

Factors affecting the client-veterinarian communication and breaking bad news in companion animal practice in Italy

Micaela Cipolla*, Luigi Bonizzi, Alfonso Zecconi

*Department of Veterinary Medicine
Università degli Studi di Milano - Italy*

Abstract: Client-veterinarian communication increases client satisfaction and compliance as well as the welfare of companion animals. Conversely, poor communication affects the health and the welfare of both humans and animals, mainly in a critical circumstance such as breaking bad news. In many countries, the veterinary education programs included also this skill, but in Italy these aspects are poorly considered and no data are available. The purpose of this study was to survey pet owners in order to investigate the factors affecting the client-veterinarian communication and the client's satisfaction with communication and breaking bad news. The 78.7% of the participants considered the pet a family member; owner's gender, household composition and pets in the household affected significantly how the pet was considered. How the participants considered the pet was significantly associated with the perception of the bad news and this result was confirmed by a consistent and significant trend. The owner's gender affected significantly the perception of the veterinarian's role while delivering the bad news. After the news, 41.8% of participants thought the veterinarian did not share their grief or was insincere. The household composition affected the participant's satisfaction with communication. The outcomes showed the importance of pets to their owners and the difficulties experienced in receiving bad news. Results suggest that in companion animal practice there is not only an animal to treat, but also an owner-pet entity requiring specific communication skills. The owners might be afflicted by veterinary practice and this is a public health issue in a One Health perspective.

Key Words: communication, attitude, pets, breaking bad news, veterinary practice.

* *Corresponding Author:* micaela.cipolla@unimi.it

Introduction

The important role of communication in small animal practice has been widely recognized (Chadderdon et al., 2001; Coe et al., 2008; Shaw et al., 2012). It increases patient satisfaction and compliance as well as in human medicine (Grant et al., 2000; Kanji et al., 2012; Kurtz, 2005; Shaw et al., 2004) and, in many countries, the veterinary education programs included also this skill (Adams & Kurtz, 2006; Latham & Morris, 2007; May, 2007). Communication is as important as other clinical skills, both in food-producing and in companion animal practices (Author, 2015; Hall & Wapenaar, 2012; Jansen & Lam, 2012; Jansen et al., 2010; Kleen et al., 2011; Martin et al., 2004; Shaw et al., 2012). Particularly, the companion animal practice mirrors the human medicine approach and, in this case, the patient-provider interaction becomes a client-veterinarian interaction. Much attention has been devoted to this topic in veterinary medicine in North America and North Europe (Latham & Morris, 2007; Lund et al., 2009; Shaw et al., 2008). Conversely, in Southern Europe and specifically in Italy, these aspects are still poorly considered. This situation may lead to malpractice claims or complaints, as observed in human medicine (Beckman et al., 1994). Moreover, communication in veterinary clinical practice is important not only for veterinary practice but also for public health in a "One Health" perspec-

tive (Author et al., 2015). Indeed, the human health is linked to the small animal health on several levels; for example, zoonoses could be a threat due to the close cohabitation with a pet, and the human-animal bond phenomenon could improve the mental health. Therefore, a lack of communication skills could be a public health issue.

Communication problems and gaps are of even larger importance in a particular circumstance such as breaking bad news (BBN). In human medicine, the bad news has been defined as any news that drastically and negatively alters the patient's view of her or his future (Buckman, 1984). In a more detailed definition, the bad news is described as "situations where there is either a feeling of no hope, a threat to a person's mental or physical well-being, a risk of upsetting an established lifestyle, or where a message is given which conveys to an individual fewer choices in his or her life" (Bor et al., 1993). In these definitions, the recipient is the patient whose health is involved. In veterinary medicine, the recipient is not the patient, but the human living with the non-human patient. Therefore, the feelings described in the previous definitions are experienced by the owners and concern both the health and future life of their companion animal (Shaw & Lagoni, 2007). Previous studies reported that the death of a pet affects people emotionally, physically, socially and cognitively (Adams et al., 2000). The owner is involved in health decisions and is responsible for the companion animal's health and care at home. This pattern resembles pediatric clinical practice (Shaw et al., 2004), but with a specific and important difference: the parent is emotionally affected and always considers important the health of his/her child, but it is not necessarily so for people living with companion animals. In our view, this is the peculiarity of the veterinary practice, especially in areas where cultural reasons might promote a low consideration of animals. Indeed, the importance assigned to the pet by its owner depends on several factors, including cultural aspects and traditions (Brown, 2002). This may affect both the persons' response to bad news and the role of communication in veterinary practice (Adams et al., 2000). The delivery of bad news is a challenge for the veterinarian and represents a significant problem for the practice of veterinary medicine worldwide (Adams et al., 2000; Williams & Mills, 2000). Veterinarians have to deal with the death of a patient more often than other health care professionals, and they cope with death and euthanasia in different ways (Manette, 2004). In human medicine, many factors contribute to physician discomfort while delivering the bad news, including concerns on how the news will affect the patient, the perception of failure, the feeling of responsibility, feelings of frustration and lack of training (Buckman & Kason, 1992; Eggy & Tzelepis, 2001). These factors also affect companion animal veterinarians. As for client-veterinarian communication, studies on this specific topic have been performed mainly in North America and Northern Europe, where the attitudes towards the companion animals are generally different from other areas, such as Southern Europe and specifically Italy. In Italy, society shows a lower regard for animals. For example, the cemeteries for companion animals are rare, and the funeral rites are even more unusual and controversial. The condolences do not apply to the death of an animal. It is compulsory to burn the dead companion animals, and the burial on the owner's property is forbidden. This attitude also affects veterinary practice. Indeed, the most common practices are small ambulatories with one or two veterinarians, while hospitals with specialized staff are rare. Moreover, the veterinary nurse is not available because it is not recognized as a profession in Italy. In this scenario, identifying the best communication strategy is a challenge for veterinarians, because the owner's attitude may be different from the societal one. If the owner's attitude is relatively uncaring, applying patient-provider communication principles might be ineffective, because these principles assume that the receiver is emotionally involved and concerned for the animal's health. Otherwise, if the owner's attitude is different from the apparent society's attitude, the veterinarian has to be prepared to face the client's grief.

