

UNIVERSITI TEKNOLOGI MARA

**KNOWLEDGE, ATTITUDES AND BARRIERS
TOWARDS ADVERSE DRUG REACTION (ADR)
REPORTING AMONG HOSPITAL PHARMACISTS:
A NATIONWIDE SURVEY**

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TABLE OF CONTENTS

	Page
TITLE PAGE	
APPROVAL	
ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF ABBREVIATIONS	vi
ABSTRACT	vii
CHAPTER ONE (INTRODUCTION)	
1.0. Introduction	1
1.1. Problem statement	2
1.2. Objective of the study	3
1.3. Significance of study	4
CHAPTER TWO (LITERATURE REVIEW)	
2.1. Definition	5
2.2. Epidemiology	6
2.3. Types of Adverse Drug Reactions	7
2.4. Pharmacovigilance: Monitoring Adverse Drug Reaction	8
2.5. Adverse Drug Reaction reporting: Malaysian prospective	10
2.6. Pharmacists role in reporting Adverse Drug Reaction	11
2.7. Knowledge, attitudes and barriers towards ADR reporting	12
2.8. Improving ADR reporting	15
CHAPTER THREE (METHODOLOGY)	
3.1. Study Design and Population	17
3.2. Study Instruments and Data Collection	17
3.3. Statistical Analysis	18
CHAPTER FOUR (RESULTS)	
4.1. Sociodemographic variables of study participants	19
4.2. General Knowledge of ADR	19
4.3. Attitudes towards ADR reporting	20
4.4. Improve ADR reporting	20

ABSTRACT

Adverse Drug Reactions (ADRs) detection and reporting are of utmost importance to ensure safe and quality use of medicine resulting in improved patient safety. Pharmacists being the drug experts play a vital role in detection and reporting of ADRs. Therefore this study is conducted to evaluate knowledge, attitudes and barriers towards reporting adverse drug reaction among hospital pharmacists in Malaysia. A cross sectional survey was conducted from July to August 2009 using a validated structured self-administered questionnaire. Fully registered hospital pharmacists from 10 randomly chosen government hospitals were invited to participate in the study. The 10-item questionnaire consisted of four parts; demographic data, general knowledge about ADR reporting, attitudes and barriers towards reporting ADR and recommendations to improve ADR reporting. Of 300 questionnaires sent, 163 were returned (respond rate 54.3%). Of the respondents, 81 per cent claimed that they knew about spontaneous reporting system in Malaysia. All the respondents (163;100%) believed that ADR reporting is part of their responsibility. Factors that encourage them to report included reaction that is serious in nature (145;89.9%), reaction that was unusual (134;82.2%) and reaction to a new product (120;73.6%). The factors that refrained pharmacists to report ADR were insufficient information from the patient (89, 54.6%), reaction is assumed to be already well known (79;48.5%), too busy to report (58;35.6%) and forget to report (52;31.9%). Education and training (114;69.9%) and feedback (104;63.8%) were the suggested methods to improve ADR reporting. Pharmacists in Malaysia are knowledgeable and have positive attitude towards ADR reporting. Education and training of ADR could be use as one of planning strategies to improve reporting rate in Malaysia.

Keywords: Hospital pharmacists; ADR reporting; Malaysia; Barriers;

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Adverse Drug Reaction is defined as any response to a drug which is noxious, unintended, and which occurs at doses normally used in a man for prophylaxis, diagnosis or therapy of disease, or for the modification of physiological function. (WHO 2002). Adverse drug reactions (ADRs) are a major cause of patient morbidity and mortality and contribute to the incidence of adverse events (Lazarou *et al.*, 1998 and Dormann *et al.*, 2000). ADRs may cause many hospitalizations and lead to large economic burdens to patients and to society. (Lundkvist & Johnsson, 2004).

During clinical trials, drugs are usually tested in small number of populations and usually involved limited duration of time. Pregnancy women, elderly, patients with comorbidities are excluded during the trials. After drugs have been released to the market, the exclusion criterias during clinical trials no longer exist. Once drugs are marketed and used by patients, continuous monitoring is needed to detect ADRs. (WHO, 2002). Healthcare professionals especially pharmacists need to participate in the very important process of continuous surveillance of safety and efficacy of pharmaceutical