

Reduction of Hopelessness Through Spiritual Emotional Freedom Techniques Therapy in Chronic Kidney Disease Patients Undergoing Hemodialysis

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Abstract

Hopelessness has been identified as a major psychological problem that exacerbates the clinical outcomes of chronic kidney disease (CKD) patients undergoing hemodialysis (HD). Hopelessness is mostly reduced by cognitive therapy, but the results are delayed, so a spiritual element is needed. Spiritual emotional freedom technique (SEFT) therapy can reduce hopelessness because it not only focuses on cognition, but also involves spiritual, psychological, and physical elements. This study aimed to determine the effects of SEFT therapy on the hopelessness of CKD patients undergoing HD. This research was quasi-experimental with pre- and post-test control group designs. The sample size was 64 respondents, who were divided into two groups, each consisting of 32 respondents who were selected by purposive sampling. SEFT therapy was conducted four times. Hopelessness was measured using the Beck Hopelessness Scale (BHS). The data were analyzed by paired t-test and independent samples t-test. Before receiving SEFT, the two groups did not indicate differences in hopelessness ($p = 0.141$). However, after receiving SEFT, the respondents' hopelessness in the experimental group was reduced significantly ($p = 0.000$). Hopelessness in the experimental and control groups also differed significantly after the intervention ($p = 0.000$). This study revealed that SEFT reduced the hopelessness of CKD patients undergoing HD. SEFT therapy can be implemented in clinical practice areas of nursing to support patient care.

Keywords: chronic kidney disease, hemodialysis, hopelessness, spiritual emotional freedom technique

Abstrak

Mengurangi Keputusan Melalui Terapi Spiritual Emotional Freedom Techniques Pada Pasien Penyakit Ginjal Kronik yang Menjalani Hemodialisis. Keputusan telah diidentifikasi sebagai salah satu masalah psikologis utama yang memperburuk hasil klinis pasien penyakit ginjal kronik (PGK) yang menjalani hemodialisis (HD). Keputusan sebagian besar dikurangi dengan melibatkan unsur kognitif, akan tetapi hasilnya mengalami keterlambatan sehingga dibutuhkan unsur spiritual. Terapi spiritual emotional freedom technique (SEFT) dapat mengurangi keputusan karena tidak hanya berfokus pada kognitif tetapi juga melibatkan unsur spiritual, psikis, dan fisik. Penelitian ini bertujuan untuk mengetahui pengaruh terapi SEFT terhadap keputusan pasien PGK yang menjalani HD. Penelitian ini merupakan quasi-experiment dengan rancangan pretest dan posttest control group. Besar sampel sebanyak 64 responden yang dibagi menjadi dua kelompok, dan masing-masing kelompok terdiri dari 32 responden dipilih secara purposive sampling. Terapi SEFT dilakukan sebanyak empat kali. Keputusan diukur menggunakan Beck Hopelessness Scale (BHS). Data dianalisis dengan uji paired t-test dan uji independent samples t-test. Sebelum menerima SEFT kedua kelompok tidak menunjukkan perbedaan keputusan ($p = 0,141$). Namun, setelah menerima SEFT, keputusan responden di kelompok eksperimen berkurang secara signifikan ($p = 0,000$). Keputusan pada kelompok eksperimen dan kontrol juga berbeda secara signifikan setelah intervensi dilakukan ($p = 0,000$). Studi ini mengungkapkan bahwa SEFT mengurangi keputusan pasien PGK yang menjalani HD. Terapi SEFT dapat diimplementasikan dibidang praktik klinis keperawatan untuk mendukung perawatan pasien.

Kata Kunci: hemodialisis, keputusan, penyakit ginjal kronik, spiritual emotional freedom technique

Introduction

Non-communicable diseases, such as chronic

kidney disease (CKD), are one of the biggest causes of death in developed and developing countries, and they increase every year. Appro-

ximately 11 – 13% of the world's population suffers from CKD. The global burden of disease (GBD) reported that CKD was the 11th leading cause of death in 2016 for 1.2 million people (Cockwell & Fisher, 2020). The prevalence of CKD in America is reported at 30 million people, while the prevalence of CKD in Asia is 10 – 18% (Khan et al., 2018). The highest prevalence's of CKD in Asia are in Japan (28.8%) and Bangladesh (20.8%) (Khan et al., 2018). The Basic Health Research Report disclosed that the prevalence of CKD in Indonesia was 2% in 2013 and increased by 3.8% in 2018. In East Nusa Tenggara, the prevalence of CKD increased and became the third-highest disease in 2018 (Trihono et al., 2018).

