



Faculty of Nursing
Ain Shams University

Effect of Patients Compliance with Hospital Discharge Plan on their Health after Undergoing Cardiac Surgery

Thesis

*Submitted in Partial Fulfillment of the Master Degree
in Nursing Sciences
(Community Health Nursing)*

By

Mona Hemdan El Meghawry

(B.SC. 2005)

Faculty of Nursing
Ain Shams University
2015



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Supervised By

Dr. Sabah Abd El MobdyRadwan

*Prof. of Community Health Nursing
Faculty of Nursing
Ain Shams University*

Dr. Omaila Mohamed Esmat

*Ass. Professor of Community Health Nursing
Faculty of Nursing
Ain Shams University*

**Faculty of Nursing
Ain Shams University**

2015

Acknowledgement

Firstly, thanks to **ALLAH**, who gave me the power to finish this work. Without his care nothing could be achieved.

I would like to thank the study sample which gives me experience & scientific thinking and helped me to prove the validity of the expectations of patients with heart surgery.

Words can never express my heartily thanks to ***Prof. Dr. Sabah Abd El Mobdy Radwan***, Professor of Community Health Nursing, Faculty of Nursing, Ain Shams University, for her meticulous supervision, constructive criticism, and continuous encouragement through-out the conduction of this work.

Also I would like to express my sincere thanks and deepest appreciation and gratitude to ***Dr. Omima Mohamed Esmat***, Assistant Professor of Community Health Nursing, Faculty of Nursing, Ain Shams University, for the great guidance to complete this work.

Mona El Meghawry



Dedication

**This work is dedicated to the
most important persons in my life**

**To My husband, My Mother, My
Father, My Sisters, and My Friends for
their:**

**✍ Effort,
✍ Encouragement,
✍ Cooperation,
✍ And Support.**

**Last but not at least I would like to thank
My patient for their Cooperation**

List of contents

| Title | Page |
|---|-------|
| List of Tables | I |
| List of Figures | II |
| List of Abbreviations | III |
| Abstract | IV |
| Introduction | 1 |
| Aim of Study | 6 |
| Literature Review | |
| Part I : Cardiovascular System Health Problems | 7-21 |
| • Heart location and function | 7 |
| • Risk factors affecting cardiac surgery | 10 |
| • Types of cardiac surgery | 12 |
| • Operative procedure and complication | 19 |
| Part II: Patient Compliance: post hospital Discharge planning | 22-36 |
| • Discharge planning definition | 22 |
| • Health Instructions | 24 |
| • Discharge Planning Process | 27 |
| • Discharge Planning Evaluation | 28 |
| Patient Compliance with Hospital Discharge Plan | 32 |
| • Compliance definition | 32 |
| • Factors impacting patient compliance | 35 |
| • Nursing Role as Assessing and Decision Making | 36 |

| Title | Page |
|---|------|
| Part III: Roles of the Community Health Nurse in Nursing Process. | 37- |
| • Community health nursing function in their roles | 37 |
| • Prevention of Behaviors Risk Factors | 42 |
| • Key Behaviors Secondary Prevention | 43 |
| Subject and Methods | 55 |
| Results | 63 |
| Discussion | 89 |
| Conclusion | 102 |
| Recommendations | 103 |
| Summary | 104 |
| References | 109 |
| Appendices I (Tool) | -- |
| Appendices II (Protocol) | -- |
| Arabic summary | -- |

List of Tables

| Table No | Title | Page No. |
|--------------------------------|---|-----------------|
| <i>Table in Review</i> | | |
| Table 1 | Factors impacting patient compliance | 35 |
| Table 2 | Adult Vital Signs Normal Ranges | 51 |
| <i>Table in Results</i> | | |
| Table 1 | Distribution of patients undergoing cardiac surgery according to their sociodemographic characteristics (N: 105). | 64 |
| Table 2 | Distribution of patient their caregivers' relationship and their educational level undergoing cardiac surgery (N: 105). | 66 |
| Table 3 | Distribution of patients undergoing cardiac surgery according to their past health problems and previous life style as regard diet, exercise, stress and smoking. (N: 105). | 67 |
| Table 4 | Distribution of cardiac surgery patients and caregiver according to their information about cardiac surgery operative needs (N: 105). | 69 |
| Table 5 | Distribution of cardiac surgery patients' and caregiver's information about risk factors affecting cardiac surgery. (N: 105). | 71 |
| Table 6 | Distribution of patients and caregivers according to knowledge on how to manage health Problems after undergoing cardiac surgery. (N: 105). | 72 |
| Table 7 | Distribution of cardiac surgery patient's and their caregiver's information about taking medications. (N: 105). | 73 |

