



IMPROVING THE SELF-EFFICACY OF POST-STROKE PATIENTS USING THE APPLICATION OF LIFE REVIEW THERAPY

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ABSTRACT

A stroke is a health problem that requires special medical attention, due to its long-term effects such as disability, anxiety, depression, and lack of social participation, which are the causes of patient's self-efficacy being reduced. High self-efficacy is needed so that patients will be motivated to take therapy programs, increase their self-esteem and desire for recovery. The purpose of this study is to determine the self-efficacy improvement of post-stroke patients when provided with life review therapy. This study was quasi-experimental. A purposive sampling technique was used to collect the data, with a sample of 60 respondents (30 controls and 30 interventions). Data was collected using a stroke self-efficacy questionnaire. The statistical tests used were Wilcoxon and Mann Whitney. The patient's self-efficacy in the intervention group showed a change in category in the post-test result (before the intervention it was mostly in the moderate category, after the intervention it went into the high category) with statistical test results $p=0.00$. The control group remained mostly in the moderate category on both pre-test and post-test results with statistical test results $p=0.002$. There was a comparison of the effectiveness of applying life review therapy between the two groups ($p=0.000$). The results of this study indicate that the administration of life review therapy can improve the self-efficacy of patients after a stroke.

Keywords: self-efficacy, stroke, life review therapy

ABSTRAK

Stroke menjadi masalah kesehatan yang memerlukan perhatian khusus, dampak yang diakibatkan jangka panjang seperti kecacatan, kecemasan, depresi dan kurangnya partisipasi social, yang menjadi penyebab efikasi diri pasien berubah. Efikasi diri yang tinggi diperlukan agar pasien termotivasi untuk mengikuti program terapi, meningkatkan harga diri dan semangat untuk sembuh. Peneliti ini bertujuan untuk mengetahui peningkatan efikasi diri pasien pasca stroke dengan pemberian intervensi life review therapy. Desain penelitian adalah Quasi eksperimen. Data dikumpulkan dengan teknik purposive sampling dengan jumlah sampel 60 responden (30 kontrol dan 30 intervensi). Pengumpulan data menggunakan instrument kuesioner stroke self-efficacy. Uji statistik yang digunakan adalah Wilcoxon dan Mann Whitney. Efikasi diri pasien pasca stroke pada kelompok intervensi menunjukkan ada perubahan kategori, dimana sebelum dilakukan intervensi sebagian besar pada kategori sedang menjadi kategori tinggi dengan hasil uji statistik $p=0.00$. Sedangkan pada kelompok kontrol sebagian besar tetap pada kategori sedang dengan hasil uji statistic $p=0.002$. Ada perbandingan efektifitas penerapan terapi life review antara dua kelompok ($p=0.000$). Hasil penelitian ini menunjukkan bahwa pemberian terapi life review dapat meningkatkan efikasi diri pasien pasca stroke.

Kata kunci: self-efficacy, stroke, terapi life review

BACKGROUND

A stroke is a condition that arises when the brain's blood vessels cannot supply sufficient oxygen to the brain cells (Gillen, 2016). A stroke has an impact on physical health (disability), psychological wellbeing and social functioning. Limitations in the post-stroke patient's physical functioning usually cause them to lose their jobs and leisure activities, which can increase their risk of suffering from anxiety and depression (Korpershoek, Bijl, & Hafsteinsdottir, 2011). However, psychological and social problems faced by stroke patients are often ignored. When stroke patients return to live in the community, they are left to face a new reality with changes in conditions due to the stroke, which can cause their condition to worsen (Maujean, Davis, Kendall, Casey, & Loxton, 2013).

There have been an increase of number of stroke patients across several countries in Europe from 1.1 million in the year 2000 to 1.5 million in 2015 (Ghani, Mihardja, & Delima, 2016). A comparison of Riskesdas (Riset Kesehatan Dasar, Basic Health Research) 2013 to Riskesdas 2018 shows that the prevalence of stroke increased from 7 to 10.9 percent (Kemenkes RI, 2018). In the Regional Public Hospital, RSUD Gambiran Kediri, stroke is ranked first, with an average number of 45 hospitalized patients in the Pamenang Room every month (Medical Records of Gambiran Hospital, 2017).

