



UNIVERSITI PUTRA MALAYSIA

***CAT OWNERS' PERCEPTION TOWARDS FELINE HEART DISEASE:
A BEHAVIOURAL STUDY***

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FPV 2017 4

CAT OWNERS' PERCEPTION TOWARDS FELINE HEART DISEASE: A
BEHAVIOURAL STUDY

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A student project paper submitted to the
Faculty of Veterinary Medicine, University Putra Malaysia
In partial fulfilment of the requirement for the
DEGREE OF DOCTOR OF VETERINARY MEDICINE

University Putra Malaysia

Serdang, Selangor Darul Ehsan

JUNE 2017

CERTIFICATION

It is hereby certified that we have read this project paper entitled “**Cat Owners’ Perception towards Feline Heart Disease: A Behavioural Study**”, by Lee Yong Chong and in our opinion it is satisfactory in terms of scope, quality, and presentation as partial fulfilment of requirement for the course VPD4999- Final Year Project.

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DEDICATION

It is with my deepest gratitude and warmest affection that I dedicate this thesis to

my supervisor Dr. Khor Kuan Hua and co-supervisor Dr. Khor Kuan Siew

who have been a constant source of support and knowledge.

To my family whose affection, love, encouragement and prayers

that make me able to get such success

Along with all diligent and respected lecturers

ACKNOWLEDGEMENTS

It has been a great learning experience for me when carrying out this research. I would like to reflect on the people who have supported and assisted me so much throughout this period.

First and foremost, I would like to express my heartfelt appreciation to my supervisor Dr. Khor Kuan Hua for her patience, motivation, knowledge and continuous guidance in helping me to complete this research. Her unconditional supervision and thoughtful comments had helped me all the time during my research and writing of this thesis. I could not have imagined having a better supervisor and mentor for my research project.

Besides my supervisor, I am sincerely grateful to be co-supervised by Dr. Khor Kuan Siew who has taught me a lot in statistical analysis which are vital for my research project. I am tremendously thankful for her unreserved sharing of knowledge and spending her precious time in teaching me.

I would also like to thank the Chairman of UVH, Professor Dr. Abdul Wahid Haron as well as UVH staffs at the clinic for allowing me to conduct my project in UVH for five weeks.

Last but not least, a wholehearted thanks to my friends and family: my beloved parents and sister for supporting me spiritually throughout my studies.

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LIST OF ABBREVIATIONS

ACE-Is	Angiotensin-Converting Enzyme Inhibitors
ARVC	Arrhythmogenic Right Ventricular Cardiomyopathy
ATT	Attitude
DCM	Dilated Cardiomyopathy
ECG	Electrocardiography
EMP	Empathic Concern
HCM	Hypertrophic Cardiomyopathy
INT	Intention to Treat
PBC	Perceived Behavioural Control
PDA	Patent Ductus Arteriosus
RCM	Restrictive Cardiomyopathy
SN	Subjective Norm
TPB	Theory of Planned Behavior
UVH-UPM	University Veterinary Hospital-University Putra Malaysia
VHS	Vertebral Heart Size
VSD	Ventricular Septal Defect

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ABSTRAK

Abstrak daripada kertas projek yang dikemukakan kepada Fakulti Perubatan Veterinar untuk memenuhi sebahagian daripada keperluan kursus VPD 499- Projek Tahun Akhir.

PERSEPSI PEMILIK KUCING TERHADAP PENYAKIT JANTUNG KUCING:

KAJIAN TINGKAH LAKU

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2017

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Keputusan untuk merawat kucing dengan penyakit jantung bergantung kepada kesedaran, pengetahuan dan tingkah laku pemilik kucing kesayangan. Tujuan kajian ini adalah untuk (i) menilai kesedaran dan pengetahuan pemilik tentang penyakit jantung kucing; (ii) menentukan halangan pemilik untuk merawat kucing dengan penyakit jantung; (iii) mengkaji hubungan antara sikap, norma subjektif dan tanggapan kawalan tingkah laku terhadap niat untuk merawat; dan (iv) memeriksa peranan perhatian empati dalam menyerdehana niat untuk merawat kucing yang telah

disahkan menghidap penyakit jantung. Seramai 139 pemilik haiwan kesayangan kucing telah mengambil bahagian dalam kajian ini. Data dikumpulkan dengan menggunakan soal selidik yang dibantu oleh penemuduga berkaitan dengan demografi, pemilikan kucing, kesedaran penyakit jantung kucing dan niat untuk merawat. Data dianalisis dengan menggunakan analisis deskriptif dan berdasarkan varians-pemodelan persamaan struktur. Majoriti responden (49.6%) sedar bahawa kucing boleh mempunyai penyakit jantung tetapi, kira-kira 89.2% responden tidak memahami tentang penyakit ini dan hanya 11.5% daripada mereka mempunyai keupayaan yang baik dalam mengenal pasti tanda-tanda yang berkaitan dengan penyakit jantung kucing. Responden menunjukkan bahawa sikap, norma subjektif dan tanggapan kawalan tingkah laku adalah positif berkaitan dengan niat untuk merawat walaupun kos adalah halangan utama (45.5%). Dapatan kajian juga menunjukkan bahawa perhatian empati hanya menyederhana hubungan antara tanggapan kawalan tingkah laku dan niat untuk merawat. Kesimpulannya, strategi dan pendidikan intervensi harus diadakan untuk meningkatkan kesedaran dan pengetahuan pemilik kucing mengenai penyakit jantung.

Kata kunci: kesedaran, penyakit jantung kucing, niat untuk merawat, sikap, norma subjektif, tanggapan kawalan tingkah laku

ABSTRACT

An abstract of the project paper presented to the Faculty of Veterinary Medicine in partial fulfilment of the course VPD4999- Final Year Project.

