ORIGINAL ARTICLE

Emotional Freedom Technique (EFT) Therapy on Chronic Kidney Disease (CKD) Patients to Reduce Fatigue

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ABSTRACT

Introduction: *Fatigue is one of the most common symptoms felt by patients who experience Chronic Kidney Disease, the level of fatigue experienced from low to severe. Some management to deal with fatigue has been done a lot, but the results have not been maximized. Emotional Freedom Technique (EFT) is a psychological therapy that can treat many diseases, both physical illness and psychological illness.* ***Objectives:*** *This study aims to determine the effect of EFT therapy on fatigue in CKD patients.* ***Methods:*** *This type of research is a quasi-experimental design with a control group pre-post-test Sample divided into two groups, consisted of 19 people, selected through purposive sampling.* ***Results:*** *The results showed that the p-value in the treatment group = 0,000 means that there is an effect of therapy EFT on health in CKD patients, whereas, in the control group, there is no difference with the p-value = 1,000. Discussion: The change in CKD patients' fatigue level after EFT therapy is due to a combination of techniques that support the effectiveness of EFT therapy.* ***Conclusion:*** *With this study, it is expected that hospitals can carry out EFT therapy to reduce fatigue in CKD patients to help cure patients.*

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1. Introduction

Chronic Kidney Disease (CKD) is a progressive impairment of kidney function that cannot be recovered. CKD is caused by the body's inability to maintain metabolism and failure to maintain fluid and electrolyte balance, which has an impact on urea. Patients with CKD have the characteristics of being persistent, incurable, and require treatment in the form of hemodialysis, peritoneal dialysis, kidney transplantation, and long-term outpatient care (Black & Hawks, 2014).

The prevalence of CKD in the world in 2011 was 2,786,000 people. In 2012 there were 3,018,860 people, and in 2013 there were 3,200,000 people. These data showed a six percent increase in morbidity in chronic kidney failure every year. Basic Health Research Data (Kementerian Kesehatan, 2013) stated that the prevalence of CKD in Indonesia was 0.2% of the total population, while in Bali, the prevalence of CKD was 816,000 out of a total population of 4,083,000 people. Based on data from the Indonesian Nephrology Association (Indonesia Renal Registry, 2015), the prevalence of CKD in Bali in 2015 was 1,006 people. Data from the Denpasar City Health Office stated that the exact number of CKD diseases in Denpasar was not known with certainty.

CKD patients need to receive therapy for helping the kidneys work, such as hemodialysis, peritoneal dialysis, or a kidney transplant. The therapy aims to prolong the patient's life but does not heal or restore the kidneys. Patients would be faced several problems and complications as

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well as various changes in the form and function of systems in the body that cause fatigue in patients (Smeltzer & Bare, 2013).

Fatigue is a subjective unpleasant feeling of exhaustion, weakness, and decreased energy, which is the main complaint of patients on dialysis (prevalence reaches 60-97%). The condition of fatigue in CKD patients undergoing hemodialysis can cause decreased concentration, malaise, sleep disturbances, emotional disturbances, and decreased ability of activities daily living (Kurniawaty et al., 2020; Suli et al., 2019; Yazid et al., 2020). Those all could reduce hemodialysis patients' quality of life (Agustiyowati et al., 2018; Joshwa & Campbell, 2017; Setyawati, 2010).

Several conditions can affect fatigue in CKD patients, particularly uremia, anemia, malnutrition, depression. Uremia in CKD patients undergoing hemodialysis can cause the patient to lose appetite, nausea, vomiting, loss of energy and protein, and decrease carnitine production, decreasing lean energy production and becoming fatigued (Mardiyah et al., 2017; Sullivan, 2009).

Many actions or therapies are used by someone who has CKD, one of which is pharmacological or drug therapy. Patients with chronic renal failure must undergo regular hemodialysis therapy (2-3 times a week) for 3-4 hours (Septiwi, 2013). The patient's dependence on hemodialysis machines throughout his life can lead to conditions such as uremia, anemia, malnutrition, depression, and a lack of physical activity that will affect physicality and cause fatigue (Agustiyowati et al., 2018; Mardiyah et al., 2017; Nugraha et al., 2020; Septiwi, 2013).

Methods of handling fatigue are carried out in two ways, namely pharmacology and non-pharmacology. Pharmacology methods such as adding L-carnitine, vitamin C, and erythropoietin and medication to control anemia. The non-pharmacological methods including exercise, yoga, relaxation, acupressure, acupuncture, electrical stimulation, and dialysis (Dewi et al., 2018). Exercise may help reduce depression and fatigue among hemodialysis patients. The exercises referred to aerobics, stretching muscles, and using tools and progressive muscle relaxation. However, exercise has not been able to deal with fatigue because doing actions such as aerobic, stretching, and muscle relaxation require much energy, which will increase fatigue in patients. Several studies suggest that relaxation techniques consider improving the condition of hemodialysis patients, especially patients who experience fatigue. However, patients with overcome fatigue need to get actions or interventions to circulate energy throughout the body, such as acupuncture or EFT. There is a higher risk for acupuncture because needles must be done professionally. Otherwise, EFT therapy is more practical, easy, and effective (Dewi et al., 2020).