Hemodialysis (HD) is the main treatment procedure for end-stage renal disease (ESRD) patients, but HD treatment has an impact on the physical and psychological aspects. The physical side effects of HD are blood pressure disorders, fatigue, nausea, vomiting, anorexia, muscle cramps, pruritus, headaches, and cold sweats. Meanwhile, the psychological side effects of HD include experiencing stress, feeling depressed, embarrassment about appearance changes, feelings of worthlessness, anxiety, having disturbed thought processes, and facing decreased concentration. These changes require adaptation; thus, when patients cannot adapt to the changes, they will experience hopelessness (Alshraifeen et al., 2020).

According to Ercan and Demir (2018) hopelessness is more commonly found and frequently occurs in HD patients than other psychological disorders such as anxiety. Kusumawardani (2018) found that more than 90% of patients undergoing HD experienced hopelessness. Hopelessness is a condition that causes stress, sociopathy, sleep disorders, decreased immunity, and psychological disorders that disable sufferers from thinking about their future. Heidari et al. (2019) explained that the most destructive impact of hopelessness is patients' intention to end their lives.

Currently, many studies have identified the impact of hopelessness on worsening the clinical outcomes of CKD patients (Jamaludin et al., 2022; Ok & Kutlu, 2019). However, there is limited research investigating interventions for hopelessness reduction (Hernandez & Overholser, 2021). Previous research has focused more on psychological disorders, such as anxiety and depression, but the focus of interventions to reduce hopelessness is still very rarely done, even though hopelessness is a predictor and subscale of depression as well as a cause of suicide (Heidari et al., 2019). The intervention that was introduced earlier is an intervention centered on somatic and cognitive aspects. These interventions have a delaying effect and change over time, so additional elements are needed (Chatwin et al., 2016). The aspect that needs to be added is spirituality. Empirically, spirituality has a close relationship with physical, cognitive, and psychological (Al-Ghabeesh et al., 2018). The combination of physical, cognitive, and spiritual aspects is seen in the spiritual emotional freedom techniques (SEFT) therapy; this therapy complements the previous therapy (Zainuddin, 2012).

SEFT therapy combines spiritual elements and fingertip tapping on key points in the body's energy meridians to reduce psychological and physical problems due to emotional and psychosomatic disorders. Spirituality and tapping in SEFT are believed to be determinants of health, creating physical and psychological well-being (Zainuddin, 2012). Spirituality is a unique force that harmonizes the physical, psychological, and social dimensions and is needed to overcome the psychological effects of illness and improve quality of life. When spiritual health is threatened, individuals easily experience hopelessness. Spirituality has been identified as the most important contributor to achieving health balance, coping mechanisms, and accelerating the recovery process (Heidari et al., 2019). Also, tapping in SEFT can neutralize negative emotions so that hopelessness can be reduced (Zainuddin, 2012).

Previous studies have revealed that SEFT therapy can reduce depression and anxiety in HD patients, but the effect of SEFT on hopelessness is still not clearly explained. In fact, to reduce anxiety and depression, what needs to be done is to modify and overcome hopelessness (Mac Giollabhui et al., 2018). The application of SEFT to hopelessness is based on the results of a systematic review from Hernandez and Overholser (2021) which states the need for therapy that includes physical, cognitive, and spiritual aspects to reduce hopelessness. SEFT, may have a higher effect on hopelessness compared to cognitive therapy. Also, there are limited studies regarding SEFT therapy on the hopelessness of HD patients. However, the hopelessness of HD patients deserves attention. In Indonesia, more than 90% of CKD patients undergoing HD experience hopelessness (Kusumawardani, 2018). This research can be considered in nursing services as a nursing intervention to reduce hopelessness. To the best of our knowledge, studies related to SEFT and hopelessness in HD patients are very limited; therefore, it is considered important to investigate the effect of SEFT on the hopelessness of CKD patients undergoing HD.

