General Sessions

Moderators: Mike Bolton, John Schnackel, Noa Roman-Muniz, Dan Grooms

One World, One Health, One Medicine

Roger K. Mahr, DVM

Immediate Past President, American Veterinary Medical Association

Abstract

Animal health and public health are truly at a crossroads. The convergence of animal, human and ecosystem health dictates that the "One World, One Health, One Medicine" concept must be embraced.

As veterinarians, collaborating and cooperating with our colleagues in human medicine, public health and the environmental sciences is imperative. By working together, more can be accomplished to improve health worldwide than by working alone. The veterinary medical profession has the responsibility to assume a major leadership role in that effort.

The AVMA has established the One Health Initiative Task Force. This is the first step of a one health initiative to establish a coordinated mechanism, which will facilitate communication, collaboration and cooperation among the various health science professions, academia, government agencies and industries with a focus on one health, one medicine.

Résumé

Aujourd'hui, la santé animale et la santé publique croisent leur chemin. La convergence des enjeux touchant aux santés animale, humaine et de l'écosystème nous force à embrasser le concept « Un monde, une santé, une médecine ».

En tant que vétérinaires, nous devons impérativement collaborer et coopérer avec nos collègues de la médecine humaine, de la santé publique et des sciences de l'environnement. En travaillant ensemble, nous pouvons accomplir plus de choses pour améliorer la santé, à travers le monde, qu'en travaillant seuls. À cet égard, la profession de la médecine vétérinaire doit jouer un rôle de leadership.

L'Association américaine de médecine vétérinaire (American Veterinary Medical Association, ou AVMA) a créé une équipe de travail qu'elle a baptisée « One Health Initiative Task Force ». Cette équipe effectuera le premier pas de l'initiative visant une santé unique, en créant un mécanisme de coordination visant à

faciliter la communication, la collaboration et la coopération au sein des diverses professions des sciences de la santé, des universités, des agences gouvernementales et de l'industrie, dans une perspective de santé et de médecine uniques.

"I solemnly swear to use my scientific knowledge and skills for the benefit of society."

Colleagues, when you and I repeated those words and were admitted into the veterinary medical profession, we had just earned the value of a lifetime...the value of our veterinary diploma. I suspect that each of those who are members of other health science professions earned a similar value as they received their diplomas as well.

But with that value also comes responsibility. I believe it is most fitting, as we convene together as veterinarians and seek to enhance our partnership with the other health science professionals, to ask:

- What is our value and responsibility as health science professionals?
- What is the value and responsibility of our professional associations, colleges, or schools?

It is with that sense of responsibility to the future that the AVMA has identified and is focusing on five top strategic issues: animal welfare, economic viability, veterinary services, veterinary education and veterinary workforce.

My focus during this session will be on two of those critical issues—veterinary education and veterinary workforce. These cannot be separated.

AVMA-accredited colleges and schools of veterinary medicine are an essential and valuable first-line resource in preparing the next generation to fulfill critically important roles in our society.

However, it is apparent that we need an increase in the applicant pool, both in numbers and in the diversity of applicants:

SEPTEMBER, 2007 1

- A diversity in professional interests, from public health, comparative or biomedical research, food animal or rural practice, to academia and government service, and
- We must strive for a greater diversity in race, gender and ethnicity, if we are to meet our goal of serving the diverse needs of society.

In addition, critical paradigm shifts are needed in our approach to education if we are to meet the growing demands of our profession.

We need creative approaches – such as collaborative training across universities. We also need to bridge relationships among disciplinary areas, such as veterinary medicine with public health, human medicine, biomedical engineering and animal science.

During the past year, three studies have been released which underscore the urgent need for more veterinarians in the United States. Two were produced by the National Academy of Sciences: "Critical Needs for Research in Veterinary Medicine" and "Animal Health at the Crossroads: Preventing, Detecting and Diagnosing Animal Diseases".

A third study, "Estimating Food Supply Veterinary Medicine Demand and Maintaining the Availability of Veterinarians in Careers in Food Supply Discipline", was commissioned by the Food Supply Veterinary Medicine Coalition.

