

Perspectives in Professional Education

Veterinary practice management education in the Association of American Veterinary Medical Colleges member colleges during 1999

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The report entitled, "The Current and Future Market for Veterinarians and Veterinary Medical Services in the United States," published by the *JAVMA* on Jul 15, 1999,¹ continues to generate a great deal of discussion across the veterinary profession. One specific item that has been the focus of considerable interest is the contention that veterinarians may lack some of the skills, knowledge, and aptitudes that result in economic success. Generally speaking, the areas of greatest recognized need for veterinarians were not scientific and clinical skills but, rather, skills in the realm of business management. However, the issue remains as to how existing educational programs in veterinary practice management (VPM) could be modified to help meet the perceived need, or how much additional business training might reasonably be considered as part of a veterinary curriculum. Prior to addressing these issues, it is critical to fully understand what is currently being taught.

Previous studies have been conducted to characterize the teaching of VPM in veterinary colleges. In 1993, Caldwell and Russell² surveyed all 30 North American veterinary colleges. They found that 96% of their respondents' schools had a course in VPM, 60% had a required course, and 12% had > 1 required course. In addition, a strong interest in national coordination of these teaching programs was identified.

More recently, a study³ was conducted in 1997 to identify the degree of education devoted to marketing of veterinary services within the 27 US veterinary colleges. That study found that 89% of the colleges had a course in VPM, and 41% had a required course. In these courses, credits ranged from 1 to 4, with a mean of 32.4 dedicated classroom hours. A mean of 5.7 hours was allocated to topics relevant for marketing (eg, advertising, public relations, newsletters, reminder systems). Other topics found in VPM courses included personnel management and training, financial management, ethics, and résumé preparation.

These studies provide useful background information, but they leave many questions unanswered.

Where are these courses placed in the curriculum? Is there a trend toward more required courses? What proportion of all veterinary school graduates actually participate in a VPM course? What topics are currently included, and what is the business expertise of the teachers? The objective of the study reported here was to describe the current status of veterinary practice management education in the Association of American Veterinary Medical Colleges (AAVMC) member colleges and to provide answers for the aforementioned questions.

Materials and Methods

Following a cross-sectional study design, all 31 AAVMC member colleges were mailed (or e-mailed) a pretested questionnaire⁴ during fall of 1999. When necessary, follow-up e-mail and telephone contacts were made at approximately 2-week intervals for initial nonrespondents.

To define course content, topics were identified by reading the course syllabi and outlines provided by survey respondents. Overall rates of student participation in VPM courses were estimated, using specific enrollment numbers (class sizes) combined with data regarding the curricular position of each required VPM course as well as the curricular position and approximate participation level for each elective VPM course.

Results

A response rate of 100% was obtained. Of the 31 AAVMC member colleges surveyed, 94% (29/31) were found to have at least 1 VPM course. Thirty-six percent (11/31) of the veterinary colleges had > 1 course, and 10% (3/31) had 3 courses. Forty-seven VPM courses were documented.

Seventeen (55%) veterinary colleges had at least 1 required VPM course, and 5 (16%) had ≥ 2 . Twenty-four required courses were identified.

Courses in VPM are not new to the AAVMC member colleges. Of the 47 courses, the mean duration that individual courses had been part of the curriculum was 10.4 years (range, 1 to 25; SD, 6.5). Required courses had slightly longer duration, with a mean of 11.3 years (range, 1 to 20; SD, 6.3).

Although they have been around for a while, VPM courses should not be viewed as static. Forty-seven percent of all courses and 50% of required courses had experienced substantial change within the preceding 3 years.

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Table 1—Placement of veterinary practice management courses in the Association of American Veterinary Medical Colleges (AAVMC) member college curricula

Curricular placement	All courses (n = 47)	Required courses (n = 24)
Year 1	6%	13%
Year 2	13%	17%
Year 3	64%	63%
Year 4	13%	0%
Variable*	4%	8%
Total†	100%	100%

*Variable placement indicates that students have the option to take a particular course at more than one time in the curriculum.
†Columns may not add to 100% because of rounding.