Methods

This research employed a quasi-experiment method with two-group, pre- and post-test control group designs. The respondents were selected using a purposive sampling technique. The sample size was calculated by the Lemeshow et al.'s (1991) formula, we used the Sample Size 2.0 application with standard deviation = 6.82, power = 80%, and $\alpha = 0.05$. To avoid dropout, the number of respondents was increased by 10%; in total, this study involved 64 respondents. The respondents were divided into experimental and control groups (each group consisted of 32 respondents). The patients with morning HD schedules were in the experimental group, while the patients with afternoon HD schedules were in the control group.

The inclusion criteria of respondents were CKD

patients undergoing HD with full consciousness (compos mentis), the ability to communicate well, read, write, and cooperate, willingness to voluntarily participate in the research, patients with national health insurance, and CKD patients undergoing regular HD for less than one year. The exclusion criteria were patients who suddenly experienced deterioration, and patients who did not follow the complete research process.

The research employed the Beck Hopelessness Scale (BHS) instrument compiled by Beck et al. (1974) to measure hopelessness. The instrument consisted of 20 items, with 11 negative statements and nine positive statements. If the respondent answers a positive statement with a “true,” then gets a score of 0 is recorded and a “false” answer gets a score of 1. A negative statement with a “true” answer gets a score of 1, and a “false” answer gets a score of 0. The total score ranges are 0 – 20. The Indonesian version of the BHS instrument was translated using the back-translation method. Validity and reliability obtained a coefficient alpha = 0.766 (Sarfika, 2019). In this study, the results of the validity test obtained $r_{\text{count}} > r_{\text{table}}$ (0.3610). The results of the reliability test obtained Cronbach's alpha = 0.76.

This study received ethical approval from the Health Research Ethics Commission of the Faculty of Medicine, University of Nusa Cendana, East Nusa Tenggara, with the number: 32/UN15.16/KEPK/ 2020. The objectives, benefits, and procedures of this study were explained to the respondents. They voluntarily participated in this research by signing informed consent forms, and their confidentiality was maintained. Since this study was conducted during the pandemic, the health protocols of COVID-19 were applied. The data collection was completed in August 2020 at the regional hospital in East Nusa Tenggara, Indonesia.

The intervention was given four times within two weeks. SEFT therapy was given for 15 – 25 minutes. Before starting therapy, we ensured a

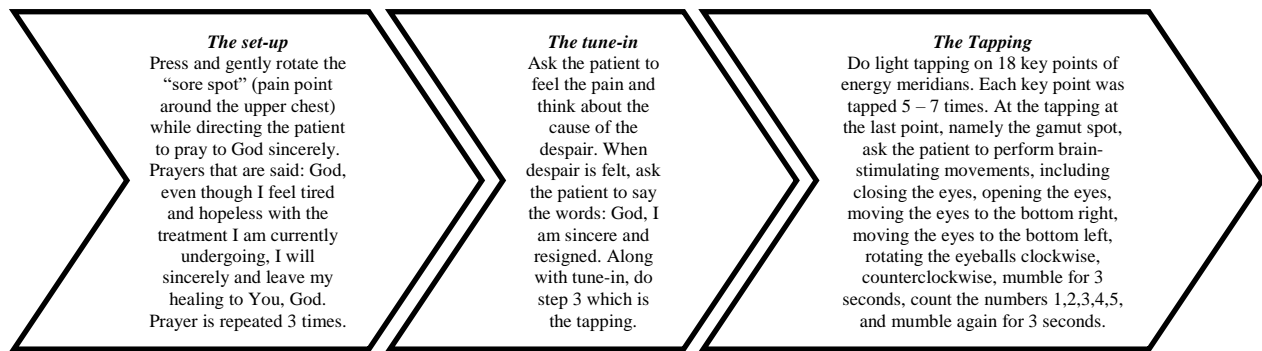


Figure 1. SEFT Steps

quiet environment and maintained patient privacy. The patient was arranged in a lying position, and then guided to perform SEFT, which consisted of three steps (as described in Figure 1).

