



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



HANAA ALY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



HANAA ALY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



HANAA ALY

Standard Precautions Among Health Care Workers in Ambulatory Units

Thesis

*Submitted in Partial Fulfillment of Master's degree
in "Community Health Nursing"*

By

Warda Ahmed Ebrahim

B.Sc. Nursing (2004)

Faculty of Nursing, Ain Shams University Hospital

**Faculty of Nursing
Ain Shams University
2021**

Standard Precautions Among Health Care Workers in Ambulatory Units

Thesis

*Submitted in Partial Fulfillment of Master Degree
in "Community Health Nursing"*

Supervised by:

Dr. Ferial Fouad Melika

Assistant Prof. of Community of Health Nursing
Faculty of Nursing - Ain Shams University

Dr. Safinaz Mohamed sayed

Lecturer of Community of Health Nursing
Faculty of Nursing - Ain Shams University

**Faculty of Nursing
Ain Shams University
2021**



Acknowledgement

Thanks to Allah who have lightened my path to accomplish this work,

The few words I wrote here can never and can't adequately express the feelings of gratitude; I have for my supervisors and the persons, who helped me to achieve this work. If I am to vote the heartiest thanks, it is to:

*I am deeply grateful to **Dr. Ferial Fouad Melika**, Assistant Prof. of Community of Health Nursing, Faculty of Nursing - Ain Shams University for her prompt and thought-provoking responses to my questions and for allowing me the freedom to work independently. I greatly acknowledge for her continuous encouragement and moral support.*

*It is with great pleasure, deep satisfaction, and gratitude that I acknowledge the help of **Dr. Safinaz Mohamed sayed**, Lecturer of Community of Health Nursing, Faculty of Nursing - Ain Shams University, for her unlimited help, effort, support, guidance and for the time she devoted to me in this work. I would not have been able to start and continue this work without her help.*

I would like to express my deepest thanks to all who helped me by time, effort, and spirit in fulfilling this work,

Warda Ahmed Ebrahim

List of Contents

<i>Title</i>	<i>Page</i>
▪ List of Abbreviations	I
▪ List of Tables	II
▪ List of Figures	V
▪ Abstract.....	VII
▪ Introduction	1
▪ Aim of the Study	4
▪ Literature Review	5
▪ Subjects and Methods	64
▪ Results	74
▪ Discussion	115
▪ Conclusion	130
▪ Recommendations.....	131
▪ Summary	132
▪ References.....	143
▪ Appendices	172
▪ Protocol	218
▪ Arabic Summary.....	----

List of Abbreviations

Abbrev.	Full-term
ABHR	: Alcohol-Based Hand Rub
ACSC	: Ambulatory care sensitive conditions
APIC	: Associated of Professionals in Infection Control
AHC	: Ambulatory Health Care
BBV	: Blood borne virus
BCG	: Bacillus Calmette–Guérin
ACN	: Ambulatory care nurse
CDC	: Center for disease control and prevention
ECDC	: European Centre for Disease Prevention and Control
EDs	: Emergency Departments
HAIs	: Healthcare-Associated Infections
HCAIs	: Health Care Associated Infections
HCWs	: Health care workers
HIV	: Human immunodeficiency virus
ICP	: Infection control practitioner
IgG	: Immunoglobulin G
JCAHO	: Joint Commission on Accreditation of Healthcare Organizations
MMR	: Measles, mumps and rubella
PPE	: Personal protective equipment
SPs	: Standard precautions
SPSS	: Statistical Package for Social Sciences
SSD	: Sterile Services Department
VZV	: Varicella-zoster virus
WHO	: World Health Organization

List of Tables

<i>Table No.</i>	<i>Title</i>	<i>Page No.</i>
1	Number and percentage distribution of the study sample according to their socio-demographic data	75
2	Number and percentage distribution of the study sample according to their aspects related to their job.	78
3	Number and percentage distribution of the sample according to their health condition	80
4	Number and percentage distribution of the sample according to their knowledge about standard precautions and hand washing	82
5	Number and percentage distribution of the sample according to their knowledge about personal protective equipment and aseptic technique	83
6	Number and percentage distribution of the sample according to their knowledge about waste management and environmental cleaning	84
7	Number and percentage distribution of the sample according to their knowledge about respiratory hygiene and cough Etiquette	85

<i>Table No.</i>	<i>Title</i>	<i>Page No.</i>
8	Distribution of the suitability of environment according to hand hygiene and personal protective equipment standards	87
9	Distribution of the suitability of environment according to aseptic technique standards	89
10	Distribution of the suitability of environment according to sheets, bed linen and environmental cleanliness, disinfection	90
11	Distribution of the suitability of environment according to medical waste management, respiratory hygiene, cough etiquette and reprocessing of instrument standards	92
12	Number and percentage distribution of the study sample according to hand hygiene and personal protective equipment practices	95
13	Number and percentage distribution of the study sample according to aseptic technique practices	97
14	Number and percentage distribution of the study sample according to environment cleaning practices	99
15	Number and percentage distribution of the study sample according to waste management practices	101
16	Number and percentage distribution of the study sample according to respiratory hygiene, cough etiquette	103

