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TITLE
REDUCING ANTIMICROBIAL USE IN PORK PRODUCTION: IS IMPROVED ANIMAL HEALTH THE ANSWER?

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CONTENT
Background: Among different European countries, differences in usage patterns of antimicrobials (AM) are enormous. The objectives of the two studies summarized in this presentation were (1) to describe differences and similarities of AM usage patterns in different European countries, and (2) to evaluate the effect of herd health consulting to reduce AM use.

Methods: (1) An expert survey among swine specialists in Denmark, Switzerland and Portugal was performed to describe AM usage patterns. Information was collected on specific AM substances used, indications for treatment, and age classes treated. (2) In a field trial, 35 breeding and 35 fattening farms with quarterly visits by a specialized veterinarian were compared to a control group with respect to their AM use over a one-year period.

Results: (1) Experts' answers to patterns and indications for AM use varied widely within and between countries. Detailed results can be consulted in https://lpgcarmo.shinyapps.io/eeii/. For example, most treatments with parenteral cefquinome in Portugal targeted gastrointestinal disease, while in Switzerland musculoskeletal problems were the main indication. Parenteral marbofloxacin is not used for respiratory diseases according to Swiss experts, contrarily to what was suggested by Portuguese experts.
(2) Treatment incidence in breeding farms of the intervention group decreased from a median of 321 animal daily doses per 1000 animals and day to 94. The control group also decreased their usage (from 287 to 112). In fattening farms, the decrease was from 205 to 75 in the intervention, and from 220 to 182 in the control group, respectively.

Conclusion: Good animal health is a prerequisite for pork production with minimal AM use and high animal welfare. However, available data indicate that good health is not sufficient to ensure low use. Even more important drivers for AM usage are motivation towards prudent use, and availability and pricing of AM drugs.