

FELINE AND CANINE VACCINATION PROTOCOLS IN PENINSULAR MALAYSIA AND VETERINARIAN PERCEPTIONS OF THE RECOMMENDATIONS BY THE WSAVA ASIAN VACCINATION GUIDELINES GROUP

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A project paper submitted to the Faculty of Veterinary Medicine, Universiti Putra Malaysia in partial fulfillment of the requirement for the DEGREE OF DOCTOR OF VETERINARY MEDICINE Universiti Putra Malaysia

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CERTIFICATION

It is hereby declared that we have read this project paper entitled "Feline and Canine Vaccination Protocols in Peninsular Malaysia and Veterinarian Perceptions of The Recommendations by The WSAVA Asian Vaccination Guidelines Group", by Sameerah Hani Binti Md Tahir and in our opinion it is satisfactory in terms of scope, quality, and presentation as partially fulfillment of requirement for the course VPD 4999 - Final Year Project.

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DEDICATIONS

I dedicate this thesis to those who are dear to me;

Husband

Hakim Narwawi, A husband, a best friend, a gift from god

Ayah & Mama

Md Tahir Azhar, The legendary dad

Naterah Ahmad, The iron lady

Siblings, in laws, nieces and nephews

Taufik Tahir & Family Faiz Tahir & Family Farah Tahir Shahir Tahir & Family Nadzwan Tahir

May god bless you always, dear brothers and sisters

BFFTJ

Amirah, Hidayah, Nabilah, Syiqin

If only we have all the time and money in the world to spend time together, travelling the world

FELINE BUDDIES

Oren, Jelir, Boy, Girl, Kecik, Pok Pok, Cookie, Momo, Odie, Oogy, Bitbit, Bibit, Ciko, Choco, Blackie, Coffee, Pot Pot, Kitty, Handsome, Garfield, Stokin, Mikikus, Shiro, Mama, Hitler, Adolf.

I would have not been here if not because of you

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"So which of the favors of your Lord would you deny?" | فَبِأَيِّ آلَاءِ رَبِّكُمَا تُكَذِّبَانِ

To Mama and Ayah, I would not trade anything in the world for your mere presence. Knowing that I can come back home seeing you both happy and healthy is enough to drive me through the days. You are both great parents in your own unique ways. I could have not gone through difficult days if it was not for my upbringing.

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List of Abbreviations

	%	Percent
	=	Equal
	AAFP	American Association of Feline Practitioners
	AAHA	American Animal Hospital Association
	APC	Annual practicing certificate
	AVMA	American Veterinary Medical Association
	CAV-1	Canine adenovirus type 1
	CAV-2	Canine adenovirus 2
	CCV	Canine coronavirus
	CDV	Canine distemper virus
	CIRD	Canine infectious respiratory disease
	CIV	Canine influenza virus
	CPD	Continuing professional development
	CPiV	Canine parainfluenza virus
	CPV-2	Canine parvovirus type 2
	DBKL	Dewan Bandaraya Kuala Lumpur
	DOI	Duration of immunity
	DVM	Doctor of Veterinary Medicine
	ELISA	Enzyme-linked immunosorbent assay
I	FCV	Feline calicivirus
	FeLV	Feline leukemia virus
	FIP	Feline infectious peritonitis
	FIV	Feline immunodeficiency virus
	FHV-1	Feline herpesvirus type 1
	FPV	Feline parvovirus
	IM	Intramuscular
	MAT	Microscopic agglutination test
	MDA	Maternally-derived antibody
	MLV	Modified live virus
	MSAVA	Malaysian Small Animal Veterinary Association
	MVC	Malaysian Veterinary Council

ion

SC Subcutaneous

SPSS Statistical Package for the Social Sciences

UK United Kingdom

UPM Universiti Putra Malaysia

US United States

UVH University Veterinary Hospital

VAAE Vaccine-associated adverse event

VGG Vaccination Guideline Group

VAM Veterinary Association Malaysia

WSAVA World Small Animal Veterinary Association

ABSTRAK

Abstrak daripada kertas projek dikemukakan kepada Fakulti Perubatan Veterinar bagi memenuhi sebahagian daripada keperluan kursus VPD 4999 – Projek

