

**UNIVERSITI TEKNOLOGI MARA (UiTM)**

**KNOWLEDGE, ATTITUDE AND PRACTICE TOWARD  
LEPTOSPIROSIS AMONG MALAYSIAN WET MARKET SELLERS**

**ATIKAH NADHIRAH BINTI JOHARI**

**BACHELOR OF PHARMACY (Hons)**

2015

## **ACKNOWLEDGEMENT**

First and foremost, I would like to take this opportunity to express my gratitude and praise to Allah SWT for His blessing and for providing me the strengths to finally complete this thesis, Alhamdulillah. I would also like to grant appreciation to the Research Ethics Committees, Research Management Institute (RMI), UiTM, for giving the ethics approval to conduct this study. Also, profound gratitude to my supervisor, Dr. Nahlah Elkudssiah Ismail Al-Masry, for her endless guidance and patience in supervising me throughout the process of completing this thesis.

Besides, sincerest thanks to my research partners, Nor Aishah Ishak and Nursyazana Husin, for all the moral support and kindness in helping me to finally be able to complete this thesis. In addition, not to forget my family members and all the respondents who providing time in answering the questionnaires and last but not least to the people who directly or indirectly contributed to this research. This study would be impossible without the help of aforementioned several people who humbly and kindly contributed and made time to assist in preparing for the completion of this study.

TABLE OF CONTENT	Page
TITLE OF PAGE	i
APPROVAL SHEET	ii
AKCNOWLEDGEMENT	iii
TABLE OF CONTENT	iv
LIST OF TABLES	vii
LIST OF FIGURES	xi
LIST OF FORMULA	xii
LIST OF ABBREVIATIONS	xiii
ABSTRACT	xiv

## CHAPTER 1 (INTRODUCTION)

1.1: Background of the Study	1
1.2: Problem Statement	3
1.3: Objectives	4
1.4: Significance of Study	4
1.5: Hypothesis	5
1.6: Limitation of Study	5

## CHAPTER 2 (LITERATURE REVIEW)

2.1: Leptospirosis	
2.1.1: Definition	6
2.1.2: Epidemiology of Leptospirosis	6
2.1.3: Leptospiral Infection Pathogenesis	10

## ABSTRACT

The study aimed to assess the level of knowledge, attitude and practice (KAP) toward leptospirosis among Malaysian wet market sellers, to determine the correlation between measured KAP of leptospirosis as well as investigating the differences, association, correlation and predictors of selected study variables with KAP of leptospirosis. Respondents which were wet market sellers were given self-administered questionnaires consisted of socio-demographic, medical and source of knowledge (n = 11 items), knowledge (n = 26 items), attitude (n = 12 items) and practice (n = 17 items) toward leptospirosis. The collected data were statistically analysed using SPSS version 20. By using Rasch analysis, the KAP instrument was found to be reliable and valid. Hence the data obtained were trusted and reliable. A total of 140 wet market sellers were recruited in this study. The mean age of the respondents was 36.37 (SD 10.75) years old. The mean number of year(s) working at wet market was 8.72 (SD 6.94) years. Majority of the respondents had moderate knowledge (51.4 %), unsatisfactory attitude score (90 %) but satisfactory practice score (64.3 %). Moderate knowledge means that the score was  $< 72$  %, unsatisfactory attitude score was when the score was  $< 75\%$ . In contrast, satisfactory practice score was when the score was  $\geq 75\%$ . There were significant associations between knowledge and highest completed level of education, occupation, and ever heard of leptospirosis. There were statistical significant differences in the mean scores of the knowledge of leptospirosis with gender, marital status, ethnicity, highest completed level of education, type of occupation, and whether they had ever heard of leptospirosis. For attitude mean scores, there was a significant different found between attitude and number of year(s) working at wet market. Significant positive low correlation was observed between the attitude and practice of leptospirosis among wet market sellers. Two predictors that made statistically significant contribution to knowledge score were the highest completed level of education, and ever heard of leptospirosis that had a negative relationship with knowledge score while the other had positive relationship. As an infectious disease with potential morbidity and mortality on arise, the information on leptospirosis must be made available to the residents via various communication media. It is hoped that the KAP of leptospirosis will be positively transformed in future.

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

Leptospirosis is known as one of the most common and most dreaded worldwide zoonotic infections (Pappas et al., 2008). Nevertheless, there is still lack of awareness regarding leptospirosis and it remains as a deserted disease although the number of cases and outbreaks kept increasing globally (Rahim et al., 2006).

Leptospirosis is normally known by public as a water-borne disease. According to World Health Organization (WHO), this disease attacks worldwide countries both in temperate and tropical climates and in urban and rural areas. It was estimated that in temperate climate countries, 0.1 to 1 per 100 000 people are affected by leptospirosis each year. The numbers soar to 10 or more per 100 000 people in tropical regions (WHO, 2014). During outbreak, the incidence may seize over 100 per 100 000 individuals (Prabhu et al., 2014).

Leptospirosis can be transmitted either directly or indirectly to humans (Sharma & Yadav, 2008). Rodents, cattle, sheep and pigs are said to be the major reservoirs for the bacteria (Ngbede et al., 2012). There are many factors that can contribute to the occurrence of leptospirosis. Through a research that had been conducted in Brazil, leptospirosis has been recognized as an important infectious