

**UNIVERSITI TEKNOLOGI MARA**

**KNOWLEDGE AND PRACTICE OF  
STANDARD PRECAUTIONS TOWARDS  
PREVENTION OF NEEDLE STICK  
INJURY AMONG NURSING STUDENTS**

**NUR ADILAH BT MOHD RODZALI @ MD GHAZALI**

**NUR AMALINA BINTI IDZANI**

**ZALWANI BINTI HAMID**

**Project submitted in fulfillment of the requirements for  
the degree of**

**Bachelor of Nursing (Hons)**

**Faculty of Health Sciences**

**JULY 2015**

## **AUTHORS' DECLARATION**

I hereby declare that the work of this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). It is original and is the result of my own work, unless for quotations and citations or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any other degree or qualification. In the event that my thesis be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA (UiTM).

Name of Student : Nur Adilah Bt Mohd Rodzali @ Md Ghazali  
Student I.D. No. : 2011292826  
Programme : Bachelor of Nursing (Hons.)  
Faculty : Faculty of Health Sciences  
Thesis : Knowledge and Practice of Standard Precaution towards  
Prevention of Needle Stick Injury among Nursing Students

Signature of student : .....

Date : July 2015

Name of Student : Nur Amalina Binti Idzani  
Student I.D. No. : 2011400392  
Programme : Bachelor of Nursing (Hons.)  
Faculty : Faculty of Health Sciences  
Thesis : Knowledge and Practice of Standard Precaution towards  
Prevention of Needle Stick Injury among Nursing Students

# **Knowledge and Practice of Standard Precautions towards Prevention of Needle Stick Injury among Nursing Students**

**Adilah R<sup>1</sup>, Amalina I<sup>1</sup>, Zalwani H<sup>1</sup>, Suzana Y<sup>1</sup>**

*<sup>1</sup>Faculty of Health Sciences, Universiti Teknologi MARA (UiTM), Malaysia*

## **ABSTRACT**

**Background:** Needle stick injury is a major work-related hazards that highly exposing the health care workers to harmful blood-borne pathogens. Implementation of standard precaution is important to reduce the risk of needle stick injury. Nursing students' knowledge together with high application of the practice would promote changes for better outcome to every hospital personnel including nursing students. The safety measures in handling sharp instruments would reduce the incidence of blood-borne disease infection among nursing students especially.

**Objective:** This study aimed to determine knowledge and practice on standard precautions and blood borne disease among Universiti Teknologi MARA (UiTM) and University of Malaya (UM) nursing students.

**Method:** Cross-sectional study conducted at UiTM and UM. The data were collected using the original version of the close-ended questionnaire from (Rampal, Zakaria, Leong, & Md Zain, 2010). A total of 116 nursing students participated in this study.

**Results:** There was no significant difference regarding knowledge of standard precautions and blood-borne disease between nursing students from UiTM and UM with  $p=0.623$  and  $p=1.732$  respectively. The finding on the comparison on practice of standard precaution showed that there is no significant difference except on the questions involving practice of wearing gloves during withdrawing needle from patient ( $p= 0.012$ ).

**Conclusion:** The overall scores for nursing students in knowledge of standard precaution and blood borne disease showed good knowledge information and on compliance of practice on standard precaution. However, there is very little significant difference on knowledge of standard precaution and blood-borne disease between UiTM and UM. Besides, there is also very little significant difference on practice of standard precaution between both universities. Present findings suggest there is improvement in knowledge and practice of standard precaution among nursing students.

**Keywords:** standard precaution, needle stick injury, knowledge, practice, nursing students

# TABLE OF CONTENTS

CONTENTS	PAGE
TITLE PAGE	
AUTHORS' DECLARATION	ii
ACKNOWLEDGEMENT	iv
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xi
LIST OF APPENDICES	xii
<b>CHAPTER 1: INTRODUCTION</b>	<b>1</b>
1.1 Background Information	1
1.2 Problem Statement	2
1.3 Significance of the Study	3
1.3.1 Nursing Students	3
1.3.2 Hospital	3
1.4 Objectives	4
1.4.1 General Objective	4
1.4.2 Specific Objectives	4
1.5 Research Questions	4
1.6 Definition of Terms	5
1.6.1 Standard Precautions	5
1.6.2 Needle Stick Injury	5
1.6.3 Nosocomial Infection	5
1.6.4 Cross-Contamination	6
1.7 Summary	6

<b>CONTENTS</b>	<b>PAGE</b>
<b>CHAPTER 2: LITERATURE REVIEW</b>	7
2.1 Introduction	7
2.2 Previous studies	7
2.3 Factors that contributed to needle stick injuries (NSIs)	9
2.4 Knowledge of standard precautions and blood borne pathogens	12
2.5 Components of standard precautions	13
2.6 Summary	15
<b>CHAPTER 3: METHODOLOGY</b>	16
3.1 Introduction	16
3.2 Study setting	16
3.3 Study design	17
3.4 Population and sample	18
3.4.1 Population	18
3.4.2 Sample	18
3.4.3 Inclusive criteria	20
3.4.4 Exclusion criteria	20
3.5 Instrument	20
3.5.1 Section A	21
3.5.2 Section B	21
3.5.2.1 Section B (I)	21
3.5.2.2 Section B (II)	21
3.5.2.3 Section B (III)	21
3.6 Pilot study	21
3.7 Validity and Reliability	22
3.7.1 Validity	22
3.7.2 Reliability	22