



## Case Report

# IMPLEMENTATIONS OF SPIRITUAL EMOTIONAL FREEDOM TECHNIQUE THERAPY FOR TREATING SLEEP DISORDERS IN CHRONIC KIDNEY DISEASE (CKD) PATIENTS



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### Abstract

Sleep pattern disturbance is a common nursing problem in Chronic Kidney Disease (CKD) patients undergoing hemodialysis. Spiritual Emotional Freedom Technique (SEFT) is a non-pharmacological intervention that may improve sleep quality through physical stimulation and spiritual relaxation. This case study aimed to describe the implementation of nursing care in CKD patients with sleep disturbances and to evaluate the effectiveness of SEFT therapy. The study involved three inpatients with CKD undergoing hemodialysis. Assessment results showed similar complaints among patients, including difficulty initiating sleep, frequent awakenings, dissatisfaction with sleep, altered sleep patterns, and inadequate rest. Based on these findings, the nursing diagnoses established were sleep pattern disturbance, ineffective peripheral perfusion, fatigue, acute pain, nausea, and ineffective breathing pattern. Nursing care planning prioritized sleep support, circulation care, energy conservation, pain and nausea management, and respiratory monitoring. SEFT therapy was provided as a complementary intervention for 10–20 minutes daily over three consecutive days. After therapy, all three patients demonstrated improved sleep quality marked by reduced sleep onset latency, fewer nighttime awakenings, and increased feelings of restfulness. The mechanism of SEFT therapy involves tapping on body meridian points, which stimulates the parasympathetic nervous system, promotes relaxation, and enhances sleep-regulating hormones such as melatonin, serotonin, and oxytocin. These physiological effects help reduce stress responses and increase comfort levels. In this case study, the use of SEFT therapy was associated with observed improvements in sleep pattern disturbances among CKD patients; however, these findings are limited to the reported cases and cannot be generalized to other populations with similar conditions.

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## Introduction

Chronic Kidney Disease (CKD) is a progressive condition in which kidney function gradually and permanently declines, so that the kidneys are no longer able to perform their role optimally in maintaining the body's homeostasis. This decline in kidney function disrupts the processes of blood filtration, removal of metabolic waste, fluid and electrolyte regulation, and hormone production that play a crucial role in blood pressure and red blood cell formation (Rambe, 2025; Yudha Crisanto et al., 2022).

When CKD reaches end-stage kidney disease (stage 5), patients require renal replacement therapy to maintain internal balance and prevent complications. Primarily, the main therapy widely used are hemodialysis, which filters blood using a dialyzer machine to remove metabolic waste, excess fluid, and maintain electrolyte balance (Parmin et al., 2024).

Patients undergoing hemodialysis therapy generally experience various physiological and psychological changes due to chronic conditions and long-term therapy processes. In addition to complaints such as fatigue, nausea, vomiting, and malnutrition, one of the nursing problems that often arises is sleep pattern disorders (Setyaningrum & Setyawan, 2023). These sleep disturbances can be influenced by uremia, psychological stress, fluid imbalance, and discomfort during and after the dialysis procedure (Anviva et al., 2022).

Poor sleep quality has a broad impact on the patient's condition, ranging from a decline in quality of life to an increased risk of complications, morbidity, and mortality rates (Damayanti & Anita, 2021; Nurhayati et al., 2024). Therefore, appropriate nursing interventions are essential. One approach that can be used is non-pharmacological therapy as a safer complementary therapy with minimal side effects. One form of this is the Spiritual Emotional Freedom Technique (SEFT) therapy, which has been proven effective in improving the sleep quality of CKD patients undergoing hemodialysis (Fajrianti et al., 2025).

Compared with other non-pharmacological sleep interventions such as cognitive behavioral therapy (CBT) and progressive muscle relaxation SEFT, offers a simpler, brief, and

easily administered. The advantages of SEFT therapy include low cost, safety, ease of use, speed, and simplicity, with no risks as it does not use tools or needles (Ramadina et al., 2022).