| Table No | Title | Page No. |
|-----------------|---|-----------------|
| Table 8 | Distribution of cardiac surgery patient's practices about their wound care and respiratory exercise (N: 105). | 77 |
| Table 9 | Reported compliance of patient's undergone cardiac surgery to instruction about their Lifestyle modification (N: 105). | 78 |
| Table 10 | Correlations between patient total Knowledge and practices regarding care post hospital discharge (N=105). | 80 |
| Table 11 | Distribution of patients after cardiac surgery and discharge plan according to their body weight, wound condition, blood pressure, temperature, pulse and pain 3 months post hospital discharge (N: 105). | 81 |
| Table 12 | Distribution of cardiac surgery patients according to their Activity of daily life as reported (N: 105). | 82 |
| Table 13 | Distribution of cardiac surgery patients according to their laboratory investigation (N: 105). | 83 |
| Table 14 | Distribution of cardiac surgery patients accords to their complication 3 months after hospital discharge (N: 105). | 84 |
| Table 15 | Relation between cardiac surgery patients' compliance and their demographic characteristic. | 85 |
| Table 16 | Relation between cardiac surgery patients' compliance about practices and their health condition. | 87 |
| Table 17 | Relation between cardiac surgery patients' compliance and their health condition related to compliance occurrence | 88 |

List of Figures

| Figure No | Title | Page No. |
|----------------------------------|--|-----------------|
| <i>Figure in Review</i> | | |
| Figure 1 | Picture of the Heart | 8 |
| Figure 2 | View of the heart | 9 |
| Figure 3 | Coronary obstruction | 14 |
| Figure 4 | Micrograph of atherosclerosis | 15 |
| Figure 5 | Tricuspid valve | 18 |
| Figure 6 | Aortic valve | 18 |
| Figure 7 | Mitral valve | 18 |
| Figure 8 | Five interacting dimensions of non-compliance | 34 |
| Figure 9 | Ideal body mass index | 50 |
| <i>Figures in Results</i> | | |
| Figure 1 | Distribution of total patient's knowledge (N: 105) | 75 |
| Figure 2 | Distribution of total caregiver's knowledge (N: 105) | 76 |
| Figure 3 | Distribution of total patient's practice (N: 105) | 79 |

List of Abbreviations

| Abb. | Full term |
|-------------|--------------------------------------|
| AVR | : Aortic valve replacement |
| BMI | : Body Mass Index |
| CABG | : Coronary arteries bypass grafting |
| CAD | : Coronary Artery Diseases |
| CVDs | : Cardio Vascular Diseases |
| DVR | : Double valve replacement |
| ECG | : Electro Cardio Graph |
| HDL | : High Density Lipoprotein |
| IHD | : ischemic heart disease |
| INR | : International Normalized Ratio |
| MVR | : Mitral valve replacement or repair |
| NCDs | : Non-Communicable Diseases |
| PCI | : Percutaneous Coronary Intervention |
| PT | : Prothrombin Time |
| TVR | : Tricuspid valve replacement |
| NIH | : Nasser institute hospital |

ABSTRACT

Cardiac surgery was one of the most critical surgeries in Egypt nowadays, without patient compliance a lot of complication harm patient health after surgery done and leaves hospital. **Aim** of this study is to evaluate the effect of patients' compliance with hospital discharge plan on their health after undergoing cardiac surgery. **Setting:** The outpatient clinic of Medical Department at Nasser Institute Hospital (NIH). **Sample:** Comprised 105 patients their age ranged between 18-59 years. **First tool:** An interviewing questionnaire for assessing socio demographic characteristics of cardiac surgery patients, previous life style, patients, and their caregiver's knowledge about cardiac surgery care, risk factors, complication, management, and medication intake post hospital discharge. **Second tool:** Physical examination of cardiac surgery patients for assessing body weight, wound condition, vital sings and activity of daily life. **Third tool:** An observational checklist for observing wound care and respiratory exercise. **Fourth tool:** Was Records analysis of patient post cardiac surgery regarding laboratory investigations and complications. **The results:** There are 71% of patient had average practices while 52% of patients and 55% of caregivers had total good knowledge. There are a positive significant correlation between patient's knowledge and practices, and there is a significant relation between patients' practices and health problems and patients' practices and complications. **Conclusion:** the present study revealed that half of the patients and their caregivers had good knowledge and more than one quarter of patients' practices post hospital discharge plan. There was a highly statistical significant relation between patient's educational level, patients' monthly income and their practices. While no any statistical significant relation between patients' gender, patients' residence and their practices. There was a highly statistical relation between patient' compliance about Practices and their severity about health condition. **Recommendations:** There is a need for a written discharge planning for the provision of continuing of home care until the patients' health needs are met.

