



Exploring Empathy and Satisfaction Dynamics in Veterinary Medical Interviews among Companion Animal Veterinarians and Pet Owners in Kerala, India

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Veterinary medical interviews are pivotal to companion animal care, directly influencing clinical outcomes and client satisfaction. This study explores the satisfaction levels of companion animal veterinarians and pet owners with these interviews and highlights a disturbing trend with regard to the role of veterinarian empathy and its effect on veterinarian satisfaction in this process. The study was conducted in the state of Kerala in India among 60 randomly selected companion animal veterinarians and 60 pet owners selected at random from four districts with the highest canine populations in the area of study. Results indicated that most veterinarians reported low (46.70 per cent) to medium (48.30 per cent) satisfaction despite medium (35.00 per cent) to high (63.30 per cent) self-rated empathy levels. The results of this study indicated that most of the pet owners reported a medium (31.70 per cent) to high (63.30 per cent) of satisfaction with the interviews. A significant positive association was found between veterinarian satisfaction and empathy; however, veterinarian satisfaction was negatively associated with owners' perception of communication behaviours. The lack of association between veterinarian empathy and owner satisfaction highlights the complex interplay between empathy, professional satisfaction, and client perceptions. Findings suggest that empathic over-arousal may contribute to reduced veterinarian well-being, potentially reflecting compassion fatigue. This study underscores the need for further exploration of empathy's dual role as a professional asset and risk factor in veterinary medicine to enhance the communication process and client satisfaction with the veterinary medical interval.

Keywords: Client; empathy's dual role; medicine; veterinary.

1. INTRODUCTION

Veterinary medical interviews are essential to veterinary care, influencing both client satisfaction and clinical outcomes. These interactions, while generally perceived by veterinarians as meaningful opportunities for relationship-building, can also be a source of stress, especially in emotionally charged situations or challenging cases. Empathy plays a pivotal role in these interviews, as it enables veterinarians to connect with clients by recognizing and addressing their emotions, fostering trust, and creating a collaborative environment. Veterinarians who demonstrate empathetic communication not only strengthen relationships with clients but also improve adherence to treatment recommendations and overall outcomes for companion animals. Equally important is the veterinarian's satisfaction with these interviews, which is often tied to the quality of communication and the depth of understanding between the veterinarian and the client. Veterinarians who find these interactions rewarding are likely to be more engaged, motivated, and effective, contributing to stronger client relationships, better health outcomes for

animals, and reduced job-related stress or burnout. Fostering satisfaction for both veterinarians and clients, is important in ultimately elevating the standard of veterinary care. In light of these considerations, the present study was undertaken with the objective of studying the satisfaction of companion animal veterinarians and pet owners with the veterinary medical interview and as well interconnection of empathy during the veterinary medical interview.

2. MATERIALS AND METHODS

The study was conducted in Kerala, one of the southern states of India. The animal health needs of the state are catered to by the Department of Animal Husbandry, Kerala. The Department has a wide network of institutions for this purpose that includes 831 Veterinary Dispensaries (VD), 213 Veterinary Hospitals (VH), 43 Veterinary Polyclinics (VPC), 14 District Veterinary Centers (DVC) and five Mobile Veterinary Hospitals (MVH) all of which comprise the network of a total of 1105 veterinary institutions for discharging various functions in the animal husbandry sector.

List 1. Category of satisfaction

Sl.no.	Category
1	Low level of satisfaction (49-59)
2	Medium level of satisfaction (60-69)
3	High level of satisfaction (70-79)

The study was conducted among companion animal veterinarians and pet owners in Kerala state. The state of Kerala consists of fourteen districts. From these fourteen districts, four districts with the highest canine population (Department of Animal Husbandry, Government of Kerala, 2012) viz., Thiruvananthapuram (canine population :1,43,168), Ernakulam (canine population: 1,00,045), Kollam (canine population: 87,055) and Thrissur (canine population: 81,344) were purposively selected for the study. Data were collected using two separate structured questionnaires for companion animal veterinarians and pet owners respectively. The questionnaire for companion animal veterinarians contained the scales to assess veterinarian satisfaction and veterinarian empathy and that for the pet owners the scale to assess their satisfaction with the veterinary medical interview. Prior to the final study, the structured questionnaires were pretested in a non-sampling area, Palakkad district, among fifteen randomly selected companion animal veterinarians and 15 randomly selected pet owners. The objective of the pretest was to assess if there were any difficulties in the comprehension of the items of questionnaires by the two categories of respondents and to familiarise the researcher with the process of data collection. No difficulties were reported by any of the respondents in the pretest.