Several CKD patients admitted to wards Rambang 2.1 and 2.2, as well as ward Rawas 1.1 at Hospital in Palembang, had sleep pattern issues. These sleep pattern disturbances are often overlooked because they are considered secondary complaints that do not directly threaten life or health. This finding aligns with research conducted by Arifiati et al. (2023), which suggests a relationship between sleep quality and quality of life; specifically, the better the sleep quality, the better a person's quality of life. The selection of SEFT therapy as an intervention for sleep disorders in CKD patients is based on its effectiveness in promoting physical and psychological relaxation, thereby contributing to improved sleep quality. This aligns with research conducted by Anggriana & Yuwono (2024) on the sleep quality of CKD patients. The study, involving 40 respondents, examined the impact of sleep quality before and after SEFT therapy. Another study, conducted by Fajrianti et al. (2025), also demonstrated the effect of SEFT therapy on improving sleep in CKD patients at Pertamina Bintang Amin Hospital.

Nurses play a vital role in meeting patients' needs, including biological, psychological, social, and spiritual aspects (Indriani et al. (2025). Meeting these needs requires the provision of quality nursing care, which includes the process of assessment, nursing diagnosis, formulation of nursing action plans, implementation of interventions, and evaluation of the results of the actions taken (Aruan, 2020). This also indicates that CKD patients require quality nursing care, particularly interventions focused on addressing sleep pattern disorders. One therapy that can be used is the Spiritual Emotional Freedom Technique (SEFT). The researchers were interested in the findings in the field and several articles on SEFT therapy, so they sought to provide nursing care to reduce sleep pattern disorders in CKD patients in Palembang.

## Presentation of the Case

### a. Patient Information

#### 1) Mrs. KD

A 59-year-old married female patient was diagnosed with CKD in January 2025 and has been undergoing hemodialysis twice a week (every Monday and Thursday). The patient presented to Hospital via the emergency room on February 27, 2025, complaining of weakness for the past few days, pallor, lethargy, and difficulty sleeping, with only 2–3 hours of sleep per night.

Previous treatment history includes a CKD diagnosis and Central Double Lumen (CDL) placement in January 2025. The patient regularly takes Amlodipine 10 mg and Candesartan 16 mg. There is no history of allergies or infectious diseases in the family. Psychologically, the patient stated that she accepted her illness as a test from God and appeared resilient and cooperative with treatment. Before falling ill, she was actively involved in worship and continued to participate in these activities while hospitalized. The patient's history of healthy living indicates that she does not smoke, does not consume alcohol, and does not engage in regular physical activity.

On examination, the patient appeared restless and fatigued, with a PSQI score of 14, indicating poor sleep quality. Previous interventions, including PRC transfusions and SEFT therapy, yielded positive results, including increased hemoglobin levels and improved sleep quality.

#### 2) Mrs. S

A 65-year-old married Muslim female patient was diagnosed with CKD nine years ago and has been undergoing hemodialysis every Wednesday and Saturday. She was admitted to Hospital via the emergency room on February 28, 2025, with complaints of weakness, dizziness, heartburn, and nausea for the past week. The patient also reported sleep disturbances, sleeping 3–4 hours per night due to frequent awakenings and dissatisfaction with sleep.

The patient was previously hospitalized in December 2024 with a diagnosis of CKD and has a history of cataract surgery in

2017. She is currently taking Amlodipine 5 mg and Folic Acid 1 mg, with no history of allergies. There is no family history of similar diseases.

Psychologically, the patient appears resilient, enthusiastic about undergoing treatment, and cooperative, although she appears anxious when experiencing pain. Religious activities are still carried out according to her physical ability, and the family plays an active role in supporting her. The patient's lifestyle is quite good: she does not smoke, does not consume alcohol, and rarely engages in physical exercise. Laboratory tests reveal anemia (Hb 6.2 g/dL), elevated urea and creatinine levels, and a PSQI score of 16, indicating poor sleep quality. Previous interventions, including pharmacological therapy (antihypertensive medications, vitamins, and albumin supplements) and SEFT therapy, yielded positive results, including increased sleep duration and decreased nausea.

#### 3) Mrs. E

A 53-year-old married Muslim female patient was diagnosed with CKD in 2023 and has been undergoing routine hemodialysis every Wednesday and Saturday. She was admitted to Hospital via the emergency room on February 28, 2025, with complaints of shortness of breath for two days prior to admission. She appeared pale and weak and was comfortable in a semi-sitting position. The patient also reported restless sleep with frequent awakenings (three times per night), sleeping only 4–5 hours per night.

Her previous medical history includes treatment for CKD and a history of benign tumor removal surgery on her back in 2020. She routinely takes Candesartan 8 mg and Amlodipine 10 mg, with no history of allergies. There is no family history of hereditary diseases.

