EFFECTIVENESS OF FAMILY CAREGIVER-BASED "STROKE CARE" COACHING ON FAMILY READINESS IN CARING FOR FAMILY MEMBERS FAMILY MEMBERS WHO EXPERIENCED A STROKE

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ABSTRAK

Introduction: Stroke is one of many non-communicable diseases with a high incidence in Indonesia. So that an intervention is needed that can improve the quality of life of stroke patients to avoid various complications due to stroke. Objectives: This study aims to conduct coaching on stroke care for family members so that the family is better prepared to provide proper care, especially in the rehabilitation phase. Method: the method used in this study was quasi experiment with pretest-posttest with control group design. 26 samples were involved using purposive sampling technique. in the intervention group, coaching was conducted for 4 meetings in 2 weeks, followed by follow-up for 2 weeks, while 13 research samples in the control group received intervention according to program procedures at the hospital. The instruments used were questionnaires and observation sheets. Statistical analysis used Wilcoxon and Mann-Withney tests. Results: for the intervention group there were differences before and after the intervention in terms of knowledge variables (p-value=0.02) and skills (p-value=0.01) while for upper and lower extremity strength there were no differences. Conclusion: Coaching intervention "stroke care" has a significant effect on family readiness for variables of family knowledge and skills in caring for family members who have a stroke in the rehabilitation phase at home.

Keywords: Care, Family, Rehabilitation, Stroke

INTRODUCTION

The increasing degree of population health is an indicator of the government's success in developing the nation's life, as for the steps in achieving this are clearly stated in the government program, namely in the sustainable development goals (SDGS) 2015-2030 (AULIA, 2021). This indicator has become a reference in various districts, including in garut regency. in garut regency, increasing life expectancy is the target of achieving the garut regency's goals. but in reality, the Garut Regency

government is faced with a threat in achieving these goals, namely the high incidence and tendency to increase the incidence of non-communicable diseases, one of which is stroke (Morotti et al., 2019). stroke is one of the diseases that is the leading cause of death and the leading cause of disability in adults worldwide. a recent publication of the global burden of diseases, injuries and risk factors study estimates that stroke will continue to be one of the top three causes of death worldwide by 2040 (… et al., 2019). stroke occurs due to sudden loss of brain function due to disruption of blood supply to the brain, this can occur due to complications of other diseases such as hypertension, cholesterolemia and diabetes (Cipolla et al., 2018).

Stroke is a disease that requires a long term in the recovery process, for stroke sufferers and families an acute stroke attack is the beginning for sufferers and families to struggle to overcome various physical disorders and disabilities experienced . in the healing process of stroke patients, poor care can cause complications in the form of physical problems such as: urinary tract infections, contractures, pressure sores, pneumonia and even recurrent stroke attacks and psychosocial problems such as: depression and other emotional disorders (Kramer et al., 2019).

In order for home care to be carried out correctly, an intervention is needed that is able to provide education and assistance while patients are treated at home (Cai et al., 2019). For stroke patients, the family is very important in the healing program for stroke patients at home due to the physical limitations experienced by stroke patients. Here are some of the roles of families in caring for their family members including as motivators, educators, supporters, initiators, caregivers, as well as coordinators and mediators (Adams et al., 2020). The family plays an important role in providing support and caring for sick families and functions as a support provider for sick family members. The family is the party that directly cares (family caregiver) for the condition of each member (healthy or sick) (Nurkhafifah, 2022). A person who has a stroke will face a number of problems, including loss of motor and sensory functions (Turc et al., 2023). This makes stroke patients dependent on their families, especially in fulfilling their daily needs. Providing training and assistance in caring for family members who experience stroke for families as caregivers is a method of

guidance and training that can be given to the family of someone who has had a stroke to help families who have family members with stroke overcome the challenges and problems that arise during the care process (Garrison & Chou, 2019). This study aims to determine the effectiveness of family caregiver-based stroke care training on family readiness in caring for family members who have had a stroke at the rehabilitation stage at home (Guo et al., 2022).

RESEARCH METHOD

The stages of the research are divided into 3 stages, including: 1) At this stage, researchers measured the knowledge of the patient's family, including the patient's family knowledge about how to care for stroke patients at home, what the patient knows and does, and checked the patient's muscle strength that experienced weakness due to stroke; 2) Implementation stage, researchers conducted coaching interventions for 4 weeks; 3) Analysis and reporting stage, researchers analyzed the data collected and then made a research report (Garrison & Chou, 2020).

