

Some ethical aspects concerning the chemotherapy treatment of small animals in veterinary medicine

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ABSTRACT: *In veterinary medicine practice the cytostatic treatment is available mainly in printed form – books, articles, studies, researches. Due to ethical issues regarding the limited access to therapeutic protocols for the pets, through the elevated costs of the chemotherapy and in the absence of the animal health insurance for pets in case of cancer in Romania it is accepted the idea to introduce in practice the software for oncological therapy.*

The research was realized based on an original questionnaire with the aim to find ethical aspects regarding the acceptance of the chemotherapy in veterinary treatment, the need to introduce a form of insurance for the pets in case of oncological treatment and the possible founding sources for the treatment.

The study confirmed that the practice vets consider unethical the idea of limiting the access to chemotherapy for small animal medicine. The study revealed the need to introduce some form of health insurance in the veterinary oncological practice and the payment for treatment should be covered by the owner, insurance, pharmaceutical and food producing companies.

KEY WORDS: *cytostatic prescription, marketing software, multimedia platform, veterinary oncology*

Introduction

In Public Health, the elevated costs of medical treatment in the oncological veterinary field are limiting the access to this type of interventions, but also the absence of a social health ensuring system or financial founding by specific programs like the National Programs from human medicine.

In case of the farm animals, where the productions can be used in human consumption, the chemotherapy treatment is forbidden; the concerns of the oncological veterinary specialists for preventing the limited access of small animals to this type of treatments are less than optimal. In veterinary medicine practice, the cytostatic oncological treatment is administered only to small animals, but a major issue is represented by the elevated costs of the treatment which influences the decision of the owners to apply for the oncological complete treatment.

The problem of initialing and applying the treatment is related to the elevated costs. Who should support the costs? Only the owners? Or, there could be other public or private structures that could support this kind of treatments?

The aim of this study was to evaluate participants' opinion regarding the ethical aspects arising from limiting the access to chemotherapy treatments for small animals if the oncological veterinary pathology is present.

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Material and method

The study was conducted on applying an original survey using the utility of electronic chemotherapy prescription for veterinary medicine, realized after the conclusions of a focus group held with veterinary practitioners. From the 32 items of the survey, this study was focused only on 5 questions (Q25-Q29) which were realized on the ethical dilemma on using chemotherapy in veterinary oncology.

Some of the items in the survey were calibrated as a tool to measure using a Lickert scale with 5 values.

It was tested on a pilot group of 5 participants; their results were excluded from the final results. Collection of the data was realized by self-registration, face to face, during the January-March 2015 period.

After validation of this survey, it was applied to a batch of people working in the field of veterinary medicine - students of the Faculty of Veterinary Medicine at different educational levels (students and graduate students), veterinary practitioners employed in the public or private veterinary assistance, teachers of the Faculty of Veterinary Medicine. The number of participants in the study was determined based on the formula of Tarro Yaman (106 persons), with a coefficient error of 0,1 (Mureşan P, 1989).

There were criteria developed for the inclusion and exclusion from research of the subjects and all of them expressed their informed consent to participate in the survey anonymously, with the right to use personal information only for the purpose of scientific research and respecting the principles of ethics in scientific research.

Inclusion criteria: student to Veterinary Medicine; veterinary public sector employee; authorized veterinarian; veterinarian in private practice; veterinarian committed to the practice (clinic, hospital) private; veterinarian unemployed; retired; Veterinary Medicine graduate and are employed in another field; regardless of age group, gender (female, male) and area of origin (urban, rural); permission to participate in the study.

Exclusion criteria from the study: the refusal of participation in the study.

Data were processed using statistical and mathematical methods. (Muresan P, 1989), presenting them being performed in Microsoft Excel 2007 - ANOVA single factor and T tests.

The results of the items Q1-24 and Q30-32 from the survey were the subject of another publication, the ethical aspects being processed only in this study.

