities, and three opinions assessed the work of public veterinary administration authorities.

A slightly smaller group of opinions covered milk production and lactation ($n = 10$), and this subject was limited to cows. It should be noted, however, that as many as 7 out of these 10 opinions were related to the correct assembly and operation of the milking parlour and were issued in the same case. Apart from milk, food of animal origin was the subject of 2 opinions regarding the withdrawal period for coccidiostats for table eggs and illegal introduction of meat into market circulation, which was associated with a case of defective procedures, failure to comply with administrative and legal obligations, as well as abuse and cruelty to cows in a slaughterhouse.

A separate group includes three opinions issued in divorce cases and related to property division to determine which former spouse should have the custody of dogs.

It should be noted that the groups presented above are not mutually exclusive. On the contrary, in many cases, opinions can be classified into several categories due to the numerous and different questions asked to the expert in a given case. It is especially worth noting the frequent combination of abuse in animal shelters or breeding centres, latent defects of animal and veterinary malpractice, abuse and failure to act *lege artis* (including one case where animal abuse was combined with malpractice by a veterinarian).

It was found that four opinions regarding animal shelters and nine regarding breeding centres dealt not

only with animal abuse, latent defects of animals sold or veterinary malpractice, but also with the legality of conducting business and with actions of administrative authorities.

Commentary

The opinions were commissioned by entities from all over Poland (Fig. 2). The most significant number of opinions were issued in the northern and northeastern regions of Poland. This is closely related to the experts' location and his being a registered expert in courts in Olsztyn and Gdańsk. The highest number of cases and opinions were related to these cities: over 10 cases (11 opinions in Gdańsk, 18 in Olsztyn). In addition, being a registered expert in a court in a large city undoubtedly affects the surrounding towns, the police, the prosecutor's office, and the courts located there. It should be noted that small courts do not have their registered experts and must appoint experts *ad casum*.

In addition, it was established that the administrative division of the two-instance court system in Poland is not without significance (31). Areas in central northern Poland, west of Olsztyn, are subject to appeal in Gdańsk, and those in northeast Poland, including Olsztyn, appeal to the court in Białystok. The juris-

diction area of these courts covers much of the expert activity discussed in this paper.

Nevertheless, numerous opinions were also issued outside this area. This indirectly indicates the importance and reputation of a given expert and the fact that there may not be enough experts in some parts of the country.

In the authors' opinion, another factor may be the location of veterinary faculties and forensic veterinary medicine units that issue institutional opinions, most notably in Olsztyn. These are undoubtedly multidimensional connections. On the one hand, it can be assumed that the demand for individual opinions will be more significant in cities without veterinary scholars, such as Gdańsk, Łódź or Białystok, characterised by high coefficients in the analysed issue (Fig. 2). On the other hand, the presence of a major institutional veterinary expert centre in Olsztyn (1-4) did not prevent the courts, police, prosecutors and private individuals from repeatedly appointing individual experts in this city and the entire surrounding area.

As already mentioned, the literature includes studies on veterinary expert opinions issued by universities in Poland (1-4, 17, 18, 29). This is important because these studies cover the same area and a partially

overlapping period. This makes it possible to adequately and reliably compare the results of this study with the results and conclusions presented there and, in particular, to determine the differences between institutional and collective expert opinions and independent, individual opinions.

In particular, it is worth noting that most opinions are commissioned by courts rather than individuals, such as pet owners, breeders or insurance companies. As many as 112 out of 160 opinions (67.5%) were prepared in court proceedings and at the court's request. Furthermore, it should be noted that private opinions examined here were also issued during court proceedings or as material preparing the parties' positions in a court case



Fig. 2. Geographical distribution of analysed cases of veterinary expertise in Poland

Explanations: bullets – 1-2 cases, rhombi – 3-4 cases, circles – 5-9 cases, stars – 10 or more cases and registered expert position in courts

for the future. They were ordered by plaintiffs or their lawyers. It should be noted that in such cases, procedural bodies interpret an expert opinion as a document in the court case.

However, a significant difference from previous analyses is the fact that in institutional opinions, the primary entities commissioning expert opinions are public authorities dealing with penal law, such as criminal courts, the police and the prosecutor's office. In contrast, the current analysis clearly shows the dominance of civil and commercial courts (1, 3, 4, 17).