<i>Table No.</i>	<i>Title</i>	<i>Page No.</i>
17	Number and percentage distribution of the study sample according to reprocessing of instrument practices	104
18	Number and percentage distribution of the study sample according to total practices regarding to standard precautions in ambulatory health care units	106
19	Number and percentage distribution of the study sample according to factors affecting the practices of standard precautions	108
20	Relation between sample' socio-demographic characteristic and their total knowledge about standard precautions	109
21	Relation between sample' socio-demographic characteristic and their total practices towards standard precautions	111
22	Correlation between sample' total knowledge, practices about standard precautions, and factors affecting the practices of HCWs regarding standard precautions	113

List of Figures

<i>Figure No.</i>	<i>Title</i>	<i>Page No.</i>
Figures in Review		
1	Steps of hand washing	9
2	5 Moments of Hand Hygiene	10
3	Personal protective equipment (PPE)	13
4	Respiratory Hygiene and Cough Etiquette	15
5	Management of Sharps	18
6	Biohazard spill kit	20

List of Figures

<i>Figure No.</i>	<i>Title</i>	<i>Page No.</i>
Figures in Results		
1	Number and percentage distribution of the study sample according to their gender	76
2	Number and percentage distribution of the study sample according to their social status	77
3	Number and percentage distribution of the study sample according to their total knowledge about standard precautions	86
4	Distribution of the ambulatory units according to Suitability of environmental structure	94
5	Number and percentage distribution of the study sample according to total practices regarding to standard precautions in ambulatory units	107

Standard Precautions Among Health Care Workers in Ambulatory Units

(1) Warda Ahmed Ebrahim, (2) Ferial Fouad Melika, (3) Safinaz Mohamed sayed

1.B.Sc. Nursing Faculty of Nursing, Ain Shams University Hospital-2. Assistant Professor of Community Health Nursing 3. Lecturer of Community Health Nursing Faculty of Nursing - Ain Shams University, Egypt.

Abstract

Standard precautions are the minimum infection prevention practices that apply to all patient care, regardless of suspected or confirmed infectious status of the patient, at any ambulatory care units. **Aim:** This study aims to assess the standard precautions among health care workers in ambulatory units. **Design:** Descriptive research design was used to conduct this study. **Setting:** The study was conducted at four ambulatory units in the New Emergency Hospital, affiliated to Ain Shams University Hospitals (medicine emergency unit, dressing unit, dental unit, and orthopaedic unit). **Sampling:** Convenience sample consisted of 200 health care workers; (68 physicians, 100 nurses, and 32 workers). **Tools:** Two tools were used in this study, **first:** An interviewing questionnaire divided into four parts: *Part I* health care workers' socio- demographic, *Part II to assess* the health status among HCWs, *Part III* health care workers' knowledge, and *Part IV* the factors that affect the performance of health care workers in ambulatory units. **Second:** Observation checklist for assessing health care workers' practices regarding standard precautions and an environmental checklist. **Results:** Revealed that, 34% of the study sample have bachelor as qualification, 40% of them attending training courses on standard precautions, and 46% of the study sample have good level of total knowledge and 60% of them have unsatisfactory level of total practices regarding to standard precautions in ambulatory units, with highly statistically significant relation between sample' knowledge and practices about standard precautions and their socio-demographic characteristics there were 79% of workers have personal factors as factors affecting the practices of standard precautions. **Conclusion:** the result proved that there was highly significant positive correlation between HCWs' total knowledge and their levels of practices at ($P = < 0.01$). And highly significant negative correlation between HCWs' total practices, and factors affecting standard precautions. at ($P = < 0.01$). **Recommendations:** The study recommended that continuing training for nurses to demonstrate their compliance/ performance/ utilization of standard precautions in all ambulatory unit.

Keywords: Ambulatory Unit, standard precautions, healthcare workers

Introduction

Standard precautions are the minimum infection prevention practices that apply to all patient care, regardless of suspected or confirmed infectious status of the patient, in any setting where health care is delivered. These practices are designed to prevent from spreading infections among patients. There are seven standard precautions include hand hygiene, personal protective equipment (PPE) (gloves, eyewear, gowns & masks), respiratory hygiene/cough etiquette, sharps safety, (engineering and work practice controls), safe injection practice (i.e. Aseptic technique for parental medications), sterile instruments and devices, and cleaning and disinfecting of the environmental surfaces ***(Central Disease Control and Prevention, 2018).***

Ambulatory care unites refers to medical or surgical care that is rendered for consultative, diagnostic, or therapeutic purposes in facilities where the patient does not remain overnight ***(Annabel 2014).*** Ambulatory care is provided in a variety of settings, including physician's offices, hospital-based clinics, public health clinics, ambulatory surgery centers, dental offices, and the home. This care can include advanced medical technology and procedures even when provided outside of hospitals ***(Hospital-infection-control/ambulatory-care, 2017).***

Health care workers (HCWs) are all people engaged in actions whose primary intent is to enhance health, delivers care