

UNIVERSITI TEKNOLOGI MARA

**A STUDY ON CURRENT CLINICAL WASTE
HANDLING AND MANAGEMENT PRACTICES IN
HOSPITALS IN MALAYSIA**

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for the degree of
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Declaration by Student

Project entitled "A Study on Current Practices of Clinical Waste Management in Hospitals in Malaysia" is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions. The project was done under the guidance of Dr. K. Subramaniam, MCIEH as Project Supervisor and Mr. Ahmad Razali Ishak as Co-supervisor. It has been submitted to the Faculty of Health Sciences in partial fulfillment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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For any errors or inadequacy that may remain in this work, of course the responsibility is entirely on my own.

TABLE OF CONTENT

TITLE PAGE

ACKNOWLEDGEMENT

TABLE OF CONTENTS

LIST OF TABLES

i

LIST OF FIGURES

iii

LIST OF APPENDICES

iv

LIST OF ABBREVIATION

v

ABSTRACT

vi

CHAPTER ONE: INTRODUCTION

1.1 Background Information

1

1.2 Problem Statement

2

1.3 Study Justification

2

1.4 Study Objectives

1.4.1 General Objective

3

1.4.2 Specific Objectives

3

1.5 Study Hypothesis

4

Abstract

A Study on Current Clinical Waste Handling and Management Practices in Hospitals in Malaysia

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Introduction: A cross-sectional comparative study of current clinical waste handling and management practices was conducted among clinical waste managers in Malaysia (n=19). A comparative case study was conducted between a selected government and a private hospital in Kajang, Selangor to compare the current clinical waste handling and management practices. A close ended multiple choice survey was also conducted among clinical waste workers and hospital workers (n= 31) to assess the level of their knowledge, attitude and practices in clinical waste handling and management practices.

Objectives: The aim of this study is to evaluate and compare the current practices of CWM in both hospitals. Besides that, this study also aims to assess the knowledge, attitude and practices of respondents towards clinical waste handling and management practices.

Methodology: Visits were carried out to identify and quantify the clinical waste from two hospitals in Kajang, Selangor. Review of the segregation, handling, collection, storage practices, at various units within both hospitals was conducted by using a standard checklist form by Department of Environment (DOE). A subset of standard questions was adopted for this study to assess the knowledge, attitude and practices of clinical waste workers and hospital workers towards CWM. A few in-depth interviews were done to enhance understanding of the existing clinical waste management in both hospitals. Preliminary risk analysis was also conducted to assess potential risk from the clinical waste handling and management practices.

Results: It was observed that there was some non-compliance in clinical waste handling and management practices in both study subjects. However, it was found that, the clinical waste handling and management in government hospital is more efficient in comparison to private hospital. The statistical analysis of survey questions showed that there is a significant difference between government and private hospital in the knowledge and practices of respondents towards clinical waste handling and management practices with $p < 0.05$. Statistical analysis of survey among clinical waste managers also showed significant difference ($p < 0.05$) in knowledge, attitude and practices.

Conclusion: There are incorrect handling and management of clinical waste among the workers. This might be due to the attitude and limited knowledge on safe CWM system.

Keywords: *Clinical waste; health and safety; infection control; management*