Heath Problems Associated with Stents among Patients with Vascular Surgeries

Thesis

Submitted for Partial Fulfillment of Master Degree
in Nursing Science (Community Health Nursing)

By

Fatma Abed El Sabour Abed Eljawad

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Faculty of Nursing - BeniSeuf University

Faculty of Nursing
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Supervised by

Prof. Dr. Nadia Hamed Farahat

Professor of Community Health Nursing
Faculty of Nursing
Ain Shams University

Dr. Asmaa Talaat Mohamed

Lecturer of Community Health Nursing
Faculty of Nursing
Ain Shams University

Faculty of Nursing
Ain Shams University

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Fatma Abed El Sabour Abed Eljawad

Dedication

This work is dedicated to

My Soul Mother

My Father

My Sister Asmaa

Who gave me too much

and received too little

and To

My Husband and My Children

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Abb.	Meaning
AAA	: Abdominal Aortic Aneurysm
ADLs	: Activities of Daily Living
BMI	: Body Mass Index
BMS	: Bare Metal Stent
CAD	: Coronary Artery Disease
CCU	: Critical Care Unit
CHN	: Community Cealth Nurse
CVA	: Cerebrovascular Accident
CVD	: Cardiovascular Diseases
DES	: Drug-Eluting Stent
DVT	: Deep Venous Thrombosis
FDA	: Food and Drug Administration
IHD	: Ischemic Heart Disease
MACE	: Major Adverse Cardiac Events
MRI	: Magnetic Resonance Imaging
PAD	: Peripheral Arterial Disease
PCI	: Perectounes Coronary Intervention
PTCA	: Perectounes Transimal Coronary Angioplasty
PVD	: Peripheral Vascular Disease
TIA	: Transient Ischemic Attack
VSP	: Vascular Surgeries Patients
WHO	: World Health Organization

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Abstract

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Background: Vascular disease is a condition that affects the arteries, veins and blood flow, either by blocking or weakening blood vessels, angioplasty (stent insertion) may be necessary to treat vascular disease**. Aim**: assess heath problems associated with stents among patients with vascular surgeries. **Research design**: Descriptive study was used .**setting**: The study was conducted in outpatient clinics at Ain shams university (El Demerdash Hospitals). **Sampling**: Purposive samples of 192 patients were recruited for study. **Tools**:interviewing questionnaire tool .Part one: assess sociodemographic charteristic of vascular surgeries patients after stent.part two: past medical history. Part three assess of Patients knowledge.part four: assess of practices .part five: assess of health problems and needs of after stent insertion. **Results:** 55.7% of the studied sample was male, with mean age55.5 ±3.2, 61%of patients had satisfactory knowledge whilel 34.4% of patients had healthy practices after stent insertion, 62.5% complain of bleeding. 62.5 %, feeling anxiety, 49.5 % limit social relations and 100% need to Continues follow up and Change life style. **Conclusion**:there was highly statistical significant association between demographic characteristic of vascular surgeries patients and knowledge except marital status .there was statistical significant association between demographic characteristics and level of practice except age, occupation.there was highly statistical significant association between vascular surgeries patients level of knowledge and their level of practice. **Recommendations:** Continuity health education programs to raise the health awareness and knowledge of public**.**

Keywords: Vascular disease, Angioplasty, Stent

Introduction

Vascular disease is a class of diseases of the blood vessels the arteries and veins of the circulatory system of the body. It is a subgroup of cardiovascular disease. Disorders in this vast network of blood vessels can cause a range of health problems which can be severe or prove fatal **(Ashton, 2017).**

Vascular surgery is the treatment of surgery on diagnosed patients with diseases of the arterial, venous, and lymphatic systems. Vascular surgery is indicated when a patient has vascular disease that cannot be treated by less invasive and nonsurgical treatments (**Jennifer 2017).**

