

## Perceptions of teenagers about the role of the veterinarian in practice: a cross-cultural study

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### ABSTRACT

A questionnaire survey of teenagers was conducted in 1995 to discover if the perceptions of the role of the veterinarian in practice differed among 3 cultural groups. Teenagers in their 1st year of secondary school education in 16 schools in the Krugersdorp area were used as the sample. Two thousand and sixty-five questionnaires were processed. A statistically significant difference in perceptions of the role of the veterinarian in practice was found between Black, Indian and White teenagers. Only 19.2 % of the Black teenagers and 51.6 % of the Indian teenagers had any idea of what a veterinarian did, compared to 88.1 % of White teenagers. Similar differences in pet ownership, disease recognition, and veterinary care between the cultural groups were also found. The study emphasised the tremendous need for increased exposure to the veterinary profession within the historically disadvantaged communities of South Africa.

**Key words:** cultural groups, differences, perception, resource-poor areas, veterinarian.

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### INTRODUCTION

In 1994 Krugersdorp Veterinary Hospital opened consulting rooms in Kagiso. Kagiso is a 'township', one of many that surround the metropolitan areas in South Africa. These townships are generally regarded as resource-poor or historically disadvantaged areas.

Kagiso and Munsieville, another small township on the borders of Krugersdorp, are populated by 127 754 Black people, mainly Tswana-speaking. Their numbers have, however, increased owing to the influx of people into informal settlements. There are 62 520 Whites and 4255 Indians in the Krugersdorp area (Central Statistical Services, Pretoria, pers. comm., 1995).

It was during consultation hours in Kagiso that it was noticed that many people in this community did not know what a veterinarian did. Owing to this observed lack of knowledge about veterinarians in the Black community, it was decided to undertake a scientific study to discover if a difference actually existed between the perceptions that teenagers had of the role of the veterinarian in

practice, that could be ascribed to their socioeconomic background. The socioeconomic groups studied could be roughly divided by culture into Black, Indian and White groups because of past segregation policies that had been in place until 1994.

In South Africa, private practitioners have generally practised veterinary medicine in the more affluent areas of the country<sup>3</sup>, resulting in the resource-poor areas having had little contact with the veterinary profession. To supply an effective veterinary service to these communities it is important to establish what perceptions these communities have of the veterinarian. This information can then be used in the planning and development of veterinary practice in these resource-poor areas.

### MATERIALS AND METHODS

#### *Sampling procedure*

A questionnaire survey was undertaken that included 16 secondary schools in the Krugersdorp area. Schools were chosen as cluster units since compulsory schooling ensured that a cross-section of the general population would be represented within the schools. The 16 schools used were selected according to their accessibility and constituted a convenience sample.

Because the survey was undertaken soon after the demise of the Apartheid system, the following schools, included in the survey, could be roughly classified according to the dominant ethnic groups as:

- Black schools (predominantly low socioeconomic group): AD Motuba Secondary School, Kagiso Secondary School, Magaliesburg Secondary School, Masupatsela Secondary School, SG Mafaesa Secondary School, Seapakitso Secondary School and Thuto-Lefa Secondary School,
- Mixed schools (having more than one cultural group; pupils in mixed schools were classified individually into a cultural group according to the place where they lived and included the Indian cultural group): High School Azaadville, Townview High School, Hoërskool Jan de Klerk, Hoërskool Monument, Krugersdorp High School, Magaliesburg Group of Schools, St. Ursulines Convent, and
- White schools (predominantly high socioeconomic group): Hoërskool Noordheuwel, Hoër Tegniese Skool N. Diedericks.

Selection of pupils was based on the population development programme's definition of a literate person, which is a person over the age of 13 years and in possession of at least a grade 7 qualification<sup>5</sup>. For this reason, teenagers in their 1st high school year, grade 8, and in some Black schools, grade 9, were used as the target group. It was felt that pupils in higher grades would be more inclined to introduce bias into the survey by anticipating what a correct answer should be and hence these grades were excluded.

In order to distribute questionnaires in the schools, each school principal was interviewed and informed, in detail, about the aim of the study. At a number of schools the principals involved the vocational guidance teachers. Questionnaires were completed voluntarily, anonymously and without any assistance to the school children by the school personnel. After completion, the questionnaires were collected from the principals of the 16 participating schools for analysis.

