

شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلو

# بسم الله الرحمن الرحيم





HANAA ALY



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكرونيله



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



HANAA ALY



شبكة المعلومات الجامعية التوثيق الإلكترونى والميكروفيلم

# جامعة عين شمس التوثيق الإلكتروني والميكروفيلم قسم

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



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



HANAA ALY



# Assess Nursing Performance During Implementation of Care Bundle for Critically ill Patients

# AThesis

Submitted for Partial Fulfillment of the Requirements of Master Degree in Medical Surgical Nursing (Critical Care)

## 

(B.Sc. Nursing)
Demonstrator in Medical Surgical Nursing Department
Faculty of Nursing
Modern University of Technology and Information

Faculty of Nursing
Ain Shams University
2021



## Assess Nursing Performance During Implementation of Care Bundle for Critically ill Patients

# AThesis

Submitted for Partial Fulfillment of the Requirements of Master Degree in Medical Surgical Nursing (Critical Care)

# Under Supervision

#### **Dr. Eman Talaat Mohammed**

**Professor of Medical Surgical Nursing Faculty of Nursing - Ain-Shams University** 

### Dr. Dalia Abdallah Abdelatief

Assistant professor of Medical Surgical Nursing Faculty of Nursing - Ain-Shams University

### Dr. Dalia Ali Ameen

Assistant professor of Critical Care Nursing Faculty of Nursing - Ain-Shams University

Faculty of Nursing
Ain Shams University
2021



First and foremost, I feel always indebted to Allah, the Most Kind and the Most Merciful for all his blessing and for giving me the will and strength for completion of this work.

I would like to express my deepest thanks, sincere appreciation and most gratitude to **Dr. Eman Talaat Mohammed**, Professor of Medical Surgical Nursing, Faculty of Nursing, Ain Shams University, for encouraging me to proceed with the subject I had chosen and for patiently putting up with my anxieties, for her precious advice, for her devoted time and effort, constructive guidance, assistance, fruitful criticism, and meticulous revision. Her influence on this work cannot be missed. I thank her for immense support and profound expertise. Without her careful supervision, this work could never be accomplished.

I am deeply grateful to **Dr. Dalia Abdallah Abdelatief**, Assistant Professor of Medical Surgical Nursing, Faculty of Nursing, Ain Shams University, for her supervision, support, constructive guidance, assistance, fruitful criticism, her influence on this work cannot be missed. I thank her for immense support and profound expertise. I am deeply affected by her noble character, perfection, care and consideration. I would not have been able to start and reach perfection of this work without her support.

I am deeply grateful to **Dr. Dalia Ali Ameen**, Assistant Professor of Critical Care Nursing, Faculty of Nursing, Ain Shams University, for her constructive guidance, assistance, fruitful criticism, her influence on this work cannot be missed. I thank her for immense support and profound expertise. I am deeply affected by her noble character.

Finally, I would like to thank the nurses who participated cooperatively in the study.



#### A would like to dedicate this work to:

- My parents and My husband, for whom I will never find adequate wards to express my gratitude.
- Also for My dear children who always make my life full of happiness.

## Eman Helwan Ismail



## **List of Contents**

<del>Ti</del> tle	Page No.
List of Abbreviations	I
List of Tables	III
List of Figures	IV
Abstract	VI
Introduction	1
Aim of the study	5
Review of Litrature	6
Subjects and Methods	42
Results	54
Discussion	77
Conclusion	99
Recommendations	100
Summary	101
References	110
Appendices	138
Protocol	160
Arabic Summary	

## **List of Tables**

No.		Title		Pag	e No.	
(1): F	requency a	nd per	centage dist	tribution	of nu	rses
ac	cording to	their de	emographic	characte	eristics.	55
<b>(2):</b>	Frequency	and	percentage	e distri	bution	of
kr	nowledge re	egardin	g assessme	nt, prev	ention	and
m	anagement	of pain				57
(3):	Frequency	and	percentage	e distri	bution	of
kr	nowledge r	egardir	ng choice	of anal	gesics	and
se	datives					59
<b>(4):</b>	Frequency	and	percentage	e distri	bution	of
kr	nowledge re	egardin	g early mov	vement	and fan	nily
er	gagement					60
( <b>5</b> ): D	istribution (	of nurse	es' knowled	lge leve	l regard	ling
ca	re bundle f	or critic	cally ill pati	ents		61
( <b>6</b> ): F	requency a	nd perc	entage dist	ribution	of nur	ses'
pr	ractice reg	arding	assessment	t, preve	ention	and
m	anagement	of pain				63
( <b>7</b> ): F	requency a	nd perc	entage dist	ribution	of nur	ses'
pr	ractice reg	arding	assessme	nt of	pain	for
ur	nconscious	patients	S			64
	(1): Find a construction (2): kr mm (3): kr see (4): kr error (5): Disconstruction (6): Find properties (7): Find	(1): Frequency as according to	(1): Frequency and pero according to their descending to their des	(1): Frequency and percentage distance according to their demographic (2): Frequency and percentage knowledge regarding assessme management of pain	(1): Frequency and percentage distribution according to their demographic characters.  (2): Frequency and percentage distribution and percentage distribution assessment, previously and percentage distribution.  (3): Frequency and percentage distribution of nurses and percentage distribution of nurses are bundle for critically ill patients.  (5): Distribution of nurses assessment, preventage distribution practice regarding assessment, preventage distribution practice regarding assessment of pain.  (7): Frequency and percentage distribution practice regarding assessment of pain.	(1): Frequency and percentage distribution of nuraccording to their demographic characteristics.  (2): Frequency and percentage distribution knowledge regarding assessment, prevention management of pain

