

Book Reviews

Complementary and Alternative Veterinary Medicine Considered

DW Ramey and BE Rollin (2003). Published by Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK. 272 pp Hardback (ISBN 0813826160). Price £29.99.

This is a timely and important work. Although the authors and the publication are American, and the educational and regulatory frameworks referenced are also American, the arguments advanced transcend national boundaries and apply with equal force to the current situation in the UK and Europe. It should be required reading for all those concerned with the teaching, regulation and advancement of veterinary science in this and indeed all English-speaking countries.

Over the past thirty years, the regulatory framework within which we practice our profession has become more and more stringent. At the same time, the level of interest in and promotion of unproven, disproven and frankly irrational forms of treatment has increased enormously, both from lay persons pushing the boundaries of the Veterinary Surgeons Act and from veterinary professionals themselves. The result is a huge dichotomy. On one hand practitioners of mainstream medicine and the drugs they use are subjected to clinical audit, accreditation, revalidation, quality control, licensing requirements demanding high-quality evidence of safety and efficacy, and restrictive prescribing protocols. In contrast, so-called ‘complementary and alternative’ methods are treated very differently, with a presupposition that any practice undertaken by advocates is acceptable, and proposals for self-regulation that simply endorse these practices without scrutiny.

As the authors point out, unquestioning acceptance of such methods as valid forms of veterinary medicine is enormously dangerous. Behind a façade of compassion, idiosyncratic and unproven approaches are shielded from scientific and sceptical scrutiny. The potential for indirect harm is obvious, as clients and their animals are diverted from proven effective therapies. Direct harm is also a real danger — unregulated herbal preparations pose an undeniable toxicity risk, and the authors also describe a disturbing acupuncture demonstration where physically restrained rabbits struggled and vocalised during surgery while the ‘true believers’ praised the effectiveness of the surgical anaesthesia achieved. Ultimately, the espousal of such therapies erodes the basis by which veterinary surgeons can legitimately claim to have a particular right to treat animals.

This, then, is the theme of this book: what is ‘alternative’ veterinary medicine, what might be the reasons for its recent upsurge in popularity, how does it relate to mainstream veterinary medicine and how should mainstream practitioners approach the subject, and of course how should it be regulated?

The authors begin by examining the underlying philosophies of the alternative medicine movement, from its roots

in German Naturphilosophie and homespun folk medicine, to the modern wholesale adoption and adaptation of a wide range of anthropological practices from various cultures. Modern distrust of science and technology, and the philosophy of ‘cultural relativism’ (where all practices are regarded as having equal validity regardless of efficacy), are seen as playing a large part in recent developments. The sections on ‘Propaganda and Language Distortion’ and ‘Misrepresentation of Research Results’ make particularly interesting reading.

The historical bases of a range of alternative practices are described, including acupuncture and traditional Chinese medicine, chiropractic, homoeopathy, herbal and botanical therapies, electrical and magnetic therapy, energy medicine, and laser and light therapy, and this section contains a wealth of factual and closely-referenced material for anyone with an interest in this subject. The authors continue by examining the relationship between science and medicine, and exploring some of the reasons why people might turn their backs on science and the scientific world-view despite the self-evident fact that science works.

The following chapter, ‘Ethics, Evidence and Medicine’, discusses the special privileges granted to veterinary surgeons by society, and the concept that veterinary practitioners are chartered by society to be scientifically and evidentially based. Thus, it is argued that although there is no barrier to studying ‘alternative’ methods if clients or society demand this, this study must be scientific in nature, and the investigations held to rigorous standards.

“One of the largest problems with a ‘what the heck let’s try it without evidence’ approach is that it opens the floodgates to anyone from faith-healers to voodoo priests to purveyors of snake-oil. The only consistently reliable way of demarcating unproven from proven is controlled study. If veterinarians abandon controlled study, why should they enjoy a special position in treating animals? To abandon scientific proof and evidence and replace it with anecdote, attestations and clinical judgement is to create a situation of medical anarchy and invite a world in which solid empirical verification has no place or pride, and a [veterinary degree] is nothing special. If there are no scientific standards, then there are also no rational grounds for excluding Doctors of Voodoo Medicine from treating animals. All this works against the hard battle for scientific credibility and respectability that veterinarians have fought (and largely won) in the twentieth century”.

Readers may take issue with a few points in the chapters on ‘Placebos and Perceptions of Therapeutic Efficacy’ and ‘Hope’. The wholesale rejection of the use of placebos and the offering of ‘false’ hope may seem somewhat hard-line, but the points are well argued and worthy of serious thought. If clients come to perceive that veterinary surgeons are merely offering hope, rather than options that have a realistic chance of successfully managing the animal’s condition, professional credibility is surely at risk, and this

applies to those practising mainstream scientific medicine just as much as to alternative practitioners.

