

Assesing Illinois small animal veterinarians' opinions on AMR and factors that influence their AMU practices

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Objective

The emergence of antimicrobial resistance (AMR) is a global public health issue. Inappropriate antimicrobial use (AMU) has been identified as the major factor impacting the occurrence of AMR. The opinion of veterinarians on AMR may influence their antimicrobial prescription practices. To prevent the development of AMR it is essential to understand their opinions and factors influencing their decision to prescribe antimicrobials.

Methods

To better understand this issue this study developed an online questionnaire using the Qualtricssm survey tool and administered it to licensed small animal veterinarians in Illinois through the Illinois State Veterinary Medical Association. The survey was open for two months between September and November 2022.

Results

A total of 95 responses were recorded, of which 83 were included in the analysis. The majority of respondents (74.7%) were veterinarians working in primary care hospitals, followed by veterinarians employed in academic teaching hospitals (14.5%) and emergency hospitals (7.2%). The majority of veterinarians believed that inadequate doses of antimicrobials (87.9%), and empirical antibiotic therapies without performing a culture and susceptibility tests (72.3%) contributed most to the increase of drug-resistant bacteria. A total of 43.4% of veterinarians stated that they were aware of the current local antimicrobial resistance profiles of major bacterial pathogens. Only 24.1% of respondents had AMU guidelines at their practice. The main factors influencing veterinarians' decision to prescribe antimicrobials were: disease severity (88%), antimicrobial susceptibility test results (84.4%), administration route (72.3%), previous experience with similar cases (68.7%), antimicrobial prescription guideline recommendations (68.7%), and the patient's medical and previous AMU history (68.7%).

Conclusions

Understanding the current local status of AMU and AMR in Illinois will aid Illinois small animal veterinarians in developing an effective antimicrobial stewardship program to mitigate the emergence of drug-resistant bacteria.

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