

UNIVERSITI TEKNOLOGI MARA

**A STUDY ON DRUGS THAT INDUCED
PULMONARY TOXICITY IN MALAYSIA FROM
2013 UNTIL 2014**

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ABSTRACT

This is a research on a study of drug induced pulmonary toxicity in Malaysia from 2013 – 2014. The objectives of the study is to determine the common drug that induced pulmonary toxicity, the severity and drug-ADR causal relationship as well as the predisposing factors that contribute to pulmonary toxicity. A total of 1716 ADR reports for 2 years data (2013 – 2014) were collected at National Pharmaceutical Control Bureau (NPCB). Simple logistic regression was done to identify the predisposing factors related to drug induced pulmonary toxicity. A chi square was performed to analyse the association between two parameters. In this study, it was found that, most of the patients were female, Malay and at the age range between 46 – 60 years old. There is an association between these 3 factors with the extent of severity with P-value <0.005. Perindopril was the highest drug induced pulmonary toxicity and dry cough was the common type of ADR with 17.8% and 37.2% respectively. However, this study shows no association for the predisposing factors. As a conclusion, perindopril was the common drug induced pulmonary toxicity. It might be associated to dry cough as the common type of ADR in this study as many study shows that perindopril induced dry cough to people who take it. Therefore, further analysis on larger data with complete information was needed to accomplish this study.

CHAPTER 1

INTRODUCTION

1.1 Background

According to National Pharmaceutical Control Bureau (NPCB) in Malaysia, there has been an increasing in the number of adverse drug reaction (ADR) reports received in 2014 compared to 2013. About 13,001 ADR reports were received in 2014 with 12,067 reports sent to World Health Organization (WHO) Uppsala Monitoring Centre to be included into the WHO database, while in the year 2013 there were 11,473 ADR cases reported to NPCB. (Ling T.A. et al, 2014).

Lung is a vital organ which is responsible for the exchange of oxygen and carbon dioxide gas between the atmosphere and the circulatory system. It can be exposed to the toxic agents by airborne particle externally or by chemicals in the blood stream internally (Smith A.C. and Boyd M.R., 2003).