

UNIVERSITI TEKNOLOGI MARA

**PATTERN OF ANTIHYPERTENSIVE DRUGS
UTILIZATION, COMPLIANCE AND DIRECT
COST EVALUATION IN SHAH ALAM HEALTH
CLINIC**

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ABSTRACT

Objectives: To examine the prescribing patterns, particularly antihypertensive and other comorbidities drugs, in a general government health care setting and to evaluate the expenditure incurred as well as adherence towards antihypertensive regimens.

Methods: questionnaire-based study was conducted to evaluate compliance and prescriptions from a general medical outpatient clinic were collected for 1 week. Drug expenditures were calculated. **Results:** A total of 2138 prescriptions containing 917 items were collected. Antihypertensive and other comorbidities drugs accounted for 25.35% and 17.54% usage, respectively. CCBs, ACE inhibitors and BBs were the most popular antihypertensive. drugs used. Sulphonylureas were the most frequently prescribed antidiabetic agents. Memory, duration of therapy and age were significantly associated with compliance. Average cost per prescription was RM12 with amlodipine accounts for the highest usage with cost of RM 879499.68 ± 69625. **Conclusion:** The use of more expensive agent like amlodipine has further increased drug expenditure. Monitoring drug usage and their correlations with clinical outcomes are warranted. Counseling should be conveyed more effectively to improve patient compliance regardless their poor memory, duration of therapy or age factors.

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CHAPTER 1:

INTRODUCTION

1.0 Background

Hypertension is commonly considered to be a chronic resting blood pressure higher than 140/90 (Kenneth S.Saladin, 2007). It is one of the major killers in the modern world and one of the great ironies of the disease is that it has little or no immediate effect on affected individuals' quality of life (A. Douglas Bremner, 2003). Nevertheless, hypertension or high blood pressure is among the most common chronic medical conditions, affecting more than 65 million individuals in the United States. Approximately \$37 billion is spent annually for medications, office visits, and laboratory tests related to hypertension treatment (Gu, Qiuping MD et al, 2006).

It is a major risk factor for cardiovascular disease (CVD), the leading cause of death for all industrialized societies, which includes coronary heart disease (CHD), heart failure and stroke. Race is not a scientific category, but a demographic term used by social scientists, historians, politicians and others (Keith C. Ferdinand et al, 2008).