After conducting the three steps, the patients took a deep breath and exhaled while expressing gratitude. After completion of therapy, we filled out the observation sheet indicating that the patient had undergone therapy. At the end of the fourth therapy, a measurement of hopelessness was carried out. The control group only received standard care, but did not receive SEFT therapy. Standard care for HD patients includes cardiovascular risk reduction, treatment of albuminuria, avoidance of potential nephrotoxins, adjustments to drug dosing, and monitoring for complications of CKD (Chen et al., 2019)

Quantitative data were analyzed using the Statistical Package SPSS 18. The normality of the data was tested with the Shapiro-Wilk test ($p < 0.05$), and the data was found to be normally distributed. Data on the characteristics of respondents between groups were analyzed using the Levene test and Chi-Square. A paired t-test was used to test for differences in hopelessness before and after the intervention. Moreover, this study employed an independent sample t-test to determine the groups' differences in hopelessness.

Results

The participants were predominantly males, had a primary education level, were occupied as

farmers, and suffered from hypertension as a comorbid disease. The average age of the participants was 56 years. All aspects of the characteristics obtained a p -value > 0.05 , which means the two groups were not different in terms of each characteristic. Table 2 shows that those who received SEFT therapy had a greater reduction in hopelessness than those who did not receive SEFT therapy. Based on the paired t-test, there was a significant difference in hopelessness in the experimental group ($p = 0.000$). Table 3 shows that the two groups had not shown differences in hopelessness before receiving SEFT therapy ($p = 0.141$). However, after receiving SEFT therapy, the two groups showed differences in hopelessness ($p = 0.000$).

Discussion

The results showed that SEFT therapy affected the hopelessness of CKD patients undergoing HD. This finding is similar to that of previous studies, which revealed that SEFT therapy could reduce the hopelessness of CKD patients undergoing HD (Farina, 2014). The effectiveness of SEFT in dealing with psychological disorders is not only present in CKD patients undergoing HD but also in other chronic diseases such as hypertension, and HIV/AIDS (Ardan et al., 2020).

One main reason that SEFT therapy is effective in reducing the hopelessness of HD patients is the spiritual aspect. The values of spiritual beliefs effectively and efficiently increase activity,

Table 1. Characteristics of Participants

Characteristics	Experimental Group (n = 32)		Control Group (n = 32)		p
	f	%	f	%	
Sex					
Male	23	71.9	21	65.6	0.365**
Female	9	28.1	11	34.4	
Education					
Primary school	10	31.2	12	37.5	0.143**
Junior high school	6	18.8	6	18.8	
Senior high school	8	25.0	7	21.9	
Diploma	2	6.2	1	3.1	
Bachelor degree	6	18.8	6	18.8	
Occupation					
Housewife	7	21.9	9	28.1	0.053**
Farmer	10	31.2	13	40.6	
Retired	4	12.5	2	6.2	
Entrepreneur	7	21.9	3	9.4	
Religious leader	1	3.1	0	0	
Civil servants	3	9.4	5	15.6	
Comorbidities					
Hypertension	17	53.1	18	56.2	0.079**
Diabetes mellitus	8	25.0	3	9.4	
Hypertension and diabetes mellitus	4	12.5	6	18.8	
Gastritis	2	6.2	2	6.2	
Heart disease	1	3.1	3	9.4	

Noted: * Levene test, ** Chi-Square

Table 2. The Effect of SEFT on the Hopelessness of CKD Patients Undergoing HD within Groups

Hopelessness	Experimental Group (n = 32)		Control Group (n = 32)	
	Mean ± SD	p	Mean ± SD	p
Pre	12.03 ± 1.90	0.000	11.37 ± 1.60	0.118
Post	8.40 ± 1.75		11.03 ± 2.11	

Table 3. Difference in Hopelessness Before and After Intervention Between Experimental and Control Group

Hopelessness	Experimental Group (n = 32)	Control Group (n = 32)	Mean Difference	p
	Mean±SD	Mean±SD		
Before	12.03±1.90	11.37±1.60	0.65	0.141
After	8.40±1.75	11.03±2.11	-2.62	0.000

improve physical and psychological functions, and counteract the effects of tension in life (Al-Ghabeesh et al., 2018). A study conducted by Heidari et al. (2019) found that spirituality can improve mental health so that hopelessness can be reduced. Likewise, spirituality practiced by HD patients can improve coping mechanisms

and reduce psychological stress, which has an impact on reducing hopelessness (Al-Ghabeesh et al., 2018). Also, spirituality not only reduces hopelessness but can also increase self-efficacy and medication adherence (Ok & Kutlu, 2019). These findings are inconsistent with those reported by Al-shraifeen et al. (2020) who claim-

ed that spirituality does not affect the psychological problems of HD patients. This difference was caused by the characteristics of the respondents and their low spirituality.

