

# ASSOCIATION OF ABO BLOOD GROUP WITH ASTHMA AMONG UNDERGRADUATE HEALTH SCIENCES STUDENTS IN UITM PUNCAK ALAM

By

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Thesis Submitted in Partial Fulfillment of the Requirements for Bachelor of Medical Laboratory Technology (Hons), Faculty of Health Sciences, University Teknologi MARA

### **DECLARATION**

I hereby declare that this thesis is my original work and has not been submitted previously or currently for any other degree at UiTM or any other institutions.

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## **TABLE OF CONTENTS**

TITLE PAGE	Page
DECLARATION	Н
INTELLECTUAL PROPERTIES	iii
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	X
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
ABSTRACT	xiv
CHAPTER 1 INTRODUCTION	
1.1 Background of the study	1
1.2 Problem statement	3
1.3 Objectives of the study	
1.3.1 General objective	4
1.3.2 Specific objectives	4
1.4 Hypothesis	
1.4.1 Alternative hypothesis	5
1.4.2 Null hypothesis	5
1.5 Significance of the study	6

#### ABSTRACT

Asthma is one the globally human chronic disease that frequently found among childhood which related to human genetic factor and also the environmental factors. Few studies have investigated the role of ABO blood group which related to the pathogenesis and prognosis of many human diseases such as cancer and cardiovascular diseases. Since there is no research about association of ABO blood group with asthma in Malaysian population, this study was conducted to determine the association of ABO blood group with asthma among undergraduate Health Sciences students in UiTM Puncak Alam. The subjects were identified and selected based on the selection criteria through simple random sampling method. The selfadministered questionnaires were distributed in which consist of written consent forms and close-ended questionnaires. All data collected were analyzed by using SPSS version 21.0. Chi-square and Fisher's exact tests were performed to measure the association of the data. The data from this study showed the frequency of Health Sciences students ever experience asthma was 22 over 149 subjects. The general distribution of ABO blood group showed high frequency of blood group O (43.0%), followed by blood group B (28.9%), blood group A (23.5%) and blood group AB (4.7%). Relationship between ABO blood group and asthma showed no statistically significant association (p>0.05). Therefore, no association found between different blood group and asthma plus there was an increase in prevalence rate of asthma with 15% among undergraduate Health Sciences students.

Keywords: ABO blood group, asthma, Health Sciences, prevalence, association, genetic inheritance, Chi-square test