## **UNIVERSITI TEKNOLOGY MARA (UITM)**

# ANTI-ASTHMATIC DRUG UTILIZATION IN OUTPATIENT DEPARTMENT OF HOSPITAL TUANKU AMPUAN RAHIMAH KLANG

## SITI FAIROS BINTI IBAHIM

## 2011889498

Faculty of Pharmacy

Dissertion submitted in partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY** 

**JULY2014** 

# **ABSTRACT**

#### Background

Type of drug prescribed and the combination of anti-asthmatic drugsaffects the control of asthma. Prescribing styles also affects the medication error, such as use of brand name instead of generic and completion of prescription.

#### Objective

The determine the trends of anti-asthmatic prescribed in government hospital setting, prescribing styles of physician and to evaluate the dosing adherence to an established asthma treatment guideline.

#### Methods

Prescriptions that are kept in the archieve of Hospital TuakuAmpuanRahimahwas collected in specific time frame. 9927 prescriptions was screened. The trend of anti-asthmatic prescribed was evaluated, together with the prescribing style. Dosing adherence to guideline was evaluated.

#### Results

Among 9927 prescriptions screened, 119 meets the inclusion criteria of this study. The mean age of patients was 42.1 years old and SD of± 26 years. Most common drug was SABA. Inhaled drug type have 100% dosing adherence to guideline, while oral corticosteroids have % adherence, methylxanthine, % adherence and leukotriene

# **ACKNOWLEGEMENT**

All Praise Go To Almighty Allah.

I would like to give my best appreciation to Professor Dr Yahaya B Hassan for his great support and guidance in completion of this work. I extend my gratitude to Dr Mohd. ShihabuddinA Noorden and Mr. Ahmad Azani B Othman, who are the coordinators of subject Reseach 1 and 11. Thanks to all lecturers and staff of Faculty of Pharmacy, UiTM, Puncak Alam Campus for their endless coorperation, and support.

I am very grateful to the management of Hospital Tuanku Ampuan Rahimah, Klang that gives permission for me to carry out my study in their hospital. Thanks to the staff of outpatient department of HTAR for their utmost support and attention onto my study.

A load of appreciation I forward to my family and friends who have shared their thought and extends their support either emotionally, and intellectually into completion of my thesis.

# TABLE OF CONTENT

BACHELOR OF PHARMACY
BACHELOR OF PHARMACY
APPROVAL SHEETIII
ABSTRACTIV
AUTHOR'S DECLARATIONVI
ACKNOWLEGEMENTVII
TABLE OF CONTENTVIII
LIST OF FIGURESXI
LIST OF TABLESXII
LIST OF ABBREVIATIONXIII
CHAPTER 1 1
INTRODUCTION
Overview
Problem Statements
Objectives of Study
Significance of Study5
CHAPTER 2
LITERATURE REVIEW6
Asthma6
Definition, Pathophysiology and Prevalence of Asthma6

### CHAPTER 1

#### INTRODUCTION

#### Overview

Asthma is the main chronic condition that affect the children's (Bitsko, Everhart, & Rubin, n.d.). While the adolescents that are affected have higher risk of death due to the exacerbation of asthma (Bruzzese et al., 2004).

There are many types of asthma that affects at certain stages of life. There can be caused by allergies. There are studies that shown children's with asthma have more food allergies than normal children's. The study, which carried out on school at the urban area shows that 73% of students with asthma there have allergies to food. While 12% of them have allergies to a number of foods (Friedlander et al., 2013). Besides air pollutants can also affect the immune response toward the stimulants. This causes negative effects to the airway responsiveness and the immune competent cells. Upon exposure to the air pollutants gases such as ozone, sulfur dioxide and nitrogen dioxide can cause these affects. (Duki, Sudarmadi, Suzuki, Kawada, & Tri-Tugaswatl, 2003). Besides, other substances that can cause exacerbation of asthma in allergy based asthma stimulation are dust mites and molds. The allergen hat cause asthma attack is varies among the patients. (Kim, Jahan, & Kabir, 2013).