Therefore, to gain information useful to support the veterinarian activity, we designed a research project on the client-veterinarian communication in Italy, as a model for situations with

similar cultural and social environments. In Italy there are no data available on client-veterinarian communication. Therefore, the purpose of the study was to survey pet owners in order to investigate the factors affecting the client-veterinarian communication and the client's satisfaction with communication and breaking bad news.

Materials and Methods

Questionnaire

We developed a questionnaire with 23 closed-ended questions, divided into three parts. The first part (questions 1 to 8) explored sample characteristics, household composition, the type and the number of animals in the household. In this part, a specific question investigated how the owner considered his/her companion animal: just an animal or a family member. This question had six answers describing an increasing level of value attributed to the pet by its owner; the first three answers defined the pet just an animal, the last three a family member.

The second part of the questionnaire (questions 9 to 22) examined the experience of receiving bad news. In the survey, bad news was defined as "a negative information you received from your veterinarian regarding your companion animal, such as a disease that you consider serious or death". We asked to participants to consider a BBN experience occurred when they were directly involved, being veterinary clients and having a role in taking care of the pet. Among the different questions, the survey investigated how the participants viewed the experience and whether the veterinarian had an influence on how they perceived such situation. The questionnaire also asked how the bad news was delivered and whether they appreciated that choice. The survey then asked how they felt after receiving the bad news, whether they felt the veterinarian sharing the participant's concerns, whether there was physical contact with him/her and whether they were satisfied overall with the delivery of bad news. Finally, question 23 aimed to assess client satisfaction with the veterinarian's communication.

The study fulfilled the ethical requirements of the University. The survey was pretested on 10 students from the Biotechnology and Veterinary Medicine schools, assessing also the time required to complete the questionnaire, the clarity of layout and instructions. After the pretesting, the graphical layout had minimal modifications, and the questionnaire was applied to the study population.

Participants and data collection

The sample population included students at the very beginning of their first year from the Biotechnology and Veterinary Medicine schools. This sample population offered some advantages: it was easy to enroll the target population as well as to manage the questionnaire administration and collection. Moreover, this sample selection allowed for avoiding possible environmental bias when questionnaires are administered to clients in veterinary clinics and hospitals. Enrolling only students at the beginning of their first year avoids potential bias related to the professional information gained during courses. This sample could also offer a view on members of younger generations, who are new and future clients of the veterinarians.

We administered the questionnaires at the beginning of two mandatory lectures to reach all of the first-year students. The participation in the research was optional, no professors were present before or during the survey, and the students were free to leave the classroom at any time. Aims, methods, terms and conditions of the research were clearly described before submitting the questionnaire; we clearly stated that answering to the questionnaire was an acceptance of terms and conditions. We administered the questionnaire without any additional information that could influence the answers. The survey was anonymous and confidential; to ensure

privacy, all questionnaires were collected together in an opaque envelope.

After collection, survey responses were turned into standard categories and recorded in a database for statistical analysis. Finally, a check on the data file for transcription or entry errors was performed prior to the onset of statistical analysis.

Data analysis

All questionnaires were analyzed by χ^2 test, applying the FREQ procedure of SAS 9.2 (SAS Institute, Cary NC). If the frequency of a cell was < 5 , Fisher's exact test was applied with StatXact software (Cytel Corp., Cambridge, MA). When three or more responses were identified in a category, the presence of a potential trend was assessed with the Cochran-Armitage trend test on StatXact software (Cytel Corp., Cambridge, MA). The significance level was set at $\alpha=0.05$.

We considered valid each questionnaire with no more than one missing answer.

