COMPOUNDING DRUGS FOR ZOO ANIMALS IN USA

Ana Victoria Pérez Sánchez
June 2016

Universitat Autònoma de Barcelona

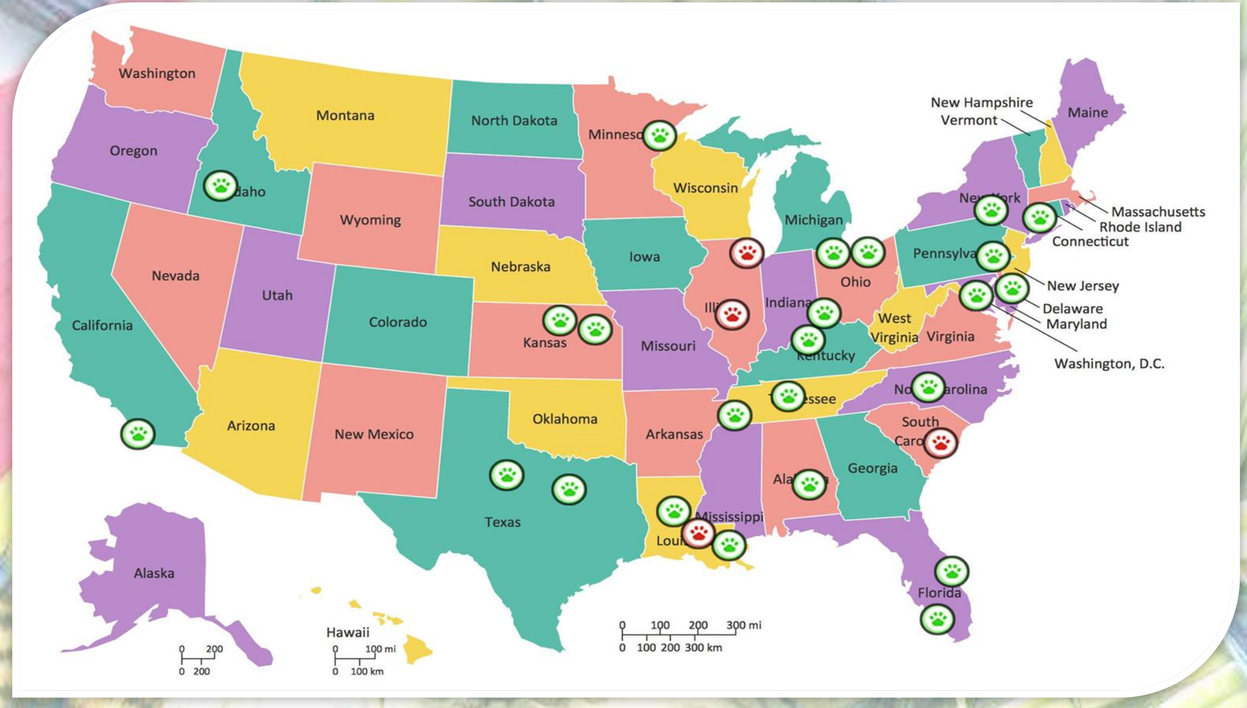
Objectives

- ✓ Investigating the way the zoos solve the lack of adequate pharmaceutical dosage for the treatments required.
- ✓ Finding out which products are ordered to pharmacies to be compounded and their advantages upon commercial drugs.
- ✓ Identifying which species are treated at a higher proportion with compounded drugs and discovering what resources do the zoos use in order to compound the drugs properly.

Materials & Methods

1. **Locating the zoos** by following a listed map.
2. **Contacting the zoos veterinarians.** The list was followed state by state looking for the veterinarians personal contact information and contacting the general e-mail adress of each one of the zoos.
3. **Compounding drugs survey.** The veterinarians were asked to fill out a short survey where they explained their experience with compounded drugs.

Figure 1. Geographical distribution of the participant zoos.



Results

Most of them are in touch with other zoos in order to share drugs formulations and they usually consult specialized bibliography. Besides, most of the zoos work with two main pharmaceuticals in the country that offer a large compounded drugs repertory and guides. The graphics show the frequency of use of compounded drugs and the main resources veterinarians use to order the drugs.

