

UNIVERSITY TEKNOLOGI MARA

**The Prescribing Pattern of Anti Diabetic Agents in
Outpatient Pharmacy Department, Hospital Tengku
Ampuan Rahimah Klang**

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ABSTRACT

Diabetes Mellitus is a major health problem in most countries and is growing concerns in Malaysia with prevalence of diabetes has steadily increased. So, it is important to us to recognize the common anti diabetic drugs that have prescribed by the doctors to ensure the drugs are safe, efficacious and in good quality to the patients. The aims of this study is to determine the common types of anti diabetic agents used in hospital HTAR and to determine whether the drugs used is similar with suggested by the literature studies . The research was conducted retrospectively at Outpatient Department of HTAR, Klang and the data were collected for 3 months that was in May, June and August 2008. The data were analyzed using Microsoft Office Excel 2003 and SPSS software Version 12.0. All prescriptions received in these three months were screening and prescription with anti diabetic agents was identified. The averages of total anti diabetic prescriptions per day are 41 prescriptions and contribute to 5.5 % from total prescription received of HTAR per day. The frequencies of anti diabetic agents were record and then separated into two groups that are insulin preparation and oral hypoglycemic drugs. According to the data collected, its show the existence of differences in the treatment of diabetes which oral hypoglycemic agents contribute about 74% compare to insulin preparation that are only 26%.For insulin preparation, pre mixed insulin be the most frequent prescribed 70% compare to others and for oral, the physicians more prefer to prescribe metformin follow by gliclazide, glibenclamide and lastly acarbose.

CHAPTER 1

INTRODUCTION

1.1 Background of study

Diabetes mellitus (DM) is a major and growing health problem in most countries. Among the types of diabetes mellitus, type 2 diabetes is more common disorder affecting up to 45% of individuals older than 65 years. According to the American Diabetes Association (ADA) (1996), accounts for at least 90% of all cases of diabetes in patients over the age of 20 years. It causes considerable amount of disability, premature mortality, lost of productivity as well as increased demands on health care facilities (Rosak 2002).

Diabetes is growing concerns in Malaysia with prevalence of diabetes have steadily increased from 0.6% in 1960, to 2.1% in 1982, 6.3% in 1986 and 8.3% in 1996. Diabetes was most common in Indians especially males at a greater risk with rates ranging from 3.5 to 16% depending on locality and least common in Chinese. Lifestyle, dietary and body mass changes are apparent to be several an important contributory factor to diabetes disease in Malaysia. Of those with diabetes 38.4% were obese with females were significantly more obese than men (Zaini 2000). There was no difference in the obesity rates for urban and rural dwellers. However, overweight was more prevalent in the urban areas compared to their rural counterparts. Hypertension associated with