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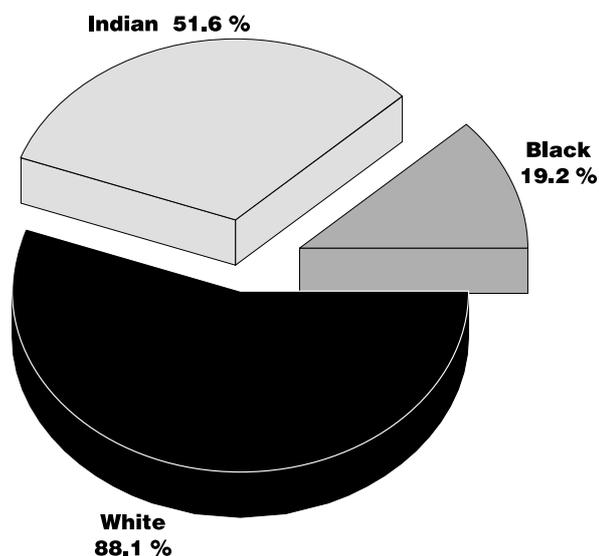


Fig. 1: Percentage of teenagers questioned within each cultural group that had some idea of what a veterinarian's function is.

#### Questionnaire format

The questionnaire was designed with the following questions for use in this study. Three questions were included in the questionnaire for purposes other than this study and are not given here.

1. How old are you?
2. Where do you live? Krugersdorp, Kagiso, Munsieville, Soweto, Roodepoort, Muldersdrift, Swanieville, Lusaka, Magaliesburg, Azaadville, Lenasia
3. What do you know about vets/veterinary surgeons?
4. Does your family own a dog or cat?
5. Has your dog or cat ever been sick? YES/NO
6. If yes, what did you or your family do?

#### Data analysis

Results were processed using the computer package EpiInfo Version 5.01b (USD, Stone Mountain, Georgia) under the field names Age, Culture, Knowledge, Ownership, Sickness and Action. Except for Age and Culture the fields were treated as dichotomous yes/no variables. Inclusion and exclusion criteria were based on the following:

1. Age: only pupils 13–19 years of age were included.
2. Place of residence/socioeconomic group/culture (Fig. 1).

Pupils were classified into cultural groups according to where they lived. Black cultural areas were: Kagiso, Munsieville, Soweto, Swanieville and Lusaka; Indian cultural areas were: Azaadville and Lenasia; and White cultural areas were: Krugersdorp and Muldersdrift. Magaliesburg had both

White and Black cultural groups and classification of pupils in this district was also based on school attended and surname.

3. Does your family own a dog or cat? Answers were classified as yes or no
4. Has your dog or cat ever been sick? Answers were classified as yes or no
6. If yes what did you or your family do? This question was to ascertain whether these animals were taken to a veterinarian or not and were classified as yes or no.

The Chi-square test and confidence intervals for proportions were calculated to establish if there were significant differences in answers between the teenagers from the 3 cultural (socioeconomic) groups<sup>1</sup>.

#### RESULTS

In total, 2065 ( $n = 2065$ ) questionnaires were collected, which represents approximately 1.06 % of the total population of Krugersdorp. The ratio (proportion) of respondents from each cultural group in the survey (1 Indian: 11 White: 21 Black) resembled that of the general population living in the Krugersdorp area, *i.e.* 1 Indian: 15 White: 30 Black (Table 1).

The mean age of the teenagers in the sample was  $14.87 \pm 1.72$  years. The mean age of the Black, Indian and White teenagers was  $15.44 \pm 0.61$  years,  $13.27 \pm 1.05$  years and  $13.98 \pm 1.05$  years respectively.

Only 43.83 % ( $n = 905$ ) teenagers had any perception of the role of the veterinarian. There was a significant statistical difference ( $p < 0.01$ ) between perceptions of the teenagers in the 3 cultural groups as to the role of the veterinarian.

Only 19.2 % ( $n = 249$ ) of the Black

Table 1: Number of survey respondents per cultural group.

Culture	<i>n</i>	%
Black	1295	62.7
Indian	62	3.0
White	708	34.3
<b>Total</b>	<b>2065</b>	<b>100</b>

Table 2: Replies to question: Does your family own a dog or cat?

Culture	Yes		No		Total <i>n</i>
	<i>n</i>	%	<i>n</i>	%	
Black	605	46.7	690	53.3	1295
Indian	22	35.5	40	64.5	62
White	653	92.2	55	7.8	708

Table 3: Replies to question: Has your dog or cat ever been sick?

