# UNIVERSITI TEKNOLOGI MARA

# RETROSPECTIVE STUDY ON WRITTEN PRESCRIPTIONS OF OBSTRUCTIVE AIRWAY DISORDERS DRUGS IN OUTPATIENT DEPARTMENT OF HOSPITAL TENGKU AMPUAN RAHIMAH KLANG

# AZILEA BINTI GHAZALLI

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Faculty of Pharmacy

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### **ABSTRACT**

COPD and asthma were common diseases affecting Malaysian population regardless the age. The prevalence of obstructive airway disorders (OAD) is increasing in time. Thus, the consumption of OAD medication would definitely rise along. This study was to assess the prevalence of OAD, level of consumption and expenditure of OAD medications in outpatient pharmacy department (OPD), Hospital Tengku Ampuan Rahimah (HTAR), Klang. This study was also conducted to determine the prescription errors that may occur during the study duration. Prescriptions from August 2008 to January 2009 were screened for only those that contained at least one OAD medication. Then, data that were recorded from the prescriptions include the MRN, date, patients' profile and the drugs including dose, frequency, duration and dosage form. In addition, the price of each drug that was obtained from the store of pharmacy department was documented. The prescriptions were also screened for prescribing errors such focusing on incomplete prescriptions (frequency, dose, duration, signature, date, patient profile) and inappropriate regimen (medicine, duration, dose and frequency). The study concluded that the most occurred prescription errors were the absence of patients' age. A total of RM 84,918.50 had been spent by OPD of HTAR during the six months. Montelukast sodium contributed to 19.9% of total expenditure of OAD medication during the six month study duration. Other than that, MDI was prescribed at higher extent than DPI due to its lower cost. Moreover, occurrence of OAD was higher in female which reflects in the pattern of expenditure for OAD medications. In addition, Malay was found to be the highest population taking OAD medications. The high number of patients with AR should be taken seriously as this disease can contribute to asthma in the future.

# **CHAPTER 1**

# INTRODUCTION

## 1.1 Introduction

Respiratory system starts from the nose or mouth to pharynx, larynx, trachea, lungs and finally into the bronchi and alveoli (Beers *et al*, 2003). Respiratory diseases including asthma, chronic obstructive pulmonary disorders (COPD), cystic fibrosis, emphysema and bronchitis, may affect patients' quality of life and healthcare. Some general pharmacological groups of drug that can be given to patients with those diseases are  $\beta_2$ -agonist (bronchodilator), corticosteroids, methylxanthine, and anticholinergics (Wells *et al*, 2009). The route of administration of drugs can vary from tablet to syrup, to inhalational devices.