

*Effect of Self Care Management on Nursing-Sensitive
Patients' Outcomes after permanent pacemaker
implantation*

Thesis

*Submitted for Partial Fulfillment of
The Doctorate Degree*

In

*Nursing Sciences
(Medical –Surgical Nursing)*

By

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2017**

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2017

Acknowledgement

First and foremost, I feel always indebted to **Allah**, the most kind and most the merciful for all his blessing and for giving me the will and strength for completion of this work,

I wish to express my deep appreciation and gratitude to **Professor Dr. Tahany Ahmed El Senousy**, professor of Medical surgical Nursing, faculty of Nursing, Ain Shams University, and words cannot describe how grateful I am for her guidance, valuable support, constructive criticism, and continuous, unlimited help. I would not have been able to start and reach perfection of this work without her.

I am deeply grateful to **Professor Dr. Sahar Yassien Mohamed**, professor of Medical surgical Nursing, faculty of Nursing, Ain Shams University, for her supervision, help and valuable support and guidance; I am deeply affected by her noble character, perfection, care and consideration.

My deepest gratitude and sincere thanks also go to **Dr. Dalia Abdallah Abdelatief**, lecturer of Medical surgical Nursing, faculty of Nursing, Ain Shams University, for her precious help, fruitful advice and kind attitude.

Last but not least, I am grateful to **my family** and to all those who sincerely helped me to fulfill this work,

Reham Adel Ebada

Abstract

Patients undergoing permanent implantable pacemaker, challenge with multiple physical, psychological and social complications. The patients may perceive the pacemaker device as an electronic security or as a source of physical, psychosocial and emotional discomfort, so self-care management for those patients and measuring nursing sensitive patient's outcomes will lead to improve their life and overcome physical, social and psychological problems. **Aim of the study:** The study aimed to evaluate the effect of self-care management on nursing sensitive patients' outcomes after permanent pacemaker implantation. **Study design:** A quasi-experimental design. **Setting:** The study conducted at the cardiac catheterization unit at Ain Shams University Hospital. **Sample:** A Purposive sample included 50 patients after permanent pacemaker implantation which divided into two equal matched groups' the study and control groups. **Tools:** 1) Patient's socio-demographic characteristics tool, 2) Patient's clinical data tool, 3) Self-care management level assessment tool, 4) Patients' self-care practice observational checklists, and 5) Nursing Sensitive patient Outcomes Measuring Scales. **Results:** The present study revealed that satisfactory level of self-care knowledge, practice and the different levels of nursing sensitive patient outcomes in the study group were improved post implementation of self-care guidelines compared to control group patients' pre implementation of self-care guidelines. **Conclusion:** Implementation of self-care management guidelines had positive effect on improving patient's self-care management level and enhancing all dimensions of nursing sensitive patients' outcomes (physiological health outcomes, functional health outcomes, psychosocial outcomes, health knowledge and behaviors; and family health outcomes. **Recommendations:** Generalize using nursing sensitive patients outcomes based on nursing outcome classifications (NOC) to provide more comprehensive standardized language to measure the effect of nursing interventions on patient and family outcomes.

Key words: Self-care management, Nursing Sensitive Patient's Outcomes, Permanent pacemaker.

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List of Abbreviations

ADLs: Activities of Daily Living
AF : Atrial Fibrillation
ANA: American Nurses' Association
A-V: Atrioventricular
AVN: Atrioventricular Node
BP: Blood Pressure
CRT: Cardiac Resynchronization Therapy
CPR: Cardio Pulmonary Resuscitation
CT scans: Computed Tomography
ECG: Electrocardiogram
ECP: Epicardial Pacing
EMI: Electromagnetic Interference
I.V.: Intra Venous
MA: Mill Amperes
MRI: Magnetic Resonance Imaging
NOC: Nursing Outcomes Classification
NIC: Nursing Intervention Classifications
NIDSEC: Nursing Information and Data Set Evaluation Center
PPM: Permanent Pacemaker
QRS /P/T waves: Heart waves
ROM: Range of motion exercises
SAN: Sinoatrial Node
TCP: Transcutaneous pacing
TVP: Transvenous pacing

Operational Definitions

Self-care management: It is refers to the decisions and behaviors that patients with permanent pacemaker and their families engage in to help them understand their central role in managing their condition that affects their health. Enabling patients to make good choices and sustain healthy behaviors requires a collaborative relationship that supports patients in building the skills and confidence they need to lead active and fulfilling lives.

Nursing-Sensitive Patients' Outcomes: It designed to describe the patient outcomes that are responsive to nursing intervention covering biopsychosocioeducational dimensions of patient care. This emphasis on identifying and measuring the results of interventions and practice is necessary and has important implications for cardiovascular nursing practice as the patient outcomes is the ultimate definition of effectiveness and efficiency.

Introduction
&
Aim of the study

Introduction

Self-care management is defined as a naturalistic decision-making process, which involves selecting behaviors that maintain physiological stability and responding to symptoms when they occur. The provision of self-care education on the need for regular physical exercise, adherence to a proper diet and medications, weight management, also management of symptoms, such as shortness of breath and fatigue to prevent the progress of disease. Effective interventions as integrating strategies that motivate, empower, and encourage patients to make informed decisions and assume responsibility for self-care (*Souza Carneiro et al., 2016*).

Self-management based on nursing-sensitive patient outcomes addresses daily problems management for patients with chronic conditions. It emphasizes three self-management tasks to regain control over daily life: take care of the medical aspects of the disease (medical management); carry out normal activities to remain socially active (role management); and manage emotional changes as a consequence of being chronically ill (emotional management). So patients are taught to deal with the physical, social and emotional consequences of being chronically ill and take responsibility in managing their

chronic condition (*Iliou, Blanchard, Lamar-Tanguy, Cristofini & Ledru, 2016*).

Patients with chronic conditions make day-to-day decisions about self-manage of their illnesses. This reality introduces a new chronic disease paradigm as: the patient-professional partnership, involving collaborative care and self-management education. Self-management education complements traditional patient education in supporting patients to live the best possible quality of life with their chronic condition. Whereas traditional patient education offers information and technical skills, self-management education teaches problem-solving skills (*Creber, Patey, Lee, Kuan, Jurgens & Riegel, 2016*).

Patients with pacemaker implantation were facing many challenges after operation due to lack of knowledge, pre-operative preparation and postoperative management. So, those patients were suffering from direct and indirect complications, which may be related to pacemaker implantation itself, or related to profound changes in their life: physical and psychological disorders, loss of bodily function, change in personal hygiene, restrictions in social and sexual functioning impairment (*Yarlagadda and Lange, 2014*).

Those patients have both psychological and physiological effects. The physiological are associated with pain, limitation of physical activity, dyspnea, arrhythmias, and sudden death. The psychological status is associated with anxiety, depression, changes in self- image and loss of self-esteem because those patients lack understanding to pacemaker implantation or show doubts regarding operations, the unhealthy psychological statuses directly influence disease development and quality of life. In addition to the physiological and psychological problems, there is an additional economic impact on both the patient and the community (***Hwang, Moser & Dracup, 2016***).

Caring of these patients requires knowledge about the device, its complications, and the related factors. Also the patient's hemodynamic condition, nurses' information and knowledge can be crucial and constructive in patients' training and enhance the reduction of complications during the life with such device. Providing nursing care and proper nursing processes for these patients can prevent complications and defects in the device performance (***HadiAtiyah, 2016***). A patient outcomes are sensitive to nursing intervention is essential for efforts to determine the effectiveness and improve the quality of nursing care and quality of patient life.