UNIVERSITI TEKNOLOGI MARA

GOOD GOVERNANCE FOR MEDICINES: MEASURING TRANSPARENCY AND ACCOUNTABILITY IN THE PUBLIC PHARMACEUTICAL SECTOR OF MALAYSIA

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Thesis submitted in fulfilment of the requirements for the degree of **Doctor of Philosophy**

Faculty of Pharmacy

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CANDIDATE'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Technology MARA. It is original and the result of my own work; unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

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ABSTRACT

The high value of pharmaceutical usage estimated at approximately USD600 billion per year has resulted in vulnerability to corruption. Inefficiencies in governments have led to a lack of transparency and accountability of the pharmaceutical system. This has created insufficient supply of medicines. The need to do continuous assessment and to identify areas for improvement in the function and structure of the pharmaceutical system is considered one of the crucial areas in healthcare system. The primary objective of the study is to measure the level of transparency and vulnerability to corruption in six functions of the pharmaceutical system (registration, inspection, promotion, selection, procurement and distribution of medicines) in Malaysia. The second objective is to evaluate the perception and knowledge of consumers, healthcare professionals and pharmaceutical industry representatives about "availability and quality of medicines", "prescribing pattern and supplier-induced demand" and "knowledge of corrupt acts and practice of sanctions". The third objective is to evaluate the knowledge among public and private stakeholders of the vulnerability to corruption.A cross-sectional study, using structured questionnaires adapted from the World Health Organisation assessment tools was used in semi-structured interview with stakeholders in the public and private pharmaceutical system. The responses to the questions were rated according to the criteria and then converted to scores on a numeral scale. The lower scores suggested greater vulnerability to corruption and the higher scores suggested lower vulnerability. The second part of the study is a selfadministered survey used to evaluate the perception and knowledge of consumers, healthcare professionals and industry representatives, who were conveniently selected to answer three different types of questionnaires for the respective groups. Statistical analysis was conducted using SPSS Version 13. The overall score for Malaysia's pharmaceutical system was 6.2 out of 10, indicating a system that is marginally vulnerable to corruption. The weakest links were in the areas of medicine selection (4.6), followed by procurement (5.6) and registration (5.9). The consumer perception surveys reveal that consumers are confident of prescribing pattern, availability and quality of medicines but knowledge of corrupt acts and practice of sanctions is low. There is significant difference in knowledge of vulnerability to corruption among public and private stakeholders in registration, promotion, inspection and selection. Despite having a strong pharmaceutical system in place, the results showed that the pharmaceutical system in Malaysia is marginally to moderately vulnerable to corruption. The most glaring deficiency seems to be the absence of conflict of interest guidelines and the lack of publicly available documents for the selection process. The offer of material gifts and favouritism seems to be a common practice as well as a lack of guidelines. There were only slight inefficiencies in the distribution and utilisation of pharmaceuticals in the system.

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TABLE OF CONTENTS

TITLE	Page
CANDIDATE'S DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	x
LIST OF FIGURES	xiv
LIST OF ABBREVIATIONS	xix
CHAPTER 1: INTRODUCTION	1
1.1 Background	1
1.2 Transparency and Accountability in Pharmaceutical System	3
1.3 Country Profile	4
1.3.1 Political System	5
1.3.2 Social and Economic Factors	5
1.4 Public Health Issues	9
1.5 The Pharmaceutical Regulations in Malaysia	11
1.5.1 Organisational Structure of Pharmaceutical Division of Malaysia	11
1.6 The Main Players in Malaysian Healthcare System	16
1.7 Current Pharmaceutical Situation in Malaysia	16
1.8 Objectives of the Research	18
1.8.1 General Objectives	18
1.8.2 Specific Objectives	19
1.9 The Scope of the Study	19
CHAPTER 2: LITERATURE REVIEW	21
2.1 The Importance of Pharmaceuticals	21
2.2 The Economic Impact of Medicines	22
2.3 Essential Medicines	23
2.4 National Medicine Policy	25