# Antimicrobial Use and Resistance Control

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# **Outline**

- Antimicrobial use in Saudi Arabia.
- History to future regarding antimicrobials resistance.
- Strategy, plan and stages to mange and control the antimicrobial resistance.
- Saudi Food and Drug Authority efforts so far to minimize the risk of antimicrobial resistance.

# **Antimicrobial Use**

### "No restrictions for dispensing"

# Most common antimicrobial use (based upon actual observation):-

- Used by professional and non-professional.
- Many animals owners use antimicrobial products as first defiance for any disease.
- Limited understanding of the consequences of antimicrobial misuse.
- Mixed between prevention and treatment.

#### • Past:

considered less significant.

#### • Present:

Cases reported and taken into consideration from the human side. In addition, advises and awareness campaigns done regarding the optimal use of antimicrobial on animals by Ministry of environment, water and agriculture and Ministry of health.

#### • Future:

cooperation from all in-charged agencies for desired results.

- Strategy: providing therapeutic effect on animals without pressure for resistance.
- Plan: collecting data → statistical views → causes pointed out → solutions by making balance on use = Control
- Stages: depends on the time needed from all in-charged agencies (e.g. SFAD, Ministry of environment, water and agriculture and Ministry of health).

- SFDA point of view:-
- 1 Antimicrobial resistant is becoming a real threat to redeem antimicrobial products from their effect on organisms.
- 2 The Public in Saudi Arabia should be well-informed in the risks of misuse of Veterinary antimicrobials.
- 3 Working with relevant agencies to mange the control on resistance will led to satisfactory results.
- **4 -** Cooperating and receiving consultations from the World Organization for Animal Health (OIE) and World Health Organization (WHO) on this field is essential.

#### SFDA efforts so far...

- **1 -** First Post marketing surveillance (PMS): during 2012/2013 SFDA did PMS for veterinary products on 54 samples randomly covering the following:- appearance, assay, sterility, pH, bacterial endotoxin and volume. The second PMS was during 2016/2017 targeting the most imported veterinary products.
- **2 VICH Guidelines:** the International Cooperation on Harmonization of Technical Requirements for Registration of Veterinary Medicinal Products. (<a href="http://www.vichsec.org">http://www.vichsec.org</a>): Saudi Arabia is now a member of the VICH Outreach Forum VOF and as a result we started sharing ideas with other members to handle the situation.

- **3 -** Any antimicrobial becomes globally suspected of spreading of resistance used in food-producing animals will be rejected.
- "e.g. using *Fosfomycin* for chicken"
- **4 -** The use of antimicrobials for growth promotion are prohibited in Saudi Arabia.
- **5 -** Stop any unknown combination of antimicrobials unless has accepted reference.
- **6 -** Start to aware the users for some humanly important antimicrobial like **Colistin** "e.g. **Colistin** is a last resort drug in human medicine for treatment of infections caused by certain multi-drug resistant bacteria, for metaphylaxis not prophylaxis and based on susceptibility testing"

# Thank you

Comments / questions !!

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