

UNIVERSITI TEKNOLOGI MARA

**ASSESSMENT ON PERMISSIBLE
STATUS OF
ANTI-HYPERTENSIVE
MEDICATION**

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ABSTRACT

Muslim consumers are very concern with anything that they take in their daily live including medication. In hospital setting especially Hospital Sungai Buloh anti-hypertensive medication are among the most common to be used. But, the Halal status of each product used is unknown. Therefore, this study is important to assess the status of Permissible/Halal or ' Shariah' comply of the anti-hypertensive medication in Sungai Buloh Hospital. The active ingredients, and inactive ingredients (excipients) of each products are evaluated. These ingredients may come from a variety of sources; animals, plants or synthetic origin. Assessment to the products are obtained based on product leaflets provided by pharmaceutical companies and used academic and other websites references. From this study, 147 products have been evaluated, of these 3.4% permissible, 79.6% doubtful and 17% are unknown. The most common compound that cause of doubtful in active and inactive ingredients are from animal or plant or synthetic. Some (17%) of the products cannot be assessed due to incomplete data from product leaflets especially for inactive ingredients. For the conclusion, all parties such as Ministry of Health, Pharmaceutical companies, health care professional and others should play their role to provide only permissible medicine for Muslim consumers to comply their religion.

Keywords: Halal status, anti-hypertensive, active ingredient, excipient

CHAPTER 1

INTRODUCTION

1.1. OVERVIEW

1.1.1 PREVALENCE OF HYPERTENSION WORLDWIDE AND IN MALAYSIA

Hypertension has becoming primary causes of cardiovascular disease and mortality worldwide. It causes at least 7.6 million deaths per year around the world which constitute to about 13.5% of all deaths (Chow, Teo, Rangarajan, & et al., 2013). Globally, most cases occurs in low-, low-middle-, and upper-middle-income countries (Chow et al., 2013).

Based on National Health and Morbidity Survey (NHMS) III conducted in 2012, the prevalence of hypertension in Malaysia was 32.2 % (Jaiprakash et al., 2013). It was forecasted that the number will increase to 35.8 % in 2020. With the increase in the prevalence of hypertension, more drugs will be prescribed and mortality and morbidity will also rise up. Only 49.3 % of them were aware of their hypertensive status, 42.4 % were under treatment and 22.6 % were under control.

The prevalence in Malaysia is higher among elderly of age 60 and above. This is based on a study conducted which involved 4933 elderly, and out of that number 74 % are diagnosed with hypertension. Elderly female predominate with 77.4 % compared to men with 70.1 % (Kiau et al., 2013). The prevalence and awareness also differ based on several other factors for example, residency either urban or rural, ethnic group and level of education. Based on the study, Chinese and Indian females of urban