Table 2—Number of credits for veterinary practice management courses in AAVMC member colleges

No. of credits	All courses (n = 47)	Required courses (n = 24)
0.5	6%	4%
1	36%	38%
2	28%	17%
3	11%	13%
4	4%	4%
Other*	15%	25%
Total†	100%	100%
Mean	1.85	1.78
Range	0.5–7	0.5–5.4

*Includes courses with fractional or variable credits. †Columns may not add to 100% because of rounding.

Mean elective course participation was found to be 51%, with a range of 7 to 95% (SD, 26.2). It was estimated that 62% of all AAVMC member college graduates participated in at least 1 required VPM course, and an additional 24% participated in elective courses only. Together, these numbers suggest that approximately 86% of AAVMC member college graduates participated in at least 1 VPM course.

The most common placement in the curriculum for VPM courses was during the third year, where > 60% were found (Table 1). The most common number of credits per course was 1 or 2 (Table 2). The grading systems that characterized VPM courses were balanced between numerical and pass/fail. Fifty-seven percent of all courses and 46% of required courses used a numerical grading system.

More than half of the VPM courses in AAVMC member colleges were coordinated by faculty without an academic degree in business or a related discipline (Table 3); however, outside lecturers were heavily employed in these courses, and these lecturers were much more likely to have academic training in business. Ninety-six percent of all VPM courses used outside lecturers, and these experts presented a mean of 41% (range, 0 to 100%) of the course content. Every required VPM course used outside lecturers who presented a mean of 34% (range, 0 to 95%) of the course content. Across all VPM courses, 85% of the outside lecturers held an academic degree in business or a related discipline. Similarly, 79% of the outside lecturers in required VPM courses had completed an academic training program in business.

A wide variety of course topics was discovered

Table 3—Proportion of veterinary practice management course coordinators holding business degrees in AAVMC member colleges

Business degree	All courses (n = 47)*	Required courses (n = 24)†
None	61%	52%
BA or BS	5%	10%
MBA	11%	10%
JD	8%	5%
Other (MS, MA, PhD, etc)	16%	24%
Total‡	100%	100%

*Total No. of coordinators was 38. †Total No. of coordinators was 21.
‡Columns may not add to 100% because of rounding.

Table 4—Proportion of veterinary practice management course content allocated to specific course topic categories in AAVMC member colleges

Course topic	All courses (n = 37)		Required courses (n = 19)	
	Mean (%)	Range (%)	Mean (%)	Range (%)
Marketing	18	0–80	14	0–38
Personnel	11	0–40	9	0–29
Finance	14	0–40	10	0–29
Law/ethics	26	0–100	34	0–100
Personal	15	0–100	15	0–77
Other	17	0–65	19	0–65
Total*	100	NA	100	NA

*Columns may not add to 100% because of rounding.
NA = Not applicable.

under the heading of veterinary practice management. Specific items from the syllabi and outlines were organized into six broad categories as follows:

Marketing—client service, client communications, advertising and promotion, professional goal setting, “The Bond”

Personnel management—employer-employee relations, communication with staff, compensation, team building

Financial management—liability insurance, evaluating a practice, starting a practice, accounting, fees

Law and ethics—contracts, negotiation, animals and the law, morals, ethics

Personal management—personal finance, personal goal setting, job search skills, interviewing

Other topics—technology, computers, regulatory affairs, real estate, facility design, administrative structure, specialty practice, medicine and surgery, inventory management, professional behavior, records, practice management.

The category that generally received the greatest emphasis was law and ethics (Table 4); however, an extreme amount of variability was identified, as evidenced by the wide ranges for each category.

Discussion

Based on the conclusions of the 1999 JAVMA report,¹ future economic vitality of the veterinary profession may well hinge on the degree to which veterinarians are able to acquire pertinent skills in business management. Although much discussion will likely

occur regarding the appropriate avenues for veterinarians to obtain such crucial expertise, veterinary schools clearly have an opportunity to develop a solid foundation through their VPM educational programs. In that regard, a structured review of existing programs, including assessment of their primary strengths and weaknesses, is timely.

The primary strength characterizing current VPM educational programs is the widespread recognition of the need for such programs. About half of the veterinary schools have consistently required a VPM course during the past decade, and most students participate in at least 1 VPM course. Among the courses available in the veterinary schools, most have faculty with business training, either in the course coordinator directly or in the form of outside lecturers. In addition, existing courses do not appear to have adopted a narrow, limiting focus.

