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Complementary and Alternative Veterinary Medicine Overview

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Biography:

Dr. Memon received veterinary education and MSc degrees from Pakistan, and PhD in Theriogenology from University of Minnesota, St. Paul. He completed residency training in Food Animal Medicine & Surgery at University of Illinois, Urbana-Champaign. Dr. Memon is a Diplomate, American College of Theriogenologists, and participates in teaching and providing clinical service as part of the Comparative Theriogenology section at WSU. He is author or co-author of more than 170 publications in scientific journals, conference proceedings and book chapters. Dr. Memon has given more than 120 presentations at international, national, and state/local meetings. With the help of other faculty members at WSU, Dr. Memon is developing Complimentary & Alternative Vet Med (CAVM) teaching and clinical activities at WSU. He recently became certified in veterinary acupuncture and has started treating patients with acupuncture at WSU’s Veterinary Teaching Hospital. Dr. Memon serves as faculty advisor for the Holistic Club (WSU student chapter – American Holistic Vet Med Association.)

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Complementary and Alternative Veterinary Medicine – An Overview
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Background

Complementary and Alternative Veterinary Medicine (CAVM) is receiving increasing attention in popular and professional circles. The CAVM modalities may include veterinary acupuncture, chiropractic, food therapy, herbal medicine, homeopathy, Ayurvedic medicine and Reiki.

Why Complementary and Alternative Medicine (CAM)?
The use of CAM therapies in the US adults has increased from 36.0% in 2002 to 38.3% in 2007. According to the Barnes, et al report, American Indian/Alaska Native groups were among the most frequent (50.3%) users of CAM therapies followed by Whites (43.1%), Asians (39.9%), Blacks (25.5%), and Hispanics (23.7%).

The use of CAVM closely parallels the development of CAM in human medicine. Internet access has greatly increased information availability to owners on CAM use for animals. In 2006, nearly half (49.7%) of the pet owners considered their pets to be family members. Over 65% of pet owners whose animals were diagnosed with cancer were using some form of CAVM.

Complimentary and Alternative Medicine Education

Washington State University (WSU) Veterinary Graduates Survey: In a 2005 survey of WSU veterinary graduates from 2000 to 2004, 60% (96/160) of respondents encountered cases requiring skills and/or knowledge in CAVM weekly (21%, 33/160) or monthly (39%, 62/160). Seven percent of respondents indicated they encounter such cases daily, while 33% indicated that they encounter such cases yearly or never. In addition to being asked about the frequency with which they encountered various types of cases, WSU alumni were asked to assess the extent of the training in specific areas while progressing through the professional curriculum, using a 0 to 5 point scale ranging from “very poorly” to “very well.” A large majority of respondents (87%) reported that their veterinary training prepared them poorly or very poorly for handling CAVM cases. Eleven percent felt that they were adequately, well, or very well trained to handle cases involving CAVM (2% did not answer this question).

By comparison, 57% of graduates felt poorly or very poorly trained in animal behavior, 29% felt adequately trained, and 14% felt well or very well trained in animal behavior. Animal behavior cases were reported as being encountered daily by 49% of graduates, and weekly or monthly by another 45%. [unpublished survey of 344 WSU alumni with responses received from 160 alumni for a response rate of 47%].

Complimentary and Alternative Medicine (CAM) education at medical colleges: In 2003, 98 medical schools had Complimentary and Alternative Medicine (CAM) as a topic in a required
In 2006-2007, 114 schools (out of 125) indicated that some aspect of CAM is included in one or more required courses, and 78 schools indicated that it was included in an elective course.\(^4\)

**Complimentary and Alternative Veterinary Medicine (CAVM) education at veterinary colleges:** An earlier study of veterinary colleges indicated that CAVM was incorporated into veterinary medical curricula at a significantly lower level than in medical schools.\(^6\) Given the growth in popularity of CAM and CAVM in the general public, the length of time since the last survey of veterinary schools, and that some of our own graduates reported low levels of preparation for utilizing or discussing CAVM approaches, we undertook a survey of AVMA-accredited programs in veterinary medicine to assess the extent of coverage of CAVM topics in professional curricula.

**Recent Survey of CAVM education at the AVMA Accredited Colleges**\(^7\): To collect and disseminate the information on CAVM contents currently offered at AVMA-accredited colleges, an email survey questionnaire was sent during the 2008-2009 academic year to academic deans and/or designated faculty at all 41 AVMA-accredited veterinary colleges. Thirty four (34) veterinary colleges responded to the survey: 26 in the US, two in Canada, three in Europe, and three in Australia and New Zealand. Sixteen colleges reported offering formal coursework in CAVM; 15 of these were electives. Only four colleges devote >0.5 Full Time Equivalent (FTE) to teaching CAVM. Nutritional therapy, acupuncture and rehab/physical therapy were the most commonly covered topics in formal courses. Most courses (14 of 16) are one or two (semester) credit hours, usually a combination of lectures and labs. Of the 18 institutions without formal CAVM courses, four plan to offer a CAVM course in the next five years. Many institutions without formal CAVM course offering address some CAVM topics in other courses. There is a consensus that this is an important topic in veterinary education, but opinions were mixed as to the appropriate framework or perspective for such coverage. The most common comments reflected strong opinions that treatment of CAVM must be evidence-based, and the view that students and practitioners should be aware of CAVM modalities given the strong public interest in them in order to be able to address client questions from a position of knowledge.

