

INTRODUCTION

Cannabis has been known for its reported history of being used as a medicine and for recreational purposes in humans.¹ As a medicine, cannabis has been used to treat various ailments such as seizures, chronic pain, cancer pain, anxiety disorders, and symptoms of neurological disorders.²

The endocannabinoid system (ECS) in animals consists of enzymes, cannabinoid receptors (CB1 and CB2), and the two main endocannabinoids namely, Anandamide and 2-Arachidonoylglycerol (2-AG). These components of the ECS help regulate and maintain homeostasis.³

Tetrahydrocannabinol (THC) and Cannabidiol (CBD) are the two most common cannabinoid compounds. THC and CBD can bind to various cannabinoid receptors and elicit pharmacologic responses. CBD was found to decrease symptoms of osteoarthritis and decrease seizure frequency in dogs.⁴

AIMS

The aim of this study is to develop, validate, and disseminate a questionnaire to assess the perception of veterinary surgeons about the use of medicinal cannabis for veterinary purposes.

METHOD

The method was divided in two phases. The first phase was a systematic literature review from 2010 to 2019. Google Scholar, PubMed, and Hydi were used to extract open access journal articles to attain information about the use of medicinal cannabis for veterinary purposes.

The second phase included the development, validation and dissemination of a questionnaire. The questionnaire is composed of ten questions. In the first part of the questionnaire, veterinary surgeons were asked to provide demographic characteristics like age, years of practice, and place of work. The second part of the questionnaire included questions related to the views of veterinary surgeons on the safety of cannabis for veterinary use, potential indications, issues, and barriers related to the use of medicinal cannabis for veterinary purposes. Veterinary surgeons were asked whether they would be willing to participate in clinical research related to the use of medicinal cannabis and whether they would be willing to collaborate with pharmacists to provide authorized cannabis products for veterinary purposes.

Questions were written in an open-ended and close-ended format. Checklist and a 5-point Rating scale type questions were also employed. The questionnaire was validated by an expert panel consisting of three pharmacists working in academia, a pharmacist working in the regulatory sector and a veterinary surgeon.

RESULTS

A total of 20 published studies regarding the use of cannabis in animals using open access journal articles were identified. Majority of studies assessed were in rats (n=10) and dogs (n=4).

Eleven veterinary surgeons, all actively practicing in Malta answered the questionnaire. Five out of eleven veterinary surgeons think that cannabis is potentially useful and safe for animal use while others (n=5) were not sure whether cannabis is beneficial and can be safely given to animals. One veterinary surgeon thinks that cannabis is not fit at all for animal use.

The top three potential barriers identified related to the use of cannabis in veterinary medicine were: the need for education on the potential use of cannabis in veterinary medicine, limited knowledge regarding appropriate dosing of cannabis in animals, and limited scientific evidence on the safety and efficacy of cannabis in animals (see Figure 1).

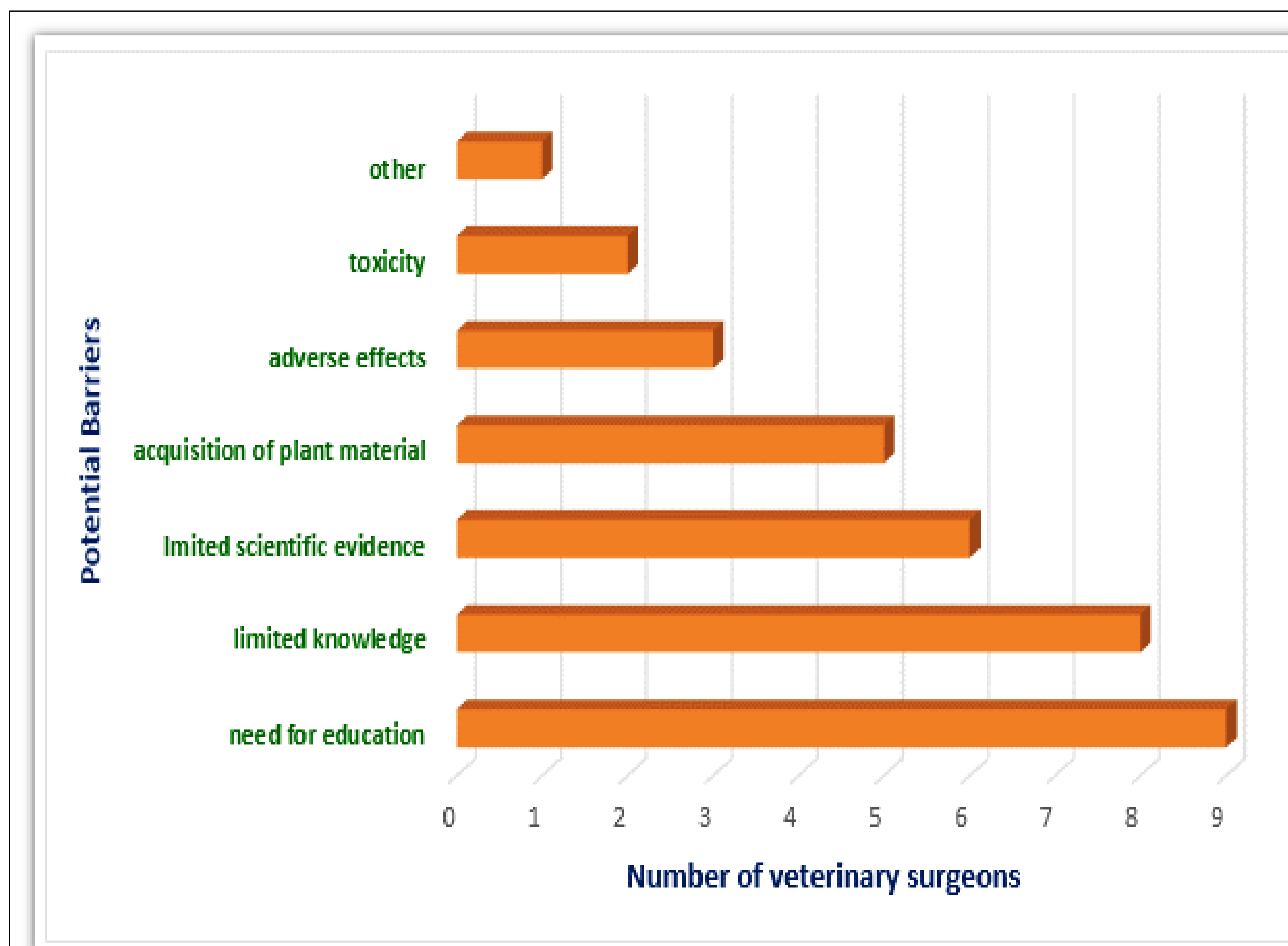


Figure 1: Potential barriers related to the use of cannabis in veterinary medicine (N=11)

CONCLUSION

Further research is needed to assess toxicity, side-effects and therapeutic efficacy of cannabis in veterinary patients. Barriers related to the use of cannabis need to be addressed to better understand its potential role in veterinary medicine.

REFERENCES

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