

**Nurse Interns' Awareness Regarding
Patient Safety Culture at Ain-Shams
University Hospitals**

Thesis

Submitted for Partial Fulfillment of the requirement of the
Master Degree in Nursing Sciences
(Nursing Administration)

By

Laila Ahmed Abdel Hamid Mohamed

*B.Sc. Nursing, Ain-Shams University
Demonstrator, Nursing Administration Department*

**Faculty of Nursing
Ain Shams University
2014**

Nurse Interns' Awareness Regarding Patient Safety Culture at Ain-Shams University Hospitals

Thesis

Submitted for Partial Fulfillment of the requirement of the
Master Degree in Nursing Sciences
(Nursing Administration)

Supervisors

Dr. Samah Faisal Fakhry

*Assistant Professor of Nursing Administration
Faculty of Nursing - Ain Shams University*

Dr. Hemat Abd El Azeem

*Lecturer of Nursing Administration
Faculty of Nursing - Ain Shams University*

**Faculty of Nursing
Ain Shams University
2014**

وعي امتياز التمريض بثقافة أمان المريض في مستشفيات جامعة عين شمس

رسالة

**توطئة للحصول على درجة الماجستير في علوم التمريض
(إدارة التمريض)**

مقدمة من

ليلى أحمد عبد الحميد محمد

معيدة بقسم إدارة التمريض

كلية التمريض

جامعة عين شمس

٢٠١٤

وعي امتياز التمريض بثقافة أمان المريض في مستشفيات جامعة عين شمس

رسالة

توطئة للحصول على درجة الماجستير في علوم التمريض
(إدارة التمريض)

تحت إشراف

د. سمح فيصل فخري

أستاذ مساعد إدارة التمريض
كلية التمريض - جامعة عين شمس

د. همت عبد العظيم

مدرس إدارة التمريض
كلية التمريض - جامعة عين شمس

كلية التمريض

جامعة عين شمس

٢٠١٤

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٣٢



*My thanks are submitted first to **GOD** who gave me the strength and ability to achieve this work.*

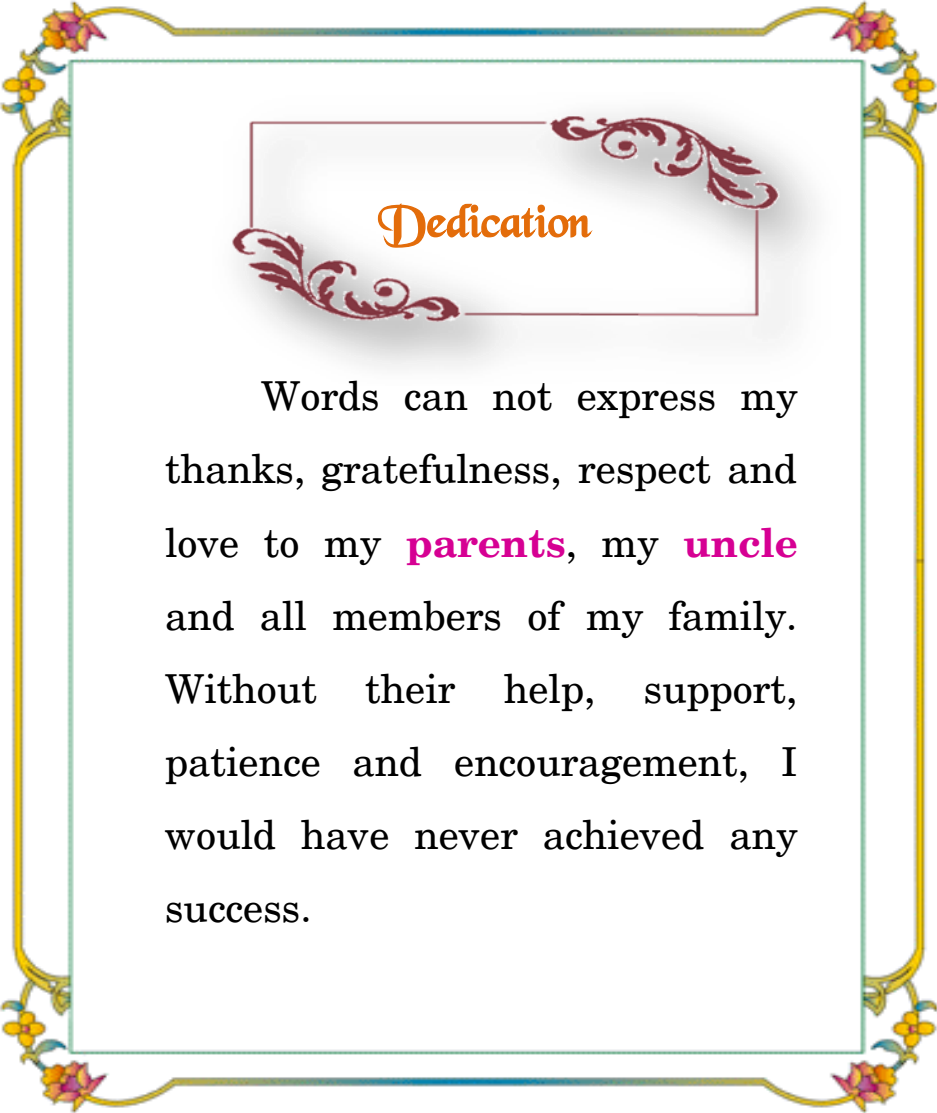
*I do express my profound respect and thanks to **Dr. Samah Faisal Fakhry**, Assistant Professor of Nursing Administration, Faculty of Nursing, Ain Shams University for her help, constant support, constructive criticism, and valuable supervision during the course of this work.*

