# PERCEPTION ON SUCTIONING TECHNIQUES TOWARDS ENDOTRACHEAL TUBE AMONG NURSES IN ICU AT HOSPITAL UNIVERSITI SAINS MALAYSIA (HOSPITAL USM)

#### NOR SYUHADA FARHANIS BINTI HASHIM 105135

### SCHOOL OF HEALTH SCIENCES UNIVERSITI SAINS MALAYSIA

2013

#### TABLE OF CONTENTS

TABI	LE OF CONTENT	I
CER	TIFICATE	V
ACK	NOWLEDGEMENT	VI
LIST	OF TABLES	VII
LIST	OF FIGURE	VIII
LIST OF ABBREVIATIONS		
ABS	TRACT	x
ABSTRAK		
СНА	PTER 1: INTRODUCTION	1
1.1	Background of The Study	1
1.2	Problem Statements	3
1.3	Research Objectives	5
	1.3.1 Specific Objectives	
1.4	Research Questions	5
1.5	Hypothesis	6
1.6	Definition of Terms (Conceptual/Operational)	7
1.7	Significance of The Study	10

#### **CHAPTER 2: LITERATURE REVIEW**

2.1	Introduction	11
2.2	Review of Literature	11
	2.2 Classification of Endotracheal Suctioning System	11
	2.3 Complications of Endotracheal Suctioning	13
	2.4 Management of Secretion	17
2.5	Conceptual / Theoretical Framework	18
СНА	PTER 3: RESEARCH METHODOLOGY	
3.1	Research Design	20
3.2	Population and Setting	20
3.3	Sampling Plan	20
	3.3.1 Sample	20
	3.3.2 Sampling Method	21
	3.3.3 Sampling Size	21
3.4	Variables	22
	3.4.1 Variables Measurement	22
3.5	Instrumentation	23
	3.5.1 Instrument	23
	3.5.2 Translation of Instrument	24
	3.5.3 Validity and Reliability	25

3.6	Ethical Considerations	25	
3.7	Data Collection Plan	26	
	3.7.1 Flow Chart of Data Collection	27	
3.8	Data Analysis	28	
3.9	Expected outcome		
СНА	PTER 4 RESULTS		
4.1	Study Outcome	29	
4,2	Socio-demographic Data	30	
4.3	Total Score of Perception Data	33	
4.4	Suctioning Technique towards ETT	34	
46	Association between Score of Perception and Age of Respondents	36	
4.6	Association between Score of Perception and Knowledge Level	37	
4.7	Correlation of Score of Perception and Suctioning Technique towards ETT	38	
СНА	PTER 5 DISCUSSION		
5.0	Introduction	39	
5.1	Socio-demographic Data	39	
5.2	Total Score of Perception Data	40	
5.3	Suctioning Technique towards ETT	41	
5.4	Association between Score of Perception and Age of Respondents	42	
5.5	Association between Score of Perception and Knowledge Level	42	
5.6	Correlation of Score of Perception and Suctioning Technique towards ETT	46	

#### CHAPTER 6 CONCLUSION AND RECOMMENDATIONS

6.1	Summary and Study findings			47
6.2	Conclusion			47
6.3	Strength and Limitations			47
6.4	Recommendations			48
	6.4.1 Nursing Practice			48
	6.4.2	Nursing Edu	cation	49
	6.4.3	Nursing Res	earch	49
REF	EREN	CES		51
	ENDIX			54
APPI		ŒS	: CONSENT FOR	54 55
APPI APPI		ES ( A (1-4)	: CONSENT FOR : GANTT CHART	
APPI APPI APPI	ENDIX	(ES (A (1-4)		55
APPI APPI APPI	ENDIX	CES (A (1-4) (B	: GANTT CHART	55 64
APPI APPI APPI APPI	ENDIX ENDIX ENDIX	ES (A (1-4) (B (C (D	: GANTT CHART : QUESTIONNAIRES	55 64 65

#### **CERTIFICATE**

This is to certify that the dissertation entitled 'Perception On Suctioning Techniques Towards Endotracheal Tube Among Nurses in ICU at Hospital Universiti Sains Malaysia (Hospital USM)' is the bonafide record of research work done by Miss Nor Syuhada Farhanis Binti Hashim, 105135 under my supervision. This dissertation submitted in partial fulfillment for the degree of Bachelor of Health Science (Nursing). Research work and collect of data belong to Universiti Sains Malaysia.

Supervisor

Mrs. Rosmawati Mohamed

Lecturer

Pusat Pengajian Sains Kesihatan,

Universiti Sains Malaysia,

Kampus Kesihatan, Kelantan.

