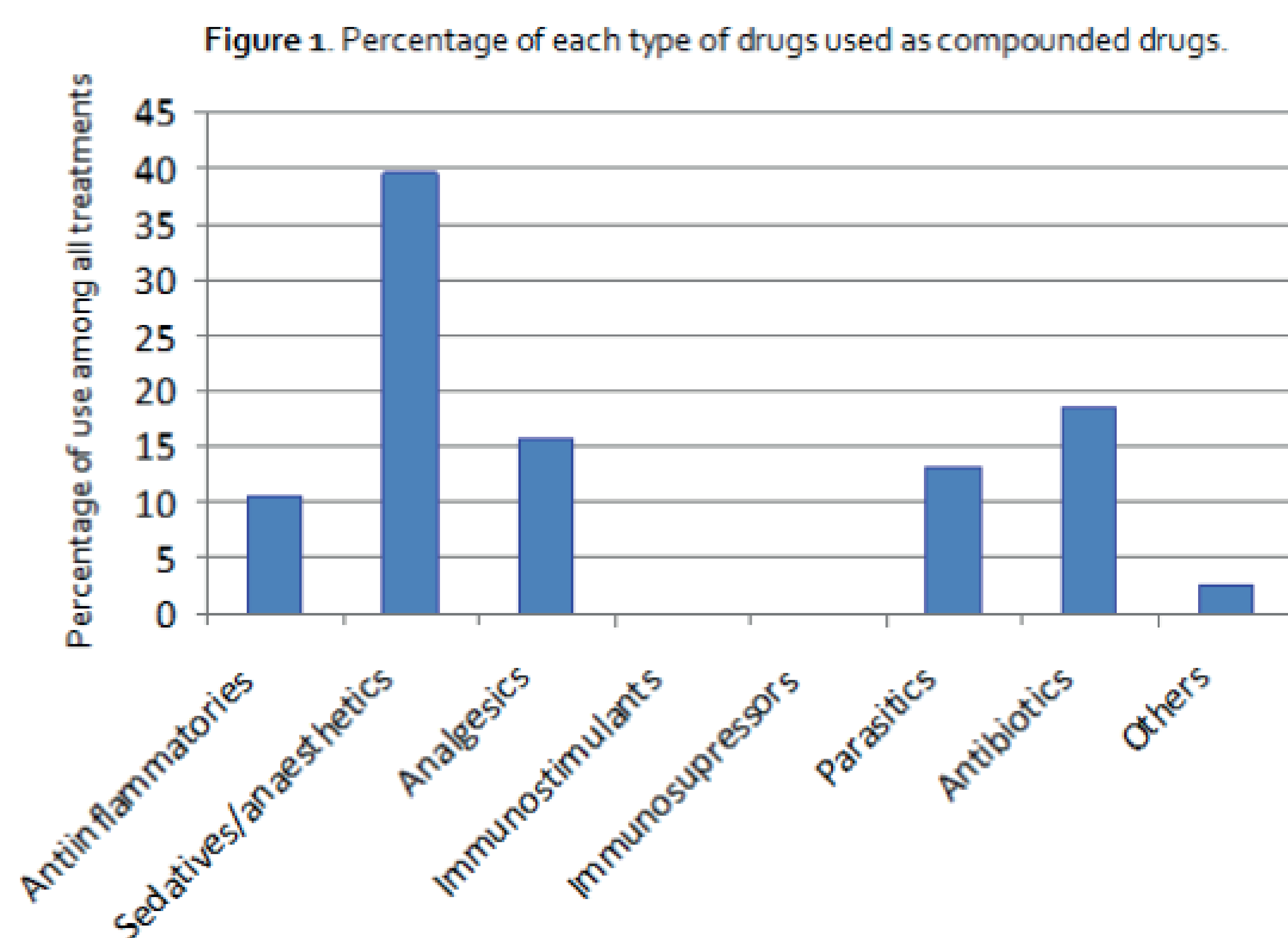


## INTRODUCTION

Compounding is the manipulation of available medicines or pure chemical substances to obtain a new dosage form. It also includes further manipulation or the combination of already existing compounds. Treatments based on compounded drugs are mainly used to immobilize wildlife animals.



