

UNIVERSITI TEKNOLOGI MARA

**PATTERN AND DRUG UTILIZATION IN OUTPATIENT
PRESCRIPTION FOR ATRIAL FIBRILLATION**

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ABSTRACT

This study was design to determine the pattern and drug utilization of drug for atrial fibrillation. This can help promotes rational use of medicines in patients and thus increasing patients' adherence. This study shows the importance of pharmacist intervention to prevent any medication errors from happening to help increase patients' quality of life. A retrospective descriptive study was done. This study involves prescriptions from Hospital Tengku Ampuan Rahimah, Klang with confirmed atrial fibrillation. The prescriptions were from both medical and cardiac outpatient clinic. 3350 of 9114 prescriptions from December 2014 were selected and only 231 prescriptions fulfill the inclusion data. The incidence of AF is higher in male gender in this study (57.1%) as they have a higher incidence of 17.6 and 42.7 compare to women with 10.1 and 21.6 events in a year. Atrial fibrillation increase progressively with age and a study imply that 70% of atrial fibrillation occurs between ages of 65 and 85 years old. Half of the subjects in HTAR were prescribed with antiarrhythmic drug (54.5%) while the rest were prescribed with anticoagulant and antiplatelet drug (45.5%). Only error in dosing (6.1%) and drug-drug interaction (1.7%) can be found in this study. As a conclusion, Majority of physicians follow the Malaysian's Clinical Practice Guideline; 93.1% for adherence to drug-drug interaction and 98.3% for adherence to dosage. The guideline was also followed when treating AF with co morbidity.

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CHAPTER 1

1.0 INTRODUCTION

1.1 OVERVIEW

Cardiovascular disease has been remaining as the main killer of men and women, claiming almost 1 death every 38 second. It has also begun to rise in numbers in many developing countries, both in urban and rural areas (Chin & Pengal, 2009). According to a report, out of 37 countries in the Western Pacific Region of WHO, 32 of these countries have identified cardiovascular disease as one of the main causes of fatality. It has claimed 3 million lives every year (Khor, 2001). In Malaysia, a report stated that the cause of death by cardiovascular disease is 23% to 26% of Malaysia's citizens (Zambahari, 2004). This has put Malaysia in the "intermediate mortality" group as it is one of the developing countries in South East Asian and has a rapid socio-economic progress that increases the standard of living (Mafauzy, Mokhtar, Mohamad, & Musalmah, 1999).

Arrhythmia is one of the known cardiovascular diseases. This term refers to a change of the normal sequence of electrical impulses and it may be abnormal, too fast or too slow, causing the heart to beat too fast (tachycardia), too slow (bradycardia) or erratically (Kirkwood, Fox, & Brown, 2014). This situation can cause the blood in our body unable to pump effectively. When this happens, the organs in our body cannot work properly thus may get damaged or shut down (Kutlu & Kuntalp, 2011).