Results

The number of respondents who had experience as a pet owner defined the sample size: overall, we considered 108 valid questionnaires out of the 145 collected, because 37 participants declared to have no pets. Therefore, the response rate was 100%. Sixty-five respondents were females, and 43 were males. The ages ranged from 19 to 29 years, with 48 respondents under 20 years and 60 between 21 and 29 years. Table 1 reports a detailed description of the frequencies for respondents' characteristics, while Table 2 reports data on the subset of respondents who had a BBN experience.

Table 1. Distribution of respondents' characteristics obtained from the 108 questionnaires considered.

Factor	Category	N	%
Gender	Female	65	60.2
	Male	43	39.8
Household composition	≤ 2	6	5.6
	3	26	24.1
	4	58	53.7
	> 4	18	16.7
Companion animals in the same household	< 3	5	4.7
	3	26	24.3
	4	58	54.2
Number of animal species in the same household	5 or more	18	16.8
	1	57	52.8
	2	30	27.8
How do you consider your companion animal?	3 or more	21	19.4
	Just an animal	23	21.3
Are you satisfied with veterinarian's communication?	A family member	85	78.7
	Yes	87	80.6
	No	21	19.4

The respondents were owners of several animal species. Many of them had more than one species at the same time: 27.8% of respondents had two different species, and 19.4% had three or more. When only respondents who experienced BBN were considered, these frequencies changed and a larger number of owners of two or more different species was observed (Table 2). Twenty-three (21.3%) of respondents considered the companion animal just an animal, while 85 (78.7%) considered it a family member. Among the latter, the majority (42.6%) gave a higher value to the companion animal ("a family member with whom I have a special relationship", "my son/daughter").

Table 2. Distribution of respondents' characteristics obtained from the 55 questionnaires involving BBN.

Factor	Category	N°	%
Gender	Female	38	69.1
	Male	17	30.9
Household composition	≤3	14	25.5
	4	34	61.8
	>4	7	12.7
Number of animal species in the same household	1	24	43.6
	2	16	29.1
	3 or more	15	27.3
Gender of the veterinarian	Male	35	63.6
	Female	20	36.4
Dogs in the same household	0	15	27.3
	1	25	45.4
	≥2	15	27.3
Cats in the same household	0	30	54.5
	1	10	18.2
	≥2	15	27.3

Table 3 reports the outcomes of the analyses on factors affecting the participants' attitude towards companion animals. Some factors were significantly associated with how the companion animal is considered. Indeed, females were more inclined to consider the companion animal a family member when compared to males (χ^2 test; $p = 0.02$). Moreover, the importance of the companion animal decreased when family size increased, with a significant trend on the Cochran-Armitage trend test ($p = 0.03$). A significant trend ($p = 0.05$) was also observed for cat owners; indeed, as the number of cats increased, the frequency of respondents considering the companion animal a family member also increased.

Table 3. Factors affecting how the companion animal is considered by respondents.

Factor	Category	How the companion animal is considered		χ^2 or Fisher's exact test	Armitage Trend Test
		Just an animal	A family member		
Gender of the owner	Female	9 (13.8%)	56 (86.1%)	$p = 0.02$	n.p. ¹
	Male	14 (32.6%)	29 (67.4%)		
Household composition (people)	≤2	0 (0.0%)	6 (100%)	n.s. ²	$p = 0.03$
	3	4 (15.4%)	22 (84.6%)		
	4	12 (20.7%)	46 (79.3%)		
	>4	7 (38.9%)	11 (61.1%)		
Number of animal species in the same household	1	13 (22.8%)	44 (77.2%)	n.s.	n.s.
	2	7 (23.3%)	23 (76.7%)		
	3 or more	3 (14.3%)	18 (85.7%)		
Dogs in the same household	0	10 (25.0%)	30 (75.0%)	n.s.	n.s.
	1	8 (17.8%)	37 (82.2%)		
	2 or more	5 (21.7%)	18 (78.3%)		
Cats in the same household	0	14 (25.9%)	40 (74.1%)	n.s.	$p = 0.05$
	1	7 (22.6%)	24 (77.4%)		
	2 or more	2 (8.7%)	21 (91.3%)		

¹ not pertinent² not significant

Based on the whole set of data, factors affecting clients' satisfaction with the veterinarians' communication were analyzed and reported in Table 4. Among these factors, only household composition showed a significant effect (χ^2 test; $p = 0.008$). Respondents from families with four

or fewer components expressed a higher satisfaction compared with respondents from larger families. However, none of the trends were statistically significant. Unexpectedly, how the companion animal was considered was not associated with satisfaction. Indeed, the frequency of satisfaction when the companion animal was considered a family member was 81%, compared to 82.6% when it was not considered a family member.

Table 4. Factors affecting the owner's satisfaction in the 108 questionnaires considered.

