DEVELOPMENT OF A TRAINING PROGRAM FOR HEALTH VOLUNTEERS IN THE MANAGEMENT AND SUPPORT OF FAMILY CAREGIVING OF STROKE PATIENTS IN A THAI CULTURAL CONTEXT

O-pas Pramoonsin, MNS. Kannika Kongbunkird, RN. Thaworn Lorga, Ph.D.
Boromarajonani College of Nursing Nakhon Lampang, Thailand
10 October, 2017

ABSTRACT
Caring for stroke patients is usually long-term in nature, and in the case of Thailand it is carried out by the family members to a certain extent that caregiving affects the quality of life of patients and family caregivers especially when the patients requires long-term complex care. Alternative support from community resources such as health volunteers is important in order to maintain the quality of care and quality of life. This paper proposes a training program for health volunteers in supporting family caregiving of stroke patients which is suitable in the Thai context. The researcher reviewed relevant literatures, formulated a competency-based training program, and consulted with specialists, health volunteers, and family of patients with stroke. The results revealed that the model consisted of three main components: 1) required competencies for family caregiving support, 2) competency development strategies, and 3) support for effective continuous learning. The required competencies for stroke care consisted of direct physical care, patient stress management, stress management for family caregiver, environmental management, and coordination of services. Competency development strategy involved knowledge and skill development. Support mechanisms are outlined in order to promote continuous learning and effective role performance. According to specialists, health volunteers and family of patients, this training program was deemed appropriate.

Keywords: Health volunteers, Family caregivers, Stroke patient

1 Financial support for this article is provided by Boromarajonani College of Nursing Nakhon Lampang, Thailand

2 Correspondence concerning this article should be addressed to O-pas Pramoonsin at Email: yoyoaoop1990@hotmail.co.th
Introduction

Stroke or cerebrovascular disease is a significant public health issue worldwide. There are 15 millions of people suffering from stroke, and 5.8 million people have died of this disease worldwide. (World Stroke Organization, 2012). Stroke is the fourth leading cause of death in Thailand (Charuponpasit et al., 2017). In 2007-2017, the number of stroke patients increased from 255.85 to 352.30 persons in every 100,000 population (Bureau of Non-Communicable Diseases, 2016). In 2013-2015, the death rate from stroke in Thailand was 36.13, 38.66 and 42.62 in every 100,000 people, respectively.

Stroke is a neurological syndrome which occurs due to problems with the blood supply to the brain. It happens immediately or after more than 24 hours (World Stroke Organization [WSO], 2016). Stroke patients exhibit rapid symptoms such as hemiplegia or hemiplegia, blurred vision, dysarthria, dysphagia, loss of consciousness, and death. Stroke illness causes permanent or temporary disability, and most survivors of stroke will become impaired (Sullivan & Hedman, 2015). As a result of stroke, patients would have limited self-care, living with difficulty, unable to perform normal activities, and unable to use their abilities to fulfill their self-care needs. Hence, stroke patients need help and care from the caregiver (Kelly et al., 2003). Stroke patients do not only suffer physically but mentally as well (Ayerbe, Ayis, Wolfe, & Rudd, 2013). Moreover, Santhayakorn (2011) found that people who suffered from a stroke are affected socially and economically. Stroke patients will be treated in the hospital when the crisis occurs, and then, patients will go through the rehabilitation phase and have to prepare for continuing care at home. Some stroke patients who are unable to provide self-help and are dependent require attention from relatives. The goal of caring for stroke patients is to enable patients to help themselves to live the average life (Pajary, 2007). Pornpit (2006) also agrees that the aim is for the patients to have a good quality of life. Therefore, caregivers of stroke patients are significant.