Table (8): Frequency and percentage distribution of nurses'
practice regarding delirium assessment67
Table (9): Frequency and percentage distribution of nurses'
practice regarding early mobility68
Table (10): Frequency and percentage distribution of nurses'
level of practice concerning family
engagement70
Table (11): Distribution of nurses' level of practice
regarding bundle care for critically ill patient71
Table (12): Relation and correlation between nurses' total
knowledge level and their demographic
characteristics73
Table (13): Relation between total nurses' practices level
and their demographic characteristics75
Table (14): Relation between total nurses' level of
knowledge and practice regarding care bundle for
critically ill patients <b>76</b>

# **List of Figures**

Fig. No.	<u>ි</u>	itle	Page No.
k	): Percentage distribut knowledge regarding critically ill patients	bundle o	care for
r	): Frequency and percenturses' practice regar Awakening Trials and B	rding Spo	ntaneous
r	enurses' practice con agitation sedation scale (	icerning i	richmond
Ī	): Percentage distributed practice regarding bund ll patients	le care for	critically

## **List of Abbreviations**

# Abbreviations Meaning

**ABCDEF** : Assess, prevent and management of pain,

Both Spontaneous awakening trials and Breathing Trials, Choice of analgesics, Delirium monitoring, Early mobility and

Family engagement and empowerment.

: American Medical Directors Association

**APA** : American Psychological Association

**BPS**: Behavioral Pain Scale

**AMDA** 

**CAM** : Confusion Assessment Method

CAM SF : Confusion Assessment Method Short FormCAUTI : Catheter Associated Urinary Tract Infection

**CCOT** : Critical Care Observation Tool

**CDC** : Centers for Disease Control and Prevention

**CIM** : Critical illness myopathy

**CIP** : Critical illness polyneuropathy

CLABSI : Central Venous Catheter InfectionCPOT : Critical-Care Pain Observation Tool

**CT** : ComputedTomography

**DC** : Direct Current defibrillation

**ECMO** : Extracorporeal Membrane Oxygenation

**FMs** : Family Members

**GSNS** : Gerontological Clinical Nurse Specialists

**IASP** : International Association for the Study of

Pain

#### List of Abbreviations

ICDSC: Intensive Care Delirium Screening

Checklist

**ICU** : Intensive Care Unit

**ICU-AW**: Intensive Care Unit-Acquired Weakness

**ICUs** : Intensive Care Units

LOS : Length Of Stay

MDs : Medical Doctors

MRI : Magnetic Resonance Imaging

MV : Mechanical VentilatorNRS : Numerical Rating Scale

**NSAIDS**: Non-Steroidal Anti-inflammatory Drugs

**PAD** : Pain ,Aggetation ,and Delirium

**PFCC**: Patient- and Family Centered Care

**PTs** : Physiotherapists

**RASS** : Richmond Agitation and Sedation Scale

**RR** : Respiratory Rate

RTs : Respiratory Therapists

SAT : Spontaneous Awakening trialsSBT : Spontaneous Breathing Trials

**UTI** : Urinary tract infection

**VAP** : Ventilator Associated Pneumonia

**VILI** : Ventilator Induced Lung Injury

**3D CAM**: 3 Dimension Confusion Assessment

Method

## Assess Nursing Performance During Implementation of Care Bundle for Critically ill Patients

#### **Abstract**

Background: Long-term morbidity, cognitive impairment and hospitalization-associated disability are common occurrence in the survivors of critical illness, with significant consequences for patients and for the caregivers. ABCDEF bundle compliance and outcomes including hospital survival and delirium-free and comafree days in community hospitals. Aim of the study: Assess nurses' performance during implementation of care bundle for critically ill patients through the following (1) assess nurses' knowledge regarding implementation of care bundle for critically ill patients (2) assess nurses' practice during implementation of care bundle for critically ill patients. Research design: A descriptive design was used in the study. **Subject:** A convenient sample of 80 nurses working at medical ICU in Ain-Shams University Hospital. **Setting:** The study was conducted in medical ICU at Ain-shams University Hospital affiliated to Ain Shams University Cairo/Egypt. Tools of data collection: Two tools were developed by the investigator and utilized for data collection (1) Self-administered questionnaire to assess nurses' knowledge regarding care bundle for critically ill patients (2) checklist nurses' observational to assess practice implementation of care bundle for critically ill patients. **Results:** Revealed that 72.5% of the studied nurses had unsatisfactory level of knowledge, 77.5 % of the studied nurses had unsatisfactory practices regarding implementation of care bundle for critically ill patients. **Conclusion:** There was a lack of knowledge and practice regarding implementation of care bundle for critically ill patients. **Recommendation:** Establish periodical in-service training improve nurses' program performance regarding implementation of care bundle for critically ill patients.

**Keywords:** Care Bundle, Critically ill patients, Nurses' Performance, Knowledge and Practice.

### Introduction

A 'bundle of cares' comprises a set of interventions that, when performed collectively, improve the effectiveness and quality of patient care (Sosnowski et al., 2021). The ABCDEF bundle or care bundle A (Assess, prevent, and manage pain; B Both Spontaneous Awakening Trials (SATs) and Spontaneous Breathing Trials (SBTs); C Choice of analgesia and sedation; D Delirium monitoring and management; E Early mobility and exercise; and F Family engagement and empowerment) has been developed and implemented in thousands of Intensive Care Units (ICUs) (Morandi et al., 2017).

Critically ill patients experience a mixture of distressing symptoms during their hospital stay including pain, agitation, delirium, weakness, and sleep deficit. The ABCDEF bundle is a gathering of six elements which represents an evidence-based approach for clinicians to optimize patients' recovery and outcomes in ICU (**Devlin et al., 2018**).

So, Patients admitted to ICUs often experience pain, over sedation, prolonged mechanical ventilation, delirium, and weakness. These conditions are important in that it often