Suffering from a stroke is a serious problem that requires special attention, because of its long-term health effects such as disability, emotional disturbances (anxiety), depression, and reduced social participation (Sadler, Wolfe, Jones, & Mckevitt, 2017). Stroke patients with disabilities must be able to adjust to their lives by learning new behaviors and new lifestyles (Riazi, Aspden, & Jones, 2014). Stroke patients must seek immediate treatment as physical disability may cause psychological problems that can cause patient self-efficacy alteration. Self-efficacy is very important for post-stroke patients because they are expected to manage their disease (Jones & Riazi, 2010). High self-efficacy can help someone to accept

their condition. On the contrary, low self-efficacy will cause feelings of anxiety that will have an impact on the patient's recovery process (Agustini, 2016).

Life review therapy is a kind of therapy where individuals can review their life history. Life review therapy activates the mechanism of recalling past life experiences so that patients know who they are. The mechanism of recall can improve psychological wellbeing, reduce anxiety and improve patient self-efficacy (Setyoadi & Kushariyadi, 2011). In the development of the world of research, the effects and changes in a person's personal life can occur due to the provision of life reviews. The development of neuroscience research explains that the patterns of memory stored in the brain affect one's cognitive and emotional states (Birren & Svensson, 2013). Effective life review therapy is given as initial therapy in patients with psychological problems such as anxiety and depression (J. Korte, Bohlmeijer, Cappeliez, Smit, & Westerhof, 2011). Previous studies have also developed more about the life review as a form of intervention to improve spiritual well-being, where the results obtained make a positive impact (A'la, Yosep, & Agustina, 2017).

The results of previous studies have explained that there was an influence of life review therapy on depression in the elderly (Aswanira, Rumentalia, & Vausta, 2015). As well as life review therapy application on psychological problems such as anxiety, this is expected to be able to turn depression due to stroke into positive thoughts so that the patient's self-efficacy to recover increases and patients become eager to undergo the treatment programs regularly and consistently. The purpose of this study was to analyze the post-stroke patient's self-efficacy to recover in increments after applying life review therapy.

METHOD

The research method used a quasi-experimental design with non-equivalent pre-test post-test with a control group. The study population was stroke patients in Pamenang Room A and Pamenang Room B at RSUD Gambiran

Kediri. The samples taken were part of the population that met the inclusion criteria: 1) acute phase stroke patients, 2) able to communicate well, 3) no dementia or senility, and 4) residing in the Kediri region. The numbers of samples in this study were 60 respondents, taken using purposive sampling, who were then divided into two groups, and then the groups were randomly selected: 30 respondents were treated with life review therapy interventions and 30 respondents as a control group (standard intervention).

Respondents who met the research criteria were informed of the research procedure and signed the informed consent if they were willing to participate. Respondents in the treatment group received standard hospital interventions and were given daily life therapy interventions for 30 minutes and attended three meetings for one week. Respondents in the control group received only standard interventions. A patient self-efficacy assessment was carried out before and after the intervention in both groups. In the life review therapy, the story-telling method was used, in which patients' were asked to share their experiences, which include telling the story of; 1) pleasant and unpleasant experiences in their childhood, 2) pleasant and unpleasant experiences in adolescence, 3) pleasant and unpleasant experiences in adulthood, and 4) pleasant and unpleasant experiences at the present

time (Misesa, 2012).

Valid and reliable test results obtained with the average value of sig $r=0.001$ and r alpha value= 0.943 . Responses were defined based on value 1: unsure, 2: hesitant, 3: sure enough and 4: very confident. The maximum score that could be achieved by patients was 60, and the lowest score was 15. The highest score obtained was then multiplied by 100. Based on the values obtained, the results were then classified into three categories: high self-efficacy if the score was ≥ 42 ($\geq 70\%$), moderate self- efficacy if the score was 21-41 (35%-69%), and low self-efficacy if the score was < 21 ($< 35\%$).

Data analysis was conducted using SPSS software. The data consisted of univariate and bivariate tests. The univariate was used to determine the frequency of data distribution. The bivariate test was performed to determine the characteristics of the difference between respondents using the chi-squared test. A bivariate test was also performed using the Wilcoxon test to determine differences in self-efficacy before and after the life review therapy intervention in both groups. Mann Whitney test was conducted to determine the significance of the intervention between the two groups. The ethics committee approved this research protocol (Institut Ilmu Kesehatan Bhakti Wiyata Kediri No. 143 / PP2M-KE / IV / 2018).

