Teaching old dogs new tricks- can the dogs invent the tricks?

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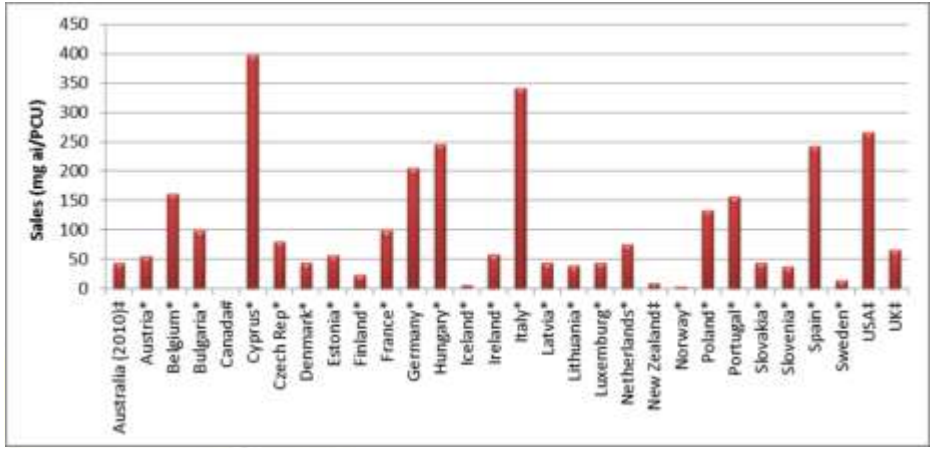
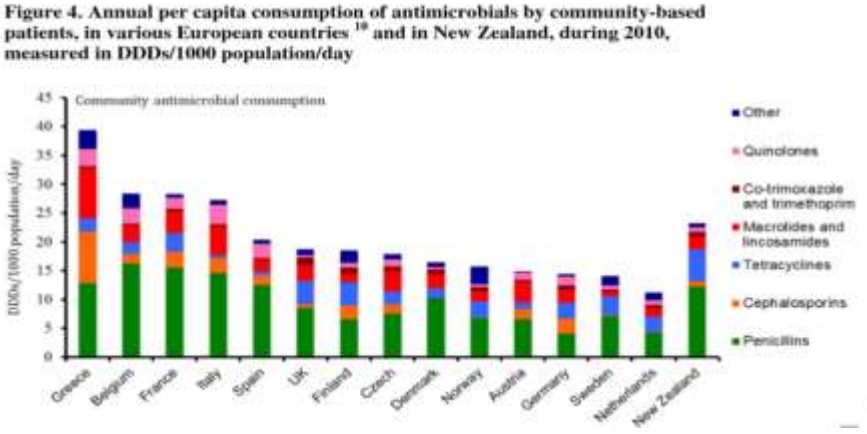
Background AMU

- 80% of antimicrobials used globally are in agriculture
- NZ has the 3rd lowest AMU globally
- NZVA goal to ‘not need antibiotics by 2030’
- Need to motivate farmers to change behaviour





Veterinary engagement…

- Long history of working closely with farm clients:
  - **Teatspray to prevent mastitis**
  - Early detection & identification of mastitis pathogens
  - Quality (and quantity) colostrum
  - Selective therapy at drying off
  - Appropriate culling of repeat offenders
  - Better disease identification before treating

  - …..how effective have we been??

If we change the dialogue can we change the outcome?

'In veterinary consultations, the predominant approach is that of paternalism, where the veterinarian sets the consultation agenda, takes on the role of the guardian and assumes that the client's values match their own, resulting in veterinarians contributing most of the talking and clients playing a passive role'

'…it is more likely to elicit client reactions against a behaviour rather than in favour of it (a phenomenon known as psychological reactance)…'

