The 4th International Electronic Conference on Antibiotics



21-23 May 2025 | Online

Antibiotic prescription in food-producing animals – A focus group study to assess Portuguese veterinarians' knowledge and attitudes

Jacinta Oliveira Pinho¹, Rafaela Nogueira^{2,3}, Ana Isabel Plácido^{4,5}, Ana Cláudia Coelho^{6,7}, Paula Oliveira^{2,3,8}, Fátima Roque^{4,9}, Maria Teresa Herdeiro^{1*}

Department of Medical Sciences, Institute of Biomedicine (iBiMED), University of Aveiro, Aveiro, Portugal; 2 Centre for the Research and Technology of Agro-Environmental and Biological Sciences (CITAB), University of Trás-os-Montes and Alto Douro (UTAD), Vila Real, Portugal; 3 Institute for Innovation, Capacity Building and Sustainability of Agri-Food Production (Inov4Agro), UTAD, Vila Real, Portugal; 4 BRIDGES - Biotechnology Research, Innovation and Design for Health Products, Guarda, Portugal; 5 Research Laboratory on Epidemiology and Population Health, Polytechnic of Guarda (IPG), Guarda, Portugal; 6 Department of Veterinary Sciences, UTAD, Vila Real, Portugal; 7 Animal and Veterinary Research Centre (CECAV), Associate Laboratory for Animal and Veterinary Sciences (AL4AnimalS), UTAD, Vila Real, Portugal; 8 Department of Veterinary Sciences, UTAD, Vila Real, Portugal; 9 Research Laboratory on Epidemiology and Population Health, IPG, Guarda, Portugal; *Corresponding author: teresaherdeiro@ua.pt

1 INTRODUCTION

The inadequate use of antibiotics in humans, animals, and agricultural practices have been associated with the emergence and dissemination of antibiotic-resistant bacteria. To successfully tackle the global public health problem of antibiotic resistance (ABR) is, therefore, necessary to take a One Health approach.

2 METHODS

In this study, focus groups were carried out in Portuguese veterinarians whose practice was in production animals (bovine, equine, swine, ovine, and caprine). The topic guide was constructed based on the information obtained from a previous systematic review. Thematic analysis was performed using a qualitative analysis software.

3 RESULTS



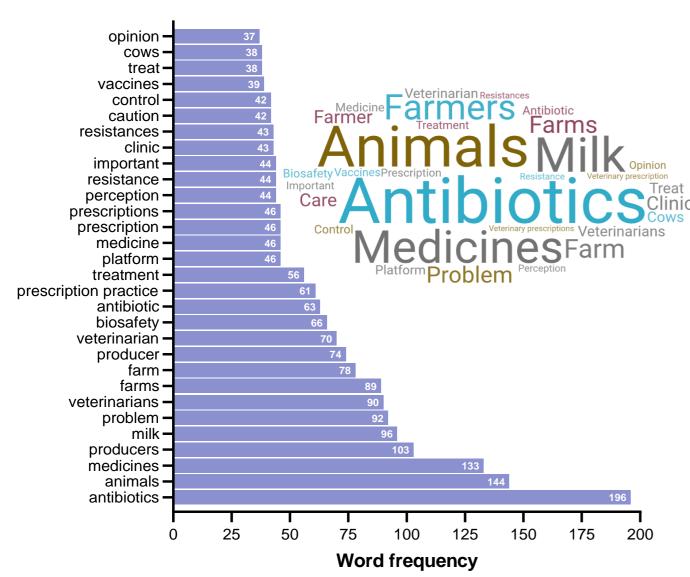


Figure 1. The 30 most frequent words spoken during the focus groups.



Factors that influence veterinarians' prescription practices

Dairy vs beef

Client-related factors Financial resources

Knowledge about ABR
Willingness to change
Biosafety and vaccination

Veterinarian-related factors Knowledge about ABR

Professional experience Fear of losing the animal Fear of audits and sanctions

Available resources Diagnostic/sensitivity tests

Online prescription platform

Regulatory and surveillance Legislation/bureaucracy

Poor monitoring

4 CONCLUSIONS

This study identified several factors that can influence the veterinarian's decision-making. Some of these factors can potentially be modified through educational interventions, aiming to increase awareness, of both veterinarians and clients, about ABR, to improve production practices and to promote adequate antibiotic use in veterinary.



Funding:

Project 2022.04568.PTDC, supported by the Foundation for Science and Technology (FCT) in its state budget component (OE).