In this study, veterinarians in companion animal practice were operationalised as those veterinarians who were reportedly engaged in a practice in which at least 50 per cent of cases handled were companion animal cases (dogs and cats). Similarly, pet owners were operationalised as those owners seeking veterinary care for dogs or cats from the companion animal veterinarians selected in the present study. The mailing list of the Indian Veterinary Association, Kerala, 2023 formed the sampling frame for selecting veterinarians in this study. The pretested structured questionnaires containing items related to the variables under study were sent to 15 randomly selected companion animal veterinarians in the selected districts as Google forms and in some cases the printed form was given, based on their preference so that a total of 60 veterinarians from the four selected districts formed the sample for this study. Outpatient register listings of companion animal cases (canine and feline) in the offices of the selected veterinarians for the months in which data collection was initiated (April and May, 2024) among veterinarians

formed the sampling frame for selection of pet owners. A total of 15 pet owners were selected at random from the outpatient listings of pet owners who had visited the selected companion animal veterinarian during the period of data collection in each district so that from each of the four selected districts a total of 60 pet owners formed the sample for this study. Data relating to the pet owners were collected using the structured pretested questionnaire in the print form only as none of the owners preferred the Google forms. The study was approved by the statutory bodies of the University under which the study had been taken.

Satisfaction of the companion animal veterinarian with the veterinary medical interview referred to the extent to which the veterinarian perceived his or her interaction with the animal owner as resulting in a pleasurable or positive emotional state. Satisfaction of veterinarians with the veterinary medical interview was assessed using the scale developed by Suchman et al. 1993. The scale consisted of twenty items rated on a five-point continuum from strongly disagree (1) to strongly agree (5). The polarity of the responses was adjusted to be in the same direction as per Suchman et al. (1993). The maximum score that a respondent could obtain was hundred and the minimum score was 20. Based on their scores, respondents were categorized into three categories as those with low, medium and high levels of satisfaction, as indicated below.

Empathy of the veterinarian was operationalised as the perception of the veterinarian about his or her ability to recognize and understand the emotions of the owner and to subsequently modulate his or her affective response so as to align it with the emotions of the owner and to generate an appropriate emotional response to the owner. The perception of empathy of the veterinarian was assessed using the Jefferson scale of Physician Empathy (Hojat *et. al.*, 2002). The scale consisted of twenty statements to which the respondent was asked to their agreement on a seven-point continuum, from strongly agree (7) to strongly disagree (1) for positive statements. Responses were reverse scored on negative statements. The items in the scale were as follows: The maximum score that a respondent could obtain was 140 and the minimum score was 20.

Based on the scores of each respondent, they were categorised into three categories as follows:

List 2. Category of empathy

Sl.no.	Category
1	Low level of empathy (20-59)
2	Medium level of empathy (60-100)
3	101-140 (high)

3. RESULTS**Satisfaction of companion animal veterinarians with the veterinary medical interview:**

Results of the satisfaction of companion animal veterinarians with the veterinary medical interview indicated that 95 per cent of them had a low to medium level of satisfaction with 46.70 per cent and 48.30 per cent reporting low and medium levels of satisfaction respectively. This was in sharp contrast to the study by Shaw et al. (2012) who reported that the majority (74 per cent) of the studied veterinarians who were engaged in companion animal practice were satisfied with their appointments and only seven per cent rated these consultations with owners as unsatisfactory.

Perception of companion animal veterinarians about their level of empathy:

The perception of companion animal veterinarians about their level of empathy indicated that that over 98.00 per cent of them perceived their level of empathy to be of a medium to high level with 35.00 and 63.30 per cent reporting medium and high levels respectively. The results of the present study were contrary to those reported by Gautam et al. (2024) who reported that most of the veterinary students and faculty members at a university in Haryana, India, had a low level of empathy towards animals.