Factor	Category	Are you satisfied with veterinarian's communication?		χ^2 or Fisher's exact test
		No	Yes	
Gender	Female	11 (17.2%)	53 (82.8%)	n.s. ¹
	Male	9 (20.9%)	34 (79.1%)	
How companion animal is viewed	Animal	4 (17.4%)	19 (82.6%)	n.s.
	Family member	16 (19.0%)	68 (81.0%)	
Household composition	≤2	1 (16.7%)	5 (83.3%)	p = 0.008
	3	6 (23.1%)	20 (76.9%)	
	4	5 (8.8%)	52 (91.2%)	
	>4	8 (25.0%)	10 (55.6%)	
Number of animal species in the same household	1	11 (19.3%)	46 (80.7%)	n.s.
	2	6 (20.7%)	23 (79.3%)	
	3 or more	3 (14.3%)	18 (85.7%)	
Dogs in the same household	0	11 (28.2%)	28 (71.8%)	n.s.
	1	5 (11.1%)	40 (88.9%)	
	2 or more	4 (17.4%)	19 (82.6%)	
Cats in the same household	0	9 (17.0%)	44 (83%)	n.s.
	1	8 (25.8%)	23 (74.2%)	
	2 or more	3 (13.0%)	20 (87.2%)	

¹ not significant

Bad news

Fifty-five participants had experience of receiving bad news, so the response rate was 50.9%. Among this subset of data, participants described the BBN experience as terrible or bad in 85.4% of cases, but in only 61.8% of cases they felt very sad, and in 9.1% of cases the economic aspects influenced their feeling. Overall, 80% of the participants were satisfied with the delivering of bad news. After the news, the majority of participants (61.8%) were very sad, and 41.8% of respondents thought that the veterinarian did not share their concern or was not sincere and pretended to share it. Only 3.6% reported physical contact between the veterinarian and the client; most respondents described physical distance and appreciated it, even though 5.5% of them would have preferred physical contact. Overall, 9.1% of participants reported the client's need for physical contact with the veterinarian while delivering the bad news.

In the majority of cases (85.4%), the room was large enough to accommodate all family members, and the time given to understand the bad news was adequate. All of the respondents who described the place as inadequate considered the companion animal a family member.

Veterinarians who delivered bad news were mostly men (63.6%). In almost all cases (96.4%), bad news was delivered in a face-to-face encounter, and all participants appreciated this choice. The veterinarian delivered bad news directly, using the name of the disease (90.9%), and almost all participants (96.4%) appreciated this method.

In most cases, the words used were clear and simple (96.4%); the veterinarian explained the problem to help the owner to understand the situation (98.2%) and explained every therapeutic choice (92.7%). All respondents who felt that the veterinarian did not explain all the therapeutic

alternatives considered the companion animal as a family member

Among the questions related to BBN, differences in responses were observed for a few parameters (place, grief sharing, discussion of therapeutic options, gender of veterinarian and veterinarian's behavior). These parameters were also analyzed in relation to the client's BBN experience. The statistical analysis showed that there was no association between the BBN experience and the veterinarian's behavior, e.g., whether he/she was kind, irrelevant or bad; whether he/she shared the owner's grief; whether he/she tried to explain all therapeutic options (data not shown).

When considering the BBN experience and the owner's characteristics (Table 6), data analysis showed a positive significant association between the perception of the experience and the value attributed to the companion animal ($p = 0.0149$). Indeed, 50% of participants considering the companion animal a family member described the BBN experience as terrible, while if the companion animal was viewed as just an animal the experience was never terrible and was "not a problem" in 33.3% of the cases. However, analysis showed an unexpected result: 10.9% of respondents viewing the pet as a family member described the BBN experience as not a bad moment, although there was a consistent and significant trend in the worsening of the experience ($p < 0.0075$) when the companion animal was considered a family member. To explain this result, a cross analysis was performed, also considering how people felt after receiving bad news. Data showed that 25.9% of respondents viewing the companion animal as a family member were not sad after the bad news (data not shown). This result suggests the need for further studies to investigate more thoroughly this specific aspect. When considering the BBN experience and the owner's characteristics, there was a numerical evidence: the majority of people owning two (43.8%) and three or more (60%) species at the same time described the BBN experience as terrible, while the experience was just bad for the majority (58.3%) of people living with only one species.

Table 6. Statistical analysis of BBN sample classified by BBN experience (respondent).

Factor	Category	How would you describe the BBN experience?			χ^2 or Fisher's exact test	Armitage Trend Test
		Terrible	Bad	Not a problem		
Gender of the owner	Female	17 (44.7%)	14 (36.8%)	7 (18.4%)	n.s. ¹	n.s.
	Male	6 (35.3%)	10 (58.8%)	1 (5.9%)		
How the companion animal is viewed	Animal	0 (0.0%)	6 (66.7%)	3 (33.3%)	p=0.0149	p=0.0075
	Family member	23 (50.0%)	18 (39.1%)	5 (10.9%)		
Household composition (people)	≤3	8 (57.1%)	6 (42.9%)	0 (0.0%)	n.s.	n.p. ²
	4	12 (35.3%)	15 (44.1%)	7 (20.6%)		
	>4	3 (42.9%)	3 (42.9%)	1 (14.3%)		
Animal species in the same household	1	7 (29.2%)	14 (58.3%)	3 (12.5%)	n.s.	n.p.
	2	7 (43.8%)	6 (37.5%)	3 (18.8%)		
	3 or more	9 (60.0%)	4 (26.7%)	2 (13.3%)		
Dogs in the same household	0	6 (42.9%)	6 (42.9%)	2 (14.2%)	n.s.	n.s.
	1 or more	17 (41.5%)	18 (43.9%)	6 (14.6%)		
Cats in the same household	0	10 (34.5%)	15 (51.7%)	4 (13.8%)	n.s.	n.s.
	1 or more	13 (50.0%)	9 (34.6%)	4 (15.4%)		
How was the veterinarian during the BBN?	Kind	11 (37.9%)	14 (48.3%)	4 (13.8%)	n.s.	n.p.
	Irrelevant	10 (43.5%)	10 (43.5%)	3 (13.0%)		
	Bad	2 (66.7%)	0 (0.0%)	1 (33.3%)		

