Nursing Intervention at Home Care to Prevent Recurrence of Cardiac Stent

Thesis

Submitted for Fulfillment of the Requirements
of the Doctorate Degree in
Community Health Nursing

By

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2017

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2017

Acknowledgement

This thesis is the end of my journey in obtaining my Ph.D. I have not traveled in a vacuum in this journey. This thesis has been kept on track and been seen through to completion with the support and encouragement of numerous people including my well wishers, my friends, colleagues mothers of children with ASD ,and various institutions. At the end of my thesis I would like to thank all those people who made this thesis possible and an unforgettable experience for me.

*First of all and above of all, greatest thanks to "**Allah**". The most Merciful whose blessings on me can't be counted.*

*I am deeply grateful to my dissertation committee for their guidance and mentorship through this process. I have been honored to have as my Major **Professor Dr. Faten Khayrat El Guindi,** Professor of Community Nursing at Ain Shams University. Under her guidance I successfully overcame many difficulties and learned a lot. I can't forget her hard times.*

*Foremost, I would like to thank my advisors also to **Dr. Omaima Mohamed Esmat** for her excellent guidance, caring, patience, and providing me with an excellent atmosphere for doing research,. I am very grateful for her patience, motivation, enthusiasm, and immense knowledge in Community Nursing that, taken together, make her a great mentor.*

This dissertation is dedicated to my late parents whose love, perseverance and commitment, especially to my education, have enabled and inspired me to pursue my dreams, for their faith in me and allowing me to be as ambitious as I wanted. It was under their watchful eye that I gained so much drive and an ability to tackle challenges head on.

My deepest thanks to my mother in law who was there caring for my children in those hard times of my absence.

I am deeply grateful to my friend Dr. Rajaa Zyoud, without her I could never be here or even to start my dream, she was the first light in this path, her heart and hands were always there for me .My beloved husband Mousa who believed in me ,who has never complained, without him I could never achieve my goal in education saying thanks is the least of what I can do, my children Baraa, Abdulla, Mohammad and Nour for their patience of missing me and waiting me to finish my path ,for spending their days without my presence in times when they needed me.

Zainab awad

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LIST OF ABBREVIATIONS

Abb.	Meaning

ACE : Angiotensin Converting Enzyme

ACS : Acute coronary syndrome

AMI : Acute myocardial infarction

AV : Atrioventricular

BMI : Body mass index

CABG : Coronary Artery By Pass Graft surgery

CAD : Coronary artery disease

CDC : Centers for Disease Control

CKD : Chronic kidney disease

CRP : C-reactive protein

CT scan : Computerized tomography

CTA : Coronary computer tomography angiography

CVD : Cardiovascular disease

DBP : Distolic Blood pressure

ECG : Electrocardiograms

HbA 1c : Glycated hemoglobin

HDL : High –density lipoproteins.

HR : Heart rate

LAD : Left anterior descending

LDL : Low density lipoprotien

MI : Myocardial infarction

MRA : Magnetic resonance angiography

PCI : Percutaneous coronary intervention

SA : sinoatrial

SBP : Systolic Blood pressure

SNS : Sympathetic nervous system

TC : Total cholesterol

TLC : Therapeutic lifestyle changes

VLDL : very low-density lipoproteins

WHO : World Health Organization

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Abstract

Aim of the study is to measure the effect of a nursing intervention program at home to prevent recurrence of cardiac stent. **Research design**: A quasi experimental design was utilized. **Settings**: The study was conducted at out patient clinicsof cardiovascular surgery hospital of Ain Shams University hospitals. **Subjects**: A purposive randomly selected sample which composed of one hundred and thirty four clients after cardiac stent. **Tools** of data collection: First tool: Structured interviewing questionnaire, it was developed to assess clients knowledge and practices, It was composed of 3 parts, part one: socio-demographic data, part two: Assess clients knowledge regarding cardiac stent .Part three: client practice related to behavioral habits, nutrition and physical activitie. Second tool: Environmental for home assessment (ventilation, cleanleness). Third tool: Client medical record to assess client diagnosis, investigations, and treatments vital signs, and weight and hight .**Results**: Revealed a highly statistical significant relation between clients practice and knowledge of clients regarding cardiac stent pre&post nursing intervention. **Conclusion:** This study concluded that, the nursing intervention program had a highly statistical significant relationship with improved knowledge and practices of clients of cardiac stent and change life style to prevent recurrence of cardiac stent. **Recommendations**: Building up anational stratigy for home care for enhancement knowledge and help in change life style for cardiac stent clients to prevent recurrence cardiac stent**.** Providing cardiac outpatient clinics in governmental hospital with rehabilitation centers to follow –up lifestyle promoting for cardiac stent clients

Keywords: Nursing intervention, Cardiac stent, and Home care nurse.