Satisfaction of pet owners with the veterinary medical interview:

Most of the pet owners

studied reported a high level of satisfaction with the veterinary medical interview (63.30 per cent) as evidenced by data in Table 3. Those reporting a medium level of satisfaction was 31.70 per cent while very few (5 per cent) reported a low level of satisfaction with the veterinary medical interview.

Association between satisfaction of the companion animal veterinarian with the veterinary medical interview and level of veterinarian empathy:

Data in Table 4 sheds light on the positive and significant association between the satisfaction of the veterinarian and the level of empathy of the veterinarian.

It is evident from the results of this study that there was a positive and significant association between the satisfaction of the veterinarian and the level of empathy of the veterinarian as perceived by the veterinarian. This result is in accordance with the observations of Shaw et al. (2012); Schoenfeld-Tacher et al. (2015) and McMurray and Boysen (2017) who reported that the expression of empathy was associated with enhanced physician satisfaction the results of the present study were also endorsed by the study of McArthur and Fitzgerald (2013) who reported that in veterinary medicine, the explicit communication of empathy as associated with higher satisfaction of veterinarians. However, these results should be read against the finding of this study that most of the veterinarians in the present study reported low to medium satisfaction but the empathy scores of most of them were high.

Table 1. Distribution of companion animal veterinarians based on satisfaction with the veterinary medical interview

n = 60			
Sl.no.	Category	Frequency (f)	Per cent (%)
1	Low (49-59)	28	46.70
2	Medium (60-69)	29	48.30
3	High (70-79)	3	5.00
Total		60	100.00

Table 2. Distribution of companion animal veterinarians based on level of empathy

n = 60			
Sl.no.	Category	Frequency (f)	Per cent (%)
1	Low (20-60)	1	1.70
2	Medium (60-100)	21	35.00
3	High (100-140)	38	63.30
Total		60	100.00

Table 3. Distribution of owners based on their satisfaction with the veterinary medical interview

n = 60			
Sl.no.	Category	Frequency (f)	Per cent (%)
1	Low (15-40)	3	5.00
2	Medium (40-65)	19	31.70
3	High (65-90)	38	63.30
Total		60	100.00

Table 4. Association between satisfaction of the veterinarian with the veterinary medical interview and level of veterinarian empathy

		Level of veterinarian empathy
Satisfaction of veterinarian with the veterinary medical interview	Spearman's rho Correlation coefficient	0.289*
	P-value	0.025

*Significant at 0.05 level

Association between satisfaction of the veterinarian with the veterinary medical interview and perception of the owner about the veterinary medical interview: An important result of the present study was that the satisfaction of the veterinarian with the veterinary medical interview was negatively and significantly associated with the perception of the owner about the veterinary medical interview. That is, the more satisfied the veterinarian was, the less was the higher favourable perception of the owner about the extent to which the veterinarian had used communication behaviours (perception of the owner about the veterinary medical interview). It is important here to note that the satisfaction of the veterinarian and the level of empathy of the veterinarian as perceived by the veterinarian were positively and significantly associated with each other. Or in other words, highly satisfied veterinarians would have higher levels of empathy; but this was negatively associated with the perception of the owner about the veterinary medical interview. It is important here to keep in mind that among physicians, empathy and empathetic behaviour are usually associated with patient satisfaction but are also hypothesised to increase the risk of burnout; this may result in an inverse association between veterinarian mental health and client satisfaction (Perret et al., 2020). The findings of the present study indicated that though veterinarians had very high levels of self-rated empathy, their satisfaction was of a low to medium level and their satisfaction was positively associated with their empathy but negatively associated with owner perception of their use of communication behaviours (perception about the