## OBJECTIVES

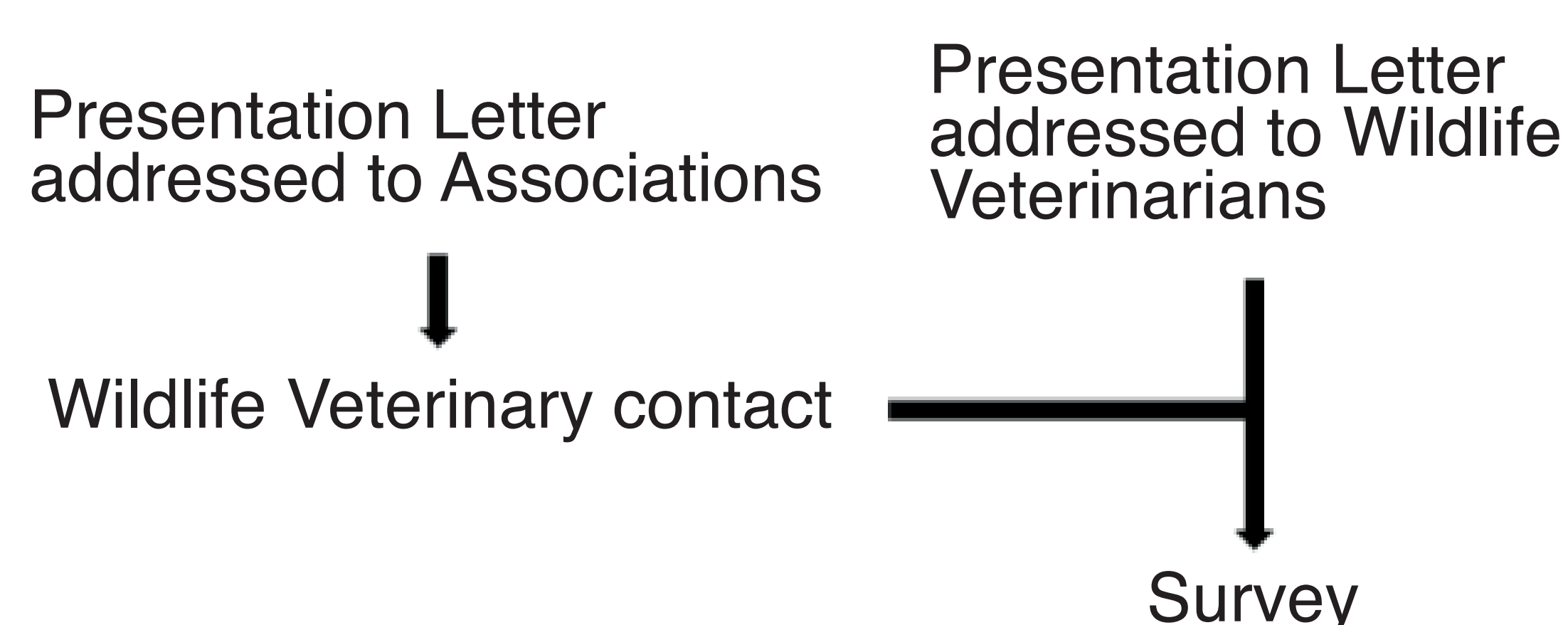
The aim of this project is the following:

- To analyse the use of compounded drugs in Africa.
- To determine the percentage of treatments that compounded drugs represent in wildlife animals.
- To determine the use of compounded drugs depending on the specie.
- To find specific compounded drugs.
- To determine the compounded drugs most commonly used.