Court opinions issued in civil cases constituted 57% of all opinions, 85% of court opinions and 65% of public opinions (court and official, $n = 146$) analysed here. This contrasts with criminal court opinions, which amounted to 10%, 15% and 11%, respectively, and with all penal opinions (prepared at the request of courts, prosecutors and the police, $n = 51$), which made up 31%, 45.5% and 35%, respectively. These results indicate the dominance of the civil courts in individual veterinary expert opinion-making over the last twenty-five years. At the same time, combined with opinions ordered by state offices, investigative bodies and official veterinary professional organisations, they indicate the dominance of the state and local governments as entities commissioning veterinary expert opinions. In this study, such non-private opinions constitute as much as 92% of the total. However, to a lesser extent, a similar pattern was revealed in earlier analyses.

In many cases, the expert's work did not end with one opinion (which was primordial, primary and ultimate). As already mentioned, 49 supplementary opinions were examined, constituting 29.5% of all opinions and almost 42% of the original opinions. However, it would be wrong to assume that in nearly 42% of all cases, a supplementary opinion was issued in addition to the original opinion. In a few instances, as many as five or six supplementary opinions were issued. Nevertheless, one original opinion was usually accompanied by one supplementary opinion, which often contained a mere response to allegations, comments or questions of the parties or the court. In several cases, a different problem or other materials were presented for analysis, or the expert was asked completely new questions distinct from the original ones. Sometimes, these questions were antinomic, some concerned an abstract and purely theoretical aspect of a given issue, and others related to a specific case. This automatically affected the content and scope of the expert opinion and its justification.

It is worth noting one partial supplementary opinion, which was corrective to the content of the primordial one. It was due to the failure to provide the expert with all case files, including veterinary documentation, at the initial stage of preparing the opinion.

It may be surprising that only nine opinions involved inspecting and examining the animals or places where

they were kept (milking parlour, shelter, farm, run). However, this is justified firstly by the subject of the opinion and secondly by the provisions of Polish judicial and prosecutorial procedure, according to which experts, as a rule, do not collect evidence on their own, but only analyse evidence submitted to them by the court or other public authority (1).

The fact that in four cases the expert refused to conduct an inspection and tests requested by the commissioning entity requires an explanation. The reason was the fundamental incomprehension by the person ordering the opinion of what a veterinary examination and a decision on the animal's health condition are – of the fact that it is a decision on the *status praesens*. In the above cases, the expert was requested to examine the animal to determine what the animal's condition was several months or years earlier. Thus, refusing to inspect and test the animal was utterly *lege artis* both from the point of view of veterinary sciences and regarding the reliability of the expert.

As shown in Figure 1, the numbers of opinions and cases in individual years have been constantly growing. This phenomenon is also noted by other studies on veterinary opinions and is associated primarily with the growing legal awareness of society, its increasing wealth and changes in attitudes towards animals (1, 3, 10, 17, 20).

As already indicated, significant gaps were found in the examined material, in which independent opinions were not issued for certain animal species, such as dogs, horses, cows or poultry. This indicates, on the one hand, a significant thematic heterogeneity of the opinions and, on the other hand, differences in the intensity of such opinions, as well as opinions on individual species. The reason is that the activity of an expert, especially an individual, non-institutional one, is not a programmed, permanent, everyday business, nor is it their primary source of income or the main form of practicing the veterinary profession. In addition, it should be remembered that every expert opinion is a response to current legal and veterinary problems presented to the veterinary expert by individuals directly or through appropriate authorities. If there is no need for such opinions, they are not ordered. It should also be noted that a summary analysis of the number of animals concerned by the opinions was not performed, as such data would be misleading – for example, one dog vs. tens of thousands of chickens in a single case.

In addition, it was found that the division of animals into companions or domestic animals and production animals, with the debatable position of horses, adopted in other papers, is inappropriate. Apart from the fact of different attitudes of people towards animals and the possibility of keeping different animals as companions and directing their friendly relations towards them, as well as the commercial use of dogs and cats, special attention should be paid to the issue of animal cruelty