¹ not significant

² not pertinent

Table 7 describes the role of client's gender on the emotional response to the veterinarian's communication and behavior. Clients' gender influenced the perception of the veterinarian sharing the client's concerns, even if the significance level was not achieved ($p=0.08$). The frequency of positive answers was higher for females than for males, who considered the veterinarian insincere or not sharing their concern in 59% of cases. This result was supported by the significantly higher frequency of females judging the veterinarian as kind (82.8%), while 52.2% of males considered the veterinarian irrelevant in the BBN experience. The veterinarian was defined as irrelevant when he/she played no role in how the owner felt and experienced the delivery of bad news. More females than males considered the vet bad, but this latter result is based only on 3 respondents. How the companion animal is viewed was analyzed for the same set of responses and no statistically significant results were observed.

Overall, people who received bad news were more satisfied with routine client-veterinarian communication than the entire sample (87.3% vs. 80.6%), but were less satisfied with communication related to the BBN experience (80%). No one who considered the companion animal just an animal was unsatisfied with the bad news delivery.

Table 7. BBN sample: association between owner's gender and response to veterinarian's communication.

Question	Category	Female	Male	χ^2
Did the veterinarian attend to your problem or share your grief and concern?	Yes	25 (65.8%)	7 (41.2%)	n.s. ¹
	No/ I don't think he/she was sincere	13 (56.5%)	10 (43.5%)	
Did the veterinarian explain every therapeutic option in order to let you make the best choice?	Yes	34 (66.7%)	17 (33.3%)	n.s.
	No	4 (100%)	0 (0.0%)	
Was the place where bad news was delivered adequate?	Yes	32 (84.2%)	15 (15.8%)	n.s.
	No	6 (88.2%)	2 (11.8%)	
Are you satisfied with the delivery of bad news?	Yes	31 (81.5%)	13 (18.5%)	n.s.
	No	7 (78.5%)	4 (23.5%)	
Are you satisfied with veterinarian's communication?	Yes	34 (89.5%)	14 (10.5%)	n.s.
	No	4 (82.4%)	3 (17.6%)	
How was the veterinarian during the BBN?	Kind	24 (82.8%)	5 (17.2%)	p=0.01
	Irrelevant	11 (47.8%)	12 (52.2%)	
	Bad	3 (100%)	0 (0.0%)	

¹ not significant

Discussion

This study is the first, in our knowledge, on client-veterinarian communication performed in Italy, where there are no courses on communication for veterinarians in veterinary curricula and where society apparently places little value on animals. The Italian situation is different from the ones in North America and North Europe, where previous studies were performed, and could provide different and complementary data useful to increase our knowledge of the communication dynamics in small animal practice.

In this study, companion animals were considered family members in most cases. Respondents often considered their pet even more than a simple relative: it was the relative with whom they have a special relationship. Our sample population could have influenced the high number of respondents who viewed the companion animal as a family member. Indeed, even if it is not applicable to students of the Biotechnology School, the students of the Veterinary School could be more predisposed to love animals. Despite this potential bias, still a good proportion of respondents viewed the companion animal as just an animal, supporting the view of people

placing little value on pets. This outcome is very important because how the companion animal is considered affected most of communication-related aspects in BBN. For example, the consideration of the companion animal was significantly associated with the perception of the BBN experience. Indeed, we observed a consistent and significant trend towards a worsening of the experience when the owners regard their animals as family members. The bad news was bad, independent of veterinarian behavior, because it was related to the bond between the owner and the companion animal. The non-significant relationship between the BBN experience and the veterinarian's role also supported this aspect, suggesting that client emotions were mainly influenced by his/her relationship with the pet.

Our study showed several pieces of numerical evidence that those who considered the companion animal just an animal seemed to have lower expectations compared to those who viewed the pet as a family member and, in this case, communication seemed to be less critical. This outcome is in agreement with previous studies, suggesting that the increase of companion animal importance parallels the increase in demands and expectations (Lund et al., 2009). For example, all respondents who viewed the companion animal as just an animal were satisfied with BBN, and all they felt that the place of bad news delivering was adequate. Moreover, they were all persuaded that the veterinarian tried to explain every therapeutic choice, to make the clients understand what was possible and to let them make the best choice. No one who viewed the pet as just an animal judged the veterinarian as bad during the BBN experience, but all they described the veterinarian as kind or irrelevant. Conversely, people who viewed the companion animal as a family member thought that in some cases the veterinarian could have done more. All people who were disappointed by the veterinarian's communication considered the companion animal a family member, as well as who felt that the veterinarian's explanations and the place where bad news was delivered were inadequate. All these aspects should be investigated in the next step of the research in a larger sample.

