

Original Article

Evaluation of owners' attitudes towards veterinarian attire in the small animal specialty setting in North America

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Abstract

Previous studies in human medicine have found that patients prefer their doctors to be more formally attired, and that this influences their trust and confidence in their physician. The purpose of this study was to evaluate how veterinarians' attire affected owners' impressions and trust in the small animal specialty medicine setting. A questionnaire based study conducted during a 2-month period at an urban based small animal private practice specialty hospital. Respondents completed a written survey after reviewing pictures of the same male and female veterinarian in five different dress styles. Respondents were asked for their preference for male and female veterinarian attire in different clinical scenarios and whether it would affect their willingness to discuss sensitive issues. Two hundred and thirty-eight questionnaires were completed during the study period with 76.1% of respondents being female. Female respondents did not have a preference to how a male or female veterinarian was attired with the attire examples provided. However, male respondents tended to have fairly equal response rates between no preference and preferring a male veterinarian to be in either clinical or professional attire. Male owners either had no preference or preferred their male veterinarian to be attired in clinical or professional attire and had no preference or preferred their female veterinarian to be clinical attire. Most respondents do not feel it is necessary for a veterinarian to wear a white coat or neck ties and most do not feel it is inappropriate for a veterinarian to wear blue jeans, have coloured hair, or have visible tattoos.

Keywords: clinical epidemiology, education, human animal bond.

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Introduction

Previous studies in human medicine found that patients prefer their physicians to be more formally attired and that those wearing more formal attire inspired more trust, confidence, and perceived empathy for their patients (Dunn *et al.* 1987; Landry *et al.* 2003; Lill & Wilkinson 2005; Rehman *et al.* 2005; Budny *et al.* 2006; Gherardi *et al.* 2009; Palazzo & Hocken 2010; Hueston & Carek 2011; Chung *et al.* 2012; Au *et al.* 2013; Maruani *et al.* 2013; Kurihara

et al. 2014). However, patient preference for their doctor's attire has been shown to vary as more formal attire is preferred in the specialty setting (Cha *et al.* 2004), whereas patients did not appear to have a preference for their physician's attire in the emergency setting (Gonzalez Del Rey & Paul 1995; Lill & Wilkinson 2005; Edwards *et al.* 2012). To the authors' knowledge owner preferences for veterinarian attire in the small animal specialty setting has not been previously evaluated. The purpose of this study is to evaluate owner preferences for veterinarian attire at a small animal specialty facility around a large urban city over a two-month period.

This study was performed at Southern California Veterinary Specialty Hospital in Irvine, CA, USA.

Materials and methods

Study animals

Owners of animals evaluated at the investigators' facility between November 1st 2016 and December 31st 2016 were eligible to participate in the study. Owners of all animals enrolled in the study provided written consent. Owners were free to decline participation in the study, which did not affect the treatment of their animal. The reason for owners declining participation in the study was not evaluated. One owner per animal that presented to the authors' facility was eligible for inclusion in the study during the study period. If the animal presented to the authors' facility multiple times during the study period or if the owner was evaluated by multiple specialists, the owner was only eligible for inclusion in the study at the initial presentation to the first specialist they saw.

Questionnaire

The questionnaire used in this study asked basic demographic information about the owner including sex, approximate age, and specialty being seen. In the questionnaire (Fig. 1), subjects were asked to report their preferences for each of the five styles of veterinarian attire or if they had no preference in different clinical scenarios. This questionnaire was modified from previous studies in human medicine (Rehman *et al.* 2005; Budny *et al.* 2006; Gherardi *et al.* 2009). The definition of each type of attire was provided and was also similar to that used in previous studies (Rehman *et al.* 2005; Budny *et al.* 2006; Gherardi *et al.* 2009). To assist in the understanding of the classification of different dress styles, a laminated picture of the same male and female veterinarian was included for each questionnaire with the corresponding attire style identified also similar to previous studies (Fig. 2) (Rehman *et al.* 2005; Budny *et al.* 2006; Gherardi *et al.* 2009). The investigators were available to answer questions participants may have had when filling out the questionnaire. In addition, owners reported on their trust, confidence and willingness to report problems with the veterinarian

in each of the pictures. Owners also rated how strongly they felt about the importance of different aspects of their veterinarian's appearance and whether or not a veterinarian's attire would affect their perception of the quality of the medical care they received. The results among between male and female respondents were compared to determine if there was a difference between the two populations.

