Self-Care for Prevention of Recurrence Cerebrovascular Stroke

Thesis

Submitted in Partial Fulfillment of Requirement of the

Doctorate Degree in Nursing Science

Community Health Nursing

By

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List of Abbreviations

Abb.	Full term
ADL	Activities of daily living
AVMs	Arteriovenous malformations
BMI	Body Mass Index
CBC	Complete blood count
CNS	Central nervous system
CSF	Cerebrospinal fluid
CVA	Cerebrovascular accident
CVS	Cerebrovascular stroke
DBP	Diastolic blood pressure
DHA	Docosahexaenoic acid
DVT	Deep vein thrombosis
ECG	Electrocardiogram
EPA	Eicosapentaenoic acid
F.A.S.T	Face, arm, speech and time
GABA	Gamma-Amino butyric acid
ICP	Intracranial Pressure
IDL	Instrumental activities of daily living
LDL	Low-density lipoprotein
MI	Myocardia infraction
MRI	Magnetic resonance image
NSAIDs	Nonsteroidal anti-inflammatory drugs
PE	Pulmonary embolus
PT / PTT	Prothrombin time
SBP	Systolic blood pressure
TIA	Transient ischemic attack
TPA	Tissue plasminogen activator
WHO	World health organization

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Self-Care for Prevention of Recurrence Cerebrovascular Stroke

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Abstract

Background: The risk of recurrent stroke following a first event is high. It is associated with poorer outcome with higher mortality and functional disability. **Aim of this study**: this study aimed at evaluating the self-care program on prevention of recurrence cerebrovascular stroke. **Design:** Quasi-experimental was applied to achieve the aim of the study. **Setting:** the study was conducted at the patient neurological department and outpatient's clinics in El Demardash Hospital of Ain Shams University and patient's home. **Sample:** included 82 patients were chosen randomly according to the inclusion criteria. **Tools:** four tools were used for data collection, **1):** An interviewing questionnaire for CVS patients including four parts; Demographic characteristics of the patients, past and present medical history, CVS patients' knowledge and their practices. **2):** Patient's physical assessment sheet. **3)**: Home observational checklist to assess patients' home environment. **4):** Assessing Activities of Daily Living (ADLs) as regards: bathing, dressing, toileting, transferring, continence, eating and walking and instrumental activities of daily living (IADLs) as ability to use telephone, shopping, food preparation, house keeping, laundry, transportation, take medication and handle finances. **Result**: The main study results revealed that significant improvement in patient's knowledge and self-care practices regarding CVS. **Conclusion:**The study concluded that the self-care program will improve the patient's health and eliminate recurrence of cerebrovascular stroke; there were highly statistically significant improvement in all items related to knowledge of CVS patients' pre, post and follow-up self-care program. There were marked improvements about all items of CVS patients' self-care practices pre, post/follow up self-care program. **Recommendation:** Establishing a nursing discharge plan includes teaching patients about prevention of recurrent stroke, warning signs of stroke and various treatments at home.

Key words: cerebrovascular stroke, recurrent stroke and self-care.

Introduction

Cerebrovascular disorders are an umbrella term that refers to a functional abnormality of the central nervous system (CNS) that occurs when the blood supply to the brain is disrupted. Stroke is the primary cerebrovascular disorder in the United States, and it is the fourth leading cause of death after heart disease, cancer, and chronic lower respiratory diseases. Stroke is a major health problem despite the great efforts made worldwide to fight against it, It is a heterogeneous and multi-factorial disease caused by the combination of vascular risk factors, environment, and genetic factors. Stroke risk factors can be subdivided into non-modifiable (age, sex, race-ethnicity, genetic variations and predispositions) and modifiable (hypertension, diabetes, dyslipidemia, atrial fibrillation, carotid artery stenosis, smoking, poor diet, physical inactivity and obesity) ***(Goldstein, Admas, Mark, and Alberts, 2016).***

