

Psychoeducation Increasing Coping and Reducing the Family's Burden of Caring for the Elderly with Stroke Rehabilitation



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ABSTRACT: Stroke is one of the diseases that most often causes a decrease in functional abilities in sufferers, giving rise to severe dependency and dependency (Riskasdas) 2018. Stroke treatment to increase independence and minimize dependency is carried out through a stroke rehabilitation program. The family as caregivers plays an important role in providing post-stroke rehabilitation at home. However, sometimes families experience stress due to the burden of caring for elderly people with stroke. One effort that can be made to overcome psychological impacts is through psychoeducational activities. The aim of the research is to determine the effect of multimedia-based psychoeducation to improve coping and reduce the burden on families in caring for elderly people in stroke rehabilitation. This research used a pre-posttest with control on 30 families selected by purposive sampling. Data were collected using closed questions and the results of data collection were analyzed using univariate and bivariate using t tests. The research results showed that the multi-media based psychoeducational intervention showed significant differences between the intervention group and the control group in aspects of stroke coping and rehabilitation. Information from the research results can be used by officers to determine the effect of psychoeducation to improve coping and reduce the burden on families caring for elderly people who are undergoing stroke rehabilitation

KEYWORDS: Psychoeducation, Multimedia, Family Coping, Elderly; stroke rehabilitation

INTRODUCTION

In the current era, there has been a shift from infectious diseases towards non-communicable diseases (NCDs). One of them is a stroke. Stroke is one of the diseases that most often causes a decrease in functional abilities in sufferers, giving rise to severe dependency and dependency (Riskasdas) 2018. Comprehensive stroke treatment to increase independence and minimize dependency in stroke patients can be done through a rehabilitation program (Winstein et al., 2016)

In Indonesia, this rehabilitation program is usually carried out in hospitals or clinics by physiotherapists and other health professionals who are members of the rehabilitation team. Rehabilitation services at hospitals or clinics are usually outpatient services, where stroke sufferers must come to the hospital or clinic every day or several times a week. Sometimes stroke patients cannot do this, especially those who experience severe to total dependence. Results Research regarding the effects of home-based stroke rehabilitation on increasing the functional abilities and independence of stroke sufferers has been conducted in several countries, such as Denmark (Rasmussen et al., 2016), Thailand (Chaiyawat & Kulkantrakorn, 2012), and Norway (Askim et al., 2016). 2010) with various rehabilitation models and results. Various factors can prevent stroke patients from receiving a rehabilitation program at a hospital or clinic. These include not having family to accompany them, a long distance from the hospital or clinic, not being able to take public transportation, and not being able to have to queue for a long time at the hospital or clinic. With these various obstacles, stroke sufferers who might be able to gradually recover if they receive an appropriate rehabilitation program become worse and complications arise that could have been avoided, such as joint pain and stiffness, wrong walking patterns, posture disorders and chronic weakness. Therefore, a program is needed that can overcome the obstacles of stroke patients through education on home-based rehabilitation activities. A home-based rehabilitation program is a rehabilitation program carried out in the patient's own home accompanied by his family. This program aims to increase the patient's independence and functional ability in carrying out basic activities such as eating, drinking, dressing, urinating, defecating, bathing, walking and climbing stairs. One important factor that needs attention is how the family supports the elderly. According to Friedman (2010), family support is the attitude, actions of family acceptance towards family members, in the form of informational support, assessment support, instrumental support and emotional support. So family support is a form of interpersonal

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relationship that includes attitudes, actions and acceptance of family members, so that family members feel that someone is paying attention. Handayani quoted Friedmen's statement stating that family support is a form of family therapy that is very valuable because it can make elderly people feel at ease in living the rest of their lives. This statement is also supported by Kuntjoro 2012, which states that in order to help the elderly remain active, family and social support is needed (Kuntjoro, 2012).

The results of Rahayu and Isnaeni's research in 2017 strengthen the importance of family support for the elderly by stating that there is a relationship between family support and the risk of falls at home in the elderly. Based on the available information, there is a need for rehabilitation measures in the form of exercise and health education with the help of multi-media facilities and assistance from the family. This is because with the development of information and communication technology (ICT), health education media are becoming increasingly diverse. Multi-interactive media is an interesting media because it is a combination of animated images and sound so that health education becomes more interesting. Dian Novitasari's research in 2016 on the influence of using interactive multimedia on students' ability to understand mathematical concepts proved that interactive multimedia has an effect on their ability to understand a concept that is the target of research. Today's technology, especially in the field of multi-media, has increasingly developed. Multimedia is a combination of various media (file formats) in the form of text, sound images, videos and animations which are packaged in digital files. According to Sadiman .et al (2010:14) Educational media as a learning resource that can channel messages can help overcome errors in learning. Interpretation. The ability to understand is very important because by understanding, interventions can be carried out as expected in the context of promotion and prevention. These promotive and preventive efforts play a very important role in preventing and overcoming falls in the elderly.