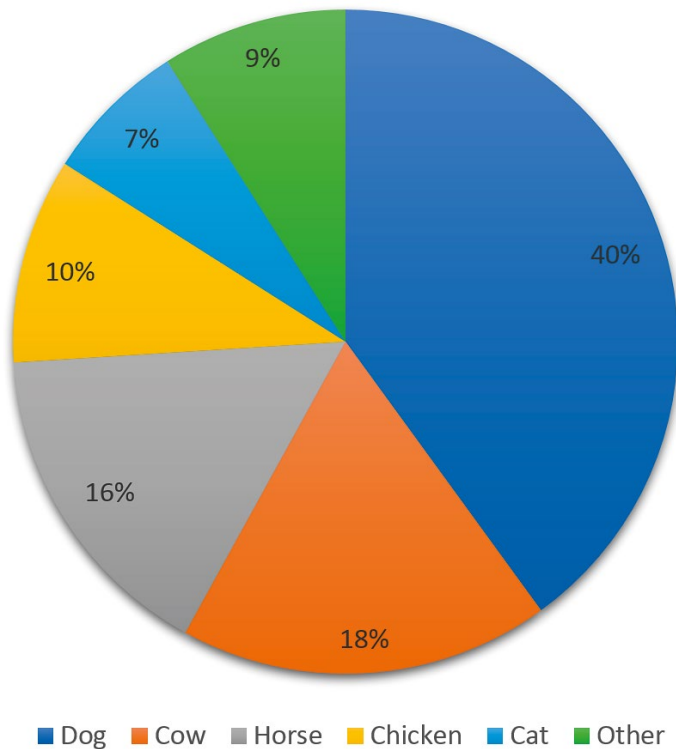


Fig. 3. Percentage of opinions devoted to particular animal species

revealed in the current analysis, which will be shown in the further part of the work.

Dogs featured in almost 40% of the opinions and over 43.5% of all cases in which these opinions were issued, which is the highest proportion for a particular species in this study (Tab. 2, Fig. 3). *Prima facie*, one might conclude that such a large total number has consequences in the form of many dog opinions in all subject areas. However dogs are not represented equally in all areas. They mostly appear in opinions concerning physical latent defects of dogs sold, animal cruelty and veterinary errors. Thus, it is impossible to demonstrate a general relationship between the number of opinions and cases concerning dogs as an animal species and the number of individual animals of a given type examined. This observation also applies to other animal species and subject groups. Each species has its characteristic subject areas, where individual independent expert opinions are most often commissioned.

In particular, an interesting thematic group are opinions ($n = 8$) on latent physical defects of feed and the repercussions of feed of inadequate quality for breeding and its profitability expressed in growth, productivity, and the number of deaths. In these opinions, the clients' questions were aimed at determining the causes of failures in breeding. Significantly, they were all concerned with poultry and no other animal species. It was found that the feed defects consisted in the contamination of the feed with anaerobic bacteria, *C. perfringens*, *E. coli*, the presence of mycotoxins, fat oxidation, unbalanced feed rations, as well as excessive amounts of coccidiostats and excessive amounts of

NaCl (which led to mass intoxication and deaths), as well as the poor consistency, texture and homogeneity of the feed.

Latent physical defects of animals sold were the subject of as many as 32% of all opinions analysed. On the other hand, no physical defects were found by only 3 out of 53 opinions, which demonstrates the importance of this problem. This is an essential conclusion comparing the previous scientific literature devoted mainly to this matter theoretically (7, 11). Furthermore, current findings differ somewhat from the results of other studies, in which civil disputes did not occur (1, 4, 15) or had much lower indicators than criminal disputes and conflicts involving animals (3, 17).

As many as 63% of horse opinions concerned physical defects ($n = 17$), which is the highest group result obtained in this study, and makes up over 10% of all opinions analysed. The defects included osteoarthritis, arthrosis of the fetlock joint, navicular syndrome, inflammation of the spine and kissing spines syndrome, equine systemic proteoglycan accumulation (ESPA), recurrent airway obstruction (RAO), rectovaginal fistula and dysphagia.

Twenty-four opinions on latent physical defects of dogs represented 36% of opinions issued for this species and 14% of all opinions analysed. The most common defect was congenital hip dysplasia, which is a significant problem in pure-breed dogs, such as German Shepherds. In addition, unilateral cryptorchidism and habitual patella luxation were found relatively often, whereas congenital heart defects, malocclusions and dental defects, microphthalmia or parvovirus infection were diagnosed in isolated cases.

In the case of chickens, three opinions concerned latent defects: infection with *S. enteritidis*, *E. coli* and anaerobic bacteria. Also, one of the opinions on geese and one on turkeys concerned infection with *S. aureus* diagnosed on the day the birds were handed over to the buyer (2).

In addition to animal diseases, other latent defects identified in the opinions include non-compliance with the intention of the parties expressed in the contract, non-conformity of the animal to declarations made by the seller, and unfitness of the animal to be used according to the buyer's intention, e.g. for breeding. This is consistent with the currently applicable Polish civil law, which recognises a broad definition of a physical defect – much broader than the previous understanding of a defect as a pathological medical condition. The current legal definition stipulates that it is any non-compliance and any breach of contract (9, 23).