Emotional Freedom Technique (EFT) is a therapy using a psycho-emotional healing method adopted from the acupuncture or needling method. This method uses light tapping with the index's tips and middle fingers (tapping) on 12 meridian points of the body. EFT therapy is more practical because it does not use needles inserted into the body, such as acupuncture, so there are no dangerous side effects. The emotional Freedom Technique proves that good health depends on a balance of proper energy flow throughout the body (Dewi et al., 2020).

EFT therapy can treat a variety of physical complaints. This finding proven through various studies, as follows EFT affects reducing blood pressure in hypertensive patients. EFT also is included in primary care as a safe, fast, reliable, and effective treatment for physical and psychological aspects. EFT was tested on patients with frozen shoulders. The results indicated stiffness and pain on the patient's shoulders reduced and even disappeared (Dewi et al., 2018, 2020).

According to a preliminary study carried out on January 21, 2019, patients with the most CKD disease during the last three months were at Wangaya Hospital with 42 patients, and the most were in the third classroom in Cendrawasih room with 28 patients from November 2018. Until January 2019, the results of interviews on January 21, 2019, with four patients experiencing CKD and all patients experiencing the same complaints of fatigue.

2. Methods

This research was conducted after obtaining permission from the research committee of the Regional Hospital of Wangaya Denpasar and Regional Hospital of Mangusada Badung from March 25 to April 25, 2019. The research design was quantitative using the quasi-experiment pre- and post-test with control group design. Based on the research design, the group was divided into two groups: one group as an intervention group carried out at the Regional Hospital of Wangaya Denpasar and the other as a control group at the Regional Hospital Mangusada Badung. Respondents used were respondents who fit the inclusive criteria, 38 respondents used, 19 people in the intervention group were CKD patients with fatigue in the Cendrawasih room at Regional Hospital of Wangaya Denpasar, and 19 respondents used in the control group were CKD patients who experienced fatigue in the Oleg room of Regional Hospital of Mangusada Badung. The intervention group was given Emotional Freedom Technique therapy once a day for three cycles for about 10 minutes for three days (Dewi et al., 2018), while in the control group, only SOP was given, and no EFT therapy was given.

This study used the FACIT scale, which has been validated by Jhonson P. Sihombing, in 2016, in his research entitled "Validation of the FACIT Fatigue Scale Questionnaire in Chronic Kidney Disease Patients Underwent Routine Hemodialysis." The validity test results showed r 0.331-0.636 (r table 0.279), and the reliability test showed Cronbach's Alpha 0.646 (Sihombing et al., 2016). The Functional Assessment Chronic Illness Therapy (FACIT) Fatigue Scale Questionnaire is an instrument to determine the patient's fatigue level. This questionnaire has 13 closed statement items with categories 0 (Very Tired), 1 (very tired), 2 (a little tired), 3 (a little tired), 4 (not tired), the sum of all items with a total score of at least 1 and the maximum 52. The value of fatigue is expressed as the mean, less than 32 of the mean meaning the fatigue is heavy, and more than 32 of the mean means low fatigue; the higher the result, the lower the patient's fatigue.

Data analysis used the Wilcoxon Signed Rank Test to determine differences in the pre-post group and the Mann Whitney test to analyze changes after the two different groups post-post.

3. Results and Discussion

All participants in this study were 38 participants who completed this research well. The majority of participants in the treatment group in this study were males (63.2%), over 40 years olds (47.4%), and already married (78.9%). The majority of participants in the treatment group in this study were males (52.6%), over 40 years old (47.4%), and 18 people were married (94.7%).

Table 1. Participants demographic

	Intervention	Control
	Frequency (%)	Frequency (%)
Sex		
Male	12 (63.2)	10 (52.6)
Female	7 (36.8)	9 (47.4)
Age		
20-30	5 (26.3)	2 (10.5)
31-40	5 (26.3)	8 (42.1)
>40	9 (47.4)	9 (47.4)
Status		
Married	15 (78.9)	18 (94.7)
Single	4 (21.1)	1 (5.3)

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Table 2. Pre and post-test analysis of the intervention and control group

Fatigue	*Pre-test*		*Post-test*		P-*value*	
	Intervention	Control	Intervention	Control	Intervention	Control
High< 32	16 (84.2%)	17 (89.5%)	0 (0.0%)	17 (89.5%)		
Low> 32	3 (15.8%)	2 (10.5%)	19 (100%)	2 (10.5%)	0,000	1,000

This study's results in the intervention group were mostly CKD patients who were more than 40 years old. Age is the most prominent factor associated with the fatigue of CKD patients who are more than 40 years old; 9 people (47.4%) experienced fatigue, younger patients had a low rate of fatigue, whereas, in the large control group, CKD patients who were older than 40 years experienced fatigue as 9 (47.4%), the younger patients had a low rate of fatigue. This study is in line with Sulistini et al. (2012), which stated that CKD patients who experience fatigue were more likely to occur in old age. According to Mollaoglu's theory, older age would reduce organ function and, when accompanied by CKD pathology, cause physical fatigue (Jacobson et al., 2019; Tavakoli et al., 2016). Researchers concluded that older age would be more susceptible to fatigue because they would get body functions to decrease.

