

LONG PRESENTATION  
ANIMAL WELFARE SCIENCE, ETHICS AND LAW  
RESEARCH/REVIEW

**Dog welfare, ethics and evidence based veterinary medicine: special focus on veterinary behavioural medicine**

Valerie S.M. Jonckheer-Sheehy<sup>1,2,5</sup>, Chris Baeken<sup>3</sup>, Karen L. Overall<sup>4</sup>, Kathelijne Peremans<sup>5</sup> and Jimmy Saunders<sup>5</sup>.

1. Dutch Veterinary Specialist Centre, de Wagenrenk, Wageningen, The Netherlands
2. Animalytics, Bussum, The Netherlands
3. Department of Psychiatry and Medical Psychology, Faculty of Medicine, Ghent University, Belgium
4. Department of Biology, University of Pennsylvania, USA
5. Department of Diagnostic Imaging, Faculty of Veterinary Medicine, Ghent University, Belgium

Valerie.Jonckheer@ugent.be

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Evidence-based veterinary medicine (EBVM) integrates Evidence-based medicine (EBM) principles into veterinary medicine (VM) facilitating practice based on valid, clinically pertinent research data. This is challenging as VM covers many species of animals with often-different neurophysiology. Veterinary behavioural medicine (VBM) is a VM discipline more notable than others for a lack of clinically relevant data.

VBM is concerned with the diagnosis, treatment and prevention of behaviour disorders in animals<sup>1,2</sup>. Behaviour problems in dogs are a major welfare and ethical concern as they are the primary reason veterinarians are requested to euthanise dogs<sup>3-5,10</sup> or they are relinquished<sup>6-9,10</sup>. Animal welfare is also compromised when behaviour problems are inaccurately diagnosed and/or flawed treatment strategies are recommended<sup>5,10</sup>. The need to develop EBVM within VBM is urgent.

True canine anxiety disorders are a significant welfare concern<sup>5,10</sup>. Validated diagnostic criteria are largely lacking and phenotypic behaviour descriptions (based on direct and indirect behaviour observations) thought to reflect emotional state are predominantly relied on. However, these are seldom sufficiently discrete to inform a neuropathologic diagnosis.

We will review the canine anxiety disorder literature and suggest where diagnostic nuclear imaging techniques might be used to validate neuropathology as a means to bringing EBVM to the field. We will also examine modalities currently explored in treating refractory human depressive and pathologically anxious patients of potential interest for our veterinary patients harmonising EBM and EBVM.

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