Results and discussions

Participants in the study belonged to both genders in almost equal percentages (F: 50.94% and M: 49.06%), the majority (84.06%) were aged between 25-59 years, with activities in the field of veterinary medicine, with experience between 1 and 29 years (56.61%), 81,13% - declared that they own a pet animal.

Owning a pet might influence, from the psychic, behavior and ethical point of view, the view of the vet towards the use and acceptance of the chemotherapy treatment for his own animal, fact that can change the therapeutically decision also on the „other patients” with oncological disease.

From the analysis of the data obtained, the analysis was directed on the two categories (81.13% pet owners and 16.98% which don't have a pet). From the analysis, the persons who didn't respond to this question were excluded (2 persons – 1.98%).

This separation in two categories tried to bring more information regarding the possible differences between the opinions of the subjects who own a pet and those who don't, regarding:

use of chemotherapy treatments for their own pet, limiting their access to chemotherapy and the utility to introduce some forms of insurance in veterinary medicine.

Analyzing the availability to use the chemotherapeutical treatment for their own pet, we registered that only 2.33% from the persons that own a pet are not willing to use this treatment in case of oncological disease. Most of the questioned people – 95.35% - showed that they are willing to use the chemotherapeutical treatment, but in different degrees of acceptance.

From the 18 questioned people who don't have a pet, 14 declared different degrees of acceptance to utilize the chemotherapeutic treatment for their own pet. (Chart 1)

The high share of those who declare that they accept the chemotherapy treatment can be explained by the professional training of the people involved in the study (veterinary staff), who realizes the importance of chemotherapy in veterinary oncological pathology.

The answers given by the subjects who declare themselves owners of pets sustain the idea that limiting the access of pets to chemotherapy treatment when the oncological pathology is present to be totally unethical (46.51%), very unethical (11.63%) and little ethical (25.58%). This opinion is found in 83.72% of the questioned people.

Even for the people who don't have a pet, all the 18 people agree that limiting the access to chemotherapy is totally unethical (10 people) and little ethical (8 people)(Chart1).

Due to elevated costs of the chemotherapy treatments in case of pathological oncology in pets and preventing inequality in accessing the health, in the survey we introduced a question regarding the utility to introduce some form of health insurance in veterinary medicine. The utility was confirmed by 79.06% of the total people owners of pets and of 10 people out of 18 people who don't own a pet (Chart1).

