

**Effect of Self-Learning on Performance
of Nurses Caring for Patients
with Pacemaker**

Thesis

Submitted for Partial Fulfillment of the
Requirements of the Doctorate Degree

In

Nursing Science
(Medical-Surgical Nursing)

By

Samar Faltas Marzouk Faltas

Assist-Lecturer in Medical-Surgical Nursing Department
Faculty of Nursing - Ain Shams University

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Under Supervision of

Dr. Kamelia Fouad Abd Alah

Professor of Medical-Surgical Nursing
Vice Dean for Postgraduate Studies and Research
Faculty of Nursing - Ain Shams University

Dr. Hanan Shehata

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

Dr. Mohamed Abd-Elkader

Lecturer of Cardiology
Faculty of Medicine - Ain Shams University

Faculty of Nursing
Ain Shams University

2013

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LIST OF ABBREVIATIONS

<i>Abbreviations</i>	<i>Meaning</i>
A	Atrium
AM	Amplitude Modulation
AV	Atrio-ventricular node
BPEG	British Pacing & Electrophysiology Group
BVP	Biventricular pacing
CICU	Coronary Intensive Care Unit
CRT	Cardiac Resynchronization Therapy
CT	Computed Tomography
CVP	Central Venous Pressure
D	Dual A+V
ECG	Electro Cardio Gram
ECP	Epicardial pacing
FM	Frequency Modulation
g	gram
ICU	Intensive Care Unit
IV	Intravenous
L	Liter
MRI	Magnetic resonance imaging
NASPE	North American Society of Pacing & Electrophysiology
O	None
P	Page
SA	Sino-Atrial node
SPSS	Statistical Package for Social Science
TCP	Trans Cutaneous Pacing
TV	Television
TVP	Trans venous pacing
V	Ventricle

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ABSTRACT

Pacemaker is a supportive therapeutic modality used to control long-term heart rhythm problems to save patients lives from complications as sudden death. Nurse plays an essential role in caring of patients with cardiac pacemaker. **Aim** to evaluate the effect of self- learning package on nurses' performance caring for patient with pacemaker through assessing (a) Nurses' level of knowledge in caring for patients with pacemaker, (b) Nurses' level of practice in caring of patients with pacemaker, (c) Develop self-learning package for nurses, and (d) Evaluate effect of self-learning package on nurses' performance. **Study design:** a quasi experimental study; **Subject:** A purposive subject of forty five (45) registered nurses caring for patients with pacemaker within five months duration were recruited from the coronary intensive care units (CICU) and open heart surgery units at Ain Shams University Hospital. **Tools:** consisted of self administered questionnaire sheet and nurses performance observational checklist applied in 3 phases (pre, immediate & post). **The results** of this study showed that 62.2% of nurses' had unsatisfactory level of knowledge and 57.8% of nurses had unsatisfactory level of practice pre implementation of self learning package which improved significantly post implementing the self learning package ($X^2= 22.8$, & 114 respectively at $P<0.001$) and there were improvement of the nurses' knowledge and practice retained significantly post 3 months period($X^2= 22.8$, & 24.1 respectively at $P<0.001$). This study **concluded** more than half of CICU nurses had inadequate performance (knowledge & practice) regarding caring of patients with pacemaker pre implementing self-learning package and many factors affecting their performance as reported from half of them were related to social, psychological & environmental factors and two thirds of them were related to work system & satisfaction. Meanwhile, self-learning package had statistically significant positive effect on CICU nurses' performance (knowledge & practice) regarding caring for patients with pacemaker. **Recommendation** the importance of conducting periodic in-service training advanced care programs for nurses caring for patients with pacemaker for improving their performance & quality of care provided for such group of patients.

Key words: Pacemaker, Self-learning package, Nursing, Performance