Construct Models in Veterinary Behavioural Medicine: Lessons from the Human Experience

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ABSTRACT

Veterinary behavioural medicine is marked by inconsistency in the naming and description of animal behavioural disorders, potentially hindering research and reducing the clinical utility of diagnoses. Sources of diagnostic inconsistency are suggested and parallels with human psychiatry are identified. This paper questions the use of categorical models as the basis for classification and reviews criticisms of categorical approaches in psychiatry. Evidence is presented to suggest an inconsistency between discrete categories and the structure of animal behavioural disorders. The potential benefits of exploring alternative models are discussed. It is concluded that it is important to move away from an approach based on advocacy and towards objective assessment of all available data. Existing diagnoses should be viewed as hypothetical constructs, with the underlying hypotheses being identified and subject to investigation. It is emphasized that global communication, empirical investigations and critical review are necessary for the development of a solid scientific basis within veterinary behavioural medicine.

Keywords: behaviour, classification, categorical models, diagnosis, dimensional models, spectrum models

Abbreviations: DSM, Diagnostic and Statistical Manual; ICD, International Classification of Diseases; NAS, nucleus accumbens

INTRODUCTION

Animal behavioural disorders represent a range of conditions relating to the problems posed to an owner by the behaviour of an animal. The problem is not the behaviour of the animal per se, but the challenge it presents to those around it (Askew, 1996). These problems may simply reflect a lack of training of an animal or an owner’s misunderstanding of behaviour, as well as abnormal or pathological processes arising directly from physical causes, such as disease, or environmental stressors. Problems arise as a result of the interaction of genetic and environmental factors within a given individual in a given physiological state, and so even those that originate from psychosocial factors must ultimately be mediated physically at some level within the individual. It is in this broad mechanistic sense that we refer to behavioural problems having a biological basis throughout this paper. Treatment of these problems often involves the
use of owner counselling, behavioural therapy and training. but in some cases
medication or surgery may be indicated. The term ‘animal behavioural therapy’ may
be used to describe the general process involved in the treatment of these conditions
and is not a regulated procedure with any statutory requirement for formal qualifica-
tion. It may therefore be undertaken by any individual with an interest in the subject.
Many disciplines, including ethology, psychology and veterinary medicine, have a valid
claim to a relevant knowledge base and the term ‘veterinary behavioural medicine’ is
used to describe the diagnosis and treatment of behavioural disorders in animals by
veterinary surgeons (Horwitz et al., 2002). This specialism has emerged relatively
recently within the profession, and has yet to develop a consistent, coherent approach
(Mills, 1997). Lack of agreement is particularly apparent in the classification of
disorders (e.g. compare Borchelt and Voith, 1982; Landsberg et al., 1997; Overall,
1997; Pageat, 1998). In a medical context, classification includes two separate
activities: the identification and naming of groups or categories on the basis of shared
attributes, and the assignment of individuals or disorders to their appropriate group
(Millon, 1991). The latter activity is essentially a diagnostic process. The medical
background of veterinary surgeons has meant that many have tended to use this
medical model to describe and analyse behaviour when it appears to be abnormal.
However, this system may not be the most appropriate one, even when a problem does
have a direct physical or biological basis. Alternative classifications of such disorders
represent alternative methods for categorizing the clinical presentations that are
encountered in practice. Diagnostic categories inevitably reflect the fundamental
philosophies or preferred theories of aetiology that the author adopts, but there is no
consensus about the most appropriate foundation for the classification of animal
behavioural disorders, since proposals have not been subject to the usual scientific
process of critical evaluation in peer-reviewed journals. Additionally, the independent
development of veterinary behavioural medicine in different geographic regions has
limited discussion at an international level. It was not until 1997 that the first global
conference was held and the extent of disparity in alternative approaches was widely
recognized.

The current variation in diagnostic practices is not only a barrier to education but
also appears to lower the integrity of the discipline within the veterinary profession.
This paper aims to critically review the current state of classification in veterinary
behavioural medicine and will identify parallels with human psychiatry. The implica-
tions of adopting alternative methods of classification will be suggested and recom-
recommendations will be made for future progress within the discipline.

VARIATION IN DIAGNOSTIC PRACTICES

English-language publications appear to promote similar ideas and use similar
diagnostic terminology, but differences are apparent in the categories identified, their
definitions and diagnostic criteria. For example, Borchelt and Voith (1996) describe 11
categories of canine aggression problems, whereas Landsberg and colleagues (1997)
refer to 13 categories and O’Farrell (1992) identifies 9 (Table I). Beaver (1983)