Questionnaire validation

Face validity, which is the degree to which the questionnaire appears to assess the desired qualities, was established through informal discussions with veterinarians and technicians and through feedback. Ten veterinarians of various specialties and backgrounds took the survey and expressed that they did not have any trouble understanding the survey questions and would not hesitate to take the survey again if needed. The study protocol was approved by the investigators' hospital's Institutional Review Board and Committee.

Statistical analysis

All data were collected on standardized forms and entered in Microsoft Excel by the investigators. For each statement, the frequency of each response was tabulated and a total and percentage reported for each response to each individual question. A 2-sample Z-test was used to compare frequency of responses between the male and female respondents. Via the False Discovery Rate correction test, the P value for determining significance was $P \leq 0.0066$.

Results

There were 238 respondents during the study period. Thirty-eight respondents (16.0%) were between 18 and 34 years of age, 75 respondents (31.5%) were between 35 and 50 years of age, 99 respondents (41.6%) were between 51 and 65 years of age and 26 respondents (10.9%) were greater than 65 years of age. There were 57 male respondents (23.9%) and 181 female respondents (76.1%). The services the respondents saw were Internal Medicine ($n = 67$),

QUESTIONNAIRE:

Sex: Male Female

What is your age (years) 18-34 35-50 51-65 > 65

Please identify the specialty you are seeing

Cardiology Internal Medicine Neurology Oncology Ophthalmology Surgery

Definitions (see attached pictures)

Business attire: suit and neck tie for male veterinarian either tailored trouser or skirt for female veterinarian

Professional Attire: shirt and neck tie with white coat for male veterinarian, trailer trouser or skirt with white coat for female veterinarian

Smart Casual attire: Jeans or khakis and shirt for male, jeans or khakis or skirt for female

Clinic Attire: Surgical scrubs for both male and female veterinarian with white coat

Surgical Attire: Surgical scrubs for both male and female veterinarian

FOR MALE VETERINARIANS:

Which would you prefer your veterinarian to be wearing:	Business	Professional	Surgical	Clinic	Smart Casual	No preference /No effect
For routine physical examination						
For an emergency						
To discuss sensitive information (ie possible exposure to illicit drugs/family member abusing animal)						
Which of these doctors:						
Would you trust the most?						
Would you be more likely to follow their advice?						
Would you have the most confidence in their diagnosis and treatment?						
Would you assess as more knowledgeable and competent?						
Would you assess as more caring and compassionate?						
Would you believe to be more responsible?						

Fig. 1. The questionnaire for the study.

Oncology ($n = 56$), Neurology ($n = 55$), Surgery ($n = 30$), Cardiology ($n = 26$) and Ophthalmology ($n = 4$).

Overall most clients did not have a preference for the veterinarian's attire in the small animal specialty

setting nor did they report veterinarian's attire affecting their opinion or trust level (Tables 1 and 2). This was also the case when female respondents were specifically evaluated (Tables 3 and 4). However, when male respondents were evaluated there

Definitions (see attached pictures)

Business attire: suit and neck tie for male veterinarian either tailored trouser or skirt for female veterinarian

Professional Attire: shirt and neck tie with white coat for male veterinarian, trailer trouser or skirt with white coat for female veterinarian

Smart Casual attire: Jeans or khakis and shirt for male, jeans or khakis or skirt for female

Clinic Attire: Surgical scrubs for both male and female veterinarian with white coat

Surgical Attire: Surgical scrubs for both male and female veterinarian

FOR FEMALE VETERINARIANS:

Which would you prefer your veterinarian to be wearing:	Business	Professional	Surgical	Clinic	Smart Casual	No preference/No effect
For routine physical examination						
For an emergency						
To discuss sensitive information (ie possible exposure to illicit drugs/family member abusing animal)						
Which of these doctors:						
Would you trust the most?						
Would you be more likely to follow their advice?						
Would you have the most confidence in their diagnosis and treatment?						
Would you assess as more knowledgeable and competent?						
Would you assess as more caring and compassionate?						
Would you believe to be more responsible?						

When a veterinarian is seeing your pet, he or she should wear a white coat:

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

Sneakers are acceptable and appropriate wear for a veterinarian who is seeing your pet:

Fig. 1. Continued.

was a fairly even distribution between no preference and preferring their male veterinarians being attired in either professional or clinical attire in different clinical scenarios (Table 5). With regards to female veterinarians' attire, male respondents most frequently selected clinical attire or they had no preference with professional attire being less frequently chosen (Table 6).