CAT OWNERS' PERCEPTION TOWARDS FELINE HEART DISEASE: A BEHAVIOURAL STUDY

By

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2017

Supervisor: Dr. Khor Kuan Hua

Co-Supervisor: Dr. Khor Kuan Siew

Informed decisions to treat cat with heart diseases depend on awareness, knowledge and behaviour of owners. The purposes of this study were to (i) assess owner's awareness, and knowledge of feline heart diseases; (ii) determine barriers to treat cats with heart disease; (iii) examine relationship between attitude, subjective norms and perceived behavioural control towards intention to treat; and (iv) examine moderating role of empathic concern towards intention to treat feline that have been diagnosed with heart diseases. A total of 139 cats' pet owners participated in the

survey. Data was collected using interviewer-assisted questionnaires on demographic, cat ownership, awareness of feline heart disease and intention to treat. Data were analysed using descriptive analysis and variance-based structural equation modeling. Majority of the respondents (49.6%) were aware that cats can have heart disease but, approximately 89.2% respondents did not understand about the disease and only 11.5% of them had good ability in identifying symptoms related to feline heart disease. The respondents showed that attitude, subjective norms and perceived behavioural control are positively associated with intention to treat even though cost was the main barrier (45.5%). Findings also indicated that empathic concern only moderates the relationship between perceived behavioural control and intention to treat. In conclusion, strategies and educational interventions are warranted to increase awareness and knowledge of cats' owners about feline heart disease.

Keywords: awareness, feline heart disease, intention to treat, attitude, subjective norm, perceived behavioural control

CHAPTER 1.0

INTRODUCTION

1.1 INTRODUCTION

Feline heart diseases often received less attention compared to canine heart diseases (Fuentes, 2015). Reasons for the species biasness may include differences in prevalence of heart disease, mortality rates, and popularity as pets, or differences in the attitudes of owners or veterinarians (Fuentes, 2015). A study conducted in Sweden reported that the prevalence of cats diagnosed with heart disease was 8.0% and of the total number of cats presented with heart disease, congenital heart disease was 0.2% (Tidholm *et al.*, 2015). Another study in US reported the prevalence of hypertrophic cardiomyopathy (HCM) was 14.7%, congenital heart disease was 0.5%, and other cardiomyopathies was 0.1% (Payne *et al.*, 2015). Based on these studies, cats diagnosed with heart diseases do not seem to be less common than in dogs. Fuentes (2015) reported that the mortality of cats due to cardiac disease does not appear to be lower than dogs. Another study showed that the cardiovascular age-standardised mortality rates (ASMR) was 30 deaths per 10,000 cat-years at risk in Swedish cats (Egenvall, 2009).

In Malaysia, every 1 out of 100 cats was diagnosed with a heart disease (unpublished; Zakaria *et al.*, 2015). Common presenting complaints for cardiac disease include dyspnea or tachypnea, coughing, exercise intolerance, syncope,

distended abdomen, cyanosis, anorexia or decreased appetite, and poor growth or performance (Tilley *et al.*, 2008). Veterinarian in our teaching hospital, University Veterinary Hospital (UVH), has often expressed that many of the cats' owners were not aware that cats can have heart disease. Even if their cats have been diagnosed with heart diseases, these owners may not necessarily treat their cats. Therefore, we intend to investigate the level of awareness and knowledge of Malaysian cat owners on feline cardiac disease. A survey of owner perception on quality of life in cats with heart diseases by Reynolds (2010) showed that majority of owners expressed that multiple visits and long term treatment may negatively impact their cat's quality of life and might be a factor causing owner reluctance to seek veterinary attention (Reynolds, 2010). This situation could be similar in Malaysia as Zakaria *et al.* (2015) noted in his study that a proportion of owners' with cardiac disease cats does not comply with the long term therapy as advised. Many factors may play a role in the issue to compliance towards treatment. Hence, there is a need to determine the predictors that affect the cats' owners' intention to treat cats with heart diseases.

Therefore, the level of awareness, attitude towards treatment and level of compliance toward treatment of cat with heart disease should be investigated. Information obtained would then allow clinician to strategise or improve strategies in client education. Ultimately, increase awareness among owners would allow prompt actions such as prevention, regular health check-up, early treatment and proper management of feline heart disease to be taken by the owner if their cats was

diagnosed with heart disease. This will ensure a better quality of life as well as longevity of their cats.

1.2 OBJECTIVES

The objectives of the study were

1. To assess cats' owners' awareness and knowledge of feline heart disease.
2. To determine the barriers to treat cats with heart disease.
3. To examine the relationship between attitudes, subjective norms and perceived behavioral control towards intention to treat cats with heart disease.
4. To examine the moderating role of empathic concern towards intention to treat cats with heart disease.

1.3 HYPOTHESES

The null hypotheses for this study were:

- H1_o. Cat owners' perceived behavioral control does not affect their intention to treat cats with heart disease.
- H2_o. Cat owners' subjective norm positively does not affect their intention to treat cats with heart disease.
- H3_o. Cat owners' attitude positively does not affect their intention to treat cats with heart disease.

H4_o. Empathic concern does not moderate the relationship between (a) perceived behavioral control, (b) subjective norm, and (c) attitude and intention to treat cats with heart disease.

The alternative hypotheses were:

H1_a. Cat owners' perceived behavioral control positively affects their intention to treat cats with heart disease.

H2_a. Cat owners' subjective norm positively affects their intention to treat cats with heart disease.

H3_a. Cat owners' attitude positively affects their intention to treat cats with heart disease.

H4_a. Empathic concern moderates the relationship between (a) perceived behavioral control, (b) subjective norm, and (c) attitude and intention to treat cats with heart disease.

CHAPTER 7.0

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