**INTRODUCTION**

The selective pressure exerted by the indiscriminate use of antibiotics in human and veterinary medicine, animal production, agriculture and food technology, has resulted in the emergence of antibiotic resistant bacteria.

This has become a widespread concern, giving prominence to reports from health agencies, that claim the urgent need for new therapies, control and prevention measures in their administration.

Resistant bacteria (n=50) isolated from WF (wild fauna) (were tested with 14 antibiotics. Those with lower activity were penicillin (69.39% AMC), tetracycline (51.02%, TE) and cephalosporin (26.53% CXN) as it is shown in chart 1.

The studied population in this work is Catalan wild fauna\(^*\) that have never received an antibiotic treatment so the prevalence of AMR bacteria is expected to be very low or invalid. To confirm or reject initial hypotheses, the following objectives are considered:

1) To determine the prevalence of AMR bacteria in wild animals.
2) To identify AMR bacterial species and their zoonotic potential.
3) To define the patterns of antimicrobial sensitivity.
4) To determine if antibiotics applied in WLC select AMR bacteria.

**RESULTS**

12.25% are sensitive to all antibiotics. 36.73% are resistant to only one. 44.90% are resistant to 3 or more antibiotics.

The identification of resistant strains resulted in: *Escherichia coli* (75%), *Klebsiella pneumoniae* (12.5%), *Proteus vulgaris* (3.6%), *Morganella morganii* (3.6%), *Serratia marcescens* (1.8%), *Citrobacter freundii* (1.8%), *Providencia alcalifaciens* (1.8%), *Shigella spp.* (1.8%) and *Pseudomonas putida* (1.8%).

Another prospective study was conducted with WF (n=11) entering WLC. Samples were taken in two different times: 1 at admission of the to WFC (T\(_s\)) and 1 after their stay (T\(_f\)). 54.5% of raptors presented AMR bacteria at T\(_s\) 100% were carriers of MDR bacteria at T\(_f\).

The increase in the number of resistances during stay is independent of whether they have received antibiotics or not. This indicates that it is due to nosocomial infections.

Resistant bacteria (n=5) were found in the rapacious raw food (n=11).

**CONCLUSIONS**

Antibiotics are essential as a therapy against bacterial infections. However, its misuse has led to the emergence of MDR bacteria in environment where they should not be present.

It is necessary to consider other holistic strategies to prevent the emergence and spread of AMR bacteria, taking into account the complex ecological interconnections.

These efforts should be directed beyond minimizing their use: preventing such MDR bacteria or the same antibiotics, to contaminate the environment.