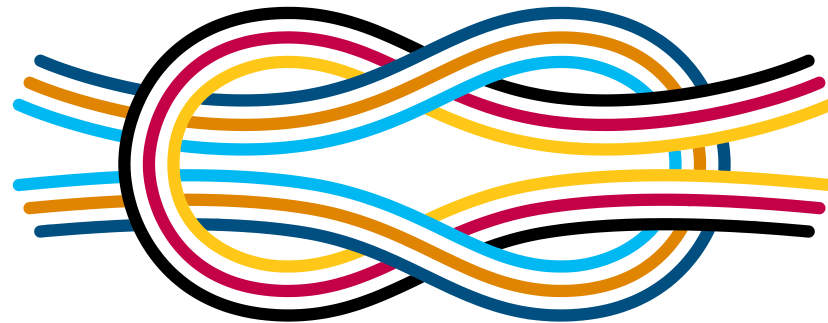




Federal Ministry
of Health

Federal Ministry
of Food
and Agriculture



G20 GERMANY 2017

Meeting of the Public Health and
Veterinary Public Health Institutes of the G20

Workshop: Rational antibiotic use
Rex Horgan and Susan Hopkins

Rational use of antibiotics

- What do we even mean by rational use ?
- Rational in terms of AMR, One Health aspects ?
- Use based on a clinical diagnosis/ veterinary input ?
- To protect human & animal health and welfare, based on expected effectiveness or diagnostic test/ susceptibility test (time, cost considerations) ?
- Appropriate dose/duration of therapy, use of broad or narrow spectrum Abs, critically important antimicrobials, availability of product even ?

Rational use of antibiotics

- Or rational in terms of economics etc. ?
- To promote animal productivity, ensure farm profitability, better feed conversion efficiency, potentially cheaper food for consumers ? Or in humans in terms of return to work 1 day earlier ?
- Weigh up cost of (cheaper) Ab treatment versus (expensive) vaccination, length of withdrawal times for meat/milk in animals ?
- Competitive disadvantages: is it economically rational for countries to apply stricter policies to their producers than in competitor countries, or justified to protect public and animal health (One Health) ?
- Are vets/farmers willing to restrict/reduce use of Abs if doctors don't ?

Rational use of antibiotics

- Use in animals: for disease treatment, metaphylaxis, prevention, for growth promotion: are all of these uses necessary or rational ?
- Use in humans: treatment of self limiting V serious conditions, medical and surgical prophylaxis
- Mode of use: individual (humans/ animals), group therapy, mass medication, routine administration for each production cycle (feed, water, inj. for animals)
- What is an appropriate level of oversight on antibiotic use by farmers or supply by veterinarians/other sources etc. ? In GPs, dentists, hospitals (government versus private), online?
- Is it necessary/useful to have some official supervision, control, recording or data collection concerning use of antibiotics in animals & humans ?

Rational use of antibiotics

- Who decides whether the use of antibiotics is rational or not ?
- Farmer/ Pet owner/ Individual/ Parent/ Carer ?
- Veterinarian/ farm consultant or adviser ?
- Doctor/human physician (for humans and animals!!) ?
- Government/ national competent authorities ?
- Scientists, experts, supermarkets, consumers ?
- International organisations: OIE, WHO, FAO-CODEX, ECDC etc.?

Key Workshop Questions proposed by organisers

1. What are the core elements of rational antibiotic use?
2. How can their application be implemented in different settings (outpatients vs clinics) and sectors (human and veterinary medicine)?
Are there examples for success stories? What are obstacles?
3. What is the impact of laboratory diagnostic, in particular sensitivity tests (antibiograms), in strengthening the rational use of antibiotics?
4. How could the outpatient sector be better integrated into activities to ensure the rational use of antibiotics?

Thank you for your attention!