Caregivers care patients who suffered from a stroke. As defined by Yingjaroen (2014), caregivers of stroke patients refer to the person who takes responsibility in caring for stroke patients. According to Thai culture, families are the primary institutions for long-term care. It was found that 95.5 percent of caregivers are members of the family who served as caregivers such as parents, spouses, children, or relatives. This reflects the gratitude of Thai people for the stroke patient with values which are accepted within their culture (Srisomboon, Sathiensub & Rangang, 2013). Caregivers of stroke patients have a role to play in the care and support of patients in all dimension, such as daily living support, rehabilitation, prevention of complications, emotional and mental support, including being in contact with the clinic, and seeking help from various sources (Somdej Phra Sangharaj Ngranasmvar Geriatric Center, 2011). The literature review by Srisaket, Sathiensub & Dangang (2013) found that stroke care causes physical, mental, emotional, and socioeconomic effects for caregivers. Physical effects pertain to fatigue, body aches, and back pain which then lead to the psychological impact that triggers emotional implications causing anxiety, sadness, and severe stress. This results in conflicts within the family economically regarding the increase in their cost of living and reduced income, less participation in community activities or meeting neighbors, and feeling lonely. As a result, the effectiveness of care for stroke patients is reduced; the patient recovers slowly, complications increase, and the quality of life is low.

Research entitled Support Requirement of Caregivers from Health Personnel found that caregivers of stroke patients need the most support and guidance for information in addressing the issues related to disease, and proper treatment (Jullamate, Azeredo, Pául, & Subgranon, 2006). There is also the need for guidance in understanding how to deal with rehabilitation about the mobility of the patients (Hafsteinsdóttir, Vergunst, Lindeman, & Schuurmans, 2011). Also,
they also need to be uplifted with sympathy, encouragement, and home visit after discharge from the hospital (Schure et al., 2006). Although the hospital will arrange home visits to provide ongoing care in the community, it is not enough to support and guide the caregivers for stroke patients (Pongcharoen, Boonlert & Sirairikul, 2012). The Ministry of Public Health has recognized the importance and the efforts needed to solve such problems resulting to the development of Public Health under the Principle of Public Participation and the development of a Public Health Volunteer System to lead the development of health care. (Kittivorawut, 2014).

Health volunteers are an essential form of community involvement in the development of public health for primary health policy. They are one of the multidisciplinary teams (Sararak, 2010). Health volunteers have the role of providing public health services, counseling for patients and caregivers, and home visits. They are important persons for the caregiver in continuing care for stroke patients at home. Health volunteers can advise and counsel consistent with the context of patients and caregivers of stroke patients. Hence, health volunteers are crucial in improving the health and the quality of life of the community. However, the potential of health volunteers to cope with chronic diseases is still limited, including knowledge, patient tracking skills, and coordination (Chuengsathiensub, 2006). Correspondingly to the research of Keyong (2017) which found that some health volunteers have low knowledge, and lacks confidence in community work. Also, it was found that people living in urban areas often trust medical personnel rather than healthy volunteers. Consequently, the health volunteers need to develop knowledge and skills in managing stroke patients at home to improve their performance.

The development of knowledge and skills require training focusing on enhancing understanding and developing essential competencies that will help the assigned workforce. The goal of the exercise is to improve the knowledge and skills of health volunteers. A case study by Siripaiboon (2010) revealed that the guidelines in developing the role of the significant public health volunteers focuses in the development learning skills and promoting education for public health volunteers. It was also found, statistically significant, that the training for potential health volunteers in-home visits improves knowledge and skills (Anunta and Tonganake, 2013) Accordingly, the development of competency of public health volunteers in managing and supporting caregivers of stroke patients is necessary to develop and practice both knowledge and skills in order to achieve accurate management and support of stroke patients. These competencies will be beneficial to the caregivers in improving their care, quality of life, the prevention of complications, and maintenance of good health through shared learning with the health volunteers.

**Methods**

The process of collecting data consists of three steps. First, a literature review on the competencies of health volunteers in the management and support of caregivers and stroke patients in conjunction with qualified counselors to determine the validity and appropriateness of the content. Then, the authors drafted a model for the development of volunteer health services in the management and support of caregivers and stroke patients. Lastly, the proposed model was drawn up, consulted and questioned for its feasibility with two health personnel, two health volunteers, and two stroke caregivers according to its appropriateness to the Thai cultural context.
Result

Framework for Health Volunteers in the Management and Support of Family Caregiving of Stroke Patients in a Thai Cultural Context