RESULT

Table 1. Frequency distribution of respondent's characteristics

Variable	Treatment group (n=30)		Control group (n=30)		P-value
	N	%	N	%	
Age (in years)					
≤50	10	33.3	12	40	0.592
>50	20	66.7	18	60	
Gender					
Male	13	43.3	10	33.3	0.426
Female	17	56.7	20	66.7	
Type of stroke					
Hemorrhagic	4	13.3	3	10	0.688
Non-hemorrhagic	26	86.7	27	90	
Education					
Low education (≤senior high school)	22	73.3	24	80	0.542
Higher education (>senior high school)	8	26.7	6	20	

*Chi-squared test

Table 1 above shows the characteristics of respondents based on age, which are mostly > 50 years in both the treatment group and the control group. Based on gender, most of the respondents in either the treatment group or the control group were female (56.7%) and (66.7%), respectively. Based on the type of stroke, almost all respondents suffered from a non-hemorrhagic stroke. By level of education, in the treatment group, most of

the respondents had a low level of education (73.3%), while in the control group, almost all of the respondents had a low level of education (80%). The results of the analysis of different tests between the intervention group and the control group showed that the respondents' age, sex, type of stroke, and education was $p > 0.05$. It indicates there was no difference between the treatment group and the control group.

Table 2. Self-efficacy of post-stroke patients in the treatment group and in the control group

Category	Treatment group (n=30) N (%)		P-value	Control group (n=30) N (%)		P-value
	Before	After		Before	After	
Low	8 (26.7)	0	0.000	8 (26.7)	3 (10)	0.002
Moderate	18 (60)	8 (26.7)		19 (63.3)	19 (63.3)	
High	4 (13.3)	22 (73.3)		3 (10)	8 (26.7)	

*Wilcoxon test

Table 2 above shows that self-efficacy in the treatment group before the intervention was mostly in the medium category (60%), while after the intervention; it was generally in the high category (73.3%). There are differences in the results of self-efficacy before and after the intervention (p -value=0.000). Table 2

also shows that the self-efficacy in the control group before and after the standard intervention was made was in the medium category (63.3%). There are differences in the results of self-efficacy before and after the intervention of life review therapy (p -value=0.002).

Table 3. The effect of post-stroke life review therapy on patients' self-efficacy

Variable		Treatment group (n=30) N (%)		Control group (n=30) N (%)		P-value
Self-efficacy before	Low	8 (26.7)		8 (26.7)		0.851
	Moderate	18 (60)		19 (63.3)		
	High	4 (13.3)		3 (10)		
Self-efficacy after	Low	0		3 (10)		0.000
	Moderate	8 (26.7)		19 (63.3)		
	High	22 (73.3)		8 (26.7)		

*Mann-Whitney test

Table 3 shows that the self-efficacy of post-stroke patients in the intervention group showed an increase, whereas, before the intervention, the majority was in the moderate category. As for the self-efficacy of post-stroke patients in the control group, it mainly remained in the moderate category. However, it can be seen in Table 3 above that the increase that occurred in the intervention group was higher than the increase in the control group. From different tests results in the two groups before the administration of the intervention, a p -value > 0.005 was obtained. These results indicate that there were no differences between the two

groups. From the results of different tests in the two groups after the intervention, the p -value was < 0.005 . It confirms that there are differences in the two groups; the application of life-review therapy on the self-efficacy of post-stroke patients was effective.

DISCUSSION

The average age of respondents in this study was > 50 years and the majority was female. The non-hemorrhagic stroke type occurred more than hemorrhagic, both in the treatment and control groups. From the results of different tests between the two groups, age, gender, type of

stroke, and education showed p-value > 0.005. It indicates that there was no difference between the treatment group and the control group. Previous studies also found that many stroke events occurred at the age of > 50 years (81.25%) and occurred mostly in females (54.17%). The type of stroke was mostly non-hemorrhagic stroke (61.4%) (Dinata, Safrita & Sastri, 2013). Age is one of the factors associated with a stroke that can not be changed. The increasing of age will also increase the risk of stroke because as the age increases, the blood vessel system experiences a setback, which is what puts a person at risk of experiencing a stroke. Previous studies have found different results, where more strokes occur in men than in women (Wayunah & Saefulloh, 2016).

The self-efficacy of stroke patients in the control group before being given the life-review therapy intervention was mostly in the moderate category (60%), while after the intervention, most of them were in the high category (73.33%). For the control group before and after the standard intervention, most of them were in the moderate category (63.3%). There was an increase in both groups, but the increase in the average treatment group was higher than the intervention group. The results of this research show that there was an effect from the application of life review therapy on the self-efficacy of post-stroke patients ($p=0.000$).

