Mortality resulting from undesirable behaviours in dogs aged under three years attending primary-care veterinary practices in England

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Abstract

Undesirable behaviours (UBs) are common in dogs and can jeopardise animal and human health, leading to dog abandonment and euthanasia. Dogs exhibiting UBs may have compromised welfare from underlying emotional motivations for the behaviour (eg anxiety) or from the methods used by owners to resolve the problem (eg aversive techniques). The objective of this study was to estimate proportional mortality due to UBs and risk factors for death due to UBs, including death from road traffic accidents, in dogs under three years of age attending primary-care veterinary practices in England from 2009–2014. Cases were identified by searching de-identified electronic patient records from primary-care veterinary practices participating in the VetCompass Programme. The findings highlight that dogs under three years of age are at a proportionately high risk of death due to UBs (33.7%) compared with other specific causes of death (eg gastrointestinal issues: 14.5%). Male dogs had 1.40× the odds of death from UB compared with females. The proportional mortality from UB for male dogs where information on the cause of death was available was 0.41. Neutered dogs had 1.94× the odds of death due to a UB compared with entire dogs. Aggression was the most prevalent UB overall. Veterinarians had recommended referral in 10.3% of cases where dogs died due to exhibiting a UB and had dispensed nutraceutical, pheromone or pharmacological treatment to 3.0% of the UB cases that died. This study shows that undesirable behaviours require better preventive measures and treatment, through further research and education of veterinarians, other professionals within the dog industry and owners.

Keywords: animal welfare, behaviour, canine, epidemiology, euthanasia, VetCompass

Introduction

Dogs are the most common mammalian companion animal in the UK, with an estimated 24% of households owning a dog (Westgarth et al 2007; Pet Food Manufacturers Association 2014). Often dubbed ‘man’s best friend’, dogs offer health and companionship benefits to their human carers but, for many human households, the reality of dog-owner co-existence is not always as harmonious as expected (McGreevy & Bennett 2010; McGreevy & Calnon 2010). Many dogs behave in ways that owners find unwelcome, with 40–87% of dogs reported to exhibit undesirable behaviours (UBs) (Voith 1985; Campbell 1986; O’Farrell 1992; Martinez et al 2011). UBs can be either a normal behaviour, such as vocalisation, a behavioural pathology, such as tail-chasing, or can arise due to physiological dysfunction or medical conditions, eg inappropriate elimination may result from a urinary tract infection (Overall 1997; Landsberg et al 2012). Human opinions about the undesirability of a behaviour are subjective and heavily dependent on context and the human’s expectations of how a dog should behave (Jagoe & Serpell 1996). This underlines the importance of veterinary and behaviourist input for dogs suspected of UBs. Some owners find certain UBs, such as tail-chasing, amusing and only consider these activities as a problem when the dog hurts itself or spends excessively long periods carrying out the behaviour (Burns 2011). The purpose for which the dog was acquired can also affect the perceived desirability by the owner for any given behaviour. For example, vocalisation may be welcomed in a dog acquired for protection of property but unwelcome in a dog acquired as a child’s pet (Lund et al 1996). In contrast to experienced dog owners, first-time owners report a higher prevalence of UBs in their dogs, which could reflect their limited understanding of how normal behaviour manifests in dogs (Jagoe & Serpell 1996) and how to respond to early signs of UBs. Specific behavioural patterns can be associated with individual breeds. For example, chase behaviour may be normal and common in certain dog breeds such as Border Collies.