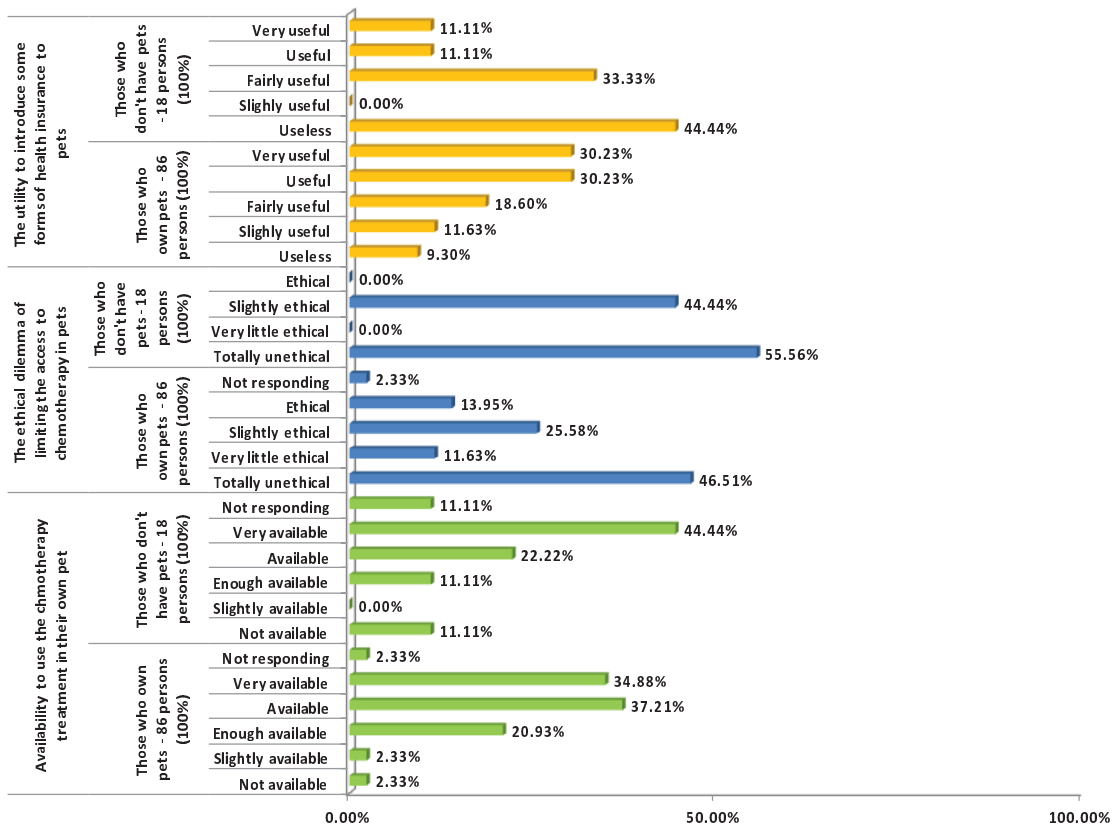


Chart 1. The opinion of the questioned people owners and non- owners of pets towards: using the chemotherapeutical treatment on their pet, the ethical dilemma of limiting the access of pets to chemotherapy and the utility to introduce some forms of health insurance in veterinary medicine

Analysis of significance was performed (by ANOVA) at a $p = 0.05$, between the following variables:

- Owning/non owning a pet and the willingness to treat their own pets with chemotherapy if he has a diagnosis of oncological pathology;
- Owning/non owning a pet and the opinion regarding the ethical dilemma of limiting the access of pets to chemotherapy treatment of pets
- Owning/non owning a pet and the opinion regarding the utility to introduce some form of health insurance in veterinary field.

Following this statistical analysis the following results were obtained:

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Column 1	106	128	1.207547	0.204133		
Column 2	106	430	4.056604	1.196765		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	430.2075	1	430.2075	614.188	2.84277E-64	3.886121
Within Groups	147.0943	210	0.700449			
Total	577.3019	211				

Statistical analysis of results between variables questions 25 and 26 show a statistically significant difference between the two groups of variables, at $p = 0.05$.

In groups of variables statistical significance is not observed.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Column 1	106	128	1.207547	0.204133		
Column 2	106	222	2.09434	1.381491		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	41.67925	1	41.67925	52.5714	7.83E-12	3.886121
Within Groups	166.4906	210	0.792812			
Total	208.1698	211				

Statistical analysis of results between variables questions 25 and 27 show a statistically significant difference between the two groups of variables, at $p = 0.05$.

In groups of variables statistical significance is not observed.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Column 1	106	128	1.207547	0.204133		
Column 2	106	356	3.358491	1.965499		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	245.2075	1	245.2075	226.0361	3.67E-35	3.886121
Within Groups	227.8113	210	1.084816			
Total	473.0189	211				

Statistical analysis of results between variables questions 25 and 28 show a statistically significant difference between the two groups of variables, at $p = 0.05$.

In groups of variables statistical significance is not observed.

Due to elevated costs of chemotherapy treatment in oncological veterinary pathology the results of the study confirms solidarity in supporting the costs and to reduce the inequity in access to treatment for companion animals, as demonstrated by the answers given by the survey participants. Thus, from the batch of participants in the study in rank I (39.62%) there are the answers sustaining the payment for chemotherapy oncological pathology in pets should be supported only by the owner and second rank is held by those who believe that payment should be the responsibility of the health insurance companies in the veterinary field (30.19%).