*My deep appreciation and gratitude are addressed to **Dr. Hemat Abd El Azeem**, Lecturer of Nursing Administration, Faculty of Nursing, Ain Shams University for her guidance, supervision, and generous advice, which were essential for completing this work.*

A special acknowledgment is due to all the nurse interns who participated in this work for their cooperation and help.

Laila Ahmed Abdel Hamid





Dedication

Words can not express my thanks, gratefulness, respect and love to my **parents**, my **uncle** and all members of my family. Without their help, support, patience and encouragement, I would have never achieved any success.

Abstract

Nurse interns' are considered an important target group for patient safety education, and can play a major role in patient safety improvement. The aim of this study was to assess nurse interns' awareness of patient safety culture. The study was carried out at Ain-Shams University Hospitals using a descriptive cross-sectional design on 160 nurse interns. The data were collected through a self-administered sheet which is based on the Hospital Survey on Patient Safety Culture (HSPSC). The field work was from June to the end of September 2013. The result of the study revealed that the total safety culture median score was 3.01, indicating uncertainty. The dimension of organizational learning has the highest median score followed by teamwork within units, while the dimensions of frequency and number of events reported had the lowest scores. More than half of the nurse interns considered patient safety grade acceptable. Some of the nurse interns' characteristics to have significant associations with various dimensions such as work hospitals, type of pre-university education, previous work and its duration, duration of training in hospital, and training hours/week. However, multivariate analysis showed that the training hours (<40/week) was the only statistically significant positive predictor of the total safety culture score. In conclusion, the nurse interns' awareness of patient safety culture is just average, tending towards uncertainty, being lowest regarding the frequency and number of events reported. However, patient safety grade is viewed as acceptable. It is recommended that an effective strong endeavor for safety culture should be initiated, supported, and maintained organization-wide. This requires considering safety culture as a top strategic priority, with clear related policies and procedures. Patient safety culture must be an integral part of all educational activities.

Key words: Nurse interns, awareness, patient safety culture

Contents

Subject	Page No.
INTRODUCTION	1
AIM OF THE STUDY	7
REVIEW OF LITERATURE.....	8
PATIENT SAFETY.....	8
Concept of patient safety.....	8
Magnitude of patient safety problem.....	9
Patient safety goals for nursing care.....	9
SAFETY CULTURE.....	18
Concept of patient safety culture.....	18
Safety culture characteristics: dimensions of patient safety culture.....	20
Factors contributing to building of a positive culture for patient safety.....	22
Achieving a culture of safety.....	25
ADVERSE EVENT REPORTING, CULTURE OF PATIENT SAFETY....	28
Definitions of adverse event.....	29
Types of errors.....	31
Causes of preventable adverse events.....	33
Adverse event reporting.....	34
INTERNSHIP PROGRAM.....	38
Patient safety in nursing education.....	40
NURSES' INTERNS' PERCEPTION OF PATIENT SAFETY CULTURE	44
Factors associated with nurse interns' perception of patient safety.....	46
Role of nurse interns' for patient safety.....	48
SUBJECTS AND METHODS	52
RESULTS.....	61
DISCUSSION.....	113

Contents *(Cont...)*

Subject	Page No.
CONCLUSION.....	133
RECOMMENDATIONS.....	134
SUMMARY.....	136
REFERENCES.....	140
APPENDICES	
ARABIC SUMMARY.....	