The results of this study in the intervention group were the majority of married status patients experiencing fatigue. Marital status affects fatigue, 15 patients who were married experience fatigue (76.9%), while in the control group, 18 patients who were married experience fatigue (94.7%). This study is in line with Sulistini et al.'s (2012) study, which stated that married people tend to experience more fatigue than unmarried people. According to the prior study, married people are more prone to fatigue than unmarried people (Joshwa & Campbell, 2017). Researchers concluded that married people tend to be more prone to fatigue than unmarried people because the life burden of married people is higher than unmarried people.

The score for CKD patients' fatigue score before being given EFT (Emotional Freedom Technique) therapy in the treatment group was> 32, and after being given EFT therapy, the median score for CKD patients decreased to <32. In the control group, the pre-test fatigue value in CKD patients was> 32, and the post-test fatigue value in CKD patients did not decrease. The treatment group showed decreasing in fatigue caused by EFT therapy because EFT therapy (Emotional Freedom Technique) is a safe healing technique using the middle finger and index finger and then tapping on 12 meridian points in the body, aiming to facilitate energy in the body, which aims to reduced complaints such as fatigue. In contrast, there was no change in the control group because there was no EFT (Emotional Freedom Technique) therapy.

Giving EFT therapy is carried out in 3 cycles with less than 10 minutes. Researchers took one month to provide this therapy. Based on the analysis of EFT (Emotional Freedom Technique) therapy for fatigue in CKD patients between the treatment group and the control group with $\alpha = 0.05$, the p-value was 0.000. It is concluded that there is an effect of EFT (Emotional Freedom Technique) therapy on fatigue in CKD patients. In line with Fachrin et al., the study showed that EFT effectively reduced work fatigue among the workers (Fachrin et al., 2020). The study showed EFT effective for physical and mental problems (Bach et al., 2019). Other studies showed EFT influences burnout, anxiety, and depression (Clond, 2016; Nelms & Castel, 2016; Wati et al., 2019).

The emotional freedom technique is a safe, fast, reliable, and effective treatment for physical and psychological aspects (Bach et al., 2019; Gaesser & Karan, 2017). The emotional Freedom Technique is proof that one's health depends on the balance of energy in the body that flows throughout the body. Stressor factors can affect the flow of energy throughout the body so that the flow of energy throughout the body becomes disrupted, which causes energy barriers to be a disease. The ancient Chinese cultural and healing concept has been relied on for thousands of years, and nowadays, its efficacy continues to be proven even linked to science and modern medicine (Dewi et al., 2020).

The emotional freedom technique is a healing technique that combines the power of psychological energy with prayer (Bach et al., 2019; Patterson, 2016). The method uses the primary energy system of the body in eliminating physical and emotional problems (anxiety,

anger, panic disorder, addiction to cigarettes and drugs, stress, depression, trauma, fear, and phobia) (Andrii et al., 2019; Bougea et al., 2013; Dewi et al., 2020). The emotional Freedom Technique can also help relieve headaches, insomnia, allergies, cancer (Dewi et al., 2020).

4. Conclusion

EFT therapy's effect on the intervention group and the control group resulted from the p-value <0.05. Therefore, there is an effect of giving Emotional Freedom Technique (EFT) therapy on fatigue in patients with chronic kidney disease.

The results of this study are expected to be a reference for implementing Emotional Freedom Technic (EFT) therapy by providing training to nurses in the room about EFT therapy so that nurses can help patients reduce fatigue in Chronic Kidney Disease (CKD) patients to help patients heal and increase patient comfort. EFT therapy should be given to patients with BUN levels from 7 mg / DL to 44 mg / DL because the higher the BUN levels in the patient, the more difficult it is to eliminate fatigue in the patient.

Families have to motivate patients to do Emotional Freedom Technique (EFT) therapy as taught when patients experience fatigue. The next researcher can use as inspiration or input for further research to develop studies on fatigue in Chronic Kidney Disease (CKD) patients and other suitable therapies for nursing midwives, both non-pharmacological and complementary therapies. Other research methods can be used by linking other factors that influence fatigue in Chronic Kidney Disease (CKD) patients, increasing the population and samples so that the results are more valid and representative.

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