Health-Related Quality of Life Issues for Patients after Open Heart Surgery

Thesis

Submitted for Partial Fulfillment of the

Requirement of Master Degree in Nursing Science

(Medical- Surgical Nursing)

By

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Sedika Sadek

Dedication to:

-My family

-My husband

Who offer me support, advice and motivation.

Sedika Sadek

Abstract

Open heart surgeries are performed to reduce cardiac mortality and to improve quality of life of the patient**.** Patients' perspectives on outcome of cardiac surgical procedure and their satisfaction with it have a great impact on their quality of life and physical, social and mental well-being. The aim of this study was to assess health-related quality of life issues for patients after open heart surgery. Two tools were used in this study; Patient structured interview questionnaire to assess sociodemographic characteristics and RAND 36-Items Health Survey questionnaire. This study was conducted at Out-patient Cardiothoracic Surgery Clinic in Ain Shams University Hospital. A Purposive sample of 100 adult patients who had open heart surgeries after six months. The finding of this study revealed that: The mean age for the patients included in the study was (41± 11.47), ranged from 20-60 years or more, the highest percentage of the study sample (29%) was below 40 years old. Less than two thirds of study samples (65%) were females, and 86% were married. The highest affected dimension of HRQOL was for social wellbeing, while the least affected dimension was role limitation due to emotional health. The study concluded that, there were statistically significant relations between dimensions of quality of life and age, gender, family role, income cover expenditure and occupation. However, there were no statistically significant relations between dimensions of quality of life and education, residence and marital status. This study recommended that improving patient's quality of life should be the main objective for nurses during their care of a patient with open heart surgeries.

Key words: open heart surgery, health related quality of life

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LIST OF ABBREVIATIONS

- ADL : Activities of Daily Living
- ACE : Angiotensin-Converting Enzyme
- ACC : American College of Cardiology
- AF : Atrial Fibrillation
- AHA : American Heart Association
- AVR : Aortic valve Replacement
- CABG : Coronary Artery Bypass Grafting
- CABS : Coronary Artery Bypass Surgery
- CAD : Coronary Artery Disease
- CPB : Cardiopulmonary Bypass
- DM : Diabetes Mellitus
- ECG : Electrocardiogram
- HDL : High Density Lipoprotein
- HTN : Hypertension
- HVR : Heart Valve Replacement
- HRQOL : Health Related Quality of Life
- MI : Myocardial Infarction
- MIDCAB : Minimally Invasive Direct Coronary Artery Bypasses Surgery
- MVR : Mitral Valve Replacement
- NTG : Nitroglycerin

- OPCAB : Off-pump Coronary Artery Bypasses
- OHS : Open Heart Surgery
- PCI : Percutaneous Coronary Intervention
- PCP : PostCABG Pain
- QOL : Quality of Life
- SF : Short Form
- STSNCD : Society of Thoracic Surgeons' National Cardiac Database.
- SPSS : Statistical Package for Social Science
- TEE : Transesophageal Echocardiography
- WHO : World Health Organization

INTRODUCTION

INTRODUCTION

Open heart surgeries (OHS) are a threatening and complex life event that affects individuals in various ways, they change their life and thus also they have impact on the family as an interactive unit. The ability to recognize the characteristic signs of decreased well-being are important for reducing the negative effects of OHS on the patients and relatives concerned **(Karlsson, 2008).**

The World health organization estimated that 16.7 million people around the globe die of cardiovascular diseases each year. This represents about 1/3 of all deaths globally and there were 7.22 million deaths from coronary heart disease globally **(WHO, 2004).** The total number of inpatient cardiovascular operations and procedures increased 27%, from 5.382000 in 1997 to 6.846000 in 2007 **(National Center for Health Statistics, 2010).**

According to Society of Thoracic Surgeons National Cardiac Database (STSNCD), which voluntarily collects data from 80% of all hospitals that perform coronary artery bypass grafting (CABG) in the United States, indicates that a total of 163.149 procedures involved CABG in 2009 **(The Society of Thoracic Surgeons National Cardiac Database, 2009).**

In Egypt, at Ain Shams University Hospitals the total number of admission to open heart surgeries were 1054 patients undergoing open heart surgeries and its mortality rate represents 5.6% in 2010,while in 2011, they were 880 patients, and this is according to medical record of Intensive Care Unit (**Information Center in Ain Shams University Medical Records Office, 2011).**

The health-related quality of life (HRQOL) is the overall state of satisfaction, it is important to identify all levels of each dimension. The World Health Organization defines all of these components and the factors that affect them. Psychological health refers to sensory functions; thinking, learning, memory, concentrating, self-esteem, body image and appearance. Physical health is associated with pain, energy and fatigue, sexual activity, and amount of sleep **(Bossier, 2005)**. One's level of independence also influences HRQOL, by how mobile one is, how well one can complete activities of daily living, the amount of dependence one has on medicinal and no medicinal substances, and the extent of communication and work capacities. Environment plays a significant role in determining one's HRQOL, as well as safety, home environment, work satisfaction, financial resources, health and social care **(Lox, Martin, & Petruzzello, 2003).**

Quality of life (QOL) is a multidimensional construct integrating an individual's subjective perceptions of physical, social, emotional and cognitive functioning. This is referred to as HRQOL. Traditionally, HRQOL in cardiac patients has been estimated by objective indices related to health outcomes such as cardiopulmonary exercise capacity, exercise tolerance. Meanwhile, there is a general agreement that these indices alone do not suffice to reflect QOL in cardiac patients **(Latal, Helfricht, Fischer, Bauersfeld, & Landolt, 2009).**

Significant of Study

Open heart surgeries are one of the most common surgical procedures performed worldwide. The operation improves survival as well as the quality of life of patients with coronary heart disease. There is a risk of complications from the operation. The amount of risk can vary according to age, general health, smoking history, specific medical

conditions and heart function. Open heart surgeries are recommended when they are considered to be the best option for the patient. Attention to lifestyle changes (such as diet, weight loss, smoking cessation, exercise) is needed after surgery **(American Heart Association, 2010).**

There has been growing interest in HRQOL outcomes. Multiple studies have demonstrated that HRQOL improves, on average, after open heart surgeries. However, this average improvement will not be realized for all patients, and little is known about the predictors of HRQOL outcomes after open heart surgeries. Knowing the preoperative risk factors for poor HRQOL outcomes should lead to enhanced patient selection and counseling. Furthermore, identification of predictors of HRQOL after CABG surgery may lead to the development of interventions to improve HRQOL outcomes **(Rumsfeld et al., 2004).** Hopefully findings of this study will help in improving quality of patient's care.

Aim of the Study

The aim of this study was to assess health-related quality of life issues for patients after open heart surgery.

Research Questions:

Does open heart surgery affect patients' health-related quality of life issues?