

UNIVERSITI TEKNOLOGI MARA



**ASSOCIATION BETWEEN PREVALENCE OF HUMAN
LEPTOSPIROSIS INFECTION AND GENDER IN
HOSPITAL MELAKA**

FARAH AMINAH BINTI HAMKA

**Dissertation submitted in partial fulfillment of the requirements for
Diploma in Medical Laboratory Technology**

FACULTY OF HEALTH SCIENCES


September 2014

DECLARATION

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations of Universiti Teknologi MARA, regulating the conduct of my study and research.

29th August 2014



.....
FARAH AMINAH BT HAMKA

2012288528

ABSTRACT

ASSOCIATION BETWEEN PREVALENCE OF HUMAN LEPTOSPIROSIS INFECTION AND GENDER IN HOSPITAL MELAKA

Leptospirosis is one of the common re-emerging zoonotic diseases transmitted from infected animals to human. It is a bacterial infection caused by a species of pathogenic leptospiragenus called spirocheates. Pathogenic leptospires live in the kidneys of many mammalian hosts, including rodents, insectivores, and livestock. Leptospires are shed into the environment, where they can survive for several months in favorable condition. The first case of human leptospirosis in Malaysia was discovered by Fletcher in the year 1925. The aim of the present study was to determine the association between prevalence and gender of patient infected with Leptospirosis in Hospital Melaka. The medical records of hospital department in Hospital Melaka were used to identify records of patients infected with leptospirosis from January 2013 until May 2014. The laboratory testing for leptospiral infection is important both for diagnosis and management of patients. In this study, the result was obtained from Rapid IgM Elisa test method. The patient data was collected for positive leptospirosis cases reported in Hospital Melaka, where 791 cases detected over the study period. 65% were male patient and 35% were female patient. The risk of leptospiral infections with respect to gender were demonstrated in this study. It is highlighted that the majority of leptospirosis cases were men due to association of man with animal and disease-infected environment. This result revealed that male have the highest prevalence of leptospiral infection compare to female.

Key words : leptospirosis, male, female

ACKNOWLEDGEMENT

Appreciation goes to the following names for their continuous support and invaluable contribution towards the completion of the dissertation entitled “ASSOCIATION BETWEEN PREVALENCE OF HUMAN LEPTOSPIROSIS INFECTION AND GENDER IN HOSPITAL MELAKA”:

1. NOR HAFEEDA BT ROSDAN
2. NOR RAIHAN BT MOHAMMAD SHABANI
3. DR SUHAILA BT BAHARUDDIN (PAKAR PATOLOGI & KETUA UNIT UD54)
4. JURAIMI BIN RAIHAN (PEGAWAI SAINS C48)
5. UMMUL HANINAH BT HJ ALI (PEGAWAI SAINS C41)
6. HALIMAH BT MOHD (JTMP KUP 32)
7. NUR AMIRAH BT AZMI
8. ZATY AINAA BT MOHAMED
9. ZATUL SYALIHAN BT MOHAMED
10. SUZANA BT MAT JAIS
11. HAMKA BIN SALIP

TABLE OF CONTENTS

Chapter	Content	Page
	TITLE PAGE	i
	DECLARATION	ii
	APPROVAL	iii
	ABSTRACT	v-iv
	ACKNOWLEDGEMENT	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
	ABBREVIATIONS	xiv
1.0	INTRODUCTION	
1.1	Overview	1
1.2	Problem statement	2
1.3	Research Justification	2
1.4	Objectives	
	1.4.1 General objective	3
	1.4.2 Specific objective	3
1.5	Hypothesis	3
	1.5.1 Alternative hypothesis	3
	1.5.2 Null hypothesis	3
2.0	LITERATURE REVIEW	4-11