Biopsychosocial Needs and Awareness of Patients with Deep Venous Thrombosis

Thesis

Submitted for Partial Fulfillment of the Requirement of Master Degree in Medical Surgical Nursing

By

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2020

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2020

Acknowledgement

Thanks to Allah who have lightened my path to accomplish this work.

The few words I wrote here can never and can't adequately express the feelings of gratitude; I have for my supervisors and the persons, who helped me to achieve this work. If I am to vote the heartiest thanks, it is to;

I wish to express my deep appreciation and gratitude to ***Prof. Dr. Tahany Ahmed El Senousy,*** *Professor of Critical Care 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. It was really an honor working under her wonderful supervision and for all her valuable efforts to produce this thesis. I cannot possibly convey words of my great appreciation for her great faithful effort in supervision during the progress of this work and without her valuable instructions this work would never have been done.*

I am deeply grateful to ***Assist. Prof. Dr. Dalia Abdallah Abdelatief,*** *Assistant Professor of Medical Surgical Nursing, Faculty of Nursing, Ain Shams University, for her unlimited help, effort, support, guidance, continuous encouragement and for the time she devoted to me in this work. I would not have been able to start and continue this work without her help.*

I would like to express my deepest thanks to the patients who participate in the study and to all who helped me with time, effort and spirit in fulfilling this work.

Dedication

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

Esraa Mohamed Abd El Azeem

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List of Abbreviations

Abbr.	Full-term
ACCP	: American College of Chest Physician
ACT	: Activated Clotting Time
ADL	: Activities of Daily Living
ADRs	: Adverse Drug Reactions
AHA	: American Heart Association
AHCRQ	: Agency of Healthcare Research and Quality
AIDS	: Acquired Immunodeficiency Syndrome
APTT	: Activated Partial Thromboplastin Time
ARDS	: Adult Respiratory Distress Syndrome
BMA	: British Medical Association
BMI	: Body Mass Index
BPS	: Biopsychosocial
CDC	: Centers for Disease Control
CDUS	: Color Doppler Ultrasonography
CHF	: Congestive Heart Failure
CI	: Cumulative Illness
COPD	: Chronic Obstructive Pulmonary Disease
CT	: Computed Tomography
CTEPH	**:** Chronic Thromboembolic Pulmonary Hypertension
DOACs	**:** Direct Oral Anticoagulants
DVT	**:** Deep Venous Thrombosis
EMA	: European Medicines Agency
EMS	: Emergency Medical Services

FAS : Fatigue Assessment Scale
GCS : Graduated Compression Stockings
HADS : Hospital Anxiety and Depression Scale
HCT **:** Hematocrit
HGB **:** Hemoglobin
HRT **:** Hormone Replacement Therapy
IBD **:** Inflammatory Bowel Disease
ICU : Intensive Care Unit
IGLC : Independent Grants for Learning and Change
IME **:** Independent Medical Education
INR **:** International Normalized Ratio
IPC **:** Intermittent Pneumatic Compression
ISTH **:** International Society on Thrombosis and Hemostasis
IVC **:** Inferior Vena Cava
LMW : Low Molecular Weight
LMWH **:** Low Molecular Weight Heparin
MCQs **:** Multiple Choice Questions
MI **:** Myocardial Infarction
MRI **:** Magnetic Resonance Imaging
NHP **:** Nottingham Health Profile
NHS **:** National Health Service
NICE **:** National Institute for Health and Care Excellence
NPSF **:** National Patient Safety Foundation
NSAIDS **:** Non-Steroidal Anti-Inflammatory Drugs
OTC **:** Over–The –Counter
PAI : Plasminogen Activator Inhibitor