veterinary medical interview). Low to medium levels of satisfaction of veterinarians coupled with very high self-rated empathy and better ratings on use of communication skills by owners (perception of owners about the veterinary medical interview) could point to possible burnout issues among the studied veterinarians. This finding is in consonance with the observations of Fahrenkopf et al. (2008) who reported that burnt out residents were rated as having higher communication skills when compared to residents who had lower burnout scores. The findings of the present study can also be explained by the observations of Lafreniere et al. (2015) who concluded that it was apparent that there could be discrepancies between how residents with burnout perceive themselves and how they are perceived by others. The results of the present study are also substantiated by the study of Thomas et al. (2007) who also emphasised that there were negative relationships between burnout and physician reported empathetic behaviour where in increased burnout may not be positively associated with how the veterinarian reports his or her empathetic behaviour. In other words, burnt out veterinarians may think they are acting empathetically; but they may not be perceived to be doing so by the companion animal owners. This could have caused the negatively and significant association of satisfaction of the veterinarian with the veterinary medical interview and the perception of the owner about the veterinary medical interview which was actually the extent to which the owner perceived the veterinarian as using appropriate communication behaviours.

Table 5. Association between veterinarian satisfaction with the veterinary medical interview and perception of owners about the veterinary medical interview

Satisfaction of the veterinarian with the veterinary medical interview	Perception of the owner about the veterinary medical interview	
	Spearman's rho	-0.263*
	Correlation coefficient	
	P-value	0.043

*Significant at 0.05 level

Table 6. Association between level of veterinarian empathy and perception of owners about extent of patient centred care received, satisfaction of owner with the veterinary medical interview and perception of the owner about the veterinary medical interview

Level of veterinarian empathy	Client Perception of the veterinary medical interview	
	Spearman's rho	-0.002
	Correlation coefficient	
	P-value	0.988

Association between level of veterinarian empathy and perception of owners the veterinary medical interview: It is evident from data in Table 6 that there was no significant association between the level of veterinarian empathy and perception of the owner about the veterinary medical interview

This was despite the fact that generally majority of the owners had high levels of perception about the veterinary medical interview and the extent of relationship centred care and though the figures were lesser, majority of them also had high level of satisfaction with the veterinary medical interview. These higher perception and satisfaction scores of the owner were however not associated with the higher empathy scores of veterinarians. These results are contrary to the study of McArthur and Fitzgerald (2013) who reported that the communication of empathy in veterinary practice was associated with higher client satisfaction. Though this was the case, the results of the present study indicated a contradiction where in the relatively medium to high empathy scores of veterinarians were not associated with the higher satisfaction of clients. This should be read along with the finding that veterinarians had a low to medium level of satisfaction with the veterinary medical interview. Less satisfaction and high empathy scores could point to an 'empathic over-arousal in professional contexts' that requires a year round exposure to suffering which could contribute to pathological conditions such as compassion fatigue and 365 burn-out (Figley and Roop, 2006; Maslach et al., 2009; Ayl, 2013; Colombo et al., 2017).

Lafreniere et al. (2015) also reported that physicians with high levels of depersonalisation were perceived as being more empathetic by owners and hence they may express a higher level of satisfaction with the veterinary medical interview; but at the same time, veterinarians may experience poor mental health. Perret et al. (2020) also reported that the associations between owners' satisfaction scores and veterinarian mental health measures were non-linear and the relationships were complex, in some models, higher client satisfaction was unexpectedly associated with poor veterinarian mental health states and in other, lower client satisfaction was associated with veterinarian mental health scores suggestive of wellness. This finding should be viewed with caution since the veterinary profession *per se* seems to be singularly predisposing to mental health problems when compared to other occupational groups; this predisposition could be the consequence of exposure to various stressors that are common in the profession, one of which is interactions with companion animal owners (Hagevi et al. (2024).

4. CONCLUSION

It is suggested that empathic over-arousal may contribute to reduced veterinarian well-being, potentially reflecting compassion fatigue. Further investigations in this direction to understand the extent to which empathy may be a source of satisfaction for veterinarians and a professional tool in their daily work or if not, the extent to which empathy represents a risk factor for job

induced pathological issues have to be explored urgently.

CONSENT

In all cases, informed consent in the prescribed form was obtained from all participants in the pilot study as well as the final study.

ETHICAL APPROVAL

Animal Ethic committee approval has been collected and preserved by the author(s)

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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