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THREE MONTHS STUDY ON THE PRESCRIBING PATTERNS OF STAIN IN OUTPATIENT PHARMACY DEPARTMENT, HOSPITAL KUALA LUMPUR

WAN NURUL IZA BT WAN MOHAMAD

SITI HANISAH BT MOHD ROZAILI
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بسم الله الرحمن الرحيم

The name of Allah, the Most Gracious and the Most Merciful'

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Thank you.

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ABSTRACT

Today there is a bewildering array of drug available and as medicines become more sophisticated and manufacturers produce more product information, it can be difficult for people to know what is most relevant to them when they take a new medicine. This especially so as more drugs and medicines previously only available with a doctors' prescriptions can now be purchased over the counter at a pharmacy or a supermarkets. Patients are now more aware of the side effect of medicines as well as their benefit. With detailed research of **'Three months study on prescribing patterns of statin in Outpatient Pharmacy Department, Hospital Kuala Lumpur'** this thoroughly revised and give some important information also shows us the way around this maze and how to use medicines safely and sensibly.

There have many topics about statin will study here. Firstly start with very general or low dosage of statin which is Lovastatin 20mg, continued by Simvastatin 20mg, Pravastatin 20mg and the last one is Atovastatin 40mg. Actually just these types of statin are cover in this research. It is because, only these statin have in Outpatient Pharmacy Department, Hospital Kuala Lumpur. Moreover, in this research, researchers also study the most frequently used of statin. For instance, researchers directly help Outpatient Pharmacy Department to select what type of statin are most useful to indent stock per month or will use in the future. This study is a compilation of the data obtained during three months of research and discussions with researchers' preceptor.

So, this research is not meant to replace advice given by professional person. Researchers feel that the research encourages us to improve work in partnership with health advisors to use statin both safely and effectively.

CHAPTER 1 **INTRODUCTION**

Research had been conducted based on a three month study on the prescriptions. Researchers had studied the prescription from October to December 2008 randomly. Generally, this research covers 4 types of statin that have been used in outpatient pharmacy department, Hospital Kuala Lumpur. Initially, researchers are supposed to study the prescriptions containing statin. Here, researchers just used four drugs (4) which are Lovastatin, Simvastatin, Atorvastatin and Pravastatin. Only Fluvastatin is not been use here. Besides from this research, researchers know how statin have given to patient. It has many procedures before it given to patients and researchers will discuss here.

The statin (Atorvastatin, Pravastatin, Fluvastatin, Simvastatin and Lovastatin) competitively inhibit 3-hydroxy 3-methylglutary coenzyme A (HMG CoA) reductase, an enzyme involved in cholesterol synthesis, especially in the liver. They are more effective than other classes of drug in lowering LDL-cholesterol but less effective than the Fibrates in reducing triglycerides and raising HDL-cholesterol.

Statin produce important reductions in coronary events, in all cardiovascular events, and in total mortality, in patient aged up to 75 years with coronary heart disease (history of angina or acute, myocardial infarction) and with a total serum-cholesterol concentration of 5mmol/litre or greater. Statin should also be considered for patients who have had coronary artery bypass surgery or angioplasty, or who have other clinically overt atherosclerotic disease such as cerebrovascular disease (non-haemorrhagic stroke or transient ischemic attacks) or peripheral vascular disease because these patient are at risk of major coronary events. Statins also reduce the incidence of non-haemorrhagic stroke when used for secondary prevention in coronary heart disease.