

UNIVERSITI TEKNOLOGI MARA

**RETROSPECTIVE STUDY
OF DRUG UTILIZATION PATTERNS
ON ANTI-ASTHMATICS DRUGS
IN OUTPATIENT DEPARTMENT OF
HOSPITAL TENGKU AMPUAN RAHIMAH
(HTAR), KLANG**

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ABSTRACT

Asthma is a chronic inflammatory disease and it is one of the very common diseases in Malaysia. A wide range of different classes of anti-asthmatic drugs including bronchodilators, anti-inflammatory drugs is now available for the treatment of asthma. Retrospective drug utilization study was done by analyzing the prescriptions from Outpatient Pharmacy Department of Hospital Tengku Ampuan Rahimah (HTAR). This was done to evaluate the drugs used pattern and identify whether the medications follow the recommended guideline or not. A total number of 276 prescriptions were collected for analysis which passed the inclusion and exclusion criteria. From the data analysis, 157 (56.9%) were male and 119 (43.1%) were female and there was highest prevalence rate of taking anti-asthmatic drugs among patient age more than 60 years old. Malay race was the highest (40.5%) followed by Indian (36%), Chinese (18.5%) and others (5%). For monotherapy, the most common anti-asthmatic drug was Salbutamol 142 (51.4%), followed by Budesonide 62 (22.5%). For overall classification of drugs, β_2 agonist (SABA) was the most commonly used drugs followed by corticosteroids. For combination therapy, Symbicort® 50 (18.1%) was the commonly prescribed by the physician, followed by Berodual® 35 (12.7%) and Seretide® 27 (9.8%). The overall drug utilization of combination therapy revealed more combination Long-acting β_2 -agonist (LABA)/Corticosteroid 77 (38.7%) anti-asthmatic drugs being distributed to patients rather than the combination of Short-acting β_2 agonist (SABA)/Short-acting Anticholinergic (SAAC) 42 (21.1%).

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

Asthma is a chronic inflammatory disease and very common disease in Malaysia. According to the National Health and Morbidity Survey in 2006, the prevalence of asthmatic cases in Malaysia was 7.1% ¹. The prescribing anti-asthmatic medications in Malaysia become increasing in number just like other developing countries. With intention to reduce the asthmatic symptoms and increasing the quality of life of the patients, guidelines on asthma management was published in Malaysia since 1996 with initiation to improve the overall management of asthma in asthmatic patients.

Several guidelines on asthma management are available to be used as reference for example Global Initiative for Asthma (GINA), Malaysia Ministry of Health (MOH), Clinical Practice Guideline for the Management of Asthma in Adult and Childhood and Global Initiative for Obstructive Lung Disease (GOLD). Anti-asthmatic drugs are also like other type of medications, although the guideline were implemented since before, the number of asthma keeps increasing and the use of asthma medications also can be associated with risk. So, by implementing drug utilization study the event of can be minimized ².