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CORONARY RISK FACTOR PROFILE, RISK SCORE AND SURVIVAL ANALYSIS OVER A 17 YEAR PERIOD IN A RURAL COMMUNITY

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Thesis submitted in fulfilment
of the requirement for the degree of
Master of Science

Faculty of Medicine

November 2014

AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulation 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 Regulation for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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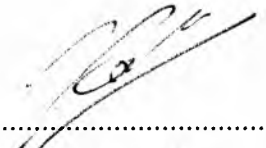
Signature of Student	:	 .....
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ABSTRACT

Cardiovascular disease continues to contribute to the major cause of death and disability worldwide in both developed and developing countries. Reliable data on the changes of cardiovascular disease (CVD) risk factor and mortality over a substantial period of time in a rural Malaysian community is limited. The objective of this study was to assess the progression of cardiovascular disease risk factor over a period of 17 years in a rural community. A follow-up study of the 1993 RAUB HEART STUDY was done in 2010. Demographic data and cardiovascular risk factors were measured and verbal autopsy questionnaires were given to the family members of the 45 deceased subjects. The changes of risk factor and survival analysis of the deceased were analysed. Significant increase in the mean systolic and diastolic blood pressure (SBP and DBP), body mass index (BMI), total cholesterol (TC), high density lipoprotein cholesterol (HDL-c), low density lipoprotein (LDL-c) were observed over the 17 year period. The prevalence of hypertension, diabetes mellitus, hypercholesterolemia and obesity also increased from 21.2%, 6.0%, 22.2% and 16.5% to 60.0%, 19.9%, 51.5% and 24.0% respectively. Significant reduction in smoking was seen among women but not men. The survival analysis showed significant difference for hypertension, smoking and FRS in all cause mortality. The cardiovascular risk factors worsen over the 17 year period. This increases the risk of having CVD disease among the follow-up subjects. Hypertension and smoking were a significant risk factor for all-cause mortality. Further understanding of the CVD risk factor in this longitudinal study is essential in determining the effect of a substantial period of time have towards an individual's cardiovascular disease risk.

TABLE OF CONTENTS

		Page
CONFIRMATION BY PANEL OF EXAMINERS		ii
AUTHOR'S DECLARATION		iii
ABSTRACT		iv
ACKNOWLEDGEMENT		v
TABLE OF CONTENTS		vi
LIST OF TABLES		x
LIST OF FIGURES		xiii
LIST OF ABBREVIATIONS		xv
CHAPTER ONE: INTRODUCTION		1
1.1	Background	1
1.2	Hypothesis	2
1.3	Significance of Study	2
1.4	Objectives of Study	2
CHAPTER TWO: LITERATURE REVIEW		3
2.1	Coronary Heart Disease and Its Risk	3
2.2	Cardiovascular Risk Factor in Malaysia	4
	2.2.1 Blood Pressure	5
	2.2.1.1 Hypertension	5
	2.2.1.2 Prehypertension	6
	2.2.2 Cholesterol	15
	2.2.2.1 Hypercholesterolemia	16
	2.2.2.2 Low Density Lipoprotein	17
	2.2.2.3 High Density Lipoprotein	17
	2.2.2.4 Very Low Density Lipoprotein	18
	2.2.2.5 Triglyceride	18
	2.2.2.6 Non-HDL	18
	2.2.2.7 Dyslipidaemia	19

2.2.3 Obesity 22
2.2.3.1 Body Mass Index 23
2.2.3.1.1 Classification of BMI and Its Ranges 25
2.2.3.2 Abdominal Obesity and Waist Hip Ratio 27
2.2.4 Diabetes Mellitus 41
2.2.4.1 Hyperglycaemia and Its Criteria 41
2.2.4.2 Prevalence of Diabetes 43
2.2.5 Smoking 46
2.3 Framingham Heart Study and Risk Score 48
2.3.1 Framingham Risk Score 49
2.4 Mortality and CVD Mortality 52
2.5 Rural Community 53

CHAPTER THREE: METHODOLOGY 54
3.1 The RAUB HEART STUDY: A Brief Introduction 54
3.2 Raub 55
3.3 Findings of the 1993 RAUB HEART STUDY 56
3.4 Subject's Information and Status Update 59
3.5 RAUB HEART STUDY 2010 Sample Size Calculation 59
3.6 Follow-up Medical Check-Up Program 59
3.6.1 House-to-House Follow-Up 60
3.6.2 Case Report File and Questionnaires 61
3.6.3 Blood Pressure Measurement 61
3.6.4 Anthropometric Measurement 61
3.6.5 Individual Specimen Kits and Blood Collection Preparation 62
3.6.6 Blood Collection and Blood Sample Analysis 62
3.6.7 Mortality and Survival Analysis 65
3.7 Data Analysis 66
3.8 Flow-Chart on Data Collection and Analysis 67
3.9 Ethics 68