PROTOKOL VAKSINASI KUCING DAN ANJING DI SEMENANJUNG MALAYSIA DAN PANDANGAN VETERINAWAN TERHADAP CADANGAN OLEH '*WSAVA ASIAN VACCINATION GUIDELINES GROUP*'

Oleh

SAMEERAH HANI BINTI MD TAHIR

2016

Penyelia: Professor Madya Dr Gurmeet Kaur Dhaliwal

Penyelia bersama: Dr Puteri Azaziah Megat Abdul Rani Dr Farina Mustaffa Kamal

Pemvaksinan kucing dan anjing merupakan salah satu komponen penting dalam program pencegahan penyakit haiwan kesayangan. Dengan adanya cadangan baru oleh WSAVA Asian VGG mengenai protokol vaksinasi yang amat berlainan berbanding protokol yang sudah lama terbentuk, pasti akan wujud keraguan, kritikan dan keengganan untuk menerima pakai protokol baru tersebut. Justeru, kajian ini perlu dijalankan bagi menentukan amalan semasa pemvaksinan kucing dan anjing di Semenanjung Malaysia dan bagi memahami pandangan para veterinawan terhadap protokol baru ini. Soal selidik yang diadaptasi daripada WSAVA Asian VGG telah digunakan dan diedarkan secara rawak kepada klinik persendirian di beberapa negeri di Semenanjung Malaysia. Sebanyak 42 klinik mengambil bahagian dalam kajian ini dan sebanyak 82% (n=34) responden pernah mendengar tentang garis panduan tersebut. Majoriti (53.3%, n=17) klinik mengesyorkan pemvaksinan anjing dimulakan

pada umur 8 minggu dan vaksinasi terakhir pula pada umur 16 minggu (77%, n=25). 50% (n=16) klinik mengamalkan pemvaksinan dalam anjing senior dan geriatrik, di mana 81% (n=26) daripadanya mengamalkan vaksinasi tahunan, manakala 19% (n=6) secara 3 tahun sekali. Sementara itu, pengesyoran bagi pemvaksinan kucing pula berbeza iaitu sebanyak 85% (n=36) klinik mengesyorkan vaksinasi pada umur 8 minggu. Pemvaksinan terakhir disarankan pada umur 16 minggu (77%, n=32). Semua responden mengamalkan vaksinasi tahunan dalam kucing dewasa. Terdapat pelbagai pandangan berbeza terhadap garis panduan WSAVA yang baru. 55% (n=23) mengatakan mereka akan mempertimbangkan untuk mengikut garis panduan itu sekiranya terdapat produk vaksin yang sesuai. Perbincangan yang lebih menyeluruh di kalangan veterinawan, penyelidik, industri farmaseutikal dan pihak penguatkuasa adalah wajar bagi membincangkan isu ini yang merangkumi kajian setempat mengenai tempoh immuniti.

Kata kunci: pemvaksinan anjing, pemvaksinan kucing, WSAVA, Semenanjung Malaysia, pandangan veterinawan

ABSTRACT

An abstract of the project paper presented to the Faculty of Veterinary Medicine in partial fulfillment of the course VPD 4999 – Project

FELINE AND CANINE VACCINATION PROTOCOLS IN PENINSULAR MALAYSIA AND VETERINARIAN PERCEPTIONS OF THE RECOMMENDATIONS BY THE WSAVA ASIAN VACCINATION GUIDELINES GROUP

By

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2016

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Co-supervisor: Dr Puteri Azaziah Megat Abdul Rani Dr Farina Mustaffa Kamal