The research site is a hospital room intended for patients with neurological disorders and general polyclinics and then the research will continue by conducting home visits (Soto-Cámara et al., 2020). The independent variable in this study is stroke care coaching, while the dependent variable is family readiness in caring for stroke patients (skills and knowledge) and muscle strength. The research method used a quassi-experimental design where in this study the results of the intervention were compared with the control group (Garrison, Chou, Hyde, et al., 2019). Data collection of family readiness variables in caring for stroke patients includes sub-variables of skills and knowledge, besides other independent variables measured are muscle strength in the patients themselves in both the intervention and control groups (Garrison, Chou, & Hyde, 2019). Univariate data analysis in this study used descriptive analysis on variables of gender, age, education level, occupation, comorbidities, and experience in caring for stroke patients while for bivariate data analysis using Wilcoxon and Mann Whitney tests (Brainin & Heiss, 2019).

RESULT RESEARCH

1. Uni Variate Analysis

a) Characteristics of the Research Sample

The characteristics of the research sample that researchers use in this study are used as a basis for knowing the description of other factors that might affect the results of the study (Baskar et al., 2021). The characteristics of the research sample that researchers set in this study include: gender, age, education level, occupation and experience caring for stroke patients.

Table 1. Characteristics of the research sample

No	Respondent Characteristics	Kelompok Intervensi (N=13)		Kelompok Kontrol (N=13)	
		F	%	F	%
1	Sex				
	Male	4	31	3	23
	Female	9	69	10	77
2	Age				
	Late Teens (18-25 years)	1	7.7	2	15
	Early Adulthood (26-35 years)	3	23	2	15
	Late Adulthood (36-45 years)	8	61.6	7	55
	Early Elderly (46-55 years)	1	7.7	2	15
3	**Education**				
	Elementry	3	23	1	7.7
	Junior Hig School	3	23	3	23
	Senior High School	7	54	9	69.3
	Diploms/Bachelor	0	0	0	0
4	Occupation				
	Working	6	46	4	31
	Not Working	7	54	9	69
5	Experience in Care				
	Available	3	23	2	15
	Not Available	10	77	11	85

Based on table 1 above, it can be seen that the characteristics of the sample in the study include patient families who care for their family members who have had a stroke, most of them in the intervention group (69%) and almost entirely for the control

group (77%) are female, for age characteristics both intervention (61. 6%) and control (55%) were mostly in the early adult age range (36-45 years), most had at least a high school education both intervention (54%) and control (69.3%), most worked for intervention (54%) and control (69%) and almost all of them both intervention (77%) and control (85%) groups had no experience in caring for their family members who had a stroke.

b) Family readiness before and after the intervention based on knowledge

Table 2: Family readiness before and after intervention based on knowledge

Group	Mean		SD		Min-Max	
	Pre	Post	Pre	Post	Pre	Post
Knowledege Aspect						
Intervensi	57.07	83.07	11.7	10,4	35-76	59-94
Kontrol	54.8	57.5	8.6	9.6	35-71	35-76
Skill Aspect						
Intervention	57.7	79.7	6.4	11.5	48-71	52-95
Control	45.7	48.3	12.5	9.3	33-81	38-71

Based on table 2, it can be seen that there is a significant difference in the knowledge aspect of the intervention group before and after the intervention where the average knowledge of the intervention group before coaching was 57.07 and after coaching for 4 weeks there was a significant difference to 83.07. Likewise, for the skill aspect, the average knowledge of the intervention group before coaching was 57.7 and after coaching for 4 weeks there was a significant difference to 79.7.

a) Muscle Strength of Stroke Patients Before and After Intervention

Table 3. Muscle strength of stroke patients before and after intervention

Group	Mean		SD		Min-Max	
	Pre	Post	Pre	Post	Pre	Post
Intervensi						
Extremitas atas	1.6	2.4	1.4	1.4	0-4	1-5
Extremitas bawah	1	2	0.9	1.2	0-3	0-4
Control						
Extremitas Atas	1.15	1.5	1.0	1.1	0-3	0-3
Extremitas bawah	1.2	1.4	1.3	1.3	0-4	0-4

Based on Table 3, which is about the muscle strength of patients who have had a stroke after coaching for 4 weeks, there is no significant difference in the average

muscle strength, but in the intervention group seen from the minimum-maximal data, before the intervention there is still a value of 0 for muscle strength, especially in the upper extremities, but after the intervention there is no muscle strength 0 but the minimum muscle strength found is 1.