The overriding recommendations from all these studies focus on improving communication, coordination and collaboration among professional associations, colleges, government agencies and industry.

Last year, Dr. David Schwartz, director of the National Institute of Environmental Health Sciences, unveiled a strategic plan for the scientific community. It emphasizes the use of environmental health sciences to better understand the causes of disease and improve human health.

He stated that "almost every human disease can be caused, modified, or altered by environmental agents." Tuberculosis, HIV, West Nile virus, SARS, monkey pox, avian influenza and many more certainly prove this statement. They also underscore the concept of one health, one medicine.

Let's look further:

- 75% of the diseases that have emerged worldwide in the past 25 years are zoonotic.
- 38,000 animals cross US borders every day.
- 21 billion animals were produced for food and fiber around the world last year alone.

I truly believe that animal health is at a crossroads. Its convergence with human and ecosystem health dictates that the "One World, One Health, One Medicine" concept must be embraced.

As veterinarians, collaborating and cooperating with our colleagues in human medicine, public health and the environmental sciences is imperative. Together, we can accomplish more to improve health worldwide than we can alone...and we, as the veterinary profession, have the responsibility to assume a major leadership role in that effort.

It was upon that basis that in July of last year as I addressed the AVMA House of Delegates and became AVMA President, I revealed my vision for a one health initiative: an initiative that will ultimately define a national action plan and establish a driving force to meet two of our most critical challenges:

- Expanding the veterinary workforce to meet our societal responsibilities, and
- Establishing a coordinated mechanism to facilitate collaboration and cooperation with a focus on one world, one health, one medicine.

I am pleased that the AVMA on behalf of the veterinary profession has committed to assume this major leadership role by taking action to establish a One Health Initiative Task Force.

This task force is comprised of thirteen of the most committed visionary individuals who have an appreciation of the one health concept...and who are excellent communicators and collaborators...from various health science professions, academia (including student representatives), government and industry.

The One Health Initiative Task Force is charged to:

- 1. Articulate a vision of One Health that will enhance the integration of animal, human and environmental health for the mutual benefit of all.
- 2. Identify areas where such integration exists and where it is needed.
- 3. Identify potential barriers or challenges to such integration.
- 4. Identify potential solutions to overcoming barriers or meeting challenges.
- 5. Prepare a comprehensive written report for the AVMA Executive Board detailing its findings and recommendations.

I consider the One Health Initiative Task Force as the first step, and most critically important, of the one health initiative. I envision the success of this task force will lead to an integrated national strategy for one health, one medicine.

I further envision the final step to be establishment of a driving force such as a National Commission for the One Health Initiative. This National Commission would be charged to execute and implement the national one health action plan, and would have a refined partnership structure to maximize the impact of one health, one medicine.

Potential outcomes that may be possible from a One Health Initiative include:

- Enhanced collaboration among colleges of veterinary medicine in developing centers of excellence for education and training;
- 2. Enhanced collaboration among veterinary clinicians and researchers to embrace the concept of translational medicine:
- 3. Collaboration between the veterinary medical, public health and human medical professions to address critical needs to improve animal and human health globally;
- Collaboration among multiple professions—veterinary medicine, public health, human medicine, ecology and wildlife—to meet new global challenges head-on.

In closing, let me return to where I started: Value...Responsibility

 What is our value and responsibility as health science professionals? What is the value and responsibility of our professional associations, colleges and schools?

It is my fervent hope and vision that we as health science professionals, and as professional associations, colleges and schools, will assume our collaborative responsibility...to protect and promote our immeasurable value, to utilize that value to its fullest, and to make sure that our future is a promising future...a future of even greater value.

By working together we can convert our 21st century challenges into opportunities. We can improve the lives of our patients, our clients, our colleagues, and our society in general, truly fulfilling all our professional oaths by using our knowledge and skills for the benefit of our global society.

One World, One Health, One Medicine.

That, my colleagues, translates to value.

SEPTEMBER, 2007 3