**Terminology**


**Complementary and alternative Medicine** - “CAM is a group of diverse medical and health care systems, practices, and products that are not generally considered to be part of conventional medicine. While scientific evidence exists regarding some CAM therapies, for most there are key questions that are yet to be answered through well-designed scientific studies—questions such as whether these therapies are safe and whether they work for the purposes for which they are used”.

**Are complementary medicine and alternative medicine different from each other?**

Yes, they are different.
Complementary medicine is used together with conventional medicine. An example of a complementary therapy is using acupuncture/or herbal therapy in cancer patients to improve quality of life for the patient receiving chemotherapy and other cancer treatments.

Alternative medicine is used in place of conventional medicine. An example of an alternative therapy is using a special diet/or herbs to treat cancer instead of undergoing surgery, radiation, or chemotherapy that has been recommended by a conventional doctor.

What is integrative medicine?
“Integrative medicine combines treatments from conventional medicine and CAM for which there is evidence of safety and effectiveness. It is also called integrated medicine. An approach to medicine that combines treatments from conventional medicine and CAM for which there is some high-quality scientific evidence of safety and effectiveness”.

What are the major types of complementary and alternative medicine?
Whole Medical Systems: Whole medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from and earlier than the conventional medical approach used in the United States. Examples of whole medical systems that have developed in Western cultures include homeopathic medicine, and naturopathic medicine.

Whole Medical Systems developed in non-Western cultures
Traditional Chinese medicine - A whole medical system that originated in China. It is based on the concept that disease results from disruption in the flow of qi and imbalance in the forces of yin and yang. Practices such as herbs and acupuncture seek to aid healing by restoring the yin-yang balance and the flow of qi. Branches of Traditional Chinese Medicine include Acupuncture, Chinese herbal medicine, Tuina, Chinese Food Therapy.

Ayurveda - A whole medical system that originated in India. In humans, it aims to integrate the body, mind, and spirit to prevent and treat disease. Therapies used include herbs, massage, and yoga.

Holistic medicine is a generic term for any treatment/therapy session that is intended to treat the individual as a whole.

Certification Programs for CAVM in the United States
- Acupuncture
- Chinese Herbal Medicine
- Tuina (Chinese massage)
- Homeopathy
- Chiropractic
The AVMA Guidelines for CAVM policy statement is that ‘The AVMA does not officially recognize diplomate-status or certificates other than those awarded by veterinary specialty organizations that are members of the AVMA American Board of Veterinary Specialties, nor has it evaluated the training or education programs of other entities that provide such certificates’⁸. Registry of Continuing Education (RACE) of the American Association of Veterinary State Boards has approved numerous CAVM programs for continuing education credits if they meet the requisite RACE criteria necessary for recognition.⁹

**Complimentary and Alternative Veterinary Medicine – Where is the Science?**

- Most CAM treatments are not standardized, which poses research design problems
- CAM therapies treat the whole body, not a specific disease or condition
- FDA wants to know that a therapy is safe before they test how well it works
- Research is expensive, the manufacturers of CAM therapies cannot afford to pay for scientific studies, unlike conventional drug companies
- Inaccessible foreign research journals and books and publication bias

**Strengths and Weakness of Conventional Veterinary Medicine**

**Strengths:** Rapid action, sophisticated diagnostics, acute known infections, surgery, emergency medical care.

**Weaknesses:** ineffective in treating chronic disease, equate the control of symptoms with a cure, side –effects, invasive, is a disease-based system of medicine, high cost

**Strengths and Weakness of CAVM**

**Strengths:** safety and few side effects, can be used for long periods of time, benefits and treats whole body instead of one part, can effectively treat functional and chronic diseases, is a preventive health care system, less cost

**Weaknesses:** many CAVM modalities lack specific diagnostic ability, can take a longer period of time to see a positive effect, ineffective to treat most of acute or emergency conditions

**Future Developments in CAVM**

- Development of CAVM courses and programs at veterinary colleges
- An increase in CAVM certification programs
- Increased research on CAVM therapies
- The continued development of local integrative veterinary clinics and hospitals
- Increased insurance coverage for CAVM therapies
- Development of preventive medicine and pet health maintenance client education classes

References