On statistical analysis female respondents were significantly more likely than male respondents to have no preference to their male veterinarians' attire for routine examination, emergency, to discuss sensitive issues, have trust or confidence in their treatment or judge as more knowledgeable and competent. Male respondents were significantly more likely than female respondents to select

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

When a male veterinarian is seeing your pet, he should wear a necktie:

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

Blue jeans are acceptable and appropriate for a veterinarian to see my pet:

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

I am uncomfortable with visible tattoos anywhere on my veterinarian:

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

I am uncomfortable with any facial piercings on a male or female veterinarian:

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

I am uncomfortable with excessive ear piercings (more than 2 on each ear) on a female veterinarian or any ear piercings on a male veterinarian:

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

I believe it is unprofessional for a veterinarian to have dyed or colored hair:

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

I believe that what my veterinarian wears influences my opinion of the care that my pet receives:

Strongly Agree Agree Don't know or Don't care Disagree Strongly Disagree

Fig. 1. Continued.

surgical attire as the preferred attire of their male veterinarian to inspire confidence in diagnosis and treatment.

Female respondents were also significantly more likely to have no preference for their female veterinarians' attire for physical examination, emergency, to discuss sensitive issues, affect trust or willingness to follow their advice, confidence in treatment, or assess as knowledgeable or competent, caring or responsible. Male respondents were significantly more likely than female respondents to prefer their

female veterinarian to be attired in surgical attire to inspire confidence in their diagnosis and treatment and also to believe as them being more responsible.

With regards to specific aspects of veterinarian attire (Table 7), approximately 70% of respondents did not have a preference or did not feel it was necessary for a veterinarian to be wearing a white coat. Less than 5% of respondents felt male veterinarians should wear neckties or that sneakers were inappropriate attire. Approximately 20% of respondents felt wearing blue jeans was inappropriate in the specialty



Fig. 2. (a and b) Pictures of the male and female veterinarian in each of the five dress styles with labels for clients to review.

setting and 80% of respondents were either neutral or did not take issue with a male or female veterinarian with visible tattoos or excessive ear piercings.

Facial piercings were the most negatively perceived physical attribute evaluated as slightly greater than 30% of respondents reported being uncomfortable

Table 1. Total responses with regards to male veterinarians

Which would you prefer your veterinarian to be wearing:	Business	Professional	Surgical	Clinical	Smart casual	No preference/ No effect
For routine examination	3/238 (1.3%)	36/238 (15.1%)	16/238 (6.6%)	52/238 (21.9%)	38/238 (16.0%)	93/238 (39.1%)
For an emergency	1/238 (0.4%)	13/238 (5.5%)	48/238 (20.2%)	60/238 (25.2%)	13/238 (5.5%)	103/238 (43%)
To discussion sensitive information (i.e. possible exposure to illicit drugs/family member abusing animal)	2/238 (0.8%)	48/238 (20.2%)	13/238 (5.5%)	45/238 (18.9%)	25/238 (10.5%)	105/238 (44.1%)
Which of these doctors:						
Would you trust the most?	1/238 (0.4%)	42/238 (17.7%)	11/238 (4.6%)	54/238 (22.7%)	18/238 (7.6%)	112/238 (47.0%)
Would you be more likely to follow their advice?	2/238 (0.8%)	37/238 (15.5%)	12/238 (5.0%)	53/238 (21.0%)	18/238 (7.7%)	119/238 (50.0%)
Would you have the most confidence in their diagnosis and treatment?	1/238 (0.4%)	42/238 (17.2%)	12/238 (5.0%)	53/238 (22.3%)	18/238 (7.6%)	113/238 (47.5%)
Would you assess as more knowledgeable and competent?	1/238 (0.4%)	46/238 (19.3%)	10/238 (5.0%)	48/238 (20.2%)	19/238 (8.0%)	114/238 (47.1%)
Would you assess as more caring and compassionate?	1/238 (0.4%)	27/238 (11.3%)	13/238 (5.5%)	53/238 (22.3%)	30/238 (12.6%)	114/238 (47.9%)
Would you believe to be more responsible?	1/238 (0.4%)	42/238 (17.7%)	10/238 (4.2%)	50/238 (21.0%)	17/238 (7.1%)	118/238 (49.6%)

with a male or female veterinarian with facial piercings. Finally, approximately 25% of all respondents stated what their veterinarian's attire influences their opinion of the care their pet receives. These results were not significantly different when male and female respondents were individually evaluated (Tables 8 and 9).