RESEARCH METHODS

This research is a quantitative research, the research design used is quasi-experimental with a pre-post test design with control with psychoeducational intervention using multimedia to improve coping and reduce the burden on families of caring for the elderly, stroke rehabilitation. The sample was 30 families with elderly people undergoing stroke rehabilitation. Data analysis was carried out using paired t tests and unpaired t tests. This research has received ethical review approval from the Poltekkes Kemenkes Jakarta 3

RESULTS AND DISCUSSION

This study aims to obtain an overview of the effect of interactive multimedia-based psychoeducational interventions to improve coping and reduce the burden on families caring for the elderly with stroke rehabilitation. The number of respondents in the sample was 30 people for the intervention group and 30 people for the control group. Furthermore, the research results are described as follows:

A. Research Results

1. Description of Respondent Characteristics

The results of the analysis of the characteristics of respondents in the intervention group and control group based on age are as follows:

A. Table 5.1: Characteristics of respondents based on age

Variable	Group	N	Mean	Median	SD	Mean- max
Age	Intervention	30	47,35	48,00	11,598	25-65
	Control	30	46,90	66,00	4,350	28-65

The results of the analysis show that the average respondent in the intervention group was 47.35 years, the youngest age was 25 years. And the oldest was 65 years old, while in the control group the average respondent was 46.90 years old with the youngest age being 28 years old and the oldest being 65 years old.

B. Table 5.2: Distribution of Elderly Characteristics Based on Gender, Education, Occupation and relationship with the elderly

Variable	Intervention Group		Control group		N	%
	N	%	N	%		
Gender						
1. Boy	8	26,7	7	23,3	15	25
2. Female	22	73,3	23	76,7	45	75

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Education						
1. Elementary school						
2. Middle school	5	16,7	7	23,3	12	20
3. High school	8	26,7	9	30,0	17	28
4. Academ/Universuty						
	17	56,7	9	30,0	26	44
	0	0	5	16,7	5	8
Work						
1. Self-employed	5	16,7	3	10,0	8	13
2. Civil servants	0	0	1	3,3	1	2
3. Rich	4	13,3	5	16,7	9	16
4. Housewife	19	63,3	19	63,3	38	63
5. Not workin	2	6,7	2	6,7	4	6
Relationship with elderly						
1. Child						
2. Son-in-law	15	50,0	19	63,3	34	56
3. Wife/husband	0	0	1	3,3	1	2
4. Others	11	36,7	8	26,7	19	32
	4	13,3	2	6,7	6	10

Table 5.2 shows that the characteristics of the intervention and control groups of women with educational background for the intervention group and control group, the majority of whom have a high school education, the occupation for the intervention group and control group is housewife (IRT), while the relationship with the elderly in the intervention group and the majority of the control group is as follows. Child.

2. Homogeneity test

This test is a requirement before carrying out a bivariate test. The test used for numerical data uses the independent t test. This test is used because it compares the means of two groups of data, namely the intervention group and the control group. The chisquare test is used for categorical data, because the data you want to compare is the difference in proportions from two groups of data. In detail, it can be seen in the following table:

Table 5.3: Analysis of equality of respondents based on age, gender, education, employment, and relationship with the elderly between groups

Variabel		Intervensi (n=70)		Control (n=70)		Nilai p*
		N	%	N	%	
1. Age	< 60 years	24	80	24	80	0,559
	> 60 years	6	20	6	20	
2. Gender	1. Male	8	26,7	7	23,3	0,404
	2. Female	22	73,3	23	76,7	
3. Education	1. Elementary school					0,058
	2. Middle school	5	16,7	7	23,3	
	3. High school	8	26,7	9	30,0	
	4. Academy/University					
		17	56,7	9	30,0	
	0	0	5	16,7		

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4. Employment	1. Entrepreneur	5	16,7	3	10,0	0,442
	2. Civil servants	0	0	1	3,3	
	3. Employee	4	13,3	5	16,7	
	4. IRT	19	63,3	19	63,3	
	5. Not working	2	6,7	2	6,7	
5. Relationship with the elderly	1. Child	15	50,0	19	63,3	0,078
	2. Son-in-law	0	0	1	3,3	
	3. Wife/husband	11	36,7	8	26,7	
	4. Others	4	13,3	2	6,7	

The results of the equality test analysis (homogeneity) in table: 5.3 above show that there are no differences in age, gender, education, employment, and relationship with the elderly between the intervention group and the control group before being given the Multimedia-Based Psychoeducation intervention.