Date: 3/7/2013

#### **ACKNOWLEDGEMENT**

#### In The Name of Allah the most Gracious and Merciful

I would like the express my gratitude to Allah for giving me strength and guidance for me in completing the research and dissertation successfully.

A special thank you to my supervisor, Mrs. Rosmawati Mohamed for her full support and supervision decides sharing the knowledge given throughout the research. I am also very thankful to all the lectures for giving me inspiration and motivation in completing the research. I am also thanks to all the contributors including seniors, statisticians and all people who gave their time to review my research study and not to forget, Dr Dariah Yusof for their guidance, advices and suggestion in completing this study.

I would like show my deepest appreciation to all my family members especially my parents for all the endless moral support and patience given from the very beginning of the study until the end. Last but not least, to all my colleagues who gave full cooperation and sharing knowledge during writing of this research. Thank You.

#### LIST OF TABLE

		Pages
Table 1	Frequency and Percentage of Nurses by Demographic Data in ICU.	30
Table 2	Working Experience of Respondents in ICU.	32
Table 3	The Score of Perception of Nurses at Intensive Care Unit (ICU).	33
Table 4	Number of Correct Suctioning Technique.	35
Table 5	Score of Perception and Age of Respondents.	36
Table 6	Score of Perception and Knowledge Level.	37
Table 7	Score of Perception and Suctioning Technique Towards ETT.	38

#### LIST OF FIGURE

		Page
Figure 1	Self Perception Theory	18
Figure 2	Data Collection Chart	27

#### LIST OF ABBREVIATION

ETT Endotracheal Tube

Hospital USM Hospital Universiti Sains Malaysia

ICU Intensive Care Unit

STAMP Suctioning Techniques and Airway Management Practices Survey

VAP Ventilator Associated Pneumonia

CSS Close Suctioning System

OSS Open Suctioning System

## PERCEPTION ON SUCTIONING TECHNIQUES TOWARDS ENDOTRACHEAL TUBE (ETT) AMONG NURSES IN ICU AT HOSPITAL UNIVERSITI SAINS MALAYSIA (Hospital USM)

#### ABSTRACT

A cross-sectional study was conducted to determine the score of perception on suctioning techniques towards endotracheal tube among nurses in ICU of Hospital USM. Samples was taken by randomly sampling among nurses, being critical nurses in intensive care unit (ICU) in Hospital USM (n=40). A constructed questionnaire was used to collect data. Data were analyzed using Statistical for Social Science (SPSS) 20.0 with alpha level of 0.05. Cronbach's alpha for the questionnaire was 0.701. The participants comprised of 90% diploma in educational level and the rest is 10% degree in educational level among nurses in critical care setting. The finding showed that the score of perception on suctioning technique was very high perception score (47.5%). There were fair correlation (r = 0.428) between the score of perception and nurses' age. Besides, there were no significant relationship between the score of perception and suctioning technique. In conclusion, nurses' perception on suctioning technique plays an important role in performing the procedures of ETT suction. Therefore, nurses should also focus on the positive perception as to ensure nurses have positive perception on suctioning technique.

## PERSEPSI TEKNIK SEDUTAN TUBE ENDOTRAKEAL DALAM KALANGAN JURURAWAT DI ICU, HOSPITAL UNIVERSITI SAINS MALAYSIA (HOSPITAL USM)

#### **ABSTRAK**

Satu kajian keratan rentas telah dijalankan untuk menentukan skor persepsi teknik sedutan tiub endotrakeal (ETT) dalam kalangan jururawat di ICU Hospital USM. Sampel telah diambil secara rawak antara jururawat iaitu jururawat yang bekerja di unit rawatan rapi (ICU) di Hospital USM (n = 40). Soal selidik yang telah dibina digunakan untuk mengumpul data. Data dianalisis dengan menggunakan statistik untuk Sains Sosial (SPSS) 20.0 dengan tahap alpha 0.05. Cronbach Alpha bagi soal selidik ialah 0.701. Para peserta terdiri daripada 90% diploma dan selebihnya adalah 10% daripada peringkat ijazah. Keputusan menunjukkan bahawa skor persepsi teknik penyedutan adalah pada skor persepsi yang tinggi (47.5%) dan skor persepsi yang sangat tinggi (47.5%). Terdapat korelasi yang adil (r = 0.428) antara skor persepsi dan umur jururawat. Selain itu, tidak berlaku hubungan yang signifikan antara skor persepsi dan teknik penyedutan. Kesimpulannya, persepsi jururawat pada teknik penyedutan memainkan peranan yang penting dalam melaksanakan prosedur sedutan ETT. Oleh itu, jururawat juga perlu memberi fokus kepada persepsi yang positif untuk memastikan jururawat mempunyai persepsi yang positif kepada teknik penyedutan.