Empowerment of PKK Team as Caregiver for Stroke Patient in PB Selayang II Urban Village, Medan Selayang Sub-district

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Abstract: As one of the degeneratives disease with high disability consequences, stroke with all of its consequences will give physical, psychiatric and social burden on the patients, family and caregiver. One of the efforts to lessen the burden is behavioral intervention of the support system in didactic discourse and workshop of taking care post stroke patients at home. We use Wilcoxon Signed Rank bivariate test of several nursing domain which evaluated pre and post test, such as bathing, oral hygiene, wound prevention, dressing and feeding which giving changes that clinically and statistically significant ($p < 0.01$).

1 INTRODUCTION

Stroke is one of the non-contagious diseases that causes death and disability with 7% on the diagnosis of health workers (Riskesdas, 2013). The data obtained in the research shows the hemiparesis sinistra disability as many as 134 people (23.8%) and right hemiparesis 133 people (23.7%) (Rambe et al., 2012). This shows the high rate of post-stroke disability is still a problem even after the patient is treated at home (Nasution, 2007), (Misbach and Jannis, 2011).

Family has a vital role in primary support in terms of maintaining post-stroke health care during recovery and rehabilitation periods, where the absence of this support can result in significantly reduced recovery (Julianti, 2013). Not only in terms of health, the incidence of stroke that affects family member also provides psychosocial effect for patient and family and caregiver. In general, post-stroke caregiver people have poor quality of life compared to the general population, which is due to depression, anxiety, limitations in social relation, general health and even higher mortality (Rigby, 2009). The purpose of this community service activity is to increase public knowledge, especially cadres and Family Empowerment and Family Welfare Movement Team (TP PKK) about stroke so that it can act as a caregiver for stroke patients. The knowledge and skills gained during this activity are expected to be transmitted to other community members.

2 METHODS

This activity was conducted by 3 lecturers and this is an affiliation activity between Neurology Department and Nutrition Department, Faculty of Medicine, Universitas Sumatera Utara (USU) and PB Selayang II Urban Village, Medan Selayang Sub-District of assisted by students of Faculty of Medicine USU. The method of service is carried out by providing counseling and training to respondents (i.e. cadres and TP PKK) of PB Selayang II Sub-District of Medan Selayang, where the service is also in line with the work program of group 4 (Pokja 4) TP PKK which is managing health program, environmental sustainability and healthy planning.

The event was held at hall in Medan Selayang and attended by 25 respondents. Generally, activities were divided into 2 stages. Stage I (Counseling) was conducted with a lecture system on the basic concept of independent stroke nursing effectively. Prior to the lecture, the respondents were asked to complete a self-assessment questionnaire in the form of pre-test before lecture and post-test after lecture. Stage II (Training) was done by improving the skills of the respondents as caregiver, especially in self-care. In this stage II activity, the team was assisted in

training using standard patient acting as stroke (role-play workshop).

Counseling and training materials include the role of general stroke caregiver to basic training on self-care, such as bathing, feeding and toileting. At the end of the training period, it is expected that respondents who have undergone training can become skilled cadres who can care for stroke patients independently and even become trainers of trainers (TOT) by providing knowledge dissemination of care that has been obtained in surrounding communities.

The collected data will be analyzed using Wilcoxon Signed Rank test. The Wilcoxon test is used to analyze pairs of observed results from two different whether or not data. Wilcoxon test is used only for the type of interval or ratio data, and the data is not normally distributed. The normality test shows that knowledge and skill variables have $p<0.05$, which means that all of the variables are not normally distributed so that the data analysis is feasible using the Wilcoxon test

3 RESULTS

Based on the characteristic variables of respondents, as many as 25 respondents (100%) were women with an average age of 43 years (age range 18-65 years). The occupation of most respondents was housewife as many as 18 person (72%), 4 person (16%) was self employed (2%) and enterpriser was 2 person (8%) and civil servant was 1 people (4%). Referring to the lattest education, most of the respondents were graduated from senior high school as many as 22 person (88%), 2 person (8%) were graduated from higher education (D3/ S1) and 1 person was graduated from elementary school (4%). Marital status showed 20 respondents (80%) were married, 4 respondents (16%) were unmarried and one respondent (4%) had widow status. The average number of children owned by total respondents was as much as 2 people (range 0-6 people).

In terms of knowledge and information about stroke, as many as 21 respondents (84%) did not have a family who suffered a stroke, while as many as 4 people (16%) had a family who had been encountering or ever had encountered stroke. As many as 20 people (80%) had heard or had learned information about stroke, while 5 people (20%) had not known or never know information about stroke. Meanwhile, when viewed formal training aspect, as many as 24 people (96%) had never received general

care training and stroke treatment, while 1 respondent (4%) had ever attended the training.

In the bivariate test, based on pre-test result, it was found that the highest level of respondent knowledge before given the extension was in fair category as many as 13 people (52%), and in good category as many as 12 people (38%). This shows that the knowledge level of respondents as caregiver in stroke sufferer still in fair category. Meanwhile, after the post-test, the same results were obtained, the highest level of knowledge of the respondents after given extension was in fair category as many as 13 people (52%), and in the good category as many as 12 people (38%). Furthermore from the analysis results obtained Z score of 0.001 with a p value of 1,000 (p>0.05), so it was decided that there is no difference in the level of knowledge of respondents as caregivers in stroke patients before and after given counseling (Table 1).