3. Differences in scores before and after intervention with Multimedia-Based Psychoeducation in the intervention and control groups

Table 5.4: Analysis of scores for problem solving, psychoeducation and rehabilitation of students before and After Multimedia-Based Psychoeducational Intervention

Variable		Mean	SD	95% CI	T	P value
problem solving coping	Group. Intervention Before	42,27	3,523	--8.216-4251	-6.431	0.000
	After	48,50	4,599			
	Difference	-6.233				
Group Control	Before	45,90	3.933	-1.732-0132	-.1.755	0.090
	After	46,70	3.218			
	Difference	-0.800				
psychoeducation	Group. Intervention Before	58,53	4.369	-9.564-3369	-4.270	0.000
	After	65,00	6.988			
	Difference	-6.467				
Group Control	Before	61,20	6.059	1.299-0.568	-0.568	0.574
	After	61,70	6.972			
	Difference	0.500				

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stroke rehabilitation	Group. Intervention Before After Difference	81.13 87.57 -6.433	13.930 6.521	12.592-0274	-2.136	0.041
	Group Control Before After Difference	69,03 71,07 -2.033	10.420 9.461	-4.521-0454	-1672	0.105

The results of the analysis showed that there was a significant difference in problem-solving coping in the intervention group and the control group before and after the Multimedia-Based Psychoeducation intervention (p value = 0.000) with the difference in the average value of the increase in problem-solving coping scores in the intervention group being greater (difference value = 6.233). while in the control group the average difference in scores was 0.800. Furthermore, the results of the analysis of the Psychoeducation variable also showed that there was a significant difference in the intervention group before and after the Multimedia Based Psychoeducation intervention (p value = 0.000) with the difference in the average value of the increase in Attitude score in the intervention group being greater (difference value = 6,467) whereas in The control group had an average difference in score of 0.500. Likewise, the Stroke Rehabilitation variable showed that there was a significant difference in the intervention group before and after the Multimedia Based Psychoeducation intervention (p value = 0.041) with the difference in the average value of increasing Skills scores in the intervention group being greater (difference score = 6.433), while in the control group the average difference score was 2.033

4. Differences in problem solving, psychoeducation and stroke rehabilitation coping scores between groups

Table 5.5: Analysis of problem solving coping scores, psychoeducation and stroke rehabilitation after intervention using multimedia-based psychoeducation

Variables	Group	N	Mean	SD	95% CI	F	P value
problem solving coping	Intervention	30	48,50	4.599	-0.251-3.851	6.389	0.014
	Control	30	46.70	3.218			
Psychoeducation	Intervention	30	65.00	6.988	0.059-6.659	1.953	0,040
	Control	30	61,70	5.972			
Stroke rehabilitation	Intervention	30	87.57	6.521	9.094-17.906	2.010	0.000
	Control	30	74.07	10.140			

The results of the analysis show that there is a difference in problem solving coping ($p= 0.014$) between the intervention group and the control group after the Multimedia Based Psychoeducation intervention. Likewise, there was a difference in psychoeducation between the intervention group and the control group ($p= 0.040$). Likewise, there was a difference in stroke rehabilitation ($p= 0.000$) between the intervention group and the control group after the Multimedia Based Psychoeducation intervention.

B. DISCUSSION

1. Respondent characteristics

The results of the study based on the characteristics of respondents which included age, gender, education, employment, and relationship with the elderly between groups showed that there were no differences in age, gender, education, employment, and relationship with the elderly between the intervention group and the control group before being given a psychoeducational-based intervention. Multimedia, shows the equality of intervention and control respondents with a strong level of homogeneity. The

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characteristics of respondents can influence the client's stroke rehabilitation program. Results of homogeneity test analysis using the t test because it compares the means of the two groups, namely the intervention group and the control group.