## MATERIAL AND METHODS

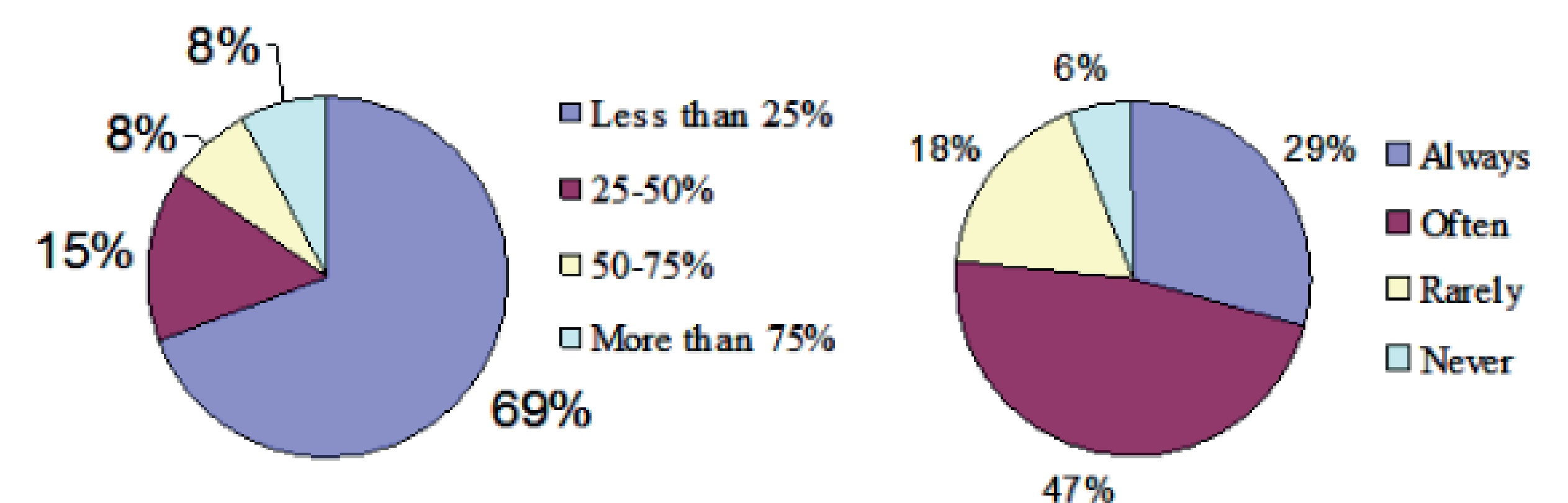
This project was based on the following: (1) development of a multi-choice survey; (2) contacting wildlife related associations as well as wildlife veterinarians around Africa by means of a presentation letter.

The leading Associations or similar contacted were the South African Veterinary Association, the State Veterinary Services of South Africa, the South African National Parks and the University of Nigeria.