The following chapter, 'Scientific Aspects of CAVM' (complementary and alternative veterinary medicine), returns to a detailed examination of the individual methodologies described earlier, this time from a scientific standpoint. Although it might have been preferable to have incorporated this information with the earlier material, or at least to have juxtaposed the chapters, this section further illuminates the question of what exactly each branch of alternative medicine claims, and how these claims relate (or in many cases do not relate) to what is known about the realities of the physical world. There is a useful section on 'Warning Flags', which highlights the language, terminology and approaches to debate which may be signals that the product or procedure being promoted does not relate to sound scientific principles. Once again the various methods are examined in detail as regards clinical evidence of efficacy in both man and animals, postulated mechanisms of action, possible scientific explanations for any effect that might be demonstrated, and safety concerns.

This chapter is particularly well-resourced (343 references listed), citing every review article and many individual articles relating to the various methods in question. Most disturbingly, the extreme paucity (or indeed complete absence) of reliable or repeatable evidence of any clinical action of almost all the methods is laid bare, including methods which have achieved some credibility within mainstream medicine such as acupuncture and herbal remedies. Even for this resource alone, this book is well worth buying.

The final chapters return to more philosophical concerns. 'Untested Therapies and Medical Anarchism' discusses the implicit assumption that, in exchange for the privileges of being allowed to perform surgery and prescribe controlled substances, society expects medical practitioners to conform to scientifically validated practices. The special position of the veterinary surgeon (similar to that of the paediatrician) is highlighted, in that an animal cannot give informed consent to the use of untested or unproven procedures, and as the veterinary surgeon's primary responsibility is to the animal, the use of evidence-based methods when these exist is imperative. The alternative to science-based practices is shown to be medical anarchy, which leaves no rational decision procedure for choosing between competing therapies.

Finally, there is some discussion of regulatory considerations, which, although it is approached mainly from the standpoint of US legislation, is nevertheless very relevant to the UK. The current regulation in various US states is detailed, and there is some discussion of how to regulate unproven practices, and whether (lay) providers of unproven practices should be allowed to work with animals. An interesting dilemma is presented here: should unproven and disproven practices be classified as veterinary medicine in order to protect the animals from the alternatively-inclined unqualified practitioners? However, does this not merely serve to accord such

practices undeserved legitimacy, risk accusations of turf-protection, and unacceptably compromise the scientific credentials of our profession? And in the end, if a useless treatment is to be administered, does it really matter whether the person prescribing it is a veterinary surgeon?

This is a complex book, presenting arguments that might be new to many readers. However, by and large it is well argued and well presented, and its bibliography is quite exceptional for the field. It is of particular relevance to those concerned with animal welfare, as the welfare implications of allowing free rein to every popular fad and fashion in veterinary medicine are extremely grave — the question of acupuncture 'anaesthesia' illustrates this only too well.

We live in a time when professional publications freely advertise courses for veterinary surgeons on acupuncture, homoeopathy and herbalism, where uncritical articles extolling the virtues of unproven and disproven treatments are commonplace, and far too often one reads grandiose claims that such-and-such dubious treatment is "backed by an increasing body of scientific evidence". We even see the new Draft Veterinary Medicines Regulations (2005) deliver the homoeopaths' wildest dream — validation for homoeopathic remedies within the cascade, exempt from the need to demonstrate either efficacy or safety. This book is therefore extremely welcome. Not only does it provide a much-needed antidote to the sentimental claptrap which accompanies most promotions of alternative treatments, it lays out the exact nature of the claimed 'scientific evidence' in all its naked-emperor glory. I commend it to all readers who want the facts about an increasingly alarming trend in both human and veterinary medicine.

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Emerging Equine Science

Edited by J Alliston, S Chadd, A Ede, A Hemmings, J Hyslop, A Longland, H Moreton and M Moore-Colyer (2004). Published by Nottingham University Press, Manor Farm, Main Street, Thrumpton, Nottingham NG11 0AX, UK (BSAS publication 32). 254 pp Paperback (ISBN 1 897676 47 6). Price £39.50.

The British Society of Animal Science (BSAS) has a stated aim to offer a forum for debate and the exchange of ideas amongst those with an interest in animals and animal production. This publication is based upon presentations given at a conference in 2003, organised by the BSAS and the British Grassland Society, which pulls together the results of recent research and thinking upon a species which has suffered from limited research funding. It claims to be an authoritative European text, covering topics under the headings of health, welfare and behaviour, breeding and genetics, nutrition, grassland and equine business management, and exercise physiology.

A foreword by HRH the Princess Royal indicates the importance of the equine industry in the rural community despite the frustrations of lack of research funding because traditionally