The results of the equality test analysis showed that there were no differences in age, gender, education, employment and relationship with the elderly between the intervention group and the control group before being given the multi-media based psychoeducational intervention, meaning that all respondents as well as those in the control and intervention groups had the same characteristics in terms of aspects, age, , education, employment and relationships with elderly people undergoing stroke rehabilitation

2. Coping in resolving family problems in solving the problem of caring for the elderly with stroke rehabilitation

Based on the research results, it is known that there is a difference in problem solving coping ($p=0.014$) in the intervention group and the control group before and after the multimedia psychoeducation intervention. There was also a difference in psychoeducation between the intervention and control groups ($p=0.040$) and in the aspect of stroke rehabilitation there was a difference ($p=0.000$) in the intervention group and the control group after the multimedia psychoeducation intervention was carried out.

Stroke is a disease that causes a decrease in functional abilities in the sufferer, causing dependence on the family or environment. Family as a source of social support can be a key factor in implementing stroke rehabilitation. Conflicts that occur in the family can make situations and conditions worse. Some of them are caused by feelings of not being appreciated, jealousy between families, privacy issues being disturbed, the economy, poor communication, and religious differences within the family. Without realizing it, conflicts that occur in the family can have a negative impact on family members. Even though the family is not always a positive source of mental health, they are most often an important part of the healing process (Kumfo in Videbeck, 2008).

Psycho-education is an effort made to strengthen coping strategies in overcoming problems from the psychological aspect experienced by families in caring for elderly people undergoing stroke rehabilitation, such as anxiety problems. Family anxiety in caring for elderly people with stroke rehabilitation can vary in the form of restlessness, feelings of discomfort, disturbed sleep patterns, digestive disorders. Concentration disorders and somatic disorders. In an effort to solve problems, according to researchers, each individual will try to get out of a situation that makes him anxious, so this shows that psychoeducation is really needed to help families determine effective coping strategies while caring for family members with stroke rehabilitation. Family coping is a positive response in accordance with the affective problem, perception and response used by the family and its subsystem to solve a problem or reduce stress caused by problems or events such as stroke rehabilitation (Friedman, Bowden & Jones, 2010). Coping is an effort made by each individual to overcome the problems faced. Adaptive coping mechanisms from the family in resolving stroke rehabilitation problems due to stressors or pressure in the form of rational and constructive Psycho-education has an important role in the interaction between stressful situations and adaptation in the form of efforts to overcome the demands experienced by controlling emotional responses as a coping strategy. by family. The family is the smallest social unit which is an important element in a person's important social life. A family consists of family members who are interconnected and interdependent in providing support, love and attention in harmony carrying out their respective roles for a common goal (Irma, 2015). Family support in stroke treatment in the form of regular rehabilitation can minimize disability due to stroke and help elderly people carry out their daily activities independently.

According to research by Setryaningrum, Rosalina and Wakhid (2012), the higher the family support for stroke patients, the more obedient they are to undergoing the rehabilitation program. Therefore, the role and support of the family is very necessary in accompanying stroke patients in undergoing rehabilitation. Along with rehabilitation activities as a care process for stroke sufferers, families will experience physical and emotional exhaustion. To overcome this, families need to carry out coping strategies while caring for the elderly with stroke rehabilitation, such as seeking social support and positive reappraisal, planful problem solving and positive reappraisal simultaneously in overcoming the stress caused by stroke rehabilitation and all its problems.

3. Reduce the burden on families caring for the elderly with stroke rehabilitation

The burden of caregiving is defined as the extent to which the care giver can feel their emotional state and physical health, social life and financial status as a result of caring for the elderly (Jagannarhan, Thirrhalli, Hamza Nagendra & Gangadhar; 2014). The results of the study show that there is a significant difference in reducing the burden on the family with problem solving coping. in the intervention group and control group after the Multimedia Based Psychoeducation intervention. Likewise, there was a difference in psychoeducation between the intervention group and the control group ($p= 0.040$). Likewise, there was a difference in stroke rehabilitation ($p= 0.000$) between the intervention group and the control group after the Multimedia Based Psychoeducation intervention.