2. Bi Variate Analysis

Table. 4. Results of bivariate analysis of knowledge, skills, muscle strength variables before and after the intervention in the intervention and control groups.

Variabel yang diukur	Nilai P-Value (Uji Wlcoxon	
	Control Group	Intervention Group
Knowledge	0.246	0.02
Skill	0.096	0.01
Upper Extremity Muscle Strength	0.059	0.026
Lower Extremity Muscle Strength	0.180	0.16

The results of the Wilcoxon Signed Ranks test showed there was no difference in the family care group for the knowledge variable in the control group with (p-value=0.246), (p-value=0.096) for the skill variable and there was no difference in upper extremity strength (p-value=0.095) san lower extremity strength pvalue=0.180. for the intervention group there were differences before and after the intervention for the knowledge variable (pvalue=0.02) and skills (P value=0.01) while for upper and lower extremity strength there was no difference.

Table 5. Comparative test results of family readiness variables (knowledge, skills) of the patient's family and the patient's muscle strength in the intervention and control groups after the intervention.

No	Variabel	N	Group Intervension Average±SD	Control Group Average±SD	p
1	Knowledge	13	83.5±10.4	57.5±9.6	0.000
2	Skill	13	79.7±11.5	48.3 ±9.6	0.000
3	Upper Extremity Muscle Strength	13	2.3±1.4	1.5±1.1	0.179
4	Lower Extremity	13	2.0±1.2	1.4±1.3	0.281

Muscle Strength					

The results of the Mann Whitney test to analyze differences in knowledge variables in the intervention and control groups were different (p value = 0.00) for the knowledge variable, there was a difference for the skill variable (0.000), there was no difference for the upper limb muscle strength variable (p = 0.179) and there was no difference for the lower limb muscle strength variable (p = 0.281).

DISCUSSION

Based on table 5 with the analysis using the Mann Whitney test results to analyze the difference in knowledge variables in the intervention and control groups, there is a difference (p value = 0.00) for the knowledge variable, there is a difference for the skill variable (0.000), there is no difference for the upper limb muscle strength variable (p = 0.179) and there is no difference for the lower limb muscle strength variable (p = 0.281).

Family readiness includes family knowledge and skills in caring for family members who have had a stroke (Macrae & Allan, 2018). The preparation of the post-intervention control group according to standard hospital procedures showed that most of the research samples were not ready because of their knowledge about stroke and skills in performing joint mobility exercises. or. The lack of knowledge and skills is influenced by the lack of medical information from nurses or other medical personnel tailored to the patient's illness and needs. This is in accordance with (Stinear et al., 2020) research that readiness is a person's psychological attitude before doing something, where readiness is influenced by himself or outsiders.

The research that the authors conducted based on field phenomena at the time the research was conducted, in the control group showed that the level of family readiness in caring for their family members who had a stroke was still low compared to the intervention group who received additional treatment. In addition to not receiving the research intervention, experience is another factor that affects the readiness of the next family. Experience is a process of learning and increasing the development of potential for better behavior (Hurford et al., 2020). The results of (Rost et al., 2022), showed that in the intervention group, the research sample had more experience in

caring for stroke patients than the control group. This shows that having better care experience will make it easier to understand information related to family training for stroke patients.

One of the factors that can influence this is because in the intervention group, in addition to being given standard procedures at the hospital, a stroke care coaching intervention was also provided for 4 meetings within a span of 2 weeks and accompanied by follow-up. Coaching given to families allows direct contact between clients and researchers to be more intensive. This is in accordance with Sahmad's research (2015) on stroke patients at Dr. Wahidin Sudirohusodo Makassar General Hospital in 2013 found that an increase in the value of readiness in the families of stroke patients was due to intense discussions conducted by researchers and patient families.

The researcher's study based on the phenomenon in the field in this study on the intervention group found that the level of family readiness in caring for their family members who had a stroke had increased. This is because the coaching method used is an intervention that facilitates clients in setting and achieving their own health goals. This is in line with research conducted by Bennet et al (2018) by providing coaching, clients gain knowledge, skills, tools and confidence to become active participants in care so that they can identify their own health goals to be achieved. The coachee approach process by training clients to achieve consistent goals can support and encourage clients to change one's behavior and attitudes.