**Training Strategies**

The development model of health volunteers in managing and supporting caregivers of stroke patients consists of three main components

**Required competencies for family caregiving support**

1.1 Direct Physical Care

1.1.1 Feeding

Health volunteers advise caregivers to prepare food which is appropriate to the patients’ condition. Food must be high in calorie, protein, and vitamin C to increase the immunity of the
body. Foods with fiber help in the excretion, and before each meal, the caregiver must take care of the respiratory tract to prevent coughing and choking. Caregivers will encourage patients to eat by themselves and to drink plenty of water at least 2-3 liters per day unrestricted, while patients with dysphagia should eat a little and chew the food thoroughly before swallowing (Hanucharurnkul, 2009). Moreover, some patients may need to feed on the nasogastric tube. Therefore, caregivers must prepare a blenderized diet for patients, the supply of raw materials, follow the right steps, study about feeding, and observe the symptoms during feeding (Kumlien & Axelsson, 2002).

1.1.2 Hygiene Care

Health volunteers advise that the distance of the patients’ bed and the bathrooms are dependent upon their mobility. The bathroom must have rails and shower chair to support the patient. Also, toiletries such as soap, shampoo, foam, and face wash must be prepared. Patients must be dried properly, and body lotion or olive oil is applied to prevent dry skin (Somdej Phra Sangharaj Nganasamvara Geriatric Center, 2011).

1.1.3 Rehabilitation

Health volunteers’ advice on rehabilitation or physical therapies should follow the instructions given by the hospital, for instance, regarding arrangement, the range of motion, sitting, standing, walking, exercising, the balance of the body, training of the nervous system and muscles, and daily life activities (Channarong, 2007).

1.1.4 Tracheal and oral suctioning

Some patients may still have a tracheostomy tube. Health volunteers advise that caregiver should learn about the care for patients who have a tracheal tube such as sputum suctioning for preventing obstruction, dressing wound, breathing exercise, effective coughing, and communication (Pajarya, 2007).

1.1.5 Bladder and bowel movement

Health volunteers advise caregivers to enact proper self-care for the patients during urination to reduce urinary tract infections and to improve the patients’ condition. For some patients, urinary catheters may be required in which caregivers must learn to care for patients with such necessities (National Stroke Association, 2017b). Meanwhile, for defecation, after eating, caregivers train the patient to defecate by sitting in the toilet or cot in the same time every day and to encourage patients to eat high fiber foods such as green leafy vegetables and to drink enough water to avoid constipation. In case of constipation, the patients often need to be urinated, or evacuation nursed if not, they are given a drink or laxative. Caregivers will have to change the diaper of the patient (Loharachun, et al., 2008).

1.1.6 Prevention of pressure ulcer

Health volunteers advise caregivers to clean the patients’ body, especially the skin around the joints must not get wet with sweat, urine, and feces. Examining the risk for ulcer by applying pressure to the skin every day, avoid pressing the bone area. While the patients are lying down, they must be properly aligned and turned over every 2 hours. Patients must be moved with caution and encouraged to have physical movement and take in enough food and water (Phasutharachat et al., 2009).

1.1.7 Medication

Health volunteers advise caregivers that the preparation of medications must be
according to doctor's order. The patients with intracranial hemorrhage need to get medication to decrease blood pressure, to decrease brain edema, and sedation. For patients with ischemic stroke, physicians will consider antiplatelet therapy or anticoagulant therapy (Public Health Nursing Division, 2011).

1.2 Patient Stress Management

1.2.1 Mindfulness-based stress reduction

After suffering from a stroke, patients have limited mobility in performing regular activities which causes them to be distressed, uncomfortable, anxious, and cut off from the society. Therefore, health volunteers emphasize on the prevention of stress by avoiding its roots to ease the feeling of frustration, such as mentioning the patient's condition or complain about the caregiver's burden. (Santayakorn, 2011).

1.2.2 Peer and community mental support

Health volunteers addressed the need for psychological help by encouraging the patient or coordinating with a friend or a neighbor of the patient to visit. This will support the buildup of the patients’ morale (Santayakorn, 2011). Moreover, the help from friends and the association of volunteer to a friend are a salient aid to stroke patients (Kessler, Egan, & Kubina, 2014).