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Elderly people with post-stroke are a condition that must receive special treatment, namely through rehabilitation. The results of research conducted by Yudi H, Ardianto, Rijal and Fadhia Adliah (2020) showed that after being given a home-based stroke rehabilitation program, the treatment group experienced increased muscle strength, decreased risk of falls, and improved ADL independence, a review from Mayo (2016) showed that stroke elderly who were treated at home without receiving a home-based rehabilitation program had a higher risk of dependency and death than stroke elderly who received a home-based rehabilitation program. Research conducted by Berg et al. (2016) in Adelaide, Australia showed that home-based rehabilitation assisted by family or people caring for the elderly had a significant effect on the quality of life of stroke elderly. The same results were also obtained in the research of Vloothuis et al. (2019) conducted in Amsterdam, a home-based rehabilitation program was actually better at dealing with anxiety in stroke elderly people and depression in close families who cared for stroke elderly people.

Coping strategies are efforts to change a person's knowledge and behavior continuously to manage specific internal or external demands that are considered to exceed a person's abilities. Everyone has a response to reduce stress when under excessive pressure. This is what is meant by stress coping efforts, so that each person has different stress coping Nur Fitriana, (2014). Every individual will try to get out of a stressful situation or condition. Families can carry out several coping strategies to solve problems in caring for elderly people with stroke rehabilitation through mentoring activities by relying on sources from their own environment or by using humor. Humor is recognized as one of the tools that can be used to relieve anxiety and tension in facing stroke rehabilitation in the elderly. Sharing or disclosure activities bring families closer to each other and maintain and overcome anxiety levels together. Also through joint problem solving through activities to discuss problems faced regarding stroke rehabilitation in the elderly or by normalization, namely the family's tendency to normalize everything when coping with the stressors of stroke rehabilitation in the elderly. In this study, assistance was carried out for 1 month with activities in the form of family assistance by cadres in carrying out stroke rehabilitation. This is intended so that the elderly feel more comfortable and improve when given support and training by those closest to them, so that it is hoped that the elderly will also be motivated to take part in post-stroke rehabilitation. In addition, home-based rehabilitation facilitated by elderly family members is more cost-effective and allows for carried out through supervision from a physiotherapist or rehabilitation team for the elderly family member. The results of research conducted by Widarti and Krisnawati (2017) showed that elderly people were given regular visits for three months. The results show that the intervention provided is in the form of home care to ensure that all stroke patients' needs are controlled and met. Capable reduce levels of anxiety and depression in stroke patients. It is hoped that the home-based rehabilitation program can relieve the patient's anxiety and depression by involving the people closest to the patient.

4. Increased coping and reduced family burden in caring for the elderly by stroke rehabilitation

The results of the study showed that there was a difference in problem solving coping ($p=0.014$) between the intervention group after the Multimedia Based Psychoeducational intervention in treating lasia with stroke rehabilitation and the control group. The impact of stroke causes physical and emotional changes in the elderly. Physical changes in the elderly will affect the level of independence. Independence is the freedom to act, not depend on others, not be influenced by others and be free to regulate oneself or one's activities, both individuals and groups, regardless of health or disease. Factors that influence the level of independence of elderly people in carrying out daily life activities, such as: age, immobility, and easy falling (Nugroho, 2012). Post-stroke physical treatment in the form of rehabilitation is an absolute necessity for the elderly to be able to improve their movement and therapy abilities. The rehabilitation program is a tertiary prevention effort with the aim of reducing weakness, disability and helping the elderly to adjust to their condition and maintain optimal quality of life. . The medical rehabilitation program is a form of integrated health service with a medical, psychosocial – educational – vocational approach to achieve the maximum possible functional abilities. Medical rehabilitation aims to overcome disease conditions through a combination of medical interventions, prevent complications, maximize functional abilities, increase activity, and strive for a quality life (Ministry of Health of the Republic of Indonesia, 2012). Rehabilitation provides great benefits in restoring movement and function to the elderly after a stroke, the enthusiasm and motivation of the elderly to exercise really helps speed up the recovery process and the role of the family in motivating them to do exercise, caring for and accompanying the patient is also very helpful in the success of rehabilitation (Nugraha, 2016)

Caring for elderly people with dependency due to stroke who require rehabilitation is a stressor for the family because it will be a burden for the family. Family burden, namely the burden of care, is defined as the extent to which the care giver can feel their emotional state and physical health, social life and financial status as a result of caring for the elderly (Jagannarhan, Thirrhalli, Hamza Nagendra & Gangadhar; 2014). The family will carry out coping strategies to overcome this problem. Coping is constant cognitive and behavioral change in an effort to overcome specific internal and/or external demands that exhaust or exceed an individual's resources (Lazarus, 1985 in Nasir and Muhith, 2011). Effective coping is coping that helps someone to tolerate and