Discussion

The primary finding of this study was that while most female respondents did not display a particular preference for male or female veterinarians' attire with the examples provided, male respondents were fairly evenly divided between no preference, clinical attire or professional attire for male veterinarians. With regard to female veterinarians, male respondents either had no preference or preferred their veterinarian to be in clinical attire. The male respondents' answers were similar to previous studies in human

specialty medicine where patients preferred their doctors to be more formally attired (Cha *et al.* 2004). The female respondents' answers were similar to studies in human emergency medicine where patients did not feel their doctor's attire affected their trust or confidence in them (Gonzalez Del Rey & Paul 1995; Li & Haber 2005). The reason for this difference between male and female respondents in this study remains unclear as the investigators did not try to ascertain why respondents chose a particular style of attire.

Approximately 70% of all respondents did not feel it was necessary for the veterinarian to wear a white coat and over 95% did not feel it was necessary for a male veterinarian to wear a tie. This is in contrast to previous studies in human medicine found that patients were more confident in physicians wearing a white coat (Cha *et al.* 2004; Edwards *et al.* 2012). Interestingly, although white coats have been long associated with the medical profession, they are becoming less frequently used

Table 2. Total responses with regards to female veterinarians

Which would you prefer your veterinarian to be wearing:	Business	Professional	Surgical	Clinical	Smart Casual	No preference/ No effect
For routine physical examination	1/238 (0.4%)	34/238 (14.3%)	17/238 (7.1%)	58/238 (24.4%)	34/238 (14.3%)	94/238 (39.5%)
For an emergency	1/238 (0.4%)	14/238 (5.9%)	45/238 (18.9%)	61/238 (25.6%)	13/238 (5.5%)	104/238 (43.7%)
To discuss sensitive information (i.e. possible exposure to illicit drugs/family member abusing animal)	2/238 (0.8%)	39/238 (16.4%)	12/238 (5.0%)	54/238 (22.7%)	25/238 (10.5%)	106/238 (44.6%)
Which of these doctors:						
Would you trust the most?	1/238 (0.4%)	40/238 (16.8%)	12/238 (5.0%)	60/238 (25.2%)	16/238 (6.8%)	109/238 (45.8%)
Would you be more likely to follow their advice?	1/238 (0.4%)	38/238 (16.0%)	13/238 (5.5%)	55/238 (23.1%)	16/238 (6.7%)	115/238 (48.3%)
Would you have the most confidence in their diagnosis and treatment?	1/238 (0.4%)	41/238 (17.2%)	12/238 (5.0%)	58/238 (24.4%)	16/238 (6.7%)	110/238 (46.3%)
Would you assess as more knowledgeable and competent?	1/238 (0.4%)	43/238 (18.1%)	12/238 (5.0%)	54/238 (22.7%)	16/238 (6.7%)	112/238 (47.1%)
Would you assess as more caring and compassionate?	1/238 (0.4%)	24/238 (10.1%)	14/238 (5.9%)	58/238 (24.4%)	25/238 (10.5%)	116/238 (48.7%)
Would be believe to be more responsible?	1/238 (0.4%)	37/238 (15.6%)	14/238 (5.9%)	52/238 (21.9%)	16/238 (6.7%)	118/238 (49.5%)

Table 3. Female owner responses with regards to male veterinarian attire

Which would you prefer your veterinarian to be wearing:	Business	Professional	Surgical	Clinical	Smart Casual	No preference/ No effect
For Routine Examination	1/181 (0.5%)	23/181 (12.7%)	11/181 (6.1%)	39/181 (21.6%)	27/181 (14.9%)	80/181 (44.2%)
For an Emergency	0/181 (0.0%)	9/181 (5.0%)	35/181 (19.3%)	39/181 (21.5%)	9/181 (5.0%)	89/181 (49.2%)
To discussion sensitive information (i.e. possible exposure to illicit drugs/family member abusing animal)	0/181 (0.0%)	34/181 (18.8%)	9/181 (5.0%)	33/181 (18.2%)	14/181 (7.7%)	91/181 (50.3%)
Which of these doctors:						
Would you trust the most?	0/181 (0.0%)	29/181 (16.0%)	5/181 (2.7%)	40/181 (22.1%)	11/181 (6.1%)	96/181 (53.0%)
Would you be more likely to follow their advice?	0/181 (0.0%)	25/181 (13.8%)	6/181 (3.3%)	40/181 (22.1%)	11/181 (6.1%)	99/181 (54.7%)
Would you have the most confidence in their diagnosis and treatment?	0/181 (0.0%)	30/181 (16.6%)	5/181 (2.7%)	39/181 (21.6%)	11/181 (6.1%)	96/181 (53.0%)
Would you assess as more knowledgeable and competent?	0/181 (0.0%)	30/181 (16.6%)	5/181 (2.7%)	36/181 (19.9%)	12/181 (6.7%)	98/181 (54.1%)
Would you assess as more caring and compassionate?	0/181 (0.0%)	17/181 (9.4%)	9/181 (5.0%)	38/181 (21.0%)	19/181 (10.5%)	98/181 (54.1%)
Would you believe to be more responsible?	0/181 (0.0%)	27/181 (14.9%)	5/181 (2.7%)	38/181 (21.0%)	10/181 (5.5%)	101/181 (55.9%)

