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Letters to the Editor

Crisis in veterinary medicine

Veterinary medicine prides itself on addressing societal needs, but the number of recent pandemics, growth in food insecurity, and need to manage the complexity of livestock farming's environmental, economic, and social costs all suggest that the profession needs to pay more attention to these vital, expanding responsibilities. The one-health approach, although complex, provides the breadth necessary for veterinary college curricula to meet the multitude of challenges presented by the rapidly changing dynamics of food systems safety and security in the 21st century.

Emerging and endemic diseases annually cost millions of lives and billions of dollars,¹ reflecting the veterinary profession's difficulties in addressing the disruptions associated with infectious diseases, pollution, climate change, and the dynamics of livestock farming. The one-health approach promotes the interrelationships of animals, people, and the environment and represents a platform for understanding the scope of these challenges. Currently, however, one-health efforts are primarily driven by the veterinary community and focus on research, with little evidence of the changes in academic curricula needed to broaden students' horizons and inspire them to address the daunting challenges ahead. Such challenges involve not just livestock's role in food safety and security, but food systems, social well-being, urbanization, the environment, and technological change. Infectious agents, toxins, and chemical or climatic disasters can disrupt food systems and threaten food safety, trade, and national economies.

Because it brings together multiple disciplines, a one-health approach is essential for addressing the complexity of livestock farming and formulating food safety and security policies acceptable to the range of stakeholders involved. With the veterinary profession's origins in food safety, food security, and public health, veterinarians must play a central role in defining these debates. In the past century, veterinary public health inspectors and private practitioners have teamed up to mitigate brucellosis, bovine tuberculosis, echinococcosis, and more. Animal and human waste contamination causes 45% of raw produce foodborne disease outbreaks,² but veterinary medicine and academia have diminished the profession's engagement in food hygiene and safety. The current coronavirus outbreak disrupted the food sector in part because infected food handlers contaminated raw foods. Food safety starts on the farm, and rural veterinarians are the first line of defense against such contaminants entering the food system, but rural veterinarians in the United States have dwindled to less than 8% of the profession, and they are aging.³

Veterinary academia lags in integrating the multidisciplinary dialogue of the one-health approach into current training programs yet doing so is essential if our profession is to continue serving society in securing a safe and sustainable food system.⁴ Although complex and difficult to teach, the one-health concept should be a required course for every veterinary student. No other profession is better positioned to grasp the dynamics of the one-health approach and the livestock sector's multiple beneficial and harmful impacts on society and the environment. To secure a safe, sustainable, and economically viable food supply, veterinary graduates must be prepared to take crucial leadership roles in shaping informed one health policies and investments in livestock farming and food safety in a rapidly changing, increasingly complex, and warming planet.

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