This study suggests the description of an initial profile of the clients with high expectations, based on the importance of the pet, household composition and respondent's gender in the whole sample. Considering the attachment to the pet, the results show some important statistically significant aspects: the importance of the companion animal increased when the number of family members decreased and when the owner's gender was female, in agreement with previous studies (Adams et al., 2000; Ramon et al., 2010). Also the species influenced how the participant viewed the pet: there was a consistent and significant trend in considering the cat a family member when the number of cats in the same household increased. This could be explained considering the prominent affective role of cats, that are only companion animals and do not have other roles, as do guard or hunting dogs. Similarly, even though statistically not significant, the pet was viewed as a family member more frequently when three or more species were present in the same household. This finding could be due to the possibility that people who have a special affection for animals are likely to have more pets than average. Furthermore, people with more companion animals have a greater chance of experience the receiving of bad news, and this could explain the increased number of owners of two or more different species in the bad news sample. In the whole sample, household composition significantly influenced participants' satisfaction with communication: larger families were less satisfied. This could be due to a greater difficulty in communicating effectively when a larger number of people are involved. In addition, the owner's gender should be considered in the evaluation of communication, because affected significantly the perception of veterinarian's role while delivering the bad news. For example, males appeared less inclined to be influenced by veterinarian's behavior. Moreover, numerically females were more convinced than males that the veterinarian attended to and shared their concern.

The veterinarian should consider the emotional aspect; indeed, a lack of awareness may affect the communication approach with the owner and has the potential to increase his/her grief (Buckman & Kason, 1992; Lagoni & Durrance, 2011). In our study, after a BBN experience, 41.8%

of participants thought the veterinarian did not share their grief or was insincere. This is a problem for the client-veterinarian interaction, and veterinarians should take it into consideration, making efforts to increase their respect for the owners' distress and assure better communication. Therefore, this skill should be improved, also bearing in mind that the companion animal could have great significance and value to its owner. Indeed, despite cultural and ethnic differences, our outcomes are in agreement with previous studies (Ramon et al., 2010; Risley-Curtiss et al., 2006; Schoenfeld-Tacher et al., 2010) and confirm the importance of the companion animal for its owner, even when the societal environment seems to have a low attitude towards animals. However, some participants considered their pet just an animal. This different attitude of the owners affected the client-veterinarian communication and showed the importance of communication in companion animal practice, because veterinarians have to be prepared to face different types of owners by using different communication strategies. Moreover, communication in veterinary clinical practice is important not only for veterinary practice but also for public health in a One Health perspective (Author et al., 2015) via the human-animal bond phenomenon (Lagoni et al., 1994; "One Health Initiative One Health Initiative; Mission statement"; Shepherd, 2008). The results showed that, in many cases, the veterinarians are managing not "an animal" but a family member who has a demanding human relative affected by veterinary practice, and this is a relevant aspect of public health. However, directly importing in veterinary practice what is observed in human medicine is not the solution, because in companion animal practice there is not only a patient to treat, but also an owner-pet entity requiring specific communication skills. For this reason, the peculiarities of the veterinary field should be considered and thoroughly investigated.

The outcomes of this study are promising, and should be confirmed in a larger and more representative sample. Moreover, it could be interesting to investigate the same participants in the future, to assess potential changes when an owner becomes a veterinarian. Similarly, it could be interesting to verify whether their attitude changes as they progress through veterinary school, as it has been observed in medical students (Hojat et al., 2004). Only the data collection mode affected the return rate: we administered the questionnaire also to participants with no pets. Despite this problem, the questionnaire proved to be a useful tool to investigate the owner's attitudes towards companion animals and factors affecting the client's satisfaction with the client-veterinarian communication. The initial data supplied by this study could be useful to understand the client-veterinarian communication and the delivery of bad news where veterinarians are not specifically trained or where social norms apparently place little value on animals. The pattern described could be used as a reference for countries or situations with similar societal attitudes and cultural environments. Independently of the location, practical implications of these results will allow the improvement of veterinary practice and the increase of client comfort, satisfaction and well-being. Moreover, our results are an initial contribution to describing the attitudes towards companion animals in European countries, complementing previous results from Northern Europe (Denneberg & Egenvall, 2009; Latham & Morris, 2007; Lund et al., 2010; Lund et al., 2009).

Author Contributions: M.C., L.B. and A.Z. conceived and designed the study; M.C. and L.B. collected the data; A.Z. analyzed the data; M.C. wrote the paper.