Table 4. Female owner responses with regards to female veterinarian attire

Which would you prefer your veterinarian to be wearing:	Business	Professional	Surgical	Clinical	Smart Casual	No preference/ No effect
For routine physical examination	0/181 (0.0%)	25/181 (13.8%)	12/181 (6.6%)	38/181 (21.0%)	25/181 (13.8%)	81/181 (44.8%)
For an emergency	0/181 (0.0%)	12/181 (6.6%)	32/181 (17.7%)	39/181 (21.5%)	8/181 (4.4%)	90/181 (49.8%)
To discuss sensitive information (i.e. possible exposure to illicit drugs/family member abusing animal)	0/181 (0.0%)	31/181 (17.1%)	8/181 (4.4%)	34/181 (18.8%)	16/181 (8.8%)	92/181 (50.9%)
Which of these doctors:						
Would you trust the most?	0/181 (0.0%)	30/181 (16.6%)	6/181 (3.3%)	42/181 (23.2%)	9/181 (5.0%)	94/181 (51.9%)
Would you be more likely to follow their advice?	0/181 (0.0%)	28/181 (15.5%)	7/181 (3.9%)	40/181 (22.1%)	9/181 (5.0%)	97/181 (53.5%)
Would you have the most confidence in their diagnosis and treatment?	0/181 (0.0%)	33/181 (18.2%)	5/181 (2.8%)	41/181 (22.7%)	9/181 (5.0%)	93/181 (51.3%)
Would you assess as more knowledgeable and competent?	0/181 (0.0%)	32/181 (17.7%)	6/181 (3.3%)	38/181 (21.0%)	9/181 (5.0%)	96/181 (53.0%)
Would you assess as more caring and compassionate?	0/181 (0.0%)	16/181 (8.8%)	9/181 (5.0%)	40/181 (22.1%)	15/181 (8.3%)	101/181 (55.8%)
Would be believe to be more responsible?	0/181 (0.0%)	28/181 (15.5%)	8/181 (4.4%)	36/181 (19.9%)	9/181 (5.0%)	100/181 (55.2%)

Table 5. Male owner responses with regards to male veterinarian attire

Which would you prefer your veterinarian to be wearing:	Business	Professional	Surgical	Clinical	Smart Casual	No preference/ No effect
For routine examination	2/57 (3.5%)	13/57 (22.8%)	5/57 (8.8%)	13/57 (22.8%)	11/57 (19.3%)	13/57 (22.8%)
For an emergency	1/57 (1.8%)	4/57 (7.0%)	13/57 (22.8%)	21/57 (36.8%)	4/57 (7.0%)	14/57 (24.6%)
To discussion sensitive information (i.e. possible exposure to illicit drugs/family member abusing animal)	2/57 (3.5%)	14/57 (24.6%)	4/57 (7.0%)	12/57 (21.1%)	11/57 (19.3%)	14/57 (24.5%)
Which of these doctors:						
Would you trust the most?	1/57 (1.7%)	13/57 (22.8%)	6/57 (10.5%)	14/57 (24.6%)	7/57 (12.3%)	16/57 (28.1%)
Would you be more likely to follow their advice?	2/57 (3.5%)	12/57 (21.1%)	6/57 (10.5%)	10/57 (17.5%)	7/57 (12.3%)	20/57 (35.1%)
Would you have the most confidence in their diagnosis and treatment?	1/57 (1.7%)	11/57 (19.3%)	7/57 (12.3%)	14/57 (24.6%)	7/57 (12.3%)	17/57 (29.8%)
Would you assess as more knowledgeable and competent?	1/57 (1.7%)	16/57 (28.1%)	5/57 (8.7%)	12/57 (21.1%)	7/57 (12.3%)	16/57 (28.1%)
Would you assess as more caring and compassionate?	1/57 (1.7%)	10/57 (17.6%)	4/57 (7.0%)	15/57 (26.3%)	11/57 (19.3%)	16/57 (28.1%)
Would you believe to be more responsible?	1/57 (1.7%)	15/57 (26.3%)	5/57 (8.8%)	12/57 (21.1%)	7/57 (12.3%)	17/57 (29.8%)

