HOW DOES THE PREVALENCE OF DISORDERS DIAGNOSED IN DOGS DIFFER BETWEEN CHARITY AND PRIVATE PRIMARY CARE IN THE UK?

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Introduction

Background: Our current understanding of disease prevalence is biased towards cases belonging to owners that can afford care, overlooking an important demographic.[1] The rising cost of living and pet ownership, as well as lack of awareness of breed dispositions to disease, has led to an increase in dogs presenting to subsidised charity care.[2,3] Recognising the most common conditions of charity practice patients could enable targeted education for clients, appropriate practice equipment investment and greater insight for practitioners of the health issues they can expect to treat. The results highlighted by this pioneering study can form the basis of information to assist in future research.

Aim: To compare the frequency of common disorders diagnosed in charity and private primary care practices in the UK in 2016.

Methods

Data collection: A random sample of VetCompass[TM] electronic healthcare records was collated from four types of veterinary practices (private primary care, charity primary care, out-of-hour, and referral services). This study chose to focus on private primary care and charity primary care. Equal representation of all groups was ensured by random under-sampling. All disorders recorded during 2016 were extracted.

Inclusion criteria: Dogs under care was defined as those that had at least one interaction with a practice recorded from January 1 to December 31, 2016, or one recorded in 2015 and 2017. Dogs were excluded if there were no clinical notes to interpret or if they presented to out of hour care.

Analysis: The medical notes of the dogs were randomly assigned and analysed in detail by four veterinary students. Prophylactic treatment and clinical signs of a disease were not recorded; however incidental findings and the causative factor were. Each disorder identified was clinically coded using an established resource of diagnostic terms.[1] Data were exported from VetCompass and analysed using a Chi squared test. Statistical significance was set at P value < 0.005.
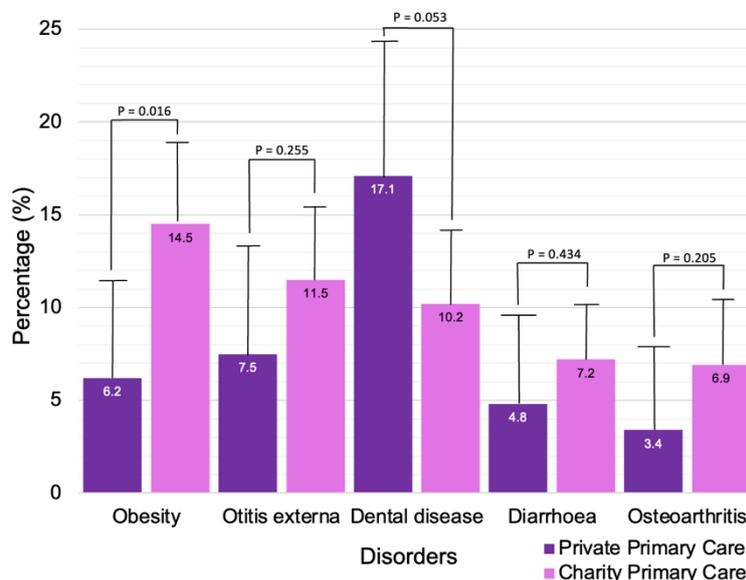
Results

For this study, records from 450 dogs were evaluated: 304 from charity and 146 from private primary care. The charity sector diagnosed significantly more obesity than private primary care (P = 0.016).

Table 1: Most common disorders					
Charity primary care (n=304)			Private primary care (n=146)		
Disorder	**%**	**CI (%)**	**Disorder**	**%**	**CI (%)**
Obesity	14.5	10.9-18.9	Dental disease	17.1	11.8-24.1
Otitis externa	11.5	8.3-15.6	Otitis externa	7.5	4.1-13.1
Dental disease	10.2	7.2-14.1	Vomiting	7.5	4.1-13.1
Diarrhoea	7.2	4.8-10.1	Obesity	6.2	3.1-11.5
Osteoarthritis	6.9	4.5-10.4	Overgrown nails	6.2	3.1-11.5

Figure 1: The most common disorders in charity primary care and private primary care veterinary practice in the UK in 2016.

Figure 2: The most common disorders in charity primary care compared to private primary care veterinary practice in the UK in 2016.

Discussion

Many of the disorders diagnosed in charity primary care overlapped with those presenting to private primary care and showed similar results to previously published work.[3] Many of these disorders can be prevented by early detection, diagnosis, or treatment. The similarity in disorder prevalence could be explained by the utilisation of routine appointments or diseases that are intrinsic to the dogs themselves rather than type or veterinary care or features of ownership.

Obesity was overrepresented in charity primary care practice. Reports have found that owners in the lower income bracket were more likely to have obese dogs[4]. Other possible explanations include decreased time spent outdoors[5], type of food fed[6] and owner awareness of obesity[7]. Alternatively, charity practices could be better at detection of obesity resulting in increased recording of this disorder.

The study was limited to veterinary practices that participate within the VetCompass[TM] programme and only one charity care provider was included. Charities tend to impose different protocols for client eligibility and provision of care offered, which could bias the results. Inter-observer variability and differing interpretations of disease may also have influenced result outcome. The number of dogs included in the study was limited due to time available. Further work including a greater number of dogs could produce more reliable frequency estimates and improve disorder detection.

Conclusion

The prevalence of the most common disorders diagnosed in dogs in charity primary care did not significantly differ from private primary care except for obesity. The current study highlights the importance of supporting owner education across both veterinary sectors to encourage habits of care for their dog's weight, ears, and teeth to improve animal health and welfare.

References

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