Table 1: Knowledge level of respondents before and after counseling

Know-ledge	Pre-test		Post-test		Z-score	p-value
	n	%	n	%		
Good	12	48	12	48	0.001	1.000
Fair	13	52	13	52		
Poor	0	0	0	0		
Total	25	100	25	100		

Based on pre-test results obtained that all respondents (100%) failed in the skill of bathing procedure to the stroke patients. This shows that all respondents were not skilled in bathing stroke patients. Meanwhile, after the post-test, the results obtained were different i.e, all respondents (100%) were succeeded in the skill of bathing the stroke patient. Furthermore from the analysis results obtained Z score of -4.243 with a value of p value of 0.001 (p<0.05), so it was decided there is a difference in the skills of respondents in the procedure of bathing stroke patients before and after training (Table 2).

Based on pre-test results obtained that almost all respondents (84.0%) failed in the skills of oral procedures for cleaning stroke patients. This shows that there were still many respondents who were not skilled in cleaning the mouth of stroke patients. Meanwhile, after the post-test obtained different results, as many as (88.0%) of respondents succeeded in the oral procedure of cleaning the mouth of stroke patients. Furthermore from the analysis results obtained Z score of -4.243 with a value of p value of 0.001 (p<0.05), so there were differences in the skills of respondents in the oral

procedure of cleaning stroke patients before andafter training (Table 3). Based on pre-test results obtained that all respondents (100%) failed in skills or procedures to prevent injury in people with stroke. This shows that all respondents were not at all skilled in preventing the occurrence of injuries in people with stroke. Meanwhile, after post-test, there were different results, all respondents (100%) succeeded in skill of injury prevention procedure of stroke patient. Furthermore from the analysis results obtained Z score of -4.583 with a value of p value of 0.001 (p<0.05), so it was decided there was a difference in the skills of respondents in the procedure to prevent injury in stroke patients before and after training (Table 2).

Based on pre-test results obtained that all respondents (100%) failed in the skill of dressing procedures in patients with stroke. This shows that all respondents were not at all skilled in putting clothes on stroke patients. Meanwhile, after the post-test, there were different results, all respondents (100%) succeeded in the skills of dressing procedure in stroke patients. Furthermore, from the analysis results obtained Z score of -5,000 with a value of p value of 0.001 (p<0.05), so it was decided there was a difference in the skills of respondents in the procedure of dressing on stroke patients before and after training (Table 2).

Based on pre-test results obtained that most respondents (60.0%) failed in the of wearing trousers procedure on stroke patients. This shows that there were still many respondents who were not skilled in putting pants on stroke patients. Meanwhile, after the post-test, there were different results, all respondents (100%) succeeded in the skill of putting the pants on the stroke patient. Furthermore from the analysis results obtained Z score of -3.873 with a value of p value of 0.001 (p<0.05), so it was decided there was a difference in the skills of respondents in the procedure of putting pants on stroke patients before and after training (Table 2).

Based on pre-test results obtained that almost all respondents (96.0%) failed in the skills of giving food an beverage procedure to stroke patient. This shows that there were still many respondents who were not skilled in giving food and beverage to stroke patients. Meanwhile, after the post-test, there were different results (80.0%) of respondents succeeded in the skill of giving food and beverage to stroke patient. Furthermore from the analysis results obtained Z score of -4.359 with a value of p value of 0.001 (p <0.05), so it was decided there was a difference in the skills of respondents in the giving food to stroke patients before and after training (Table 2).

Table 2: Skill procedure of bathing stroke patients in respondents before and after training.

Skill variables	Pre-test		Post-test		Z-score	p-value
	n	%	n	%		
Bathing procedure						
Success	0	0	18	72	-4.243	0.001
Fail	25	100	7	28		
Total	25	100	25	100		
Mouth Cleansing						
Success	4	16	22	88	-4.243	0.001
Fail	21	84	3	12		
Total	25	100	25	100		
Injury prevention procedure						
Success	0	0	21	84	-4.583	0.001
Fail	25	100	4	21		
Total	25	100	25	100		
Dressing procedure						
Success	0	0	25	100	-5.000	0.001
Fail	25	100	0	0		
	25	100	25	100		
Putting pants procedure						
Success	10	40	25	100	-3.873	0.001
Fail	15	60	0	0		
Total	25	100	25	100		
Giving food and beverage						
Success	1	4	20	80	-4.359	0.001
Fail	24	96	5	20		
Total	25	100	25	100		

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4 DISCUSSION

Intensive training of knowledge interventions to post-stroke caregiver will provide a higher rate of qualitative knowledge than control group (Bakas, 2009). Skills are skills in performing tasks that are the result of training and education (Dunnette, 2006). (Evita, 2013) concluded that the standard training of infant growth monitoring on Puskesmas' cadres increases knowledge, skills and compliance when compared to only the modules (Priyono, 2017). Priyono's research results also explain the difference of knowledge and skills before and after emergency education at the MANTAP agent (community responsive) (Evita, 2013). This is the reason why empowerment and training of families and caregivers especially in post-stroke care is essential because good knowledge and skills will not only speed up the patient's recovery but also avoid families and caregivers from burnout due to lack of knowledge and skills.

5 CONCLUSIONS

Intervention of caregiver behavior and knowledge of stroke in this study provide statistically significant differences in caregiver skills in caring for post-stroke patients, so further research is needed to assess the effect of long-term intervention.

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