At the same time, some definitive weaknesses were discovered in the approach to VPM education in the AAVMC member colleges. Primarily, a wide variability exists in VPM education. Even though the diversity in topics being addressed signals that the educational focus is not so narrow as to be restrictive, there seems to be limited agreement concerning any real focus for VPM across AAVMC member colleges. Not surprisingly, a wide variety of faculty expertise accompanies the diversity in course topics. As such, graduates from 2 veterinary schools could easily have little in common with regard to their respective trainings in practice management, even though both schools may have a seemingly well-developed VPM educational program.

One look at the wide assortment of course topics provides convincing evidence that many of these courses are likely to lack the focus required to be truly effective. It is difficult to conceive any 1- or 2-credit course that could fully address even a portion of the course topics listed. In that light, either courses are approaching topics superficially, or only a few of the topics are being addressed. In the latter case, questions arise as to which topics are included and how priorities are set. Considered in this context, the rather limited business expertise of course coordinators provides an extremely interesting point to ponder.

The heterogeneity in VPM education is not limited to course topics and faculty expertise. A similar wide-ranging scope exists in the specifics of course administration. Issues of very little agreement between the various veterinary schools include whether VPM courses are core versus elective, where they are placed in the curriculum, the number of credits allocated to the courses, and what grading system should be used. The fact that many of these courses have experienced recent change may, in reality, signal a prevailing uncertainty about topics to include and methods of delivery.

In a time when the need for business skills in the veterinary profession is being widely discussed, the numerous approaches to VPM education raise some interesting questions and perhaps challenges. However, the situation also presents a great opportunity to initiate a profession-wide discourse on VPM edu-

cation, the immediate focus of which should include defining acceptable minimal competencies in business management for veterinary school graduates and identifying the most appropriate (ie, efficient and effective) methods of educational delivery. Leadership in the attending discussions may reasonably be expected to come from 1 or more of several potential sources, including the AAVMC, **National Commission on Veterinary Economic Issues (NCVEI)**, individual educational institutions, or industry.

Several approaches may be considered to address the issues of minimal competencies and appropriate VPM educational delivery methods. First, it may be useful to determine educational priorities for VPM from the perspective of experts in the field: consultants and teachers. These 2 groups should be targeted because of their vital perspective on the strengths, weaknesses, opportunities, and threats that currently face VPM. Second, an outcomes assessment would be extremely insightful, especially if the characteristics and distribution of successful veterinary medical graduates were considered in light of the current study's findings. Information on which of the VPM educational programs described herein are producing successful graduates would provide invaluable background information for development of VPM educational programs in the future. Successful programs in existence and methods in use would then provide reasonable models for other schools to emulate as a starting point. In that light, the current study represents only the first critical step in the process of defining the need for VPM education.

Finally, the lack of agreement on VPM teaching suggests that perhaps initiation of well-grounded academic research programs in VPM may also be prudent. Such programs should be appropriately designed to provide the essential foundational knowledge base and structure for future educational programs. At the same time, VPM research in an academic setting would provide an ideal venue for training future teachers, specialists, and consultants in the discipline. Again, it would be reasonable to expect leadership to come from the AAVMC, NCVEI, and individual academic institutions. Development of consistent, adequate funding sources will be crucial if VPM research programs are to expect success.

Summary

Most veterinary students enrolled at AAVMC member institutions take at least 1 VPM course prior to graduation. These courses are characterized by widespread involvement of outside lecturers with business expertise, which likely adds to their strength. However, it remains that wide variation in VPM education exists across the AAVMC with regard to the topics addressed, the specific business expertise of faculty, and administrative course specifics. As such, the situation provides several key opportunities. Foremost among these is the immediate need for profession-wide discourse on VPM education to define reasonable expectations with regard to the business skills of veterinary graduates. In addition, outcomes assessment would provide information on which of the widely varying approaches to

VPM education is most likely to produce successful graduates. The opportunity also exists for development of academic research programs to support VPM education directly by strengthening the related disciplinary knowledge base. Effective leadership for these efforts will be crucial to their success.

^aPrior approval was obtained from the University Committee for Research Involving Human Subjects at Michigan State University. A copy of the questionnaire can be obtained from the author on request.

References

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