- Bard et al, 2017

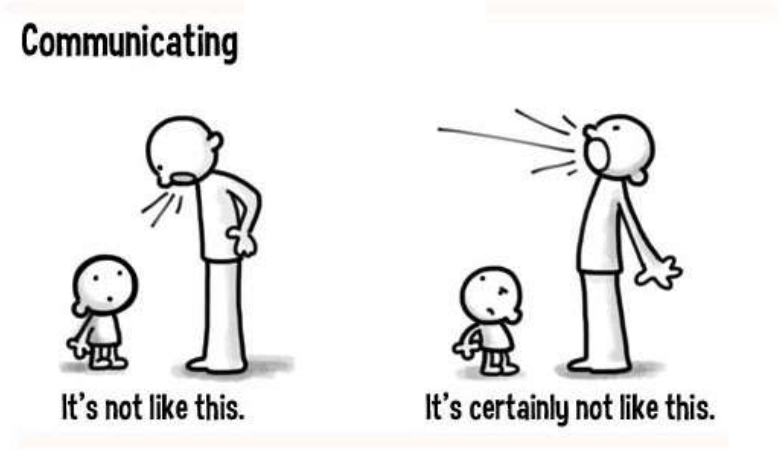
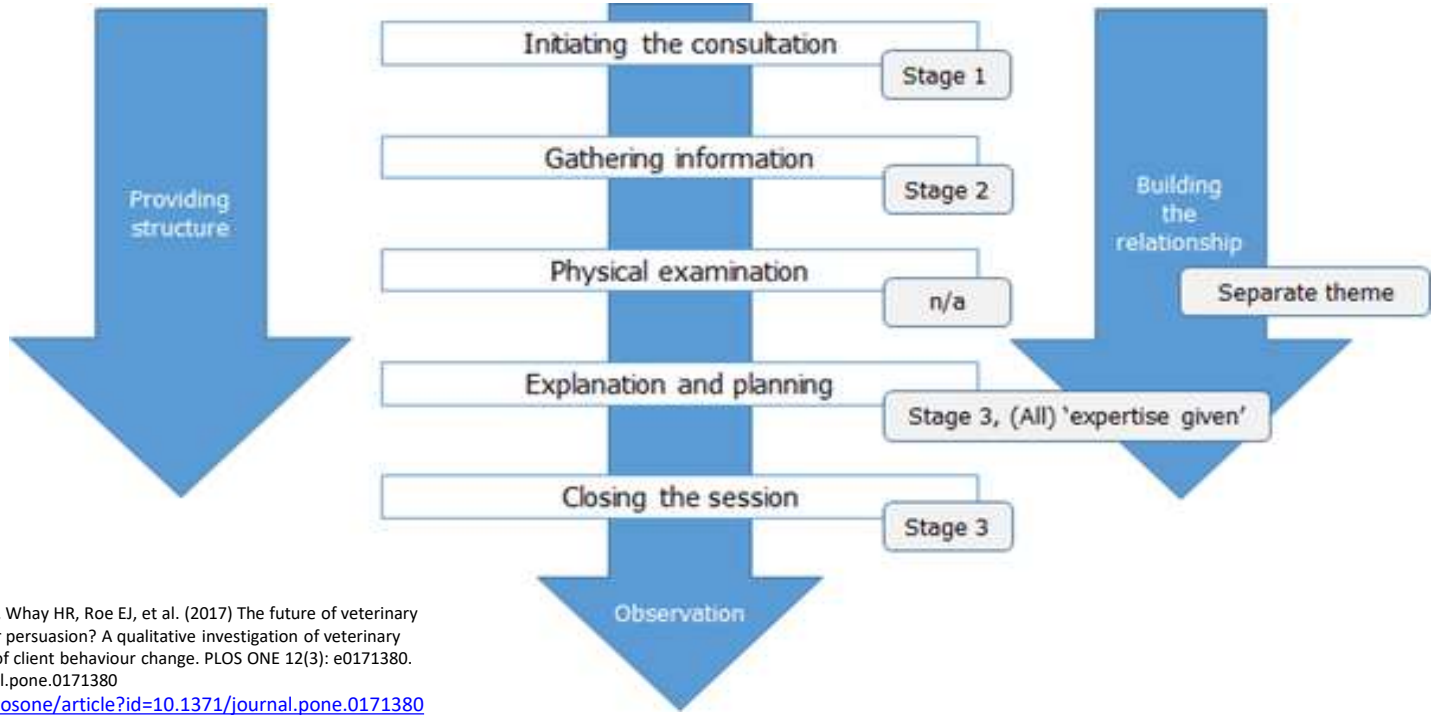


Fig 4. Congruence of consultation stages identified by thematic analysis of role-play (n = 15) discourse and Calgary-Cambridge model.