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accept stressful situations and not worry about pressure that they cannot control (Lazarus and Folkman, (1984) in Nasir and Muhith, 2011). Coping mechanisms are ways that individuals use to solve problems, overcome changes that occur, and threatening situations, both cognitively and behaviorally. Coping is also referred to as a process in which a person tries to regulate the perceived discrepancy between desires (demands) and income (resources) which are assessed in a stressful situation, coping can be directed at improving or mastering a problem, it can also help change perceptions of the discrepancy, accept danger, escape or avoid stressful situations (Nasir and Muhith, 2011).

Family coping strategies for dealing with elderly stroke rehabilitation can also be carried out through external family coping strategies, although it is realized that internal coping sources are very important. Some external family coping strategies include: seeking information related to stressors resulting from stroke rehabilitation in the elderly from various sources, apart from that, maintaining affective relationships with the community as sustainable coping, where family members are active participants in organizations operating in the field of stroke rehabilitation problems. Efforts to strengthen support can be done through seeking spiritual support, such as prayer activities which are identified as very important efforts for families in reducing the family burden through activities to overcome stressors related to stroke rehabilitation in the elderly.

5. Interactive multimedia-based psychoeducation towards increasing coping and reducing it family burden in caring for elderly people with stroke rehabilitation

The results of the study showed that there was a significant difference in problem-solving coping between the intervention group before and after the Multimedia-Based Psychoeducation intervention and the control group. It was also found that the Attitude score in the intervention group was greater than the control group, as well as the aspect of the stroke rehabilitation variable showing that there was a significant difference in the group. intervention before and after the Multimedia Based Psychoeducation intervention where the Skills score in the intervention group was greater than in the control group. Caring for clients with stroke rehabilitation will cause stress for the family. Stressful conditions that can occur as a result of actions, stress regarding information, stress due to weakness, stress due to the environment and privacy, stress related to social and economic matters, stress related to spirituality as well as coping and perception of problems.

Psychoeducational intervention using interactive multimedia provides increased knowledge and skills to families in providing care to family members (elderly) who experience problems in their ability to carry out daily activities due to undergoing stroke rehabilitation. The experience of family members who have had a stroke and are undergoing rehabilitation with their ability to carry out daily activities disrupted, can have negative outcomes for caregivers, including anxiety, stress, strain, physical and mental health problems. Continuous and long-lasting stressors often produce negative impacts and can affect a person's ability to fulfill ADLs (Soetjningsih, 2010). Facing situations like this, families must have adaptive coping strategies to manage the full situation because dysfunctional family coping tends to use habitual defensive strategies which may not eliminate or eliminate and weaken stressors (Ebstein et al., 1993; Whit, 1974 in Friedman et al., 2010). The coping behavior used by caregivers in dealing with problems is the result of self-resilience (resilience) in resolving problems and solving problems (Hidayatulq, 2013). If the family or someone who helps them can identify an upcoming stressor, anticipatory guidance and preventative coping strategies are provided to weaken or reduce the impact of the stressor (Friedman et al, 2010). Caregivers who have good coping strategies will be able to reduce the increase in depression in caregivers and can solve the problems they are facing wisely.

A home-based rehabilitation program is a rehabilitation program carried out in the patient's own home accompanied by his family. . Through this program, a physiotherapist or rehabilitation team comes to visit the patient at home to provide home-based stroke rehabilitation. The aim of this program is to increase the patient's independence and functional abilities in carrying out basic activities such as eating, drinking, dressing, urinating, defecating, bathing, walking and climbing stairs. In accordance with the results of several studies that have been conducted in several countries, such as Denmark (Rasmussen et al., 2016), Thailand (Chaiyawat & Kulkantrakorn, 2012), and Norway (Askim et al., 2010) where the aim of the research is to find out the picture A home-based rehabilitation program that is suitable for stroke sufferers to reduce the level of dependency of stroke sufferers and increase functional ability to carry out daily activities.

The results of research by Sobirin, Husna and Sulistyawan (2014) regarding the role of the family in motivating stroke patients with patient compliance in participating in rehabilitation, stated that the less favorable role of the family was found to be greater in post-stroke patients who were disobedient in carrying out rehabilitation. The greater the role of the family in motivating post-stroke family members, the more confidence the post-stroke patient will have in recovering and undergoing rehabilitation. The role of the family in motivating the elderly with stroke rehabilitation will have a positive impact in the form of strength and enthusiasm in following the healing process regularly.