List of Tables

Table	Title	Page
	Review	
I	Patient safety culture dimensions	21
	Results	
1	Socio-demographic and job characteristics of nurse interns' in the study sample	62
2	Agreement upon teamwork within units, and supervisor expectations and actions among nurse interns' in the study sample	66
3	Agreement upon organizational learning and continuous improvement, management support for, and overall perceptions of patient safety among nurse interns' in the study sample	68
4	Agreement upon feedback and communication about error, communication openness, and frequency of events reported among nurse interns' in the study sample	70
5	Agreement upon teamwork across units, and staffing among nurse interns' in the study sample	72
6	Agreement upon handoffs and transitions, and non-punitive response to errors among nurse interns' in the study sample	74
7	Scores of nurse interns' agreement upon patient safety dimensions in the study sample	78
8	Comments and suggestions reported nurse interns' in the study sample	80

List of Tables *(Cont.)*

Table	Title	Page
9	Relation between nurse interns' agreement upon team work within units and their characteristics	81
10	Relation between nurse interns' agreement upon supervisor/manager expectations and actions and their characteristics	83
11	Relation between nurse interns' agreement upon organizational learning and continuous improvement and their characteristics	85
12	Relation between nurse interns' agreement upon management support of patient safety and their characteristics	87
13	Relation between nurse interns' agreement upon overall perception of patient safety and their characteristics	89
14	Relation between nurse interns' agreement upon feedback and communication about error and their characteristics	91
15	Relation between nurse interns' agreement upon communication openness and their characteristics	93
16	Relation between nurse interns' agreement upon the frequency of errors reported and their characteristics	95
17	Relation between nurse interns' agreement upon teamwork across units and their characteristics	97
18	Relation between nurse interns' agreement upon staffing and their characteristics	99
19	Relation between nurse interns' agreement upon handoffs and transition and their characteristics	101

List of Tables *(Cont.)*

Table	Title	Page
20	Relation between nurse interns' agreement upon non-punitive response to errors and their characteristics	103
21	Relation between nurse interns' agreement upon the number of errors reported and their characteristics	105
22	Relation between nurse interns' awareness of patient safety grade and their characteristics	107
23	Relation between nurse interns' agreement upon total safety culture and their characteristics	109
24	Correlation between nurse interns' safety culture score and their personal characteristics	111
25	Best fitting multiple linear regression model for the total safety score	112

List of Figures

Table	Title	Page
	Review	
I	Different forms of errors	30
	Results	
1	Distribution of nurse interns' in the study sample according to work hospital	64
2	Distribution of nurse interns' in the study sample according to pre-university education	65
3	Patient safety grade as agreed upon among nurse interns' in the study sample	76
4	Number of events reported as agreed upon among nurse interns' in the study sample	77

INTRODUCTION

Issues of patient safety have become a priority in health policy and healthcare management. The rapidity by which healthcare technologies evolve have required greater attention to safety issues necessary for effective and efficient delivery of high quality services. Patient safety is a new healthcare discipline that emphasizes reporting, analysis, and prevention of medical errors that often lead to adverse healthcare events (*World Health Organization [WHO], 2010*).

The Canadian Patient Safety Dictionary (2003) defines patient safety as “the reduction and mitigation of unsafe acts within the healthcare system, as well as through the use of best practices shown to lead to optimal patient outcomes”. The World Health Organization’s (*WHO, 2009*) International Classification for Patient Safety defines patient safety as, “the reduction of risk of unnecessary harm associated with healthcare to an acceptable minimum. An acceptable minimum refers to the collective notions of given current knowledge, resources available and the context in which care was delivered weighed against the risk of non-treatment or other treatment”. Patient safety is often considered a component of quality, thus,