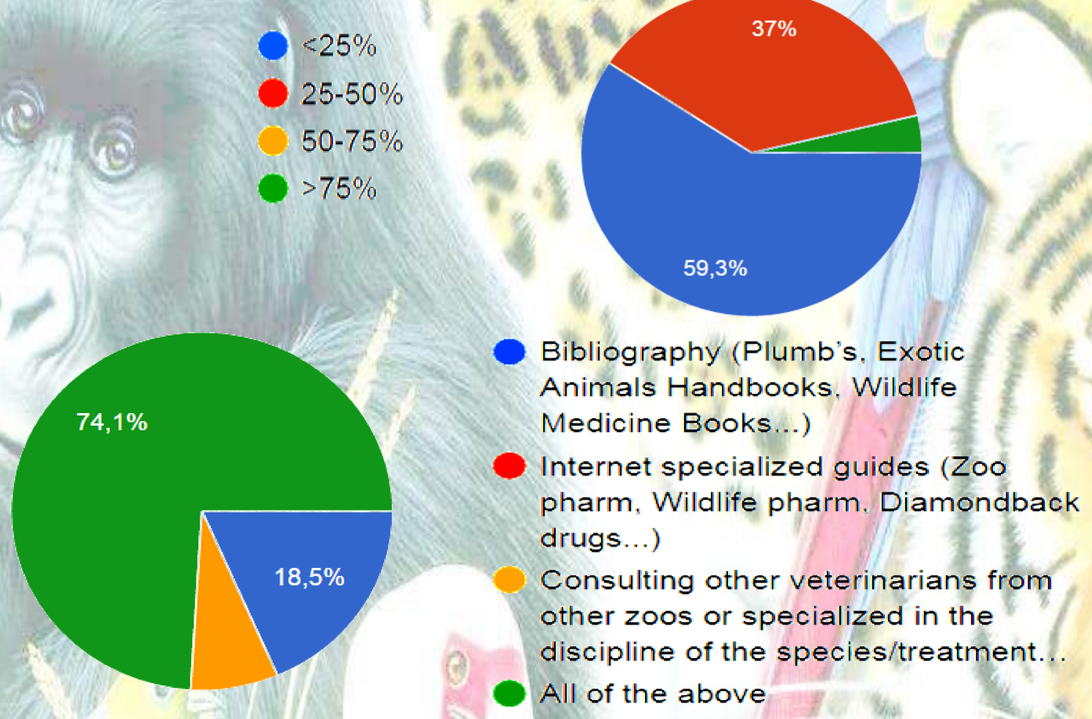


Figure 2. Proportion of groups of drugs used as compounded drugs.