PE **:** Pulmonary Embolism
PT **:** Prothrombin Time
PTS **:** Post Thrombotic Syndrome
PTSD **:** Post Traumatic Stress Disorder
SCD **:** Sickle Cell Disease
SCDs **:** Sequential Compression Devices
SD **:** Standard Deviation
SDRS : Social Dysfunction Rating Scale
SPSS **:** Statistical Package for Social Sciences
T-PA : Tissue Plasminogen Activator
U. S : United States
U.S. A : United States of America
UFH : Unfractionated Heparin
US : Ultra Sound
VTE : Venous Thromboembolism
VTEs : Venous Thromboembolic Events
VWF : Von Willebrand Factor
WHO : World Health Organization
WTD : World Thrombosis Day

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Biopsychosocial Needs and Awareness of Patients with Deep Venous Thrombosis

Abstract

Deep Venous Thrombosis (DVT) is the third most common acute cardiovascular disease after ischemic heart disease and stroke. **Aim:** This study aimed to assess biopsychosocial needs and awareness of patients with deep venous thrombosis. **Design:** A descriptive exploratory research design was utilized. **Setting:** This study was conducted at the vascular surgery unit and the vascular outpatient clinic at Kafr El- Dawar General Hospital. **Study subjects:** A convenient sample including ninety patients with DVT. **Data tools:** 1) patient interviewing questionnaire. 2) Biopsychosocial needs assessment scales. **Results:** 61.1% of the studied patients had unsatisfactory knowledge regarding DVT, 70% of them had the highest level of fatigue and 30% were completely dependent in their daily living activities. Regarding the psychological needs, 42.2% of the studied patients had mild depression and anxiety level. Regarding the social needs, 76.7% of them had a moderate level of social dysfunction. **Conclusion:** More than three fifths of the studied patients had unsatisfactory knowledge, more than two thirds of them had the highest level of fatigue and less than one third of them were completely dependent. Also, more than two fifths of them had mild depression and anxiety level, while more than three quarters of them had a moderate level of social dysfunction. **Recommendation:** Availability of simplified and comprehensive Arabic booklet about DVT and biopsychosocial needs of patients in outpatient clinics.

Keywords: biopsychosocial, awareness, deep venous thrombosis.

Introduction

Deep venous thrombosis (DVT) is an important health care problem. It is part of the venous thromboembolism (VTE) disorders which represent the third most common cause of death from cardiovascular disease after heart attacks and stroke. It impacts millions of people worldwide. The threats of VTE are a daily concern in intensive care units (ICU), hospitalized and bedridden patients **(Adelborg, Sundbøll & Sørensen, 2015)**.

Early diagnosis of DVT is essential for prevention of unnecessary deaths caused by pulmonary embolism (PE). Deep venous thrombosis refers to obstruction within the venous system, most commonly in the lower extremities, that is one of the most common causes for the majority of deaths which result from PE **(Zostautiene, Zviniene & Kiudelis, 2016).**

Deep venous thrombosis is a thrombus or blood clot that can develop in any of the deep veins in the body. It occurs as much as 60% more frequently in the left lower extremity as compared with the right lower extremity. Investigators have recommended that this disparity may be as a result of the pressure done by the right common iliac artery on the left common iliac vein **(Patel & Brenner, 2019).**

Deep venous thrombosis and its most serious complication "PE" encompass the most prevalent preventable cause of hospital-related death. One to two people per 1,000 are affected by VTE in the United States (U.S) each year. Among people who have had a DVT, one-half will have long-term complications as post thrombotic syndrome (PTS), which characterized by pain, swelling, discoloration, and scaling in the affected limb **(Grosse, Nelson, Nyarko, Richardsonc & Raskob, 2016 and Centers for Disease Control and Prevention (CDC), 2019).**

The biopsychosocial (BPS) model is an ideal representation of science and humanism in medical practice. It is supposed in the BPS model that disease or illness outcome is associated with the complex mixture of biological, psychological and social factors described in systems hierarchy from molecules to the universe with the patient at the central interfaces in the hierarchy. It empowers patients as persons, who actively engage in managing their illnesses **(Kusnanto, Agustian & Hilmanto, 2018)**.

Better knowledge about the risk factors and preventive measures in DVT patients is needed for their active involvement in treatment plans, ensure their adherence especially after hospital discharge, and promote self-diagnosis. This effort should also be extended to the general