Note the relatively high share of subjects who claim that responsibility for payment of chemotherapy should belong equally, to the owner, veterinary drug companies, the companies that produce pet foods and the health veterinary insurance companies (26.41%). (Chart 2)

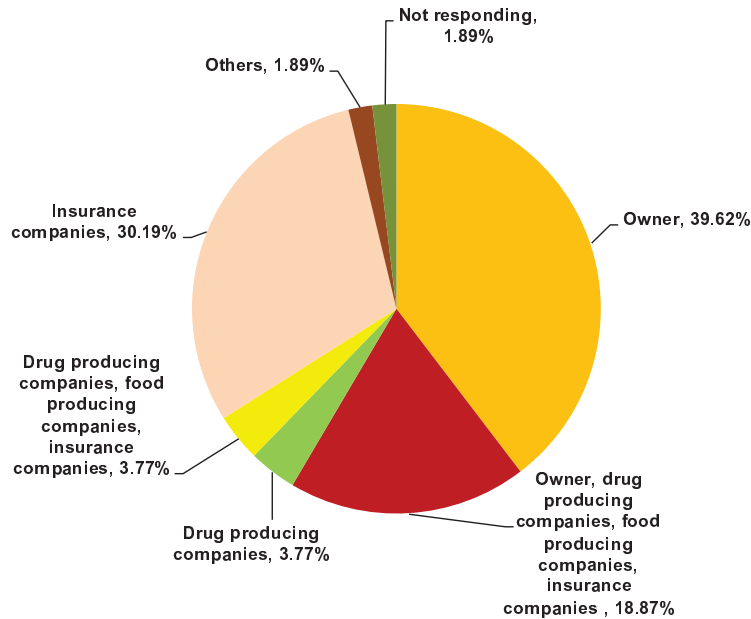


Chart 2. Opinion of the subjects regarding the responsibility for the payment of chemotherapy in the pet with oncologic pathology

The research was realized based on the original survey that we conceived. We did not use a standard survey instrument because the literature lacks this type of instrument to evaluate the aspects that we were interested for this research. The data collected could not be compared with similar results and can be considered as preliminary results, which need further research on other batches of subjects. This will allow comparing the results that we obtained with similar studies. The results cannot be generalized to the whole veterinary community in Romania; the sample on which the research was made it is not representative for the whole veterinary community.

However, a significant number of participants consider that this responsibility should be divided between owners and other structures: insurance companies, drug producing companies, food producing companies. Obviously, these responses indicate a normalization of the situation taking into account that this trend is also visible in other European countries such as Switzerland, where 10% of dogs and cats are insured, 20% in the UK, and in Sweden pets are insured in a percentage close to 80%. (<http://www.acommeasure.com/>, 15 December 2014)

In Romania, although some insurance agencies have some assurance for pets concerning the health care program, there are no facilities assured for the chemotherapy treatment in case of oncological pathology.

Conclusions:

1. Overall batch investigated a share of 92.30% of survey participants said, to varying degrees, the availability for use of chemotherapy for their own pet, where oncologic diagnosis would advocate for this type of medication.
2. Out of the total subjects retained in the statistical analysis only a share of 13.95% consider ethic the limiting access to chemotherapy in pets.
3. Only 25.00% of investigated subjects consider unnecessary or very little useful the introduction of health insurance for pets, the study highlighting the usefulness of

introducing some form of health insurance in the veterinary field, three quarters of respondents - 75.00% - confirming, to varying degrees, this need.

4. Over a quarter of respondents - 26.41% - claim that the responsibility for payment of chemotherapy should belong equally, to owner, veterinary drug companies, the companies that produce food for pets and the health insurance companies that work in the veterinary field.
5. It is natural that pet owners to be supported in their quest to treat affected animals of cancer, which results from the study participants' answers.
6. Study confirms the idea of solidarity and participation of several structures in supporting the costs and to reduce inequality between pet owners, on accessing expensive treatments for pets. It remains only to insurance companies to offer affordable options for those interested, and represents the owners and profile associations to represent their interests involving other interested structures in this process.

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