

Community Service Article

COMMUNITY EMPOWERMENT PASSIVE ROM (RANGE OF MOTION) TRAINING ON REHABILITATIVE POST-STROKE PATIENTS

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ABSTRACT

Background. Stroke is a non-communicable disease, and the number of cases continues to increase every year. Proper treatment after a stroke determines the patient's maximum recovery rate. Until now, the incidence of stroke continues to increase, which is due to the lack of information among post-stroke patients about stroke care at home. Most of them only get information regarding stroke nutritional diets, even though they also have to be trained physically, one of which is ROM (Range of Motion). This Community Service activity aims to improve the knowledge and behavior of elderly cadres at the Bandung community health center.

Implementation Method. Community service methods are pre-test and post-tests, with activities ranging from counseling about stroke and how to prevent stroke, outreach, ROM training for rehabilitation of post-stroke patients, assistance with ROM training, and evaluation of elderly posyandu cadres. The number of respondents targeted for this community service was 50 health cadres and the elderly in Suruhan Kidul village, Bandung Community Health Center working area, Tulungagung District.

Findings. The result of community service based on observation and evaluation is an increase in the knowledge and skills of health cadres and the elderly regarding rehabilitative actions for stroke patients (ROM).

Conclusion. Community service in the form of counseling and training carried out in Suruhan Kidul Village, Bandung Community Health Center working area, Bandung District, Tulungagung Regency, generally provides benefits to health cadres and the elderly. Cadres and the elderly have the knowledge and skills for stroke rehabilitation (ROM).

Keywords: Cadre, Elderly, Physical Exercise, Range of Motion, Stroke.

BACKGROUND

Stroke is a clinical syndrome with symptoms in the form of focal or global brain function disorders that can cause death or abnormalities that persist for more than 24 hours, without other causes except vascular disorders [1]. An unhealthy lifestyle is one of the risk factors for stroke [2]. Stroke is still one of the main health problems in Indonesia and in the world, so serious treatment needs to be done to speed up healing. Based on the Central Statistics Agency, the population in Tulungagung Regency in 2021 is 1,118,727 people, and for stroke sufferers, there are 2,490 people. In the working area of the Bandung Community Health Center, there are 185 people. The results of a preliminary study at the Bandung health center in January 2022 showed an increase in the incidence of stroke.

Delayed treatment of stroke patients will cause permanent disabilities such as impaired mobility, communication disorders, swallowing disorders and other neurological disorders. The family has a very important role in caring for a family member who has suffered a stroke by providing attention, motivating, administering medication regularly according to the dose given by health workers, apart from that the family also has a role in healing the patient (rehabilitation at home) such as helping with exercise, providing nutrition, and taking control patients to health services to speed up the healing process. Nursing care for families with stroke is provided in an effort to meet client needs [3]. If someone who has a stroke is not treated quickly, the result is that the patient can experience permanent disabilities such as impaired mobility, communication disorders, swallowing disorders, and other neurological disorders, resulting in nursing care for families who suffer from a stroke. Most stroke sufferers often experience weakness in the face, arms or legs (especially on one side of the body), confusion/confusion or changes in mental status, difficulty speaking or understanding speech, visual disturbances, difficulty walking or sudden severe headaches [4]. Stroke can also cause complications including heart disease, pneumonia, venous thrombosis, dicubitus, fever, post-stroke pain, dysphagia, incontinence, and depression are very common complications in stroke patients [5].

For patients who are on bed rest or experience limitations in movement, passive ROM exercises are very appropriate and will get benefits such as avoiding the possibility of contractures in the joints. Every movement carried out with a full range will increase your ability to move and prevent limitations in activities. When a patient cannot do ROM exercises actively, the nurse can help him do the exercises [6]. Exercises can be carried out by nurses or other health workers. The nurse's role in this case begins with conducting an assessment to determine the part of the joint that requires exercise and the frequency of exercise required. Range of Motion (ROM) is a muscle and joint action or exercise given to patients whose joint mobility is limited due to disease, disability or trauma. Where the patient moves each joint according to normal movements, either actively or passively. The aim of this action is to prevent the risk of muscle atrophy in clients who experience immobilization, prevent joint contractures, maintain or increase muscle strength, increase or maintain muscle flexibility and strength. The recommended dose and intensity of ROM training shows quite varied results. With the ROM exercises that will be carried out, it is hoped that it can improve the daily living activities and independence of stroke patients and their families in caring for stroke patients.

Based on this description, it is necessary to carry out community service regarding Community Empowerment for Cadres and the Elderly with Passive ROM (Range of Motion) Training in Rehabilitative Actions for Stroke Patients in the Working Area of the Bandung Health Center, Tulungagung Regency.