Vaccination is one of the most important components in the preventive health care for dogs and cats. With new recommendations from the WSAVA Asian VGG on vaccination protocols that are vastly different from long established protocols, there may exist doubts, criticisms and reluctance to adopt these new protocols. This study was carried out to determine the current practices of feline and canine vaccinations in peninsular Malaysia and to understand the perceptions of veterinarians regarding the new protocols. A questionnaire adapted from the WSAVA Asian VGG was used and distributed randomly to private clinics in several states of peninsular Malaysia. 42 clinics participated in this study and 82% (n=34) of veterinarians were familiar with the guidelines. The majority (53.3%, n=17), of clinics recommends starting the puppy vaccination series at the 8th week of age, with the last vaccination recommended at 16th weeks of age (77%, n=25). 100% recommend a booster after one year and 96.8%

(n=31) practice annual vaccination following the first year booster. Only 50% (n=16) of the clinics recommend continuing vaccination for senior and geriatric dogs, with 81% (n=16) recommending it annually and 19% (n=6) recommending it triennially. The age of recommendation for the start of the kitten vaccination series is also variable with a majority of veterinarians (85%, n=36) starting it at 8 weeks of age. The last vaccination for the kitten series is recommended at 16 weeks of age (77%, n=32). All clinics practice annual revaccination of adult cats. The perception of veterinarians towards the recommendation varies. 55% (n=23) would consider following the recommended guidelines for the vaccination protocols, only if suitable vaccine products were available. More thorough discussions among veterinarians, researchers, pharmaceutical industries and the regulatory authorities are warranted, including local scientific studies on the duration of immunity (DOI).

Keywords: canine vaccination, feline vaccination, WSAVA, peninsular Malaysia, veterinarian perceptions

1.0 INTRODUCTION

Vaccination plays an important role in the control of infectious diseases; both for individuals as well as for the pet population. Apart from the core vaccines for feline panleukopenia (FPV), feline herpesvirus, (FHV-1) and feline calicivirus (FCV) for cats and canine distemper (CDV), canine parvovirus (CPV-2), and canine adenovirus (CAV-1) for dogs, some vaccine antigens are used to reduce the potential zoonotic spread of diseases, rabies for example. Routine and widespread vaccinations can be very beneficial as it can significantly reduce the incidence of highly pathogenic diseases (Pritchard, 2012).

The World Small Animal Veterinary Association (WSAVA) Vaccination Guideline Group (VGG) was established in the year 2006 as it recognized the need for globally applicable recommendations on best practice for the vaccination of dogs and cats. In 2007, the first global vaccination guidelines for veterinarians was published, followed by revisions in 2010 and 2015, making a total of three sets of guidelines available for reference. In 2013, the WSAVA VGG also undertook a fact-finding visit to several Asian countries, with a view to developing advice for companion animal practitioners in Asia related to the administration of vaccines to dogs and cats. The committee members had meetings with various first opinion practitioners, small animal association leaders, academicians, government regulators and industry representatives from South Korea, Japan, China, India and Thailand. Later in 2014, the guidelines for Asian region was published (WSAVA, 2014). According to the Association of American Feline Practitioners (AAFP) (2006), vaccination programs in companion animals have been major topics of discussion among veterinarians. This phenomenon is caused primarily because of concerns about vaccine safety, the number of commercially available vaccines, and an incomplete knowledge of the duration and extent of protection provided by certain vaccines, which brings us to the initiation of this project.

1.1 Objectives of study

Major advancements in vaccinology over the last decade with the production of more immunogenic vaccines, the recognition of adverse vaccine reactions and more scientific evidence on DOI, have resulted in new vaccination recommendations for cats and dogs that are vastly different from long established protocols. With change, there may exist doubts, criticisms and reluctance to adopt these new protocols. This study on current practices in feline and canine vaccinations, and veterinarian perceptions towards the new vaccination guidelines was needed to fill the gaps of knowledge in this area in Malaysia. It will further serve to better address the concerns regarding the new protocols, by the researchers, pharmaceutical industries and regulatory authorities and encourage more evidence-based local studies on diseases of importance.

Thus the objectives of this project were to:

 determine the current vaccination protocols of cats and dogs being practiced in small animal clinics in peninsular Malaysia.
determine the level of awareness of small animal practitioners of the WSAVA Asian VGG recommendations on vaccination of cats and dogs.

3. identify the concerns of small animal practitioners in adopting the recommendations of the WSAVA Asian VGG.

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