

Research program IZS VE 07/15

Development of a training strategy aimed to increase veterinarians' and breeders' awareness of the proper use of antibiotics in farming

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Antimicrobial resistance (AMR) is the ability of a microorganism to resist the action of an antibiotic [1] by compromising the treatment effectiveness of infectious diseases in humans and in animals. The misuse of antibiotics is considered among the major causes of the emergence of resistant microorganisms representing a serious health risk for people [2]. The European Union estimates a total cost of 1.5 billion euro and 25,000 patients who die every year due to problems related to AMR [3]. In 2008, the European Council called upon the Member States to strengthen surveillance systems and improve data quality on antimicrobial resistance and on consumption of antimicrobial agents within both human and veterinary sectors. Several authorities started working together in the collection of data on sales of veterinary antimicrobial agents in the Member States involving the European Centre for Disease Prevention and Control (ECDC), the European Food Safety Authority (EFSA) and the European Community Reference Laboratory for Antimicrobial Resistance (EURL-AMR).

In Italy a system of surveillance for AMR was implemented through D.L. 4/2006, no. 191 (Directive 2003/99/EC). Several activities were developed in the national territory to improve the proper use of the veterinary drugs (e.g. National system of traceability of the veterinary drugs - Circolare Ministero Salute no. 1602 del 01.02.2010, the experimental application of electronic veterinary prescription in some Regions, etc.). In that process, it is crucial to study veterinarians' (employed both in the public and private sector) and breeders' level of awareness on AMR in order to assess both their level of consciousness in the use of antibiotics and the information gaps thereof. This would be a starting point to identify potential and effective corrective measures.

To these extends, the Istituto Zooprofilattico Sperimentale delle Venezie intends to implement and suggest a new training strategy that would encourage veterinarians and breeders to a proper use of the veterinary drugs in farming. A procedural model will be applied to devise the overall training strategy: a pilot study will involve cattle and poultry breeders with the aim to propose the model to other kind of breeding after its validation.

References

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