

# Prescription Opioid Epidemic: Do Veterinarians Have a Dog in the Fight?

The United States is battling an epidemic of opioid abuse and misuse<sup>1,2</sup> resulting in over 42 000 deaths in 2016<sup>2</sup> and 1000 emergency room visits daily.<sup>3</sup> Researchers, policymakers, and public health professionals are seeking ways to help prevent misuse and abuse by educating Drug Enforcement Agency (DEA)-licensed prescribers of controlled substances on guidelines for managing pain and modifying opioid prescribing practices. One goal is to reduce the supply side of the prescription opioid “supply and demand” equation. Appropriately, much of the attention and educational effort has focused on the pharmaceutical industry, providers of human health care, and patients. Veterinarians have been largely overlooked, despite the fact that many hold DEA licenses and can prescribe, administer, carry, stock, and dispense narcotics in clinics. Our research suggests that this is a serious omission and must be addressed.

Veterinarians prescribe synthetic opioids, which are a class of opioids driving the increase in drug-related overdose deaths.<sup>2</sup> Although intended for the treatment of animals, these are commercial-grade pharmaceuticals that have the potential to be diverted and abused by humans. Remarkably, the magnitude of such diversion and misuse is unknown, despite its implications for both human and animal suffering. As members of our statewide Consortium for Prescription Drug Abuse Prevention (<http://www.corxconsortium.org>), we have focused on prescriber education. In 2014, anecdotes concerning veterinary medication diversion led us to convene a focus group of

veterinarians to learn more about their practices, awareness, and concerns regarding opioid misuse and abuse. Subsequently, we collaborated with a local veterinary society to administer a 24-item online survey to gauge their members’ perceptions of abuse and misuse of opioids by animal owners. The survey focused on four key concepts: (1) whether veterinarians feel they play a role in preventing diversion, (2) their utilization of the state’s prescription drug monitoring program (PDMP), (3) their awareness of abuse and misuse in their clinic, and (4) the resources they need.

The survey, completed by 189 Colorado veterinarians, reinforces the need for veterinarians, public health professionals, pharmaceutical companies, and other stakeholders to take a systematic approach to identifying and addressing the role of veterinary practice in the opioid epidemic. Demographics as reported by the respondents were as follows: 64% were female, 77% were aged 40 years or older, mean time in practice was 22 years, 51% practiced in a suburban setting, and 73% practiced small animal care. Key findings include the following: 13% of surveyed veterinarians were aware that an animal owner had intentionally made an animal ill, injured an animal, or made an animal seem ill or injured to obtain opioid medications; 44% were aware of opioid abuse or misuse by either a client or a veterinary practice staff member; and 12% were aware of veterinary staff opioid abuse and diversion.

Veterinarians reported a lack of awareness and a lack of role clarity as potential barriers to be overcome. Sixty-two percent of the

surveyed veterinarians believed that they had a role in preventing opioid abuse and misuse. Forty percent were unsure if opioid drug abuse and misuse was a problem in their communities. Veterinarians reported substantial gaps in both knowledge and education. Seventy-three percent of respondents indicated that their veterinary medical school training on opioid abuse or misuse was either fair, poor, or absent. Additionally, 64% said that they had not completed continuing education on best practices for prescribing opioids since entering practice. Respondents identified three continuing educational priorities: opioid abuse prevention (81%), pain management guidelines (55%), and how to engage electronic resources (54%). More than a third (36%) of respondents recommended improving the PDMP guidelines and tutorials to help improve access and utilization. We recognize that this convenience sample, representing 10% of the society’s members, has limited generalizability and cannot be used to extrapolate to all practices. Nonetheless, these data are sufficient to warrant immediate action.

We call for the veterinary, public health, pharmaceutical, and regulatory communities to devote time and resources to assess and intervene

on the issue of prescription opioid diversion in veterinary medicine. Our recommendations fall into three main categories.

## TRACKING AND SURVEILLANCE

Steps should be taken in the veterinary medicine community to align with other DEA license holders in prevention measures, leading to congruent efforts by all prescribers of opioids in the United States. This should include setting expectations for veterinarians to meet the same levels of compliance required of other prescribers for logging prescriptions of scheduled drugs into state PDMP systems. In addition, because much of the prescribing, dispensing, and administration of DEA-scheduled drugs by veterinary practices does not flow through commercial pharmacies, there is a need to reexamine and redouble efforts to ensure the highest standards of inventory stocking, tracking, and security from the time these medications reach the clinic to the time they are either dispensed or returned to the supplier. This should include enhanced workplace policies, practices, procedures, training, and monitoring to mitigate the risks of diversion, misuse, and abuse by both clinic staff and clients. State PDMP systems can serve as a valuable resource that is available to veterinarians in almost every state.

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In the case of animal abuse reporting, although the American Veterinary Medical Association considers it the responsibility of the veterinarian to report suspected cases, only 17 states have mandatory reporting laws. Strengthening legislative reporting could benefit human and animal health alike.

## AWARENESS AND EDUCATION

Solutions should include improving awareness of opioid safety and management among veterinarians and staff, as unprepared providers contribute to the epidemic.<sup>4</sup> We call on veterinary medical schools and professional societies to evaluate and, where needed, enhance curricular offerings and continuing education trainings to address the epidemic. Such training should reinforce the important role of practitioners in identifying and reporting animal mistreatment when they suspect vulnerable animals are being injured or undermedicated for pain by clients because of diversion. Clinical practice guidelines should call attention to the potential for diversion and abuse by clients and within veterinary practice.

Resources for veterinarians should target prevention strategies for opioid abuse and misuse. In Colorado, we have launched one such training in collaboration with the veterinary medicine community (<http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/CHWE/training/Online/Pages/RxAbuse.aspx>).

## RESEARCH GAPS

There are many gaps in research. For example, we have found no published studies in the peer-reviewed literature on veterinary opioid-prescribing rates or on the risk of diversion. Research funds should be allocated and directed to addressing the gaps. We need to establish the magnitude and relative contribution of the veterinary prescribing pathways to the epidemic. Fundamental systems research is warranted to examine and track opioid prescribing and dispensing pathways that flow through veterinary practices. Abuse rates are a useful tool to quantify abuse within a community, but without proper knowledge of where individuals obtain the drugs, an abuse rate

will not be entirely valid.<sup>5</sup> Research is needed to identify and evaluate best strategies for veterinarians to use to identify and report clients who are more likely to divert opioids and to put animals at risk. In the face of this epidemic, and based on the experience of Colorado veterinarians, researchers should urgently test new approaches to ensure that the veterinary patients in need of medication are, in fact, receiving prescribed treatment.

In conclusion, the evidence indicates that, yes, veterinarians have a dog in this fight. **AJPH**

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the expected effects of health conditions and impairments on activities and functioning.<sup>1</sup> However, DALYs have been criticized, as they devalue persons with disabilities and interventions aimed at enhancing their lives, and they tend to focus on prevention.

# From Disability in Resource-Poor Settings to Policy and Research Opportunities in Global Health

Disability receives very little attention in global health, and in particular in the context of countries that are resource poor, whether in terms of low per capita income, human development index, or access to health care services. This is not surprising given the lack of internationally comparable data

and standard approaches to measure disability. In global health, since the 1990s, disability has often been considered in terms of disability adjusted life years (DALYs), a composite indicator of premature mortality and nonfatal health outcomes. Disability prevalence is inferred from data on health conditions

and impairments and their disability weights, which represent

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