1.3 Stress Management for Family Caregiver

1.3.1 Advice on Stress relief

There must be enough knowledge and understanding about the disease, treatment guidelines, and caring methods that can affect the perceptual process, confidence in care and mental control. It makes way for proper care and stress reduction (Forster, et.al, 2001).

1.3.2 Respite care service

a) Volunteers - Coordination in finding volunteers in the village that would help in caring for stroke patients in the village to enable respite among caregivers.

b) Relatives – Coordinate and mediate the relatives in caring for stroke patients to help lighten the burden on caregivers.

c) Paid Caregiver – Consult with the caregiver about the cost of hiring paid caregivers to provide care for the patients and respite for the family caregiver. According to a study of Grootegoed, Knijn, & Da Roit (2010) it was found that caregivers were seen as self-employed and saw their roles as formal caregivers and they feel attached to the patients. This makes high-quality care.

d) Institutional Care – Coordinate with temporary care institutions such as home care or nursing homes to reduce and alleviate burdens from caregivers in critical situations.

e) Household chores support – It is not a mandatory function but a spirit of the health volunteer while visiting the patient by helping with the household to reduce the workload of the caregiver. This is one of the characteristics of the Thai society in supporting each other.

1.4 Environmental Management
The environment must be conducive to the support patients based on their mobility. For instance, the location of the bathroom must be close to where the patient’s sleep and installation of railings, access to ramps for moving patients, and placement of various facilities as well as its arrangement to prevent accidents. Furthermore, the caregiver should prepare a place which is calm, light, accessible, and no sleep disturbances or stimulation of patient’s stress (National Stroke Association, 2017).

1.5 Coordination of Services

1.5.1 Local government

Health volunteers take care of public health benefits. They are responsible in coordinating with the local government organization to apply for support and disability living allowance for patients and so as the participation in supporting local equipment to rehabilitate such as bamboo walk, hoist, elastic motorcycle, and sandbag (Pinyo et al., 2015).

1.5.2 Health service

Health volunteers are the public health service providers. They are obligated for patient referral, follow up for patients who have been referred to the service, and coordinate with health institutions to manage the health of caregivers and stroke patients (Department of Health Service Support, 2011).

1.5.3 Community organizations

Health volunteers help people with stroke by coordinating with the organization within the community. This enables the community to participate in patient care with the plan formulation in assisting caregivers and stroke patients in collaboration with public health personnel (Pinyo et al., 2015).

In conclusion, if the required competencies for family caregiving support are followed accordingly in the practice of health volunteers in caring and supporting caregivers of stroke patients, it will result to efficient and quality care.

2. Competency development strategies in caring for caregivers of stroke patients

A person’s capacity is not entirely dependent on educational background. As stated in the study of Akarabowon (2012), people who work well does not mean they are good people but those they are the ones who succeed at work by being able to apply the principles of self-knowledge. The features include the ability to work, communicate, and interact with others. On the other hand, competency refers to a group of skills, knowledge, abilities, behaviors, attributes, and attitudes that are necessary for performing quality work. It also determines the behavior of the person in achieving the task under the corporate environment and reflection of expertise, experience, and qualification (Wiboonwong & Arrayawong, 2012). Therefore, the development of the capacity of the health volunteers to manage and support stroke caregivers consists of two main components, they are as follows:

2.1 Knowledge Development – The importance of the development of knowledge or learning in adult volunteering is enumerated in four items. First, adults tend to prefer manual guidance. Therefore, the development of expertise in health volunteers requires the selection of self-learning models. Second, the adult’s experience is a valuable learning resource, so participatory learning should be a training method for developing knowledge. Third, adults are often aware of the real story. Hence the development of knowledge should
be used in real life as a guideline for development. Lastly, adults need to learn the skills and pursue understanding that they need in empowering their work.