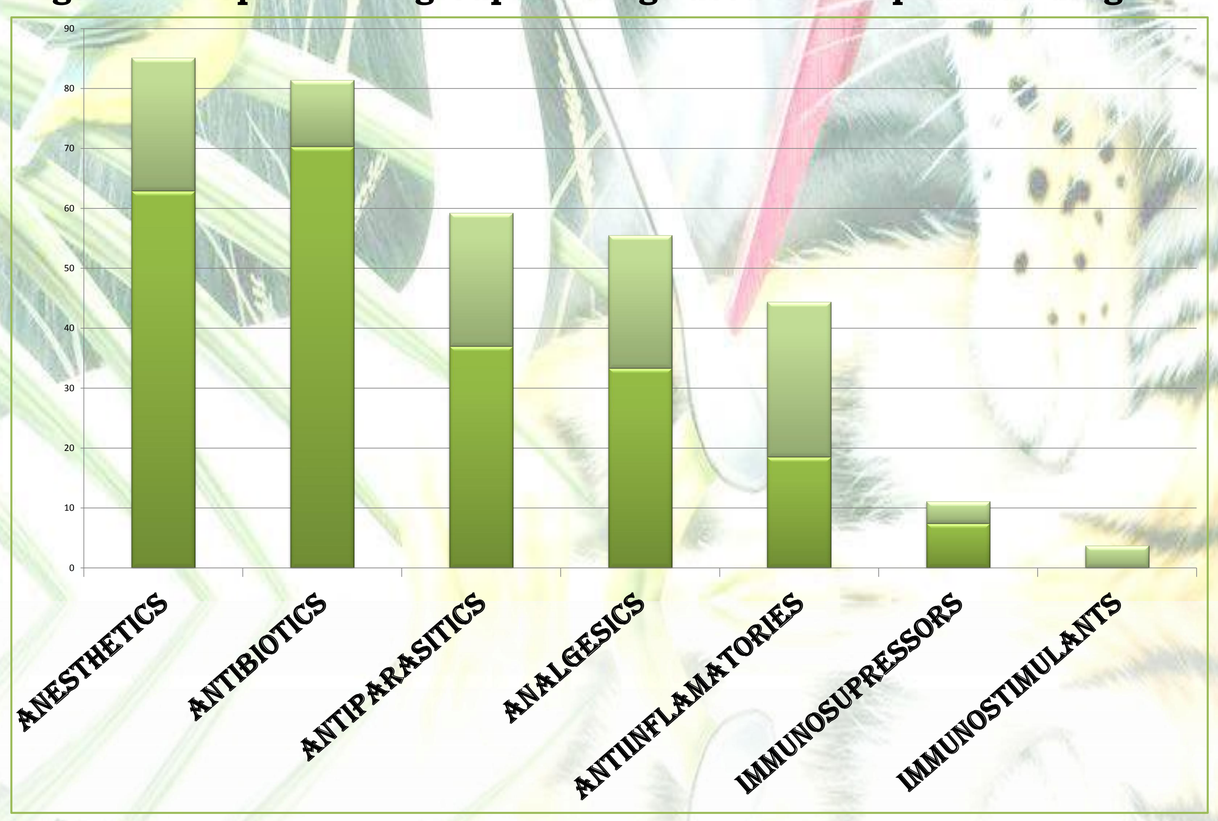
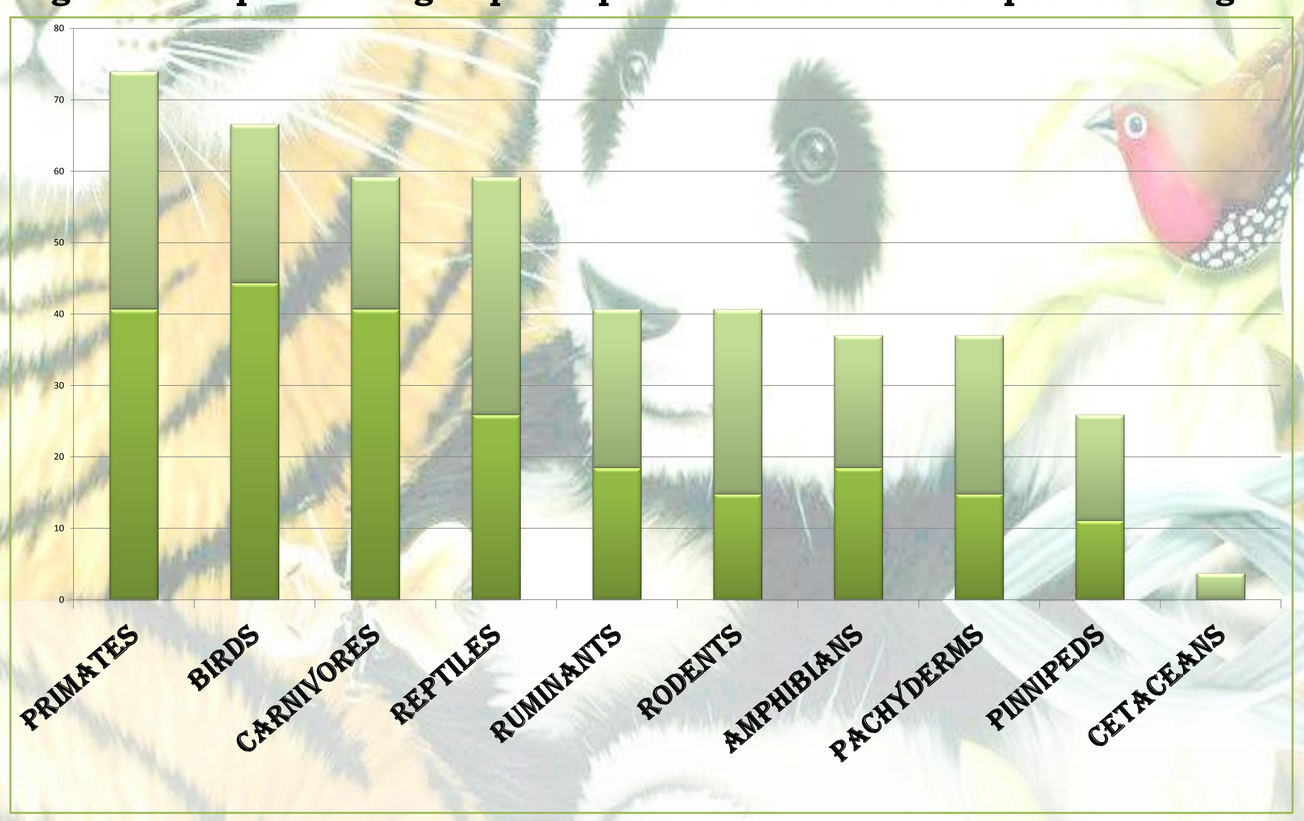


Figure 3. Proportion of groups of species treated with compounded drugs.



Conclusions

✓Compounding drugs are very common in the USA and most veterinarians share their formulations with other zoos and AAZV members. However, there is not a compile guide of all the compounding drugs used at the zoos but the pharmaceuticals catalogs are very large and complete.

✓Primates and birds are treated at a higher proportion mainly with anesthetics, antibiotics and antiparasitics. In small species, drugs are compounded at a smaller dose and flavored to enable their administration. On the other hand, anesthetics are specially compounded at a higher concentration for big mammals, that need to be restrained via intramuscular injection.