Bard AM, Main DCJ, Haase AM, Whay HR, Roe EJ, et al. (2017) The future of veterinary communication: Partnership or persuasion? A qualitative investigation of veterinary communication in the pursuit of client behaviour change. PLOS ONE 12(3): e0171380. https://doi.org/10.1371/journal.pone.0171380
https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0171380

PLOS ONE

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Behavioural change: keys

- Approach:
  - Engage rather than tell
  - Education first
  - Focus on the person not the disease
- Co-factors:
  - Personal (gender, culture, age etc)
  - Environmental factors (family, friends, finance, values, networks)
  - Control of decision making (eg IWG TF)
- Plan:
  - Ease of adoption
  - Holistic, broad
  - Nudges, incentives, positive

'….is it simply enough to ask for more partnership when the subtle effects of the existing paternalistic paradigm are likely to undermine it?….'

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Other recent work

- Kristen Reyher's work on AM reduction programmes

- Behavioural change very difficult
  - Especially if routine behaviour
  - Need motivation => intention to change
  - Assistance in new behaviour
  - Support in maintenance

- Vets seen as key influencers and major referrants
- *'….veterinarians have often been found to fall short in adopting this supportive role as proactive and motivating animal health consultants…'*

  - Reyner et al; 2016, 2018; Speksnijder Animal Frontiers, 2018

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SFF Project – 2017-2020

- **Development of farmer-led regional Sustainable Health Groups**
- **20% reduction in AM use by 2020**
  - 3 year project- SFF and VetSouth
  - Southland/South Otago
  - Multi- sector
  - Supported by Beef & Lamb; SDDT; local vets and farmers
  - Stakeholders: Uni of Auckland (Prof Mark Thomas); Otago Uni (Prof Greg Cook)

- **'Participatory development'** farmer-led approach
  - 4 x Farmer- driven groups; 2 facilitators

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20% 2020

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Process & Expected Outcomes

- **Reduction** in antimicrobial use on farms.
- **Changes in farmers' attitudes** to disease management, with a reduced reliance on antimicrobials.
- Identification of **successful and less successful strategies** for reduction in AM use
- **Dissemination of information**, knowledge, and success or otherwise of strategies

- **Unofficial goal to reduce AMU by 20% by 2020**

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Current progress

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Outcomes: new dogs, old tricks

Farmer strategy

- ‘Treat it once, treat it right’
- ‘Decide with data’
- ‘Go for Gold’
- ‘3 strikes and you’re out’
- ‘Managing mastitis’
- ‘Test to treat’

Vet Advice

- Improved diagnostics
- Selected DCAT
- Improve colostrum intake
- Identify recurrent cases
- Focus on most critical disease
- Identify pathogen before treating cases of mastitis

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Outcomes: old dogs, new tricks

Reducing wastage on farm

- Novel strategy
- Reduce purchase
- Reduce use
- Appropriate dose/course
- Weigh animals
- Return unused AMs

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Challenges

- Minor ED incursion in the middle of project
- Facilitation and ownership
- Farmers defaulting to vets for advice and direction
  - Breaking down *all* default behaviour
- Strategy-led rather than group- led
- Some over-enthusiasm
- Keeping vets out of it!

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Wins

- Education of farmers
- Significant uptake in most strategies
- Farmers engaged and keen to ‘buy in’
- Farmers inform other farmers- collective momentum
- Changed conversations
- Workshops and field days

- ……The old dogs can invent the tricks!

Acknowledgements

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