Key words: Compliance, Discharge Plan, Cardiac Surgery.

INTRODUCTION

Open heart surgery indicated when patients do not respond to medical management, or when disease progression is evident and the patients have unstable angina with occlusions of the left main coronary artery greater than 50% (**Kaplow & Hardin 2010**). Cigarette smoking, body fatness and relative bodyweight did not seem to explain population differences in incidence of the disorder, but there was a tendency for incidence to be related to the prevalence of hypertension, serum cholesterol values and saturated fatty acids in the diet (**KEYS, 2015**). Globally, the World Health Organization estimates that in 30% of all deaths were due to cardiovascular diseases (CVD), of which 7.3 million were due to heart disease. Mortality from heart disease has decreased significantly in recent decades despite this decrease, heart disease is still the cause of a significant burden of mortality, including premature mortality and it accounts for more deaths than either lung cancer or breast cancer (**Nichols, et al., 2014**).

Cardiac surgery patient have a lot of complication postoperative as myocardial ischemia, pulmonary, neurological as stroke and peripheral nerve injuries and gastrointestinal, wound and hematologic as deep venous

thrombosis. Compliance was a patient's or doctor's instruction adherence to a recommended course of treatment. Compliance known as the extent to which patients behavior change in terms of taking medication, following diet or exercising and other life style changes. Compliance is a part of helping relationship between health care providers and patient. The patient has the right to choose not to follow the advice, so patient goal making own decision, so the patient will be responsible for maintaining behavior change through own life style **(Kaplow & Hardin, 2010).**

Global atlas on cardiovascular disease prevention and control states that cardiovascular diseases are the leading causes of death and disability in the world. Although a large proportion of cardiovascular diseases are preventable, they continue to rise mainly because preventive measures are inadequate. An estimated 17.3 million people died from cardiovascular diseases like heart disease and stroke in 2008, representing 30% of all global deaths. World heart day, today, provides an opportunity to take stock of the situation and lessen the impact of cardiovascular diseases through healthy diet, regular physical activity and avoiding tobacco smoke **(World Health Organization, 2012).**

According to **Global Health – Egypt, (2013)** Top 10 causes of deaths in Egypt sources in 2010 were Ischemic heart disease 21% and Stroke 14%. Role of nursing and caregivers of cardiac surgery patients is an essential component of patient care. Nursing management requires strategy to help the patient and family come to terms with an illness for which is chronic and in which sudden death can occur. Nursing intervention should aim to help the patient maintain a good quality of life by developing ways to cope and comply with the constraints of the treatments and the possibility of complications occurring. Patient whose caregiver is more supportive, more flexible, less critical, and good at problem solving have been found to have fewer problems in adherence.

If the patient is in an institution, a target discharge date and level of function should be established as soon as possible. This allow the caregivers in the community as the family members to arrange for the necessary home supports, which may include making structural modifications to the home, obtaining equipment and supplies, and arrange for caregivers prior to discharge. To evaluate care effectively, the nurse should know the individuals preferred life style, the risks to health status and to monitor the care plan based on previously obtained

psychological assessment data (**Nasser Institute Hospital, 2012**).

Most cardiovascular diseases can be prevented by addressing behavioral risk factors such as tobacco use, unhealthy diet and obesity, physical inactivity and harmful use of alcohol using population-wide strategies. CVDs are the number 1 cause of death globally: more people die annually from CVDs than from any other cause. An estimated 17.5 million people died from CVDs in 2012, representing 31% of all global deaths. Of these deaths, an estimated 7.4 million were due to coronary heart disease and 6.7 million were due to stroke. Over three quarters of CVD deaths take place in low- and middle-income countries. Out of the 16 million deaths under the age of 70 due to non-communicable diseases, 82% are in low and middle income countries and 37% are caused by CVDs (**Global Atlas, 2014**).

According to **Nasser Institute Hospital cardiac surgeons (2012)** which considers one of the biggest cardiac hospital in ministry of health the most famous types of open heart surgery in Egypt was coronary artery bypass graft (CABG) and valves repair or replacement (MVR, AVR or DVR), and reported the number of patient admitted