in both human and veterinary medicine due to concerns they harbour infectious organisms (Akanbi *et al.* 2017). Future studies may need to evaluate how this change in professional attire affects

owners' opinions of this change. More perplexing was the fact that if a male or female respondent selected a style of veterinarian attire the most common selection was either clinical or professional

Table 6. Male owner responses with regards to female veterinarian attire

Which would you prefer your veterinarian to be wearing:	Business	Professional	Surgical	Clinical	Smart Casual	No preference/ No effect
For routine physical examination	1/57 (1.75%)	9/57 (15.79%)	5/57 (8.77%)	20/57 (35.09%)	9/57 (15.79%)	13/57 (22.81%)
For an emergency	1/57 (1.75%)	2/57 (3.51%)	13/57 (22.81%)	22/57 (38.60%)	5/57 (8.77%)	14/57 (24.56%)
To discuss sensitive information (i.e. possible exposure to illicit drugs/ family member abusing animal)	2/57 (3.51%)	8/57 (14.04%)	4/57 (7.02%)	20/57 (35.09%)	9/57 (15.79%)	14/57 (24.56%)
Which of these doctors:						
Would you trust the most?	1/57 (1.75%)	10/57 (17.54%)	6/57 (10.53%)	18/57 (31.57%)	7/57 (12.28%)	15/57 (26.32%)
Would you be more likely to follow their advice?	1/57 (1.75%)	10/57 (17.54%)	6/57 (10.53%)	15/57 (26.32%)	7/57 (12.28%)	18/57 (31.57%)
Would you have the most confidence in their diagnosis and treatment?	1/57 (1.75%)	8/57 (14.04%)	7/57 (12.28%)	17/57 (29.82%)	7/57 (12.28%)	17/57 (29.82%)
Would you assess as more knowledgeable and competent?	1/57 (1.75%)	11/57 (19.30%)	6/57 (10.53%)	16/57 (28.07%)	7/57 (12.28%)	16/57 (28.07%)
Would you assess as more caring and compassionate?	1/57 (1.75%)	8/57 (14.04%)	5/57 (8.77%)	18/57 (31.57%)	10/57 (17.54%)	15/57 (26.32%)
Would be believe to be more responsible?	1/57 (1.75%)	9/57 (15.79%)	6/57 (10.53%)	16/57 (28.07%)	7/57 (12.28%)	18/57 (31.57%)

Table 7. Total responses for investigation into specific aspects of veterinarian attire

Statement	Strongly Agree	Agree	Don't know or Don't care	Disagree	Strongly disagree
When a veterinarian is seeing your pet, he or she should wear a white coat	7/238 (2.9%)	68/238 (28.6%)	136/238 (57.1%)	19/238 (8.0%)	8/238 (3.4%)
Sneakers are acceptable and appropriate wear for a veterinarian who is seeing your pet	67/238 (28.2%)	104/238 (43.7%)	58/238 (24.3%)	8/238 (3.4%)	1/238 (0.4%)
When a male veterinarian is seeing your pet, he should wear a necktie	1/238 (0.4%)	7/238 (2.9%)	109/238 (45.9%)	76/238 (31.9%)	45/238 (18.9%)
Blue jeans are acceptable and appropriate for a veterinarian to see my pet	31/238 (13.0%)	64/238 (26.9%)	91/238 (38.2%)	47/238 (19.8%)	5/238 (2.1%)
I am uncomfortable with visible tattoos anywhere on my veterinarian	10/238 (4.2%)	29/239 (12.2%)	105/238 (44.1%)	59/238 (24.8%)	35/238 (14.7%)
I am uncomfortable with any facial piercings on a male or female veterinarian	13/238 (5.5%)	62/238 (26.1%)	88/238 (36.9%)	53/238 (22.3%)	22/238 (9.2%)
I am uncomfortable with excessive ear piercings (more than 2 on each ear) on a female veterinarian or any ear piercings on a male veterinarian	7/238 (2.9%)	28/238 (11.8%)	106/238 (44.5%)	62/238 (26.1%)	35/238 (14.7%)
I believe it is unprofessional for a veterinarian to have dyed or coloured hair	4/238 (1.7%)	19/238 (8.0%)	101/238 (42.4%)	72/238 (30.3%)	42/238 (17.6%)
I believe that what my veterinarian wears influences my opinion of the care that my pet receives	4/238 (1.7%)	52/238 (26.1%)	50/238 (21.0%)	65/238 (27.3%)	57/238 (23.9%)