Two opinions concerning cats, or interspecies hybrids between so-called 'Savannah cats' and wild African servals, revealed an interesting case of such a physical defect. Apart from purely physical defects (hypertrophic cardiomyopathy leading to death), the expert proved that the animals sold did not conform

to the parties' agreement, according to which they were supposed to be Savannah F1 cats suitable for reproduction and breeding. The authors believe that it is very important for the expert to be able to present a broader perspective on a given problem, even if the parties (individuals, companies or civil courts) ask him for an opinion concerning a defect defined narrowly as a disease.

All opinions regarding latent animal defects were related to the significant economic value of the animals and their intended commercial use by the buyer (purebred dogs and cats used for reproduction, horses, high-yielding cows and poultry flocks). This suggests that court cases and pre-litigation preparation are often initiated for purely economic and business reasons, rather than emotional reasons or because of concern for the animals.

Animal cruelty to dogs was the subject of 23 expert opinions, constituting 35% of dog opinions and almost 14% of all opinions, which is almost the same as the number of opinions concerning physical defects in this species. Abuse was the subject of 4 out of 10 opinions on cats and 8 out of 30 opinions on cows. This indicates a relatively high identifiability of abuse in dogs, cats and cows, which partially confirms the results of previous studies (1, 3, 5, 13, 17).

Nevertheless, signs of abuse were not found in almost a quarter of the opinions (9 out of 38). This demonstrates that accusations of abuse or failure to provide animals with appropriate conditions and welfare can be made hastily, often by people who do not have veterinary knowledge but are socially active, e.g. in foundations and associations for animal protection. The results prove the importance of appointing a veterinary expert because neither such people nor local authorities (22), the police or prosecutors, are competent to determine whether and why the condition of animals has deteriorated. Only a veterinary specialist can comment on this subject and determine whether a given situation threatens the animal or whether the accusations are justified (8, 27). Thus, a veterinary expert plays a vital role in cases of abuse from the scientific, social and legal points of view and according to the principles of legalism and justice.

Most of the cases of abuse consisted in failure to provide animals with appropriate living conditions, such as housing, runs, water and feed. They concerned farms and shelters for homeless animals and were often due to the lack of awareness and knowledge among animal carers. A typical situation of abuse identified in the material was a combination of inadequate housing conditions (below minimum requirements established by the law), poor nutrition, inappropriate use (e.g. keeping Holstein-Friesian cows as beef cows), failure to provide veterinary care, and errors in documentation required by the law. In the case of animal shelters, most opinions concerned owners deprived of their dogs

without justification and overcrowding in shelters. Sometimes, these opinions were also related to insufficient veterinary care.

Only one case concerned abuse as such, specifically, cruel and sadistic practices of a cat owner. Equally outrageous was a case concerning the abuse of cows in a slaughterhouse combined with negligence in supervision by the state veterinary administration authority, which led to the illegal introduction of dangerous or illegal food into the market.

Opinions that identified improper human behaviour or inadequate feeding and housing conditions in other species are rare. This does not mean these problems do not exist, but rather that they are not detectable. For example, among the opinions analysed, only two concerned the abuse of pigs, including one opinion in which the expert proved animal cruelty during transport. There was also a case related to transport of sheep, in which two opinions were issued. They revealed a failure to comply with welfare requirements established by the law for sheep transported abroad as well as a failure of the state veterinary administration to fulfil its obligations. The cases listed above, although objectively few, indicate serious problems with ensuring animal welfare for animals transported to slaughterhouses and subjected to slaughter. The authors believe this should be a signal for public authorities and the general public to take appropriate measures.

Given these findings, it is difficult to say whether animal cruelty is a significant problem in Poland. The literature suggests that the increase in the number of such cases is related exclusively to the growing social awareness and better detectability of such crimes, while the absolute number of violations may be decreasing (2, 3, 5, 16, 17, 20).