References

- Adams, C.L., Bonnett, B.N., & Meek, A.H. Predictors of owner response to companion animal death in 177 clients from 14 practices in Ontario. *J. Am. Vet. Med. Assoc.* 2000; 217: 1303-1309.
- Adams, C.L., & Kurtz, S.M. Building on existing models from human medical education to develop a communication curriculum in veterinary medicine. *J. Vet. Med. Educ.* 2006; 33: 28-37.

- Beckman, H.B., Markakis, K.M., Suchman, A.L., & Frankel, R.M. The doctor-patient relationship and malpractice. Lessons from plaintiff depositions. *Arch. Intern. Med.* 1994; 154: 1365-1370.
- Bor, R., Miller, R., Goldman, E., & Scher, I. The meaning of bad news in HIV disease. *Counselling Psychological Quarterly*, 1993; 6: 69-80.
- Brown, S. Ethnic variations in pet attachment among students at an american school of veterinary medicine. *Soc. Anim.* 2002; 10: 249-266. doi: 10.1163/156853003321618873.
- Buckman, R. Breaking bad news: why is it still so difficult? *Brit. Med. J.* 1984; 288: 1597-1599.
- Buckman, R., & Kason, Y. (1992). *How to break bad news: a guide for health care professionals*. Baltimore: Johns Hopkins University Press.
- Chadderdon, L.M., King, L.J., & Lloyd, J.W. The skills, knowledge, aptitudes, and attitudes of successful veterinarians: a summary of presentations to the NCVEI subgroup (Brook Lodge, Augusta, Michigan, December 4-6, 2000). *J. Vet. Med. Educ.* 2001; 28: 28-30.
- Coe, J.B., Adams, C.L., & Bonnett, B.N. A focus group study of veterinarians' and pet owners' perceptions of veterinarian-client communication in companion animal practice. *J. Am. Vet. Med. Assoc.* 2008; 233: 1072-1080. doi: 10.2460/javma.233.7.1072.
- Denneberg, N., & Egenvall, A. Evaluation of dog owners' perceptions concerning radiation therapy. *Acta. Vet. Scand.* 2009; 51: 19.
- Eggy, S., & Tzelepis, A. Relational control in difficult physician-patient encounters: negotiating treatment for pain. *J. Health. Commun.* 2001; 6: 323-333. doi: 10.1080/108107301317140814.
- Grant, C.H., Cissna, K.N., & Rosenfeld, L.B. Patients' perceptions of physicians communication and outcomes of the accrual to trial process. *Health. Commun.* 2000; 12: 23-39. doi: 10.1207/S15327027HC1201_02.
- Hall, J., & Wapenaar, W. Opinions and practices of veterinarians and dairy farmers towards herd health management in the UK. *Vet. Rec.* 2012; 170: 441. doi: 10.1136/vr.100318.
- Hojat, M., Mangione, S., Nasca, T.J., Rattner, S., Erdmann, J.B., Gonnella, J.S., & Magee, M. An empirical study of decline in empathy in medical school. *Med. Educ.* 2004; 38: 934-941. doi: 10.1111/j.1365-2929.2004.01911.x
- Jansen, J., & Lam, T.J. The role of communication in improving udder health. *Vet. Clin. N. Am-Food. A.* 2012; 28: 363-379. doi: 10.1016/j.cvfa.2012.03.003.
- Jansen, J., Renes, R.J., & Lam, T.J. Evaluation of two communication strategies to improve udder health management. *J. Dairy Sci.* 2010; 93: 604-612. doi: 10.3168/jds.2009-2531.
- Kanji, N., Coe, J.B., Adams, C.L., & Shaw, J.R. Effect of veterinarian-client-patient interactions on client adherence to dentistry and surgery recommendations in companion-animal practice. *J. Am. Vet. Med. Assoc.* 2012; 240: 427-436. doi: 10.2460/javma.240.4.427.
- Kleen, J.L., Atkinson, O., & Noordhuizen, J.P. Communication in production animal medicine: modelling a complex interaction with the example of dairy herd health medicine. *Irish. Vet. J.* 2011; 64: 8. doi: 10.1186/2046-0481-64-8.
- Kurtz, S.M. (2005). *Teaching And Learning Communication Skills In Medicine* (2nd ed.): Radcliffe Publishing.
- Lagoni, L., & Durrance, D. (2011). *Connecting with grieving clients: supportive communication for 14 common situations* (2nd ed.). Lakewood, Colo.: American Animal Hospital Association Press.
- Lagoni, L., Hetts, S., & Butler, C. (1994). *The human-animal bond and grief*. Philadelphia: Saunders.
- Latham, C.E., & Morris, A. Effects of formal training in communication skills on the ability of veterinary students to communicate with clients. *Vet. Rec.* 2007; 160: 181-186. doi: 10.1111/j.1365-2929.2007.01811.x
- Lund, H.S., Eggertsson, S., Grondahl, A.M., & Eggertsdottir, A.V. Views on euthanasia and the rehoming of dogs in Norway and Iceland. *Ve. Rec.* 2010; 166: 749-752. doi: Doi 10.1136/Vr.B4856.
- Lund, H.S., Eggertsson, S., Jorgensen, H., Grondahl, A.M., & Eggertsdottir, A.V. Changes in the relationships between dogs, owners and veterinarians in Norway and Iceland. *Vet. Rec.* 2009; 165: 106-110.
- Manette, C.S. A reflection on the ways veterinarians cope with the death, euthanasia, and slaughter of animals. *J. Am. Vet. Med. Assoc.* 2004; 225: 34-38.
- Martin, F., Ruby, K.L., Deking, T.M., & Taunton, A.E. Factors associated with client, staff, and student satisfaction regarding small animal euthanasia procedures at a veterinary teaching hospital. *J. Am. Vet. Med. Assoc.* 2004; 224: 1774-1779.