2.2 Skill Development – There are five essential items in skill development. First, to develop skills, adults need to know the importance of practicing and the benefits they can gain for them to be interested and practical. Second, the learning and practice of adults require the freedom to control their learning. Third, it should be taken into consideration that everyone has different experiences, and these experiences should be used in skill development by exchanging knowledge and information. Fourth, the learning approach for adults must be practical wherein problem-solving or learning to correct is involved. Lastly, training should motivate satisfaction in the work done and enrich life.

As a result, when health volunteers are enriched according to the right and proper strategies in developing knowledge and skills in caring and supporting caregivers of stroke patients, it will help and benefit the caregivers in providing quality care while attending to their own needs.

3. Support for effective continuous learning

Is providing through giving information, material or psychological reinforcements; it may be by a group or individually. Providers of assistance behave based on the recipients’ guidelines. Social support comes from family or community members such as parents, siblings, neighbors, community leaders, colleagues, teachers, health personnel, and health volunteers including to interpersonal relationships (House& Kahn, 1985). Support does include not only materials and emotional aspects but also the fact that the people feel accepted as part of other people’s lives. Social support can be divided into three categories:

1. Emotional Support which is mental support, such as gratification, acceptance, and expressing concern;
2. Appraisal Support, this is the support of reflection or evaluations, such as feedback, approved or certified performance, or indicating appreciation as a result of good behavior;
3. Information Support, this is the provision of information, such as advice, counseling, and information; and
4. Instrumental Support, the provision of tools such as labor, money, time, and so on (House& Kahn, 1985).

Having good support will affect behavioral compliance. Social support is more likely to promote healthy behaviors than those with less social support and mental health. It can be said that social support affects psychological health wherein social support improves the ability to combat problems in a person's life and helps reduce stress. Moreover, when a health volunteer is constantly supported in learning, it will motivate them to work well.

Training Evaluation

Evaluating Training Programs for Health Volunteers in the Management and Support of Family Caregiving of Stroke Patients Base on Kirkpatrick & Kirkpatrick, 2007
Level 1: Reaction – The evaluation of health volunteers who attend training programs as to what they think and feel about the training, such as project satisfaction.

Level 2: Learning – It measures the increase in knowledge, skills, and changes in attitudes of health volunteers. This evaluation occurs during training in the form of a demonstration or knowledge test.

Level 3: Behavior – This pertains to the shared knowledge and skills of health volunteers. It also includes their attitudes from training or the change in working behavior due to the training. This evaluation occurs after 3-6 months of training, and most importantly evaluations are usually based on observations.

Level 4: Results – In this part, the training program is evaluated. It can be economically assessed or in the long-term effects such as quality of life of the participants gained from the program.

Conclusion
By reviewing related literature in line with the advice from two experts, two health volunteers, and two caregivers, the authors have drawn their conclusion. There are many factors to be taken into consideration in achieving effective care for stroke patients. These factors must come from the patient themselves, the caregiver's ability to care, and support and participation of public health leaders who are the health volunteers. The authors found that to be able to provide quality care the caregivers must be directed, and to do so, the health volunteers must have sufficient capacity and expertise. Health volunteers need to have the ability to manage and support caregivers and stroke patients which are divided into three core competencies.

First, the required competencies for a family regarding caregiving support which is divided into five: 1. direct physical care such as nutrition, cleaning the body, rehabilitation or physical therapy, tracheostomy, and suction, excretory, pressure sore prevention, and medication; 2. Patient stress management which consists of mindfulness-based stress reduction and peer and community mental support; 3. Stress management for family caregiver, composed of advice on stress relief, respite care service that includes volunteers, relatives, paid caregiver, institutional care, and household chore support; 4. environmental management which focuses on the appropriate placement of facilities based in the mobility of the patients; and 4. coordination of services which consist of local government, health service, and community organizations. Second, the competency development strategies which involves knowledge and skill development. Lastly, the support for efficient continuous learning, the critical component is for the support mechanisms to be outlined to
promote continuous learning and efficient role performance. According to specialists, health volunteers and family of patients, this training program is deemed appropriate.

Therefore, if volunteers abide by the said competencies suitable for the caregivers and the stroke patients, they can provide care and efficiently support which results in a good quality of life for caregivers and stroke patients, and stabilization of symptom and improvement of the stroke patient’s condition.

Reference


