



An investigation into dog owner and veterinary perceptions of the canine obesity endemic in the United Kingdom.

Laurel Belverstone BSc (Hons) Veterinary Nursing with Small Animal Rehabilitation RVN Katherine Hart BSc (Hons) DipAVN CertAVN PgCTSLHE FHEA RVN Department of Animal Health, Behaviour and Welfare (Veterinary Nursing), Harper Adams University.

Introduction

Canine obesity is a significant problem in veterinary medicine, with an estimated prevalence of 40% in the United Kingdom (Wainwright *et al.*, 2022). In 2016, upon recognition of the health implications, the World Small Animal Veterinary Association (WSAVA) called for clearer definitions of canine obesity to be established, aiming for recognition as a disease and welfare concern. Literature reflects a lack of research into dog owner and veterinary professionals' (VPs) perceptions towards canine obesity (White *et al.*, 2011), despite human behaviours being a leading cause of canine weight gain (Orsolya *et al.*, 2018). Given that these two groups bear primary responsibility for addressing the endemic, a deeper understanding of their perceptions is crucial for improvements to be made to canine welfare and the obesity endemic. As part of my BSc (Hons) Veterinary Nursing degree, this investigation therefore aimed to compare and contrast the perceptions of these groups and determine awareness of this endemic.

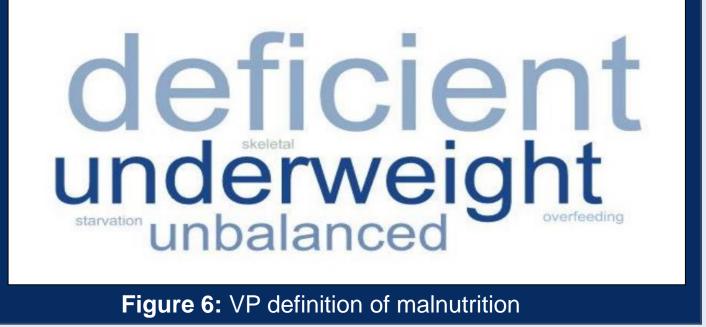
Methods

Prior to data collection, ethical approval was obtained from the Harper Adams University ethics committee. Proceeding this, a pilot study consisting of 10 participants per questionnaire was conducted to evaluate questionnaire quality and make the appropriate changes where necessary. Data collection involved the use of two online questionnaires – one for UK dog owners and the other for practising UK VPs, to include registered veterinary surgeons and registered veterinary nurses. Using social media-based convenience sampling, across a 44-day period, data was acquired from 210 dog owners and 111 VPs and analysed using descriptive statistics on Microsoft Excel. Where appropriate, the GenStat Software 23rd edition chi-squared and Fisher's exact permutation test were used to determine if significant associations exist between the perceptions of VPs and owners towards canine obesity. Additionally, thematic analysis was used to produce word clouds, displaying the themes most commonly identified amongst the open question responses.

Results

- Overall, respondents recognised canine obesity as a problem in the UK (figure 1), however a statistically significant difference was found between the perceived severity of the endemic (P<0.001).
- VPs were consistently more confident in defining obesity as both a disease and form of malnutrition, whilst significantly more owners were unsure (P<0.001) (Figures 2 and 3). However, when asked to define malnutrition, "underweight" and "deficient" were used repeatedly by both groups to form a definition, contradicting the VPs' overall recognition of obesity as a form of malnutrition (Figures 5 and 6).
- Owner-related factors were identified by both VPs and dog owners as the most significant contributors to canine obesity, yet discrepancies existed between how the two groups ranked the influence of weight-related education. Whilst owners rated the absence of education highly, VPs ranked it as the least significant cause (Figure 4). This contrasted with Alvarez et al. (2022), where a large proportion of VPs reported a self-perceived lack of knowledge regarding canine obesity.
- In terms of practical experiences, notable differences emerged between VPs and owners. Whilst 95% (n=106) of VPs expressed confidence in discussing weight-related issues with clients, 36% (n=75) of owners reported that such discussions had never occurred.
- It was suggested by both groups, that canine obesity is becoming "commonplace" and "normalised" within the UK, with a skewed societal perception of what qualifies as a normal canine weight and body condition.





52(12), pp. 622-626. doi: 10.1111/j.1748-5827.2011.01138.x.

Discussion, Conclusion and Suggestions for Further Research

The study revealed significant differences in the perceptions of VPs and owners towards canine obesity. These findings support previous research, highlighting a lack of understanding and omissions in the roles of both groups in managing and preventing the disease. Whilst respondents recognised obesity as a welfare concern, the estimated prevalence of canine obesity demonstrates potential misperceptions on the significance of animal welfare, highlighting the need for future studies into owner and VP understanding of the Animal Welfare Act 2006. If owners and VPs had a greater understanding of their roles in accordance with this act, as well as a shared perception towards the severity of this endemic, it is reasonable to suggest that they may be more proactive in the prevention and management of canine obesity. Whilst this study provided an insight into a small sample of perceptions, future research should explore the factors influencing these perceptions. Identifying these factors could encourage a more consistent understanding of canine obesity among both VPs and owners, allowing for more targeted interventions to correct misconceptions and minimise the prevalence of canine obesity.

Acknowledgements

I would like to thank my supervisor, Katherine Hart, for her invaluable guidance throughout the completion of this project. I would also like to thank Helen Cartlidge for her assistance with statistics and Pippa Bond for her unwavering support.

References

- Alvarez, E.E., Schultz, K.K., Floerchinger, A.M. and Hull, J.L. (2022) 'Small animal general practitioners discuss nutrition infrequently despite assertion of indication, citing barriers', Journal of the American
 - Veterinary Medical Association, 260(13), pp. 1704-1710. doi: 10.2460/javma.22.05.0226.
- Orsolya Julianna, T., Kata, V., Vanda Katalin, J. and Péter, P. (2020) 'Factors affecting canine obesity seem to be independent of the economic status of the country—A survey on Hungarian companion dogs', Animals, 10(8), p. 1267. doi: 10.3390/ani10081267.
 Wainwright, J., Millar, K.M. and White, G.A. (2022) 'Owners' views of canine nutrition, weight status and wellbeing and their implications for the veterinary consultation', Journal of Small Animal Practice, 63(5), pp.
- 381-388. doi: 10.1111/jsap.13469.

 White, G.A., Hobson-West, P., Cobb, K., Craigon, J., Hammond, R. and Millar, K.M. (2011) 'Canine obesity: Is there a difference between veterinarian and owner perception?', *Journal of Small Animal Practice*,