attire which were the only two attire styles where the veterinarian was wearing a white coat. As such, the importance of the white coat may be more sub-consciously important to owners' comfort and trust

in their veterinarian than they actually realize. The importance of the white coat in veterinarian attire to instil confidence and trust in owners requires further evaluation.

Table 8. Male owner responses with regards to specific aspects of veterinarian attire

Statement:	Strongly agree	Agree	Don't know or Don't care	Disagree	Strongly disagree
When a veterinarian is seeing your pet, he or she should wear a white coat	1/57 (1.7%)	20/57 (35.1%)	28/57 (49.1%)	6/57 (10.6%)	2/57 (3.5%)
Sneakers are acceptable and appropriate wear for a veterinarian who is seeing your pet	15/57 (26.3%)	29/57 (50.9%)	11/57 (19.3%)	2/57 (3.5%)	0/57 (0.0%)
When a male veterinarian is seeing your pet, he should wear a necktie	0/57 (0.0%)	2/57 (3.5%)	22/57 (38.6%)	17/57 (29.8%)	16/57 (28.1%)
Blue jeans are acceptable and appropriate for a veterinarian to see my pet	10/57 (17.5%)	18/57 (31.7%)	19/57 (33.3%)	10/57 (17.5%)	0/57 (0.0%)
I am uncomfortable with visible tattoos anywhere on my veterinarian	3/57 (5.3%)	10/57 (17.5%)	21/57 (36.9%)	13/57 (22.8%)	10/57 (17.5%)
I am uncomfortable with any facial piercings on a male or female veterinarian	5/57 (8.8%)	14/57 (24.6%)	18/57 (31.6%)	15/57 (26.2%)	5/57 (8.8%)
I am uncomfortable with excessive ear piercings (more than 2 on each ear) on a female veterinarian or any ear piercings on a male veterinarian	4/57 (7.0%)	9/57 (15.8%)	21/57 (36.9%)	13/57 (22.8%)	10/57 (17.5%)
I believe it is unprofessional for a veterinarian to have dyed or coloured hair	2/57 (3.5%)	5/57 (8.8%)	25/57 (43.9%)	17/57 (29.8%)	8/57 (14.0%)
I believe that what my veterinarian wears influences my opinion of the care that my pet receives	1/57 (1.7%)	17/57 (29.8%)	15/57 (26.4%)	10/57 (17.5%)	14/57 (24.6%)

In regard to specific aspect of veterinary attire the most negatively reported feature was facial piercings with over 30% of respondents reported being uncomfortable with a male or female veterinarian having facial piercings. This is similar to a previous study in human medicine that identified facial piercings as the most common physical characteristic identified that caused patients to be less confident in their physician (Budny *et al.* 2006). However, other physical characteristics found to make patients uncomfortable in this previous human study were tattoos and male physicians wearing earrings (Budny *et al.* 2006) but this did not appear to negatively affect the majority of respondents. The reason for this disparity may reflect differences in perception or opinion of physicians compared to veterinarians or regional differences and attitudes towards certain aspects of outward appearance as well.

At least 25% of both male and female respondents stated their veterinarian's attire would affect the perception of the care their veterinarian provides. This is a significant percentage of owners and does not address typical issues for which a doctor is judged such as competency, bedside manner or clinical experience. Furthermore, the investigators suspect this rate is likely

higher than what is being reported as respondents may be reluctant to admit they are basing evaluation of a medical professional on superficial appearance.

