

Science, Or Something Else? How Veterinarians Choose Antibiotic Treatment Regimens

SCIENCE, OR SOMETHING ELSE? HOW VETERINARIANS CHOOSE ANTIBIOTIC TREATMENT REGIMENS

Introduction: Understanding the influences on prescribing choices is an essential step in designing effective antimicrobial stewardship interventions. Previous research with doctors and veterinarians indicates that non-clinical factors often play a central role in prescribing.

Materials and Methods: Interviews were recorded with 22 companion animal veterinarians practising in Australia. Two case studies were discussed, followed by semi-structured questions about antimicrobial choices. Inductive thematic analysis was performed.¹

Results: Few interviewees were aware of local guidelines and only a small minority (1/22; 2/22) selected guideline-concordant management for the two case studies. Selection of empirical antimicrobial treatment regimens was affected by a diverse set of factors related to the case, the pet owner, the drug, the prescriber's past experiences, other veterinarians (particularly veterinary specialists) and various external influences. The widespread empirical use of broad-spectrum antibiotics was driven by a perception of safety, familiarity and habit, ease of administration (particularly for cats), and pharmaceutical marketing, and perpetuated by the choices of colleagues. While many veterinarians expressed concern about antimicrobial resistance, they often lacked sufficient knowledge about how to mitigate this risk effectively. Some participants mistakenly believed that extending treatment durations and ensuring patients completed their prescribed course would reduce the likelihood of antimicrobial resistance and lead to better treatment outcomes.

Conclusions: Veterinarians in Australia recognise the importance of antimicrobial stewardship, but are hindered by practical challenges, including drug formulations, limited awareness of local guidelines and outdated beliefs about the importance of 'finishing the course'.

Note: This research has been published – see references.

References

1. Scarborough RO, Bailey KE, Sri AE, Browning GF, Hardefeldt LY. Seeking simplicity, navigating complexity: How veterinarians select an antimicrobial drug, dose, and duration for companion animals. *J Vet Intern Med* 2024;38:3215-3234.