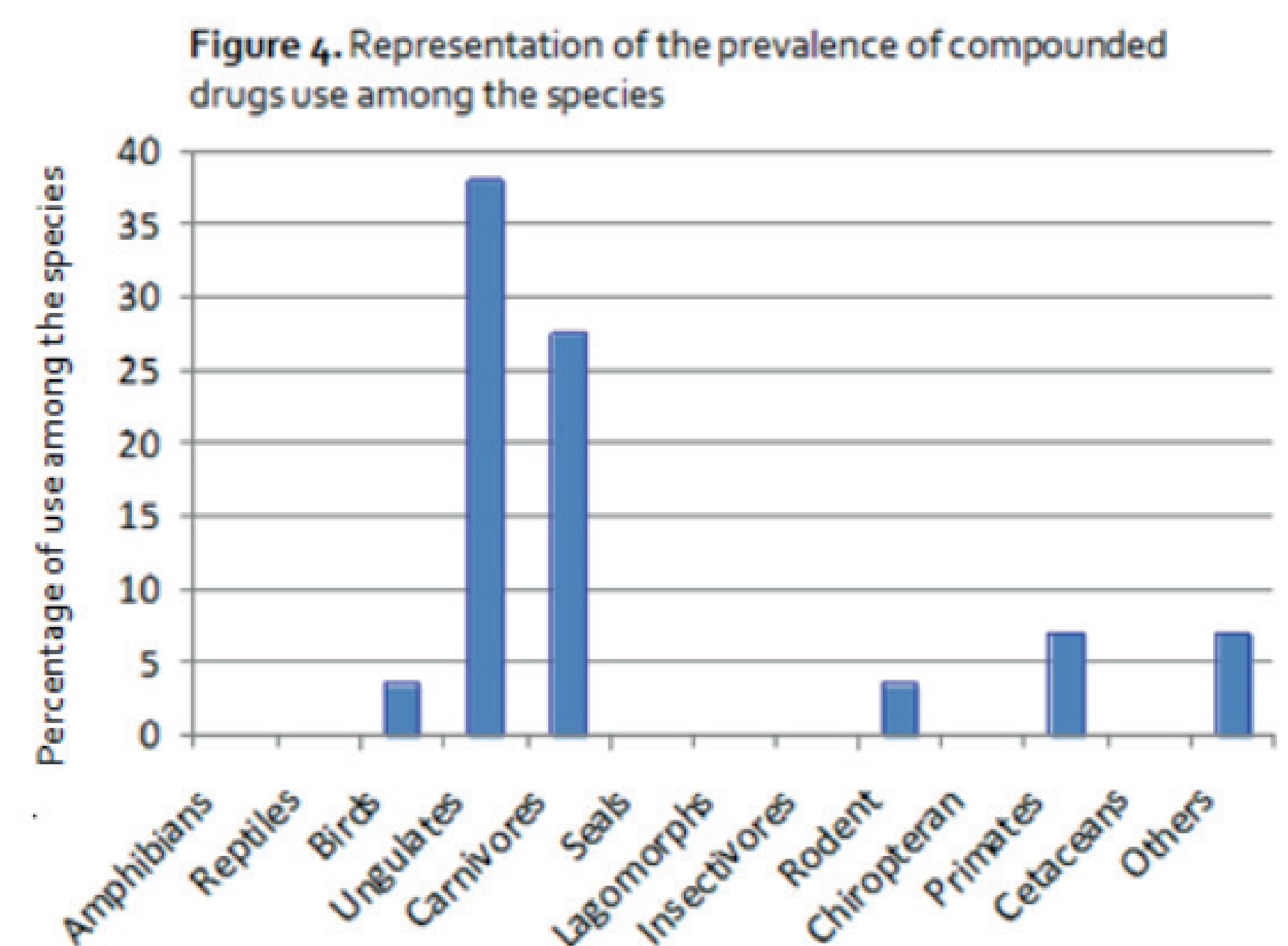
## RESULTS

Eighteen veterinarians (10% of the total) answered the survey. 83% of them indicate having the need of using compounded drugs.



The compounded drugs mainly used are sedatives and anaesthetics, being butorphanol the most common among them. Analgesic and antibiotic are also frequently used (*Figure 1*).

The main reason for compounding is the need of having a specific dose not available in the market.



69% of these veterinarians use an external pharmacy to develop their compounded drugs (V-Tech & Kyron Laboratories).

## CONCLUSIONS

- Most of the wildlife veterinarians consulted use compounded drugs, although they do not represent the main treatment applied in their daily practice.
- Most compounded drugs are applied by means of darts. Darts have a limited volume and therefore drugs have to have highly concentrated doses. The main reason for compounding is the need of such highly concentrated doses, which are not commercially available.
- In many cases, in order to deal with wildlife animals, they need to be sedated. Compounded drugs are mainly used in sedation and anaesthesia.
- Ungulates and carnivores are the leading species treated using compounded drugs, which could be because of these being the predominant species in wildlife facilities.
- On one hand, ketamine and medetomidine are the anaesthetics most commonly used as compounded drugs. On the other hand, the analgesic most commonly used as compounded drug is butorphanol.