METHOD OF ACTIVITIES

This community service uses several methods in its implementation. Counseling and training on early stroke detection and ROM (Range Of Motion) rehabilitative measures, this activity involved 50 respondents, namely health cadres and the elderly. Respondents were given a pretest-posttest of knowledge and skills for early stroke detection and Range of Motion (ROM) rehabilitative action exercises for post-stroke patients. Cadres and the elderly are given activities to practice range of motion exercises for post-stroke patients. Activities carried out include health outreach, education on early stroke detection, training on range of motion exercises, and assistance with post-stroke rehabilitative action exercises. Community service activities targeting health cadres and the elderly in Suruhan Kidul Village, Bandung Community Health Center working area, Tulungagung Regency.

Activities carried out include education on early stroke detection. Education on early stroke detection and ROM therapy can increase knowledge and insight to make appropriate and quick decisions if a family experiences a stroke, to prevent an increase in the incidence of post-stroke disability in the area. Community service activities in this period are a continuation of community service in the previous period. Community service activities begin with a pre-test for health cadres and the elderly using paper-based or offline tests. Next, the activity continued with socialization and counseling to health cadres and the elderly. This activity takes 3 hours accompanied by a question and answer discussion related to the material provided. At the next meeting, the activity continued with training and assistance for stroke rehabilitative action exercises using range of motion exercises. The training is provided not only to health cadres but also to the elderly. In the following month, community service activities were held in monitoring and evaluation and monitored by the Community Service team, monitoring was carried out every month for 3 consecutive months.

All community service activities are carried out for 1 (one) year. Community service activities begin with a licensing process by the community service implementation team. The permit letter that has been issued is used as a basis for carrying out community service activities, to carry out socialization of activities to be carried out to health cadres and the

elderly in the Suruhan Kidul village in the working area of the Bandung Community Health Center, Tulungagung Regency. Next, the Community Service team collaborated with the Head of the Community Health Center and the village head of Suruhan Kidul village, Bandung sub-district, Kab. Tulungagung. The village head facilitates the community service implementation team to carry out activities in accordance with the proposals that have been submitted.

RESULT OF ACTIVITIES

The implementation of six community service activities reached 100% attendance. During theoretical and practical activities, the participants' attention to the speakers was good. The level of activeness in asking questions and carrying out practical work was good.

Community service activities run smoothly according to the plans that have been prepared in the activity proposal, community service participants are very enthusiastic about the activities that have been carried out. The following is documentation of community service activities.



Figure 1. Provision of ROM therapy materials



Figure 2. ROM therapy practice

1) Knowledge about early detection of stroke in Suruhan Kidul Village, Bandung Tulungagung health center working area

Table 1 Knowledge about early detection of stroke in Suruhan Kidul Village, Bandung Tulungagung health center working area Level of Knowledge about Early Detection of Stroke in Suruhan Kidul Village, Bandung Public Health Center Working Area, Tulungagung Regency among Posyandu Cadres

Category	Before		After	
	Frequency	%	Frequency	%
Good	0	0	41	82
Enough	12	24	9	18
Not enough	38	76	0	0
Total	50	100	50	100

Based on the table above, it shows that there has been an increase in knowledge of Posyandu cadres in Suruhan Kidul Village, Bandung Community Health Center Working Area, Tulungagung Regency. Posyandu cadres participating in community service from before delivering material on early detection of stroke in Suruhan Kidul Village, Bandung Community Health Center Working Area, Tulungagung Regency were 76% in the Poor Category to 82% of Participants in the Good Category.

2) Knowledge of the concept of ROM (Range of Motion) training for Posyandu cadres in Suruhan Kidul village, Bandung health center working area, Tulungagung Regency

Table 2 Level of Knowledge about ROM (Range of Motion) in Posyandu Cadres in Suruhan Kidul Village, Bandung Community Health Center Working Area, Tulungagung Regency

Category	Before		After	
	Frequency	%	Frequency	%
Good	0	0	25	50
Enough	0	0	15	30
Not enough	50	100	10	20
Total	50	100	50	100

Based on the table above, it shows that before training, all respondents have not enough category of knowledge. After training, most of respondents have good category of knowledge. The average (50%) is an increase in knowledge with a good category among Posyandu cadres in Suruhan Kidul Village, Bandung, Tulungagung Regency regarding ROM (Range of Motion).

3) The Skill Level of Posyandu Cadres of Community Service Participants in Suruhan Kidul Village, Bandung Community Health Center Working Area, Tulungagung Regency regarding ROM (Range Of Motion) Skills can be seen in the following table:

Table 3 Skill Level Execution of Range of Motion Exercises ROM (Range Of Motion) at Posyandu Cadres in Suruhan Kidul Village, Bandung, Tulungagung.

Category	Before		After	
	Frequency	%	Frequency	%
Good	0	0	15	30
Enough	0	0	20	40
Not enough	50	100	15	30
Total	50	100	50	100

Based on the table above, it shows that before training, all respondents have not enough category of skill. The average (30%) is an increase in skills with a good category for Posyandu cadres of community service participants from before the delivery of material regarding ROM (range of motion) training.