The current intervention approach for stroke patients is more focused on acute care during hospitalization, whereas subsequent care at home is something that needs to be monitored, especially from health workers so that stroke patients can recover as soon as possible (Perceka et al., 2022). The coaching approach is one option that can be used to assist families of stroke patients in overcoming problems that arise during the care process, increasing their readiness to care for their family members who have experienced a stroke and creating positive communication to provide coaching and assistance to families of stroke patients (Leynov et al., 2021). The coaching process includes three actions: connecting, using a structured process, and sharing knowledge

(Teasell et al., 2020) Connecting is defined as involving the provision of emotional support and the establishment of a therapeutic relationship, then a coach will guide the client in a structured manner with the aim of achieving predetermined goals, and facilitate the exchange of information related to achieving goals. Based on literature studies that researchers have conducted, coaching techniques can be used with families of stroke patients as primary caregivers (Sari et al., 2020).

Family caregiver-based coaching is a method of guidance and training given to families who have family members who suffer from stroke, with the aim of increasing family knowledge and skills in managing family members who suffer from stroke. Coaching is done by providing relevant information to families, as well as providing exercises related to handling family members who suffer from stroke. The change in the level of family readiness in caring for stroke patients in the rehabilitation phase at home after coaching is in line with the research of (Lakka et al., 2020), where family caregiver-based coaching increases family knowledge and skills in managing family members who have suffered a stroke.

Providing coaching intervention is one of the efforts in overcoming nursing problems with physical mobility disorders, this is in accordance with (Shi et al., 2019), that mobilization support is included in the main intervention for patients with physical mobility disorders, where the goal itself is to facilitate patients in increasing physical movement activities. Mobilization support can involve the family to assist the patient in increasing movement. Another study, namely research by (Powers et al., 2018), showed that stroke care training for caregivers of stroke patients can increase joint range, where contraction and relaxation reactions during movement.

The implementation of coaching in family members can also be influenced by several factors such as age, gender, education, work and experience (Too et al., 2018). The results of the study of caregiver age characteristics showed that in the intervention group and control group most were in the late adult age category (31-40 years). The increasing age of a person is positively correlated with the insight and knowledge he has so that it is easier to receive better or positive information for health (Hathidara et al., 2019). In addition, late adulthood is a productive age range where work productivity

can be optimized (III et al., 2019). Other characteristics in this study are gender, the gender of family members involved in stroke care is female, women have a character that tends to be more painstaking in doing things (IV & Harris, 2020). Another characteristic is the level of education, the highest level of education in this study is in the high school range, the higher the education, the easier it is for someone to receive all forms of information. The next factor is experience, experience makes an important contribution in determining the next action taken.

Coaching in this study was provided through a five-stage coaching process based on the theory of (Maria, 2021), namely by establishing a relationship (connect), conversation goals (outcome), raising awareness (awernness), action steps (course) and reviewing learning (highlights). Through coaching techniques, a trusting relationship can be built, which is essential for building long-term relationships with clients, and is the best way to provide consistent care that can truly improve patient well-being and readiness (Karim & Lubis, 2017).

Readiness is a psychological aspect that a person has before doing something, where readiness can be influenced by internal and external factors. In this study, coaching can be utilized as a form of monitoring health worker support for families as caregivers for stroke patients. According to (Rembet & Wowor, 2023), families participate in providing health services to the community. family involvement becomes even greater when a family member needs ongoing support due to a health problem.

Based on the results of the research obtained, the provision of Coaching is proven to have a positive influence on family readiness in caring for family members who have had a stroke. The use of coaching methods provided based on the family as a caregiver allows the development of behaviors that can encourage an individual's awareness to achieve satisfactory results (… et al., 2022).

For stroke patients, the family is very important in the healing program for stroke patients at home due to the physical limitations they experience. The role of the family in the care of their family members is as a motivator, educator, facilitator, initiator, care giver, as well as coordinator and mediator (Pulatov, 2022). The family plays an important role in providing and providing care to families who experience

illness, as well as a support system for family members who experience illness. The family is a direct care provider (family caregiver) in every situation (healthy-sick) members (Stroke & ..., 2022).

CONCLUSIONS AND SUGGESTIONS

The results of the research that has been done can be concluded that there is a significant influence between Coaching Stroke care based on Family Caregiver on the readiness of the patient's family (Knowledge, Skills) who experienced a stroke.

ACKNOWLEDGEMENT

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