There are several limitations to the study reported here that require mentioning. The study was performed over a relatively small duration of time at one facility. It would have been more ideal to conduct the study over a longer duration in multiple geographical locations and compare response rates and owner preferences to see if there were regional differences to the response rates. Furthermore, in this facility most of the veterinarians commonly wear smart casual attire which could have influenced any respondents who had been to the practice multiple times. The study included three times as many female respondents as male respondents. It remains unclear if this happens to reflect the normal owner population of the hospital or if the results would have been different if there was a more even response rate between male and female owners. This may also reflect a reticence of male owners to discuss their preferences for veterinarian attire compared to female owners. It also would have been ideal to evaluate if owner preferences for veterinarian attire varied depending on the small animal specialty being seen (i.e. internal medicine compared to

Table 9. Female owner responses with regards to specific aspects of veterinarian attire

Statement	Strongly agree	Agree	Don't know or Don't care	Disagree	Strongly disagree
When a veterinarian is seeing your pet, he or she should wear a white coat	6/181 (3.3%)	48/181 (26.5%)	108/181 (59.7%)	13/181 (7.2%)	6/181 (3.3%)
Sneakers are acceptable and appropriate wear for a veterinarian who is seeing your pet	52/181 (28.7%)	75/181 (41.4%)	47/181 (26.0%)	6/181 (3.3%)	1/181 (0.6%)
When a male veterinarian is seeing your pet, he should wear a necktie	1/181 (0.6%)	5/181 (2.8%)	87/181 (48.0%)	59/181 (32.6%)	29/181 (16.0%)
Blue jeans are acceptable and appropriate for a veterinarian to see my pet	21/181 (11.6%)	46/181 (25.4%)	72/181 (39.8%)	37/181 (20.4%)	5/181 (2.8%)
I am uncomfortable with visible tattoos anywhere on my veterinarian	7/181 (3.9%)	19/181 (10.5%)	84/181 (46.4%)	46/181 (25.4%)	25/181 (13.8%)
I am uncomfortable with any facial piercings on a male or female veterinarian	8/181 (4.4%)	48/181 (26.5%)	70/181 (38.7%)	38/181 (21.0%)	17/181 (9.4%)
I am uncomfortable with excessive ear piercings (more than 2 on each ear) on a female veterinarian or any ear piercings on a male veterinarian	3/181 (1.7%)	19/181 (10.5%)	85/181 (46.9%)	49/181 (27.1%)	25/181 (13.8%)
I believe it is unprofessional for a veterinarian to have dyed or coloured hair	2/181 (1.1%)	14/181 (7.7%)	76/181 (41.9%)	55/181 (30.4%)	34/181 (18.8%)
I believe that what my veterinarian wears influences my opinion of the care that my pet receives	3/181 (1.7%)	45/181 (24.9%)	35/181 (19.3%)	55/181 (30.3%)	43/181 (23.8%)

surgery). The questionnaire photo examples were titled as 'professional', 'casual', etc. ... which could have influenced respondent's opinions. The investigators purposefully did not include all types of work attire to respondents were not overwhelmed with all the attire examples provided. Future studies could also evaluate other types of attire including the effect of eccentric clothing or owner perceptions on the professional's cleanliness. Finally, any study involving a questionnaire can be affected by the inherent biases of the respondents, which can be difficult to control. There is the concept of the 'threat of disclosure' which is often seen in respondents given questionnaires on sensitive topics (Tourangeau & Yan 2007). This describes situations where the respondent is concerned about the consequences of giving truthful answers. In this study, while respondents may have said that they had no issues with having a veterinarian with tattoos, for example how they would react to such a person caring for their pet in real life is difficult to account for. We sought to reduce this effect by making the questionnaires anonymous but cannot completely rule out the possibility of it affecting the results reported here.

Conclusions

In conclusion in the small animal private practice specialty medicine setting female owners do not appear to have a preference for male or female veterinarian attire. However, male owners either have no preference or prefer their male veterinarian to be attired in clinical or professional attire and have no preference or prefer their female veterinarian to be clinical attire. Most respondents do not feel it is necessary for a veterinarian to wear a white coat or neckties and most do not feel it is inappropriate for a veterinarian to wear blue jeans, coloured hair, or have visible tattoos. Facial piercings were the most displeasing external feature reported by respondents. Approximately 25% of owners stated that what their veterinarian wears influences their opinion of the care their pet receives.

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Conflicts of interest

The results of this study have not been presented at any meeting or conference. The authors declare no conflicts of interest.

Ethics statement

The authors confirm that the ethical policies of the journal, as noted on the journal's author guidelines page, have been adhered to. No ethical approval was required as this was a survey based study with no animal involvement.

Contributions

DC and RN conceived the study. KR, RN, LM wrote the manuscript. KR, TR, CT, GH performed the experiments and data collection. All of the authors reviewed, revised and accepted the manuscript.

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