



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY

**THE EFFECT OF NON-TRADITIONAL TEACHING METHOD
ON NURSE'S PERFORMANCE REGARDING BASIC
CARDIOPULMONARY RESUSCITATION (CPR)**

Thesis

Submitted for Partial fulfillment of the Requirements of
Doctorate in nursing science Degree
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By

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List of Abbreviations

Abbrev.	Full term
BLS	: Basic Life Support
CABD	: Circulation, Airway, Breathing, Differential Diagnosis.
AED	: Automated External Defibrillator.
AMI	: Acute Myocardial Infarction
CPR	: Cardio Pulmonary Resuscitation
ER	: Emergency Room
EMS	: Emergency Medical Services
ED	: Emergency Department
ICU	: Intensive Care Unit
IV	: Intra Venous
MET	: Medical Emergency Team
mmHg	: Millimeters Of Mercury
NPA	: Nasopharyngeal Air Way
VF	: Ventricular Fibrillation
VT	: Ventricular Tachycardia
SVT	: Super Ventricular Tachycardia
RRT	: Rapid Response Team
ECC	: Emergency Cardiac Care
CCU	: Cardiac Care Unit
FIP	: For Intrathoracic Pressure.
ROSC	: Return of Spontaneous Circulation.
ST	: Standard deviation
AHA	: American Heart Association
DNAR	: Do not attempt resuscitation
NR	: Needs Remediation

Operational Definitions

Traditional method: refers to the use of lectures /discussion method in teaching.

Non- traditional teaching: refer to lecture / discussion plus Arabic film of basic cardiopulmonary resuscitation

Nurse's performance: level of nurse's knowledge and nurse's skills regarding to basic cardiopulmonary resuscitation (CPR)

Basic cardiopulmonary resuscitation

A series of actions that may significantly increase the chance of survival following cardiac arrest.

Introduction

Cardiac arrest is a cessation of normal circulation of the blood due to failure of the ventricles of the heart to contract effectively during systole. The primary first aid treatment for cardiac arrest is cardiopulmonary resuscitation (*American Heart Association (AHA, 2006)*).

The most common underlying reason for patients to die suddenly from cardiac arrest is coronary heart disease. Some cardiac arrests are due to extreme slowing of the heart. This is called bradycardia. Other factors besides heart disease and heart attack can cause cardiac arrest; they include respiratory arrest, electrocution, drowning, choking and trauma, as well as other cardiac conditions such as the cardiomyopathy. Cardiac arrest can also occur without any known cause (*Browner, B.D, Pollak, A.N, Gupton, C.L. 2002*).

Major clinical findings in cardiac arrest include loss of consciousness; rapid shallow breathing leading rapidly to apnea. Ineffective respiratory gasping, profound arterial hypotension with non-palpable pulses over major vessels absent heart sounds (consciousness, pulse and blood pressure lost immediately). Within several minutes, tissue hypoxemia results leading to vital organ injury (*Carpenter T.C. 2001*).

The purpose of basic life support (BLS) is to maintain an adequate circulation and ventilation until action can be taken to reverse the underlying cause of the cardio-respiratory arrest. Failure of the circulation for 3-4 minutes (less if the patient is hypoxemic initially) will cause irreversible cerebral damage. Any delay in starting BLS reduces the chances of a successful outcome. The chances of survival are much greater for those patients in ventricular fibrillation, but successful resuscitation requires defibrillation as possible as well as prompt institution of BLS (*Lewis ,S.M,Heitkemper,M. M andDirksen,S.R . 2005*).

Early CPR and rapid defibrillation combined with early advanced care can result in high long term survival rates for witnessed cardiac arrest (*Urban, N, Greenlee, K, Krumberger, J, and Wkelman c. 2005*).

CPR is a medical practice for all cardiac arrests except where a do-not resuscitate (DNR) order has been given for a particular patient. Nurses are generally the first responders to a cardiac arrest and initiate basic life support while waiting for the advanced cardiac life support team to arrive. Through-out the years, as CPR guidelines are altered, the roles of the

multidisciplinary team members are also subjective to change (*American Heart Association, 2011*).

More nurses are interested in continuing education and training, in increasing their knowledge and improving their skills. As a result, nurses that are working in departments such as: cardiology, intensive care units as well as accident and emergency departments where events of cardiac arrest are more common , are more involved in attending CPR seminars (*A.H.A., 2011*).

Significance of the study

Retrospective study of the Police Authority Hospital at El-Agouza quarter in Cairo shows 500 cases of cardiac arrest in year 2010, 15 cases of them died after unsuccessful CPR, retrospective study of Police Authority Hospital at Madinat Nasar(Nasser City) in Cairo shows 500 cases of cardiac arrest in year 2010, 80 cases of them died after unsuccessful CPR and retrospective study of the Cardiac Heart Center shows 1000 cases of critical care units of cardiac arrest in 12 month in year 2010, 220 cases of cardiac arrest died after unsuccessful CPR.

Good quality CPR improves a victim's chances of survival. The critical concepts for quality CPR include: push hard, push fast: compress at a rate of 100 compressions per minute, allow full chest recoil after each compression, minimize interruptions in chest compressions; try to keep interruptions to less than 10 seconds, avoid hyperventilation and the nurse know all the steps of CPR (*American Heart Association, 2010*).