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The family is the smallest social unit which is an important element in a person's important social life. A family consists of family members who are interconnected and interdependent in providing support, love and attention in harmony carrying out their respective roles for a common goal (Irma, 2015). According to research by Setryaningrum, Rosalina and Wakhid (2012), the higher the family support for stroke patients, the more obedient they are to undergoing the rehabilitation program. Therefore, the role and support of the family is very necessary in accompanying stroke patients in undergoing rehabilitation. Family support is support consisting of verbal and non-verbal information or advice, real assistance or actions provided by social familiarity and obtained because of the presence of those who have emotional ties or behavioral effects on the receiving party (Nursalam & Kurnawati, 2007 in Setryaningrum 2012) . A stroke patient's recovery will be greatly helped if the family provides encouragement, shows confidence in the patient's improvement, and allows the patient to do as many things as possible and live as independently as possible. According to Jannah & Azzam (2015) Family support is an important factor that can influence a person's compliance with treatment or therapy. The family is the smallest and closest unit to the patient. The family has a role as a motivator and supporter for other family members in implementing health programs independently. The family is also the main caregiver for other family members who experience health problems. If someone in the family is sick, the other family will provide motivation so that the success of rehabilitation is greater.

CONCLUSIONS AND SUGGESTIONS

The research results show that:

1. Characteristics of respondents in the intervention group are families with an average age of 47.35 years, female with a high school educational background, and work as a housewife and relationship with the elderly as child, while in the control group it is a family with an average age 46.90 years old, with gender, female, high school educational background, and work as a housewife and relationship with the elderly as a child
2. Multi-media based psychoeducation has a different effect on the use of coping in the intervention group and the control group, where the difference in the average value of the increase in problem-solving coping scores is greater, as well as in the attitude aspect there is an increase in scores, and in the aspect of stroke rehabilitation activities there is a significant difference. which is in the aspect of improving skills
3. Psychoeducation is able to have an influence in solving coping problems and reducing the burden on families in caring for elderly stroke rehabilitation

REFERENCES

- 1) Basic Health Research (Riskesdas) (2018). *Research and Development Agency Ministry of Health of the Republic of Indonesia in 2018*
- 2) Winstein, C, et al. (2016). *Guidelines for adult stroke rehabilitation and recovery: a guideline for healthcare professionals from the american heart association / american stroke association*. AHA / ASA Guideline, 4(7), 1-73.
- 3) Rasmussen, R. S., Østergaard, A., Kjær, P., Skerris, A., Skou, C., Christoffersen, Overgaard, K. (2016). *Stroke rehabilitation at home before and after discharge reduced disability and improved quality of life: A randomised controlled trial*. *Clinical rehabilitation*, 30(3), 225- 236.
- 4) Chaiyawat, P., & Kulkantrakorn, K. (2012). *Effectiveness of home rehabilitation program for ischemic stroke upon disability and quality of life: a randomized controlled trial*. *Clinical neurology and neurosurgery*, 114(7), 866-870
- 5) Askim, T., Mørkved, S., Engen, A., Roos, K., Aas, T., & Indredavik, B. (2010). *Effects of a community base Intensive Motor Training Program Combined with Early Supported Discharge after Treatment in a Comprehensive Stroke Unit*. *Stroke*, 41(8), 1697- 1703. doi:doi:10.1161/STROKEAHA.110.584284
- 6) Friedman, M., Bowden, V., Jones, E. (2010). *Family Nursing: Research, Theory & Practice*. Ed 5. Jakarta: EGC.
- 7) Kuntjoro. 2012. *Social Support for the Elderly 2012*. www.e-psikologi.com
- 8) Rahayu, Siti Nurul And Isnaeni, Yuli (2017) *The Relationship Of Family Support With The Risk Of Falls At Home Among The Elderly In Notoyudan Rw 24 Pringgokusuman* , Thesis Yogyakarta. 'Aisiyiah University.
- 10) Arief S, Sadiman, (et al). 2010. *Educational Media*. Jakarta: Raja Grapindo.Homeland.
- 11) Irma Okta Wardhani, Santi Martini. (2015). *The Relationship Between Characteristics of Stroke Patients and Family Support and Compliance with Rehabilitation*. *Periodical Journal of Epidemiology*, Airlangga University
- 12) Setryaningrum, A., Rosalina & Wakhid.(2012). *Family support relationships in stroke patients to undergo physiotherapy at regional hospitals Semarang Regency*. Semarang: STikes Ngudi Waloyo Ungaran