DISCUSSIONS

In community service carried out in Suruhan Kidul Village, Bandung Community Health Center Working Area, Kab. Tulungagung was attended by 50 participants from all Health cadres in Suruhan Kidul village. In its implementation, attendance in six community service activities reached 100%. During theoretical and practical activities, participants' attention to the presenters was good. Good level of activeness in asking questions and carrying out a good practicum. Increasing Knowledge of Posyandu Cadres in Suruhan Kidul Village, Bandung Community Health Center Working Area, Tulungagung Regency. Posyandu cadres participating in community service from before delivering material on early detection of stroke in Suruhan Kidul Village, Bandung Community Health Center Working Area, Tulungagung Regency were 76% in the Poor Category to 82% of Participants in the Good Category. There is an increase in knowledge with a good category among Posyandu cadres in Suruhan Kidul Village, Bandung, Tulungagung Regency regarding ROM (Range Of Motion). There has been an increase in skills with a good category for Posyandu cadres of community service participants from before the delivery of material regarding ROM (range of motion) training. This result in line with previous research that passive range of motion training improve hand function of chronic stroke patients[7].

According to the theory, it is explained that one way to increase a person's knowledge is through counseling. Health counseling is identical to health education, because both are oriented towards changing knowledge, attitudes and behavior. Counseling in midwifery is a process of providing more objective and complete information that is carried out systematically based on interpersonal communication skills guidance, guidance techniques, mastery of clinical knowledge, which aims to help clients recognize their conditions, problems faced by clients and help them determine solutions and ways out in an effort to overcome their problems. The general purpose of counseling is to change the behavior of individuals and communities in the health sector. This goal is to make health something valuable in society, to help individuals to be able to independently or in groups carry out activities to achieve a healthy life. Counseling has an important goal to improve knowledge and skills as a criterion for the success of the overall health program. By holding counseling on stimulation of growth and development of preschool children, it will be able to improve the knowledge of parents and teacher about growth and development of preschool children[8], so that it will have an impact on better attitudes and different behaviors between before being given counseling and after being given counseling about discomfort in pregnancy for the better.

In this community service after conducting counseling and training of ROM rehabilitative actions for stroke patients, almost all respondents have good knowledge about early detection of stroke and rehabilitative actions of range of motion (ROM) exercises. Improving Knowledge of Posyandu Cadres in Suruhan Kidul Village, Bandung Health Center Working Area, Tulungagung Regency. Posyandu Cadres Participants in Community Service from Before the Delivery of Material on Early Detection of Stroke in Suruhan Kidul Village, Bandung Health Center Working Area, Tulungagung Regency by 76% in the Poor Category to 82% of Participants in the Good Category, Showing an Average (30%) of Increased Skills in the Good Category in Posyandu Cadres Participants in Community Service from Before the Delivery of Material on ROM (Range Of Motion) Exercises.

This shows that community service in the form of counseling and training carried out by health workers as trusted people in the health sector is very useful in improving the knowledge and skills of Posyandu Cadres and the elderly. Factors that influence the success of training are seen from the selection of methods used, methods also greatly influence the success of training and see targets who have different or diverse backgrounds, training here uses lecture and projector methods, provision of pre-screening development questionnaires, and provision of ROM modules, so that respondents can receive material with various senses

both hearing and sight. Meanwhile, research by Nurbaya et. al [9] found that training activities to increase the capacity of Posyandu cadres through education and simulation methods can improve the knowledge and skills of Posyandu cadres in monitoring the growth and development of toddlers and conducting health education in the community.

This will support the optimal implementation of integrated health posts and can contribute to efforts to prevent the increase in paralyzed post-stroke patients. Training activities like this are still very much needed by cadres to improve their services at integrated health posts. Furthermore, in Pakpahan's study [10], it was found that the skills of training participants increased by 27.1% in the very good category, 20.8% in the good category, and 47.9% in the sufficient category. So it can be concluded that the knowledge and skills of the participants increased due to the training. And for health cadres, it is hoped that they can apply the knowledge gained in the training in everyday life and it is hoped that there will be a transfer of knowledge from health cadres to the surrounding community.

CONCLUSION & SUGGESTION

Based on the results of community empowerment activities for Posyandu cadres in Suruhan Kidul village, Bandung health center working area, Tulungagung Regency, the implementation of Community Service Training Activities can be concluded as follows: Community service activity participants are interested, happy and enthusiastic in participating in early stroke detection training activities and ROM (range of motion) training activities, Service participants after participating in training activities can understand the importance of training activities - to prevent the impact or consequences of late treatment of stroke patients. After monitoring and evaluation, the output of the training activities, posyandu cadres will understand and be able to apply in the surrounding environment if there are signs and symptoms of stroke, actions must be taken immediately.

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