Different treatment options are available for vascular atherosclerosis; Treatment varies with the type of vascular disease; the main procedures are: the bypass surgery, the angioplasty and the stent placement. Lifestyle changes are often the best treatment for atherosclerosis. But sometimes, medication or surgical procedures may be recommended as well **(Rajendran et al., 2013).**

Heart disease and blood vessels are considered the primary cause of death in the world, ahead of cancer that comes second, rate of annual deaths from heart disease

and blood vessels than all other causes of death, and by 2030, about 23.6 million people will die from diseases heart and blood vessels **(Heart Dieses and Stroke Statistic, 2014).**

Everyone is at risk for vascular disease**,** with the increase in obesity and type II diabetes in Americans and as the population ages, vascular diseases are becoming epidemic. Peripheral arterial disease (PAD) alone affects 8.5 million people. It can occur in anyone at any time; affecting men and women equally. Atherosclerosis can begin in adolescence (**GBD 2015 Mortality and Causes of Death, 2015).**

Stent is tube designed to be inserted into a vessel or passageway to keep vessel open. Stents are inserted into narrowed coronary arteries to help keep them open after balloon angioplasty and narrowed carotid arteries (the vessels in the front of the neck that supply blood to the brain) appear useful in treating patients at elevated risk for stroke **(National Institutes of Health, 2017).**

Several health problems can results from stents. Stents are used to treat coronary artery disease (CAD) and its complications, including clots and bleeding at site of insertion. About 1 to 2 percent of people who receive

stents develop blood clots in the stent location **(Radiological Society of North America, 2016).**

Inserting a stent may require accessing arteries of the heart or brain. This leads to an increased risk of adverse effects. Stents are not completely foolproof that cause physical, social psychological and spiritual problems effect on health status to patient after return to home (**Mackenbach et al., 2014**).

Major health problem that can occur after perctounes coronary intervention (PCI) is too much tissue growth within the treated portion of the artery. This can cause the artery to become narrow or blocked again. When this happens, it's called restenosis (RE-sten-no-sis).Using drug-eluting stents can help prevent this problem. These stents are coated with medicine to stop excess tissue growth (**Jesurem et al., 2017)**.

Patients' risks can be reduced by community health nurses who are knowledgeable about these risk factors and identify complications before they become problematic. As recommended in the National Disease Management Guidelines patients with vascular disease and those who have undergone stent implantation should be followed up regularly (every three to six months) by their primary care physicians, independently of any additional visits that may be necessitated by worsening

symptoms, comorbidities, or any other tests that need to be done (**Mills et al, 2014).**

Community health nurse plays important role in follow-up visit after stent placement that provide health education about how to deal with daily activities, occupation, emotional aspects, sports, nutrition and sexual activity **(McMahan, 2016).**

Significance of study:

In Egypt the deaths caused by heart disease and vascular 38% of the total number of deaths, ranking it first in the causes of death. Studies have shown that one out of every five people who are over the age of forty susceptible to disease, heart failure, where the prevalence of the disease among people aged between 65 and 74 years about 7% and up to 15% among people over the age of 85 **(The Egyptian Association for Care of Heart Patients, 2015).**

In Egypt, cardiovascular disease accounts for 46% of all deaths and 37% of Egyptians with high cholesterol this according to the latest statistics published by the World Health Organization (WHO), **(WHO, 2017).**

Aim of the Study

The aim of this study is to assess health problems associated with stents among patients with vascular surgeries through:

1. Assessing knowledge of patients with vascular diseases after stenting.
2. Assessing practices of patients with vascular disease related to stenting
3. Assessing health problems and needs to patient's with vascular disease after stenting.

Research questions:

1. What is the knowledge & practices of patients with vascular disease related to stenting?
2. What is the health problem for patients with vascular disease after stenting?
3. Is there a relation between patient's socio-demographic characteristic and their knowledge after stenting?
4. Is there a relation between patient's socio-demographic characteristic and their practices after stenting?