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- 13) Jaganattan, A, Thirtahalli, J, Hamza, A. Nagendra, H, R, & Ganggadhar, B, N (2014). *Predictor Of Family caregiver burden in schizophrenia: Study from an inpatient tertiary care Hospital in India* Asian Journal of Psychiatry, 8, 94-98. <https://doi.org/10.1016/j.ap.2013.12.018>
- 14) Yudi Hardianto, Rijal Rijal, Fadhia Adliah. (2020). Overview of the Effectiveness of Program Implementation Home Based Stroke Rehabilitation in Makassar City. *Health Scientific Journal. Sandi Husada*. Volume 9 No 1, 2020
- 15) Mayo, N. E. (2016). Stroke Rehabilitation at Home. *Stroke*, 47(6), 1685-1691. DOI:10.1161/Strokeaha.116.011309
- 16) Berg, M. v. d., Crotty, M., Liu, E., Killington, M., Kwakkel, G., & Wegen, E. v. (2016). Early Supported Discharge by Caregiver-Mediated Exercises and e-Health Support After Stroke. *Stroke*, 47(7), 1885-1892. DOI:10.1161/STROKEAHA.116.013431
- 17) Vloothuis, J. D., Mulder, M., Nijland, R. H., Goedhart, Q. S., Konijnenbelt, M., Mulder, H., . . . Kwakkel, G. (2019). *Caregiver-mediated exercises with e-health support for early supported discharge after stroke (CARE4STROKE): A randomized controlled trial*. *PLoS One*, 14(4).
- 18) Nurfitriyani, 2014. The Influence of Student Creativity and Discipline on Calculus Learning Outcomes. *Formative Journal*, 4(3), p. 233
- 19) Widarti, L., & Krisnawati, K. (2017). Home Care Holistic on the Change of Anxiety and Depression for the Patient with Stroke Ischemic. *Jurnal Ners*, 7(2), 107-115.
- 20) Indonesian Ministry of Health. 2012. Guidelines for Implementing Stimulation, Detection and Early Intervention of Child Growth and Development at the Basic Health Service Level. Jakarta: Indonesian Ministry of Health.
- 21) Nugraha, A. et al. 2016. Family support in motivating patients to carry out post-stroke mobilization in general hospital (RSUD) Dr. Slamet District Garut. *Health Polytechnic Journal Bengkulu Province Vol. 3 no. 7*
- 22) Abdul Nasir, Abdul Muhith. 2011. Basics of Mental Nursing. Jakarta: Salemba Medika
- 23) Soetjningsih. Adolescent Growth and Development and Its Problems. Jakarta: Sagung Seto; 2010
- 24) Friedman, M., Bowden, V., Jones, E. (2010). *Family Nursing: Research, Theory & Practice*. Ed 5. Jakarta: EGC.
- 25) Hidayatulq, N. (2013). Resilient Personality: Strategy Achieving Happiness Lansia. <https://docs.google.com/viewer?a=v&q=cache:CJUL81FvGh4J:nurrohmahhidayatulq.ugm.ac.id/files/2001/13/Resilientpersonality.pdf+strategy+achieve+happiness+lansia>
- 26) Sobirin, C., Husna, E & Sulistyawan, A. (2014). The relationship between the role of the family in motivating post-stroke patients and patient compliance with rehabilitation at the Medical Rehabilitation Unit at Bukittinggi Stroke Hospital. Bukittinggi: Prima Nusantara Stikes
- 27) Irma Okta Wardhani, Santi Martini. (2015). The Relationship Between Characteristics of Stroke Patients and Family Support and Compliance with Rehabilitation. *Periodical Journal of Epidemiology*, Airlangga University
- 28) Setryaningrum, A., Rosalina & Wakhid. (2012). Family support relationships in stroke patients to undergo physiotherapy at regional hospitals Semarang Regency. Semarang: STikes Ngudi Waloyo Ungaran
- 29) Jannah & Azzam. 2015. The relationship between family support and compliance Physical rehabilitation of stroke patients at Yogyakarta City Regional Hospital. Yogyakarta: Muhammadiyah University of Yogyakarta



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