CVS recurrence is more devastating than the first attack. The risk of recurrent CVS is up to 15 times greater than the risk of CVS and is attributed to insufficient control of risk factors and noncompliance with medical advice. Identification of risk factors of recurrent cerebrovascular stroke may lead to better secondary prevention. Among these factors are old age, smoking, excess carbohydrates, fats and salts in diets, obesity, irregular practice of physical exercise, low income, chronic medical diseases, lack of commitment to prescribed drugs, high levels of serum cholesterol, triglyceride and LDL ***(Rankin, and Stalling, 2012).***

Worldwide, CVS is the second leading cause of death for people above the age of 60, and the fifth leading cause of death for those above the age of 51. About 16 million persons are affected with CVS annually, with a mortality rate among up to 6 million. One quarter of all CVS is fatal and when not fatal, it is often disabling. More than 70% of cerebrovascular stroke survivors are unable to return fully to their prior occupations, in addition to have longer periods of disability before death with significant costs for individuals and society ***(Thom, Haase, and Rosamond, 2011).***

According to ***(Pierre, 2013)*** self-care is the activities that enable people to deal with their impact of a long term condition on their daily lives, dealing with the emotional changes, and adherence to treatment regimes. Some of patients with stroke have better lives when they are supported to take care of their conditions themselves. If patients have a clear understanding of their condition and what they can do, they are more likely to take control themselves. Most chronic illnesses, such as stroke require adherence to some type of treatment regimen, and they typically involve self-care (self-monitoring of symptoms) on the part of the patient. Major areas for self-care are patient education regarding maintaining and enhancing health these include exercise & physical fitness, nutrition & weight control, stress management, stop smoking, maintenance of social support systems, and environmental control.

The importance of self-care experience improve health and well-being, reduce the perceived severity of their

symptoms, improve medicines compliance, prevent the need for emergency, prevent unnecessary hospital admissions, remain in their own home, have greater confidence and a sense of control, and have better mental health and less depression. Better skills of education and training can play a role in helping patients with long term conditions to become more confident when it comes to self-caring. As patient's confidence grows, they become more active and more interested in helping themselves ***(Bamford, Sandercock, Dennis, Burn, and Warlow, 2014).***

Home care provided refers to all the services and products provided to patients in their homes to maintain, restore, or promote their physical, mental, and emotional health. Providing care to the patient with stroke at home includes providing care to the entire family. Thus attention to the structure of the family, cultural factors, roles and responsibilities shared by nuclear and extended family, communication patterns among family members and the perceived impact of the illness of the patient on the individual family members and on the family unit is essential in providing comprehensive home care. As the primary caregiver, the family is an integral member of the home health care team ***(Mohan, Wolfe, Rudd, Heuschmann, Kolominsky-Rabas, Grieve, 2011).***

Health education is one of the areas where the community health nurse can make a real difference in prevention of recurrent stroke. Physicians and hospitals spend more time on curative than preventive health matters during the delivery of health care services. Preventive care is one of the core needs of every community and it must be

emphasized in nurses 'training. The community health nurse play an important role in stroke and preventive its recurrent, education should be to teach the importance of a healthy diet, exercise, stress management, smoking cessation and other health behaviors that can reduce high risk of recurrent stroke ***(Ketchner, 2011)*.**

The community health nurse plays a major role in the discharge planning for home care by educating patients and caregiver to perform the necessary care, by providing opportunities for them to demonstrate competence before assuming total responsibility, and by ensuring that the patients and the home environment are ready for the patient's discharge. Throughout this process, the principles of normalization are applied to provide the patient with an optimum home environment. Establishing patient-professional partnerships is crucial to provide family support that empowers family members, especially care givers, to assume the responsibilities of caring for their patient ***(Rankin, and Stalling, 2012)*.**

Significance of the study:

According to the ***World Health Organization, (2015)*** data estimated stroke is the second cause of death in Egypt and the ranks of Egypt in the world are 82. Deaths in Egypt reached 52,166 or 14.37% of total deaths. The risk of recurrent stroke following a first event is high and highest in the first month after stroke. Within the first year, up to 14% of patients presenting with ischemic stroke will go on to have another stroke and up to 40% in the following 5 years. Recurrent stroke is associated with poorer outcome, with higher mortality and functional disability; there are approximately 795,000 new strokes per year in the US, hyperlipidemia, atrial fibrillation, current tobacco smoking, and hypertension occurs primarily during the hospitalization for acute stroke.