Introduction

Percutaneous coronary intervention (PCI), commonly known as coronary angioplasty or simply angioplasty is a non-surgical procedure used to treat the stenotic (narrowed) coronary arteries of the heart found in coronary heart disease. These stenotic segments are due to the buildup of the cholesterol-laden plaques that form due to atherosclerosis. PCI is usually performed by an interventional cardiologist, though it was developed and originally performed by interventional radiologists ***(Oberhauser et al., 2009).***

During PCI, a cardiologist feeds a deflated balloon or other device on a catheter from the inguinal femoral artery or radial artery up through blood vessels until they reach the site of blockage in the heart. X-ray imaging is used to guide the catheter threading. Angioplasty usually involves inflating a balloon to open the artery and allow blood flow. Stents may be placed at the site of the blockage to hold the artery open ***(Oberhauser et al., 2009).***

PCI is used primarily to open a blocked coronary artery and restore arterial blood flow to heart tissue, without requiring open-heart surgery. In patients with a restricted or blocked coronary artery, PCI may be the best option to re-establish blood flow as well as prevent angina (chest pain), myocardial infarctions (heart attacks) and death. Today, PCI usually includes the

insertion of stents, such as bare-metal stents, drug-eluting stents ***(Eric Topol and Paul Teirstein, 2015).***

PCI may be appropriate for patients with stable coronary artery disease if they meet certain criteria, such as having any coronary stenosis greater than 50 percent or having angina symptoms that are unresponsive to medical therapy. Although PCI may not provide any greater help in preventing death or myocardial infarction over oral medication for patients with stable coronary artery disease, it likely provides better relief of angina ***(Sipahi et al., 2014).***

Balloon angioplasty is commonly used to describe percutaneous coronary intervention, which describes the inflation of a balloon within the coronary artery to crush the plaque into the walls of the artery. While balloon angioplasty is still done as a part of nearly all percutaneous coronary interventions. Coronary angioplasty is widely practiced and has a number of risks, however, major procedural complications are uncommon. Coronary angioplasty is usually performed using invasive catheter-based procedures by an interventional cardiologist, a medical doctor with special training in the treatment of the heart ***(Pursnani et al., 2012).***

Lifestyle changes in the form of increased physical activity, dietary modification/weight loss, and smoking cessation are of proven benefit and may improve outcomes in as quickly as six months. Drug therapies of proven benefit. These therapies work,

in part, by ameliorating the risk attributable to the major modifiable risk factors of hypertension, dyslipidemia, diabetes, and smoking. Most clinicians prefer to recommend life style modifications prior to the initiation of drug therapy ***(Eckel et al., 2013)***.

Community health nurse have an ideal opportunity to enhance health care activities that can reduce the risk of coronary artery disease as educators and role models for their families ,communities and patient .for effective prevention and treatment ,it is important that nurse consider the psychological parameter that may affect health behaviors community health nurse can promote healthy lifestyle patterns that reduce the risks of recurrence cardiac stent for example physical activity, regular meals and nutrition and weight measure are all areas where nurse may help to reduce the risk factors ***(Miller et al., 2010).***

Nursing care at home may include nutrition, eating a healthy diet to prevent or reduce high blood pressure and high blood cholesterol and to maintain a healthy weight the nurse should obtain a detailed diet history, determine not only what foods the patient eats and the sociocultural value of food .the nurse can use this data base to assist the patient in solving problems and developing an individual diet plan .the patient should be taught what foods are low and high in sodium and way to enhance food flavors without the use of salt (e.g. substituting lemon juice and various spices) ***(White et al., 2013).***