- May, S. Communication skills. *Vet. Rec.* 2007; 160: 243-243.
- One Health Initiative [Internet] One Health Initiative; Mission statement. from <http://www.onehealthinitiative.com/mission.php>.
- Ramon, M.E., Slater, M.R., & Ward, M.P. Companion animal knowledge, attachment and pet cat care and their associations with household demographics for residents of a rural Texas town. *Prev. Vet. Med.* 2010; 94: 251-263.
- Risley-Curtiss, C., Holley, L.C., & Wolf, S. The animal-human bond and ethnic diversity. *Soc. Work.* 2006; 51: 257-268.
- Schoenfeld-Tacher, R., Kogan, L.R., & Wright, M.L. Comparison of strength of the human-animal bond between Hispanic and non-Hispanic owners of pet dogs and cats. *J. Am. Vet. Med. Assoc.* 2010; 236: 529-534.
- Shaw, J.R., Adams, C.L., & Bonnett, B.N. What can veterinarians learn from studies of physician-patient communication about veterinarian-client-patient communication? *J. Am. Vet. Med. Assoc.* 2004; 224: 676-684.
- Shaw, J.R., Adams, C.L., Bonnett, B.N., Larson, S., & Roter, D.L. Veterinarian-client-patient communication during wellness appointments versus appointments related to a health problem in companion animal practice. *J. Am. Vet. Med. Assoc.* 2008; 233: 1576-1586. doi: 10.2460/javma.233.10.1576.
- Shaw, J.R., Adams, C.L., Bonnett, B.N., Larson, S., & Roter, D.L. Veterinarian satisfaction with companion animal visits. *J. Am. Vet. Med. Assoc.* 2012; 240: 832-841. doi: 10.2460/javma.240.7.832.
- Shaw, J.R., & Lagoni, L. End-of-life communication in veterinary medicine: delivering bad news and euthanasia decision making. *Vet. Clin. North. Am. Small. Anim. Pract.* 2007; 37: 95-108.
- Shepherd, K. The role of the companion animal veterinary surgeon in behavioural husbandry. *Acta. Vet. Scand.*, 2008; 50: S12.
- Williams, S., & Mills, J.N. Understanding and responding to grief in companion animal practice. *Aus. Vet. Pract.* 2000; 30: 55-62.

Fattori che influenzano la comunicazione tra il veterinario ed il cliente e la comunicazione delle cattive notizie nella pratica degli animali da compagnia in Italia

Micaela Cipolla, Luigi Bonizzi, Alfonso Zecconi

Dipartimento di medicina Veterinaria, Università degli Studi di Milano - Italia

Sintesi

Una buona comunicazione tra cliente-veterinario aumenta la soddisfazione del cliente e la compliance come pure il benessere degli animali. Al contrario, una comunicazione scarsa influenza negativamente la salute ed il benessere di persone ed animali, soprattutto in circostanze critiche quali la comunicazione di cattive notizie.

In molti paesi I programmi formative per veterinari includono anche queste abilità ma in Italia questi aspetti sono poco considerati e non esistono dati disponibili al riguardo.

Lo scopo di questo studio è stato quello di analizzare i fattori che influenzano la comunicazione veterinario-cliente e la soddisfazione del cliente riguardo al modo in cui gli sono riferite cattive notizie riguardanti la salute del proprio animale.

Il 78,7% degli intervistati considera l'animale da compagnia come un membro della famiglia; il sesso del proprietario, la composizione della famiglia e gli animali presenti in casa influenzano significativamente il modo in cui è considerato il pet.

Questo aspetto è risultato associato in modo significativo con la percezione delle cattive notizie. Il genere del proprietario influenza significativamente la percezione del ruolo del veterinario nel comunicare cattive notizie. Dopo la comunicazione di una brutta notizia, il 41,8% dei proprietari pensa che il veterinario non condivida il loro dolore o che non sia stato sincero.

I risultati sottolineano l'importanza dell'animale da compagnia per i proprietari e la difficoltà che essi sperimentano nel ricevere cattive notizie riguardanti i propri pet. Questi dati inoltre suggeriscono di porre attenzione al fatto che nella pratica veterinaria dedicata agli animali da compagnia, non vi è solo l'animale di cui prendersi cura ma anche il proprietario che richiede una particolare abilità comunicativa.