



# 'BRAVE ENOUGH'

## Veterinary decisions to withhold antimicrobial therapy in pets

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### BACKGROUND



- Many prescribers admit to **using antimicrobials** when they know they are **probably or definitely not required**, despite being concerned about antimicrobial resistance (AMR)
- To design effective antimicrobial stewardship (AMS) programs, it is essential to understand **the drivers of this behaviour** in different contexts
- No qualitative studies had previously been undertaken with **Australian companion animal veterinarians** to understand how they decide to **withhold or prescribe antimicrobials** in the absence of a clear indication

### 10-SECOND SUMMARY

Fears of clinical deterioration and client dissatisfaction can make it difficult for veterinarians to appropriately withhold antimicrobial treatment in pets. However, there are a number of practical ways to mitigate these fears.

### STUDY DESIGN

- **In-depth, semi-structured interviews** were conducted with **22 veterinarians** registered in Australia who treated companion animals
- Participants were deliberately selected to represent a **broad range** of clinical experience, seniority, practice types and locations, and level of interest in AMR/AMS
- The **Theory of Planned Behaviour** was used to structure the thematic analysis



### FINDINGS

In the absence of a clear indication for antimicrobial treatment, a wide range of factors influenced veterinarians' decisions to prescribe or withhold antimicrobials. Prescribing antimicrobials often gave veterinarians a **sense of safety**; conversely, withholding them was seen as an **act of bravery**.



**BACKGROUND FACTORS** of importance included:

- Veterinarian **attitudes to AMR**, clinical **experience**, assertiveness, **communication skills**
- Workload, **exhaustion** and **workplace culture**
- **Habit** of prescribing antimicrobials in a particular situation
- **Client prejudices**, **health literacy** and the client-veterinarian **relationship**

#### BEHAVIOURAL BELIEFS

(consequence beliefs)  
 dominated veterinarians' decisions to prescribe or withhold antimicrobials, chiefly:

- Fear of **clinical deterioration**
- Fear of **failure to meet client expectations**

#### NORMATIVE BELIEFS

(social approval beliefs)  
 were also important, particularly:

- **Client approval**
- **Employer/colleague approval**
- Perceived approval of veterinary registration **board**

#### CONTROL BELIEFS

(ease or difficulty beliefs)  
 were very important, especially:

- Client **capacity to adequately monitor/nurse** their animal
- Client **financial constraints**
- **Time pressure** on consultation

The main things that you think of when someone leaves and you haven't given them antibiotics, you're like, is it gonna get worse? Is the client going to ring up tomorrow and abuse me for not giving them the antibiotics?

—Vet M, 28yo female, regional practice, low interest in AMR/AMS

### VETERINARIANS' FEARS

WHEN WITHHOLDING ANTIMICROBIAL TREATMENT



Sometimes it's just a case of, I'm going to be the one who's brave enough to actually have this slightly confrontational conversation, which ... is going to be the best thing for the pet even though it's a bit uncomfortable initially.

—Vet R, 28yo female, regional practice, high interest in AMR/AMS

### WHAT DOES THIS STUDY ADD?

This study supports many findings from similar Dutch and British qualitative studies, including the importance of veterinarians' **communication skills, habits, time pressure** and the **public's understanding of AMR**.

This is the first study to show that:

- A **client's capability** to undertake adequate home monitoring/care of their pet plays a critical role in enabling antimicrobial withholding decisions. Enhancing pet owner competencies could reduce unnecessary antimicrobial use.
- Pet owners receiving **AMS messages from their own doctors** can reduce their expectations of antimicrobials for their pets, demonstrating the potential for **cross-sector collaboration** on public AMS messaging.
- **Para-veterinary staff** (receptionists, practice managers, nurses) can either facilitate or undermine a practice's AMS efforts through their interactions with clients and veterinarians. These staff should be actively involved in AMS initiatives.
- A **supportive veterinary workplace culture** can enable appropriate withholding of antimicrobials.
- Veterinarians' fear of negative feedback on **social media** can contribute to unnecessary antimicrobial use. Developing a practice strategy for managing negative social media content could be helpful.

**These findings should be considered when designing AMS interventions in companion animal practice.**



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Antibiotics, 2023