Culture	Yes		No		Total <i>n</i>
	<i>n</i>	%	<i>n</i>	%	
Black	245	18.9	1050	81.1	1295
Indian	11	17.7	51	82.3	62
White	494	69.8	214	30.2	708

Table 4: Number of families with teenagers where sick or injured animals were presented to a veterinarian for treatment.

Culture	Yes		No		Total <i>n</i>
	<i>n</i>	%	<i>n</i>	%	
Black	107	8.3	1188	91.7	1295
Indian	11	17.7	51	82.3	62
White	472	66.7	236	33.3	708

teenagers and 51.6 % ( $n = 32$ ) of the Indian teenagers had any idea of what a veterinarian did while 88.1 % ( $n = 624$ ) of the White teenagers knew something about a veterinarian's function (Fig. 1).

It is interesting that while 61.98 % ( $n = 1280$ ) of the sample had dogs or cats at home (Table 2), only 58.6 % ( $n = 750$ ) of those with pets had experienced a situation where an animal was either recognised as ill or injured (Table 3).

Of the 58.6 % that reported having had an ill or injured animal, 78.7 % ( $n = 590$ ) had had their animal treated by a veterinarian either in private practice or employed by an animal welfare organisation (Table 4).

## DISCUSSION

This survey revealed that in the greater Krugersdorp area relatively few Black (46.7 %) and Indian (35.5 %) homes with teenagers appear to have dogs and cats as pets. The figure for Black pet owners supports the findings of McCrindle *et al.*<sup>2</sup> at Rietgat that 33.7 % and 6.4 % of Black homes kept dogs and cats respectively. It contrasts, however, with the high proportion of White homes (92.2 %) that reportedly have dogs and/or cats. The ownership of pets may at first appear to be linked to socioeconomic conditions but the fact that the proportion of Indian homes with pets is significantly ( $p < 0.10$ ) lower than Black homes could indicate that ownership is more directly linked to cultural aspects previously described by Pistorius *et al.*<sup>4</sup>.

Although more Black homes had pets compared with Indian homes, the proportion of Black pet owners that knew what a veterinarian did (41 %) was appreciably lower than that of Indian pet owners (68.8 %) and much lower than that of White owners (95.6 %). It seems therefore that while socioeconomic factors may play little role in pet ownership, they are probably linked to how much contact an individual is likely to have with the veterinary profession. This in turn is likely to influence their knowledge of what a veterinarian does. A potential confounding factor that was not accounted for in the survey was whether or not English was the scholar's home language. What effect this may have had in the scholar's ability to interpret the questions could not be gauged. It must be pointed out, however, that many of the white scholars were Afrikaans-speaking and English was therefore a 2nd language for a large portion of the white group as well. Hence any biasing effect 2nd

language status may have had would have been present, to varying degrees, in all the groups surveyed.

Another interesting difference between the cultural groups surveyed is their ability to recognise sick pets. Only 40 % of Black pet owners and 50 % of Indian pet owners reported having sick dogs or cats compared with 76 % of White pet owners. If disease frequencies are the same within these communities, this would imply that Black and Indian owners are less able or inclined to recognise an ill animal. Alternatively, it could imply that dogs and cats in White (high socioeconomic) communities are more susceptible to disease. This may be because veterinary care in Black communities is lacking and only the fittest animals are likely to survive. Coupled to this is the fact that when a dog or cat was seen to be sick in White or Indian communities it was taken to a veterinarian in 96–100 % of cases, whereas only 44 % of Black teenagers indicated that their sick animals were taken to a veterinarian.

Increasing urbanisation and improvement of socioeconomic conditions in South Africa will probably lead to an increase in companion animal owners in the presently defined resource-poor areas surrounding the cities and towns. The present study emphasises the need for development programmes to address the veterinary needs of these communities.

The enthusiasm and cooperation of both the teaching personnel and scholars in the resource-poor areas surrounding Krugersdorp was very evident in the response to this study. This may offer opportunities to veterinarians to broaden these inhabitants' perceptions by involving the schools in formal or informal information educational programmes.

## CONCLUSION

Black teenagers in the lower socioeconomic areas of Krugersdorp have a poor perception of what a veterinarian is or can do, compared with other socioeconomic and cultural groups. This poor perception is probably related to a historical lack of contact with members of the veterinary profession in their communities. There is thus a great need for increased exposure to the veterinary profession within these communities. Such exposure has the potential to open hitherto untapped markets for veterinarians and producers of veterinary products alike.

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