The increase in self-efficacy in patients can be influenced by several aspects such as improving the patient's physical condition, decreasing the level of stress, experiencing positive emotions and self-reflection on the body (Rustika, 2012). The application of life review therapy is given to stroke patients by encouraging patients to remember, evaluate, and analyze their past experiences in-depth to gain self-confidence. Negative patient experiences are logically analyzed, while positive experiences are discussed together so that patients feel more useful and their self-confidence in recovery becomes stronger (Sharif, Jahanbin, Amirsadat, & Moghadam, 2018). The results of previous studies explain that the balance of psychological factors and self-

efficacy is essential in achieving optimal stroke recovery (Schmid et al., 2012). The previous research also mentioned that self-efficacy affects the quality of life of patients. It plays a role in the initiation of health behavior, so it is expected that an increase in self-efficacy in health behaviors will improve patient health and the quality of life of patients. Self-efficacy can affect the quality of life which has an impact on improving patient health, where a good quality of life is a critical aspect for the survival of stroke patients themselves, so they can continue to live their lives well in society (Kurniawan, Andini, & Agustin, 2019).

The researchers' argument in this matter is that the change in self-efficacy of post-stroke patients increases due to the intervention of life review therapy, which eliminates or reduces stress levels, as well as feelings of fear, tension, and anxiety. All these conditions turn out to be positive, or put the patient's mind in a calmer state, and therefore improve the patient's self-efficacy. It is supported by previous research that short-term life review is effective in improving the spiritual wellbeing of terminally ill cancer patients, and alleviating psychosocial distress and promoting a good death (Ando, Morita, Akechi, & Okamoto, 2010). Previous research conducted found that a simple life review carried out on terminal cancer patients with cognitive impairment was effective in increasing spiritual well-being, dying peacefully and reducing psychological pressure on patients and its impact on patients' daily lives (Ando, Minota, Shibukawa, & Kira, 2012). Patients who have high self-efficacy will also be more involved and participate in various activities and will also have a stronger desire and ability to survive better than patients with low self-efficacy (Thornton, 2019).

The results of previous studies also found that life review therapy affects the level of anxiety in adolescent girls of divorced families (Somaye, 2012). The results of previous studies explain that effective life review therapy can be used as a non-pharmacological therapy to reduce anxiety or depression in post-stroke patients (Hadidi, Wagner, &

Lindquist, 2017). Other studies also mention that life review therapy is effective in reducing depressive symptoms, in which patients with higher levels of depressive symptoms, neuroticism with depressive symptoms, neuroticism and bitterness revival are also able to develop alternative stories about life that are more positive, meaningful and empowering. So the life review is appropriate to be developed for various patients with psychological problems (Jojanneke Korte, 2012). So therefore, it can be concluded that, from the results of this study and the previous research, the provision of life review therapy can change the patient's feelings to be positive and trigger high self-efficacy. The therapy also decreases anxiety or depression, which in turn has a significant effect on stroke patients' good disease management (Korpershoek, Bijl, & Hafsteinsdottir, 2011).

The results of previous studies explain the necessity of a functional level of self-efficacy in obtaining the freedom to fulfill the needs of daily activities, improving quality of life and reducing the psychological impact that often occurs in post-stroke patients (Frost, Weingarden, Zeilig, Nota, & Rand, 2015). Life review therapy is the main thing for patients in achieving personal meaning in life, such as learning from bad experiences, remembering solutions to solve problems in the past, integrating memories into better life stories to produce good beliefs to find life goals (Westerhof, Bohlmeijer, Beljouw, & Pot, 2010). Therapy life review can make post-stroke patients more familiar with the reality of life that occurs amongst patients, besides therapy life review reactivates the patient's memory from past life's experiences until the present, which is what causes post-stroke patients to increase their self-efficacy and further boost the quality of life for the patient.

CONCLUSION AND RECOMMENDATION

Life review therapy has a significant effect on the self-efficacy of post-stroke patients. Life review therapy can change the feelings of patients to be positive so that they can improve their self-

efficacy. Life review therapy interventions in post-stroke patients are highly recommended. Future researchers are expected to conduct studies of life review therapy intervention in post-stroke patients undergoing treatment at home. Post-stroke patients, while having home treatment, might experience the impact of stroke for the rest of their life, which can cause them to lose their self-confidence to recover from their illness.

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