Many opinions ($n = 35$) also concerned the clinical practice of veterinarians. They were more numerous than in previous publications (1, 3, 20). The highest number, as many as half of the cases of errors in the veterinary art concerned dogs ($n = 17$), constituting over 10% of all opinions and more than a quarter of opinions issued for this species. The errors included the wrong order and frequency of procedures, failure to perform necessary diagnostic tests or failure to take their results into account, as well as therapeutic errors, such as the use of clotrimazole on the mucous membrane of the urinary bladder or the use of outdated surgical methods (inconsistent with current medical knowledge). Errors in documentation were found in four cases, illegal euthanasia in two cases and violations of pharmaceutical law in another two. In addition to errors, one instance of surgical negligence was also found (leaving a splinter of a scalpel in the wound). As already mentioned, in one case concerning cows, in addition to an error in art, it was also shown that the veterinarian was guilty of animal cruelty.

No error or malpractice was detected in 6 out of 35 opinions examined. In addition, in an opinion concerning a veterinarian's violation of ethical principles, the expert found no such violation (although, interestingly, he revealed a diagnostic and therapeutic error).

The current analysis also showed several problems not noted in the literature. In the vast majority of opinions, the expert's conclusion or justification was categorical. Non-categorical or partially categorical assessments resulted from the scope of the expert opinion (numerous cases in which he was asked to estimate a specific value, quantity or amount) or from the inadequacy of materials on which the expert's assessment was based. In 33 opinions (including 15 concerning dogs), a categorical answer to questions asked was impossible in light of the materials, documents and case files. The most notable was a case in which the expert was asked to assess the health status of the animal and the quality of diagnostics of veterinary therapy without being provided with any medical documentation.

In 14 opinions, the current study also identified incorrect questions. The questions were illogical, self-contradictory, or referred to matters beyond the expert's competence, such as those concerning mechanical engineering or economics. In addition, the analysis revealed cases of numerous judges and public officers unfamiliar with basic terminology (even the school biology knowledge level), such as one who wrote about 'e-coli'.

Poorly formulated questions, especially those exceeding the expert's competence, and the inadequacy of materials constituting the basis for the opinion are fundamental problems. They hinder or prevent the expert's effective, complete, reliable work, causing a waste of time to everyone concerned and a waste of public money. Pointing out these shortcomings should be a basis for reflection and learning for opinion-commissioning entities. Moreover, the client should consult with a future expert to correctly specify future questions.

The findings of this study suggest that official veterinary organisations should carefully consider whether to appoint veterinary experts and what questions to ask them. This issue has never been addressed in the scientific literature before.

It should be noted that all members of veterinary professional courts and professional liability advocates are practicing veterinarians and have a legal obligation to possess up-to-date medical knowledge (25, 27). In addition, they must apply provisions of the criminal procedure analogously in all their activities (24, 27). According to these regulations, just as state courts cannot generally appoint lawyers as experts, because judges themselves should know legal norms, so cannot veterinary judicial bodies appoint veterinary experts, because these bodies should know the rules

of veterinary medical art and have current scientific knowledge. The legal doctrine makes one exception for very narrow, specialist and innovative issues (10, 14), but only one example of such an issue was found in the material analysed.

The analysis revealed that the majority (as many as 5 out of 6) of opinions ordered by veterinary professional organisations should not have been commissioned at all. They concerned matters of rudimentary veterinary knowledge, such as the basic rules of conducting animal necropsies, the order of medical procedures and the use of clotrimazole. Thus, they were inconsistent with the principle of *iura novit curia* (the court knows the rules) and constituted a flagrant violation of the law (10). In addition, it should be noted that most of these opinions were of a theoretical and abstract nature. Still, even in non-abstract opinions and those concerning specific cases, some questions were irrelevant to the problem assessed by the expert.

Summation

The study summarises a quarter of a century of individual and independent veterinary expert opinion-making. The analysis underscores the importance of streamlining ongoing criminal and civil proceedings, preparing for the trial and explaining intricate and complex veterinary issues to lay private clients and official bodies.

The scope of veterinary expertise and opinion-making can be vast and diverse, but characteristic and dominant elements were demonstrated. An upward trend in independent expert opinions was revealed, which suggests their increasing popularity. The study identifies areas in which such expert opinions are most sought, as well as mistakes and situations that those ordering the opinion should avoid to make the expert's work easier and obtain the answers they seek.

The results and conclusions drawn indicate that the role of a veterinary expert is socially, scientifically, economically and legally essential. Individual independent experts constitute an important group among veterinary practitioners who use their specialist knowledge in the legal context.

So far, individual and independent veterinary experts have been ignored by science as a social and legal phenomenon. Therefore, knowledge about this branch of the veterinary profession has been relatively limited among veterinarians themselves. The authors hope that the results of the present analysis will change this situation and increase the number of cases in which services of individual independent veterinary experts will be sought.

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