Spirituality by offering prayer has been proven to help those with chronic diseases, such as CKD and diabetes mellitus, achieve life goals in the context of adapting to changes in disease (Firdaus et al., 2020). The results showed that before being given SEFT, the average score of hopelessness was 12.03 ± 1.90 , and after being given SEFT, it was 8.40 ± 1.75 , while in the control group, hopelessness tended to persist (11.37 ± 1.60 vs. 11.03 ± 2.11). Similar to results of research by Ercan and Demir (2018) the hopelessness of HD patients is 9.63 ± 5.56 . However, it is different from the study by Ok and Kutlu (2019) which reported the hopelessness of HD patients was 7.61 ± 4.6 . This difference lies in the aspect of spiritual perception. The decrease in hopelessness in this study is believed to be due to the influence of spiritual elements on SEFT. This opinion is reinforced by Alshraifeen et al. (2020) who reported that spirituality prevents hopelessness.

SEFT therapy is an intervention that not only focuses on the spiritual aspects, but also combines other aspects, such as cognitive, psychic, and physical aspects, that enable patients to be more adaptable and improve their psychological, physical, and social well-being. The combination of these aspects is very effective in reducing hopelessness by tapping on 18 nerve points (energy meridians). SEFT therapy changes the negative thoughts of HD patients into positive thoughts by neutralizing them through prayer, surrender, and tapping (Zainuddin, 2012). Research conducted by Sulistianingsih et al. (2012) on 52 HD patients found that the difference in the hopelessness score between the intervention group and the control group was -0.115 . In contrast to this study, it was found that the difference in the decision score was -2.62 ($p = 0.000$). According to Zainuddin (2012), the power of prayer, sincerity, surrender, and continued tapping can strengthen the effect of SEFT

in reducing hopelessness.

From a physiological point of view, tapping on 18 points along 12 energy meridians can stimulate the gland pituitary to release endorphins and serotonin hormones, where these hormones can have the effect of reducing pain, calming, and causing feelings of happiness (Zainuddin, 2012). Previous research found that tapping was proven to improve mood and calm by 1.94 ± 3.03 ($p < 0.05$), and that tapping reduced tension (Al-Ghabeesh et al., 2018). Research by Suwito et al. (2019) found differences in serotonin levels in the group receiving tapping and affirmation-tapping using prayers, with the serotonin levels in the affirmation-tapping group being higher (0.69 ± 0.13 vs. 0.37 ± 0.06). This opinion is reinforced by Kusnanto et al. (2018) who mention praying by focusing attention and thoughts on God followed by tapping as in SEFT therapy will decrease cortisol and increase serotonin. As a result, the hopelessness of the respondents could be reduced.

Physiologically, hopelessness indicates an energy imbalance in the body and the endocrine system. Changes in the endocrine system can be evaluated by monitoring cortisol. SEFT intervention in the body's energy system can change neurotransmitter and cortisol levels (Kusnanto et al., 2018). Research by Pössel et al. (2015) showed that patients who experience hopelessness have an increase in cortisol, but spiritually can reduce this so that the hopelessness of respondents can be reduced. In line with Chatwin et al. (2016), their reported the effect of tapping to increase improvements across the spectrum of the body's physiological systems, which ultimately reduced psychological disorders, such as hopelessness.

The results of this study highlight the positive benefits of SEFT in reducing hopelessness in HD patients. The implementation of SEFT is easy, fast, has no side effects, and involves patients in maintaining health, and alleviating the burden of disease. SEFT makes a significant contribution to reducing hopelessness. Through

SEFT therapy, patients pray, sincere and express their feelings so that they can adapt to changes in disease, take treatment, and face the effects of HD with a positive attitude (Zainuddin, 2012). However, a limitation of this study is that there was no follow-up to measure hopelessness due to hospital restrictions after the data collection procedure was completed.

Conclusion

This study revealed that SEFT therapy reduced the hopelessness of CKD patients undergoing HD. SEFT therapy can be implemented in clinical practice areas of nursing to support the patient care of CKD patients undergoing HD.

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