

**UNIVERSITI TEKNOLOGI MARA**

**RELATIONSHIP OF  
STIGMATISATION DEGREE, SELF-  
ESTEEM AND KNOWLEDGE OF  
ASTHMA WITH ASTHMA CONTROL  
AND INDEPENDENT VARIABLES  
FROM SOCIO-DEMOGRAPHIC AND  
MEDICAL DATA IN ADULT ASTHMA  
PATIENTS**

**SOHAIL AHMAD**

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

**Faculty of Pharmacy**

March 2016

## **CONFIRMATION BY PANEL OF EXAMINERS**

I certify that a panel of examiners has met on 5th February 2016 to conduct the final examination of Sohail Ahmad on his Master of Science thesis entitled “Relationship of Stigmatisation Degree, Self-esteem and Knowledge of Asthma with Asthma Control and Independent Variables from Socio-demographic and Medical Data in Adult Asthma Patients” in accordance with Universiti Teknologi MARA Act 1976 (Akta 173). The Panel of Examiners recommends that the student be awarded the relevant degree. The panel of Examiners was as follows:

Zabidah Ismial, PhD  
Professor  
Faculty of Pharmacy  
Universiti Teknologi MARA  
(Chairperson)

Shubashini A/P Gnanasan, PhD  
Senior Lecturer  
Faculty of Pharmacy  
Universiti Teknologi MARA  
(Internal Examiner)

Adilah Mhd Ali, PhD  
Senior Lecturer  
Faculty of Pharmacy  
Universiti Kebangsaan Malaysia  
(External Examiner)

**SITI HALIJJAH SHARIFF, PhD**  
Associate Professor  
Dean  
Institute of Graduates Studies  
Universiti Teknologi MARA  
Date: 10th March, 2016

## AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic 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 for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student : Sohail Ahmad  
Student I.D. No. : 2012263372  
Programme : Master of Science (Clinical Pharmacy)-PH780  
Faculty : Faculty of Pharmacy  
Thesis Title : Relationship of Stigmatisation Degree, Self-esteem and Knowledge of Asthma with Asthma Control and Independent Variables from Socio-demographic and Medical Data of Asthma Patients  
Signature of Student : .....  
Date : March 2016

## ABSTRACT

The control of asthma is influenced by psychosocial wellbeing and socio-demographic and medical characteristics of adult asthma patients. The main objectives of this present study were to determine the reliability and validity of translated Malaysian version of stigmatisation degree, self-esteem and knowledge (M-SDSE-K) of asthma instrument in adult asthma patients, to assess the level of stigmatisation degree (SD), self-esteem (SE), knowledge and control of asthma (AC), to investigate the differences of SDSE-K of asthma and AC among independent variable categories and to examine the relationship of SDSE-K of asthma and AC with independent variables from patients' socio-demographic and medical data and among respective dependent variables. In this cross-sectional study, adult asthma patients were recruited for pilot (n = 30) and main (n = 152) studies using purposive sampling method. The study was conducted in multiple respiratory clinics in Selangor, Malaysia. The M-SDSE-K of asthma instrument was found to be valid and reliable by both Modern Response Theory (MRT) and Classical Test Theory (CTT). The enrolled asthma patients possessed moderate level of SD, moderate level of SE, and good level of knowledge of asthma. No statistically significant association was found between independent study variables with SDSE-K of asthma and AC, except with four variables of occupation, number of years since diagnosed as asthmatic, hospitalisation and emergency visits for AC. Furthermore, AC showed significant negative correlation with number of hospitalisations, number of emergency visits and number of asthma triggers as mentioned by the patients. For SD, emergency visits of the asthma patients showed significant weak positive correlation. Patients' knowledge of asthma was significant weak negatively correlated with number of years diagnosed as asthmatic. Moreover, AC showed moderately significant negative correlation with SD, and significant weak positive correlation with SE. The findings of multiple linear regression analysis showed that the number of patients' visits to emergency department because of asthma was the significant predictor to level of AC among all selected study variables from socio-demographic and medical data. From dependent variables, SD and SE of asthma patients were the significant predictors to AC. The asthma patients' emergency visits and patients' level of education were the significant predictors for SD. For SE and knowledge of asthma, no predictor was detected out of all selected variables. The findings of both multinomial logistic regression and binary logistic regression suggested that only the patients' age was a significant predictor for AC in both studied regression models for SDSE-K of asthma and AC. The selected study variables from socio-demographic and medical data; for SD: the patients' highest completed level of education and number of years since diagnosed as asthmatic; for SE: none of the variables; for knowledge: the number of years since diagnosed as asthmatic; and for AC: patients' age, showed significant effect on SD, SE, knowledge and control of asthma. The evidences presented in this study supported the fact that numerous factors such as socio-demographic and medical factors are capable of influencing asthma control as well as psychosocial wellbeing of the asthma patients.

# TABLE OF CONTENTS

|   | <b>Page</b> |
|---|-------------|
| <b>CONFIRMATION BY PANEL OF EXAMINERS</b>                     | <b>ii</b>   |
| <b>AUTHOR'S DECLARATION</b>                                   | <b>iii</b>  |
| <b>ABSTRACT</b>   | <b>iv</b>   |
| <b>ACKNOWLEDGMENTS</b>  | <b>v</b>    |
| <b>TABLE OF CONTENTS</b>                                      | <b>vi</b>   |
| <b>LIST OF TABLES</b>   | <b>x</b>    |
| <b>LIST OF FIGURES</b>  | <b>xiv</b>  |
| <b>LIST OF ABBREVIATIONS</b>                                  | <b>xv</b>   |
| <br>  |             |
| <b>CHAPTER ONE: INTRODUCTION</b>                              | <b>1</b>    |
| 1.1 Overview  | 1           |
| 1.2 Problem Statement   | 5           |
| 1.3 Objectives of the Study                                   | 6           |
| 1.4 Scope of the Study  | 6           |
| 1.5 Significance of the Study                                 | 7           |
| <br>  |             |
| <b>CHAPTER TWO: LITERATURE REVIEW</b>                         | <b>9</b>    |
| 2.1 Overview of Asthma  | 9           |
| 2.1.1 Definition of Asthma                                    | 9           |
| 2.1.2 Signs and Symptoms of Asthma                            | 10          |
| 2.1.3 The Burden of Asthma                                    | 10          |
| 2.1.4 Pathophysiology of Asthma                               | 12          |
| 2.1.5 Inflammatory Cells in Asthmatic Airways                 | 14          |
| 2.1.6 Diagnosis of Asthma                                     | 16          |
| 2.1.7 Pharmacological Treatment of Asthma                     | 19          |
| 2.2 Overview on Stigmatisation Degree (SD) in Asthma Patients | 20          |
| 2.2.1 Definitions of Stigma                                   | 20          |
| 2.2.2 Philosophical and Theoretical Background                | 21          |