Psychologically, the patient appeared anxious but remained cooperative and highly motivated to recover, as she wished to return home to her children as soon as possible. She performed her prayers while sitting due to shortness of breath, with assistance from her family.

Her behavioral history indicates that she does not smoke, does not consume alcohol, and rarely engages in physical exercise. Laboratory tests revealed urea 89 mg/dL, creatinine 8.47 mg/dL, hemoglobin 7.7 g/dL, and a PSQI score of 14, indicating poor sleep quality.

The provided interventions, including pharmacological therapy (Furosemide, Omeprazole, Candesartan, and supplements) and non-pharmacological therapy (SEFT therapy and breathing exercises), resulted in improvements: the patient became calmer, her shortness of breath decreased, and her sleep quality improved..

#### **b. Clinical Findings**

##### **1) Mrs. KD**

Physical examination revealed general weakness and pallor. Vital signs were as follows: blood pressure 139/88 mmHg, heart rate 90 bpm, respiratory rate 20 bpm, temperature 36.5°C; the patient was alert and oriented to time, place, and person.

On cardiovascular examination, capillary refill time (CRT) was >3 seconds, extremities were pale and cold, and peripheral circulation was decreased. The patient reported no chest pain, and the heart rhythm was regular with normal S1 and S2 sounds. Respiratory examination was unremarkable, with regular respiratory rate and vesicular breath sounds.

Urinary assessment revealed an output of 25 mL/hour, yellow-colored urine, no tenderness on palpation, and a 24-hour fluid balance of -230 mL. Neurological examination was within normal limits. Pupils were isocoric at 3 mm, and the Babinski reflex was negative.

The patient reported difficulty sleeping with frequent awakenings, obtaining only 2–3 hours of sleep per night, and feeling unrested; PSQI score was 14, indicating poor sleep quality. Gastrointestinal examination was unremarkable, with no tenderness. The patient had a BMI of 29.6 (Class I obesity) and reported decreased appetite. Skin was dark brown, with decreased turgor and no edema.

Laboratory results revealed Hb 5.1 g/dL (low), Ht 16% (low), RBC  $2.05 \times 10^6/\text{mm}^3$  (low), albumin 2.7 g/dL (low), urea 57 mg/dL (high), and creatinine 7.42 mg/dL (high).

These findings indicate severe anemia,

hypoalbuminemia, and impaired peripheral perfusion, contributing to fatigue and sleep disturbances.

##### **2) Mrs. S**

Physical examination revealed general weakness, pallor, and emaciation. Vital signs were as follows: blood pressure 110/70 mmHg, heart rate 88 bpm, respiratory rate 20 breaths/min, temperature 36.4°C; the patient was alert and oriented to time, place, and person.

On cardiovascular examination, capillary refill time (CRT) was >3 seconds, extremities were pale and cold, peripheral circulation was decreased, and heart rhythm was regular without chest pain. Respiratory examination was unremarkable, with no dyspnea or cough.

Neurological examination revealed a GCS of E4V5M6, normal patellar reflexes, isocoric pupils measuring 3 mm, and no cranial nerve abnormalities.

The patient reported difficulty sleeping, obtaining only 3–4 hours of sleep per night, often awakening at 4:00 a.m., dissatisfaction with sleep due to heartburn, and persistent fatigue; PSQI score was 16, indicating poor sleep quality.

Gastrointestinal examination revealed intermittent epigastric pain rated 3/10, accompanied by nausea and loss of appetite. The patient's BMI was 15.8, classified as underweight.

Laboratory results revealed Hb 6.2 g/dL (low), Ht 18% (low), RBC  $2.15 \times 10^6/\text{mm}^3$  (low), albumin 3.1 g/dL (low), urea 67 mg/dL (high), creatinine 5.57 mg/dL (high), and platelets  $78 \times 10^3/\mu\text{L}$  (low). These clinical findings indicate severe anemia with impaired peripheral perfusion, poor nutritional status, and sleep disturbances secondary to pain and nausea.

##### **3) Mrs. E**

Physical examination revealed general weakness and shortness of breath; the patient was more comfortable in a semi-sitting position. Vital signs were as follows: blood pressure 153/107 mmHg, heart rate 86 bpm, respiratory rate 21 breaths/min, temperature 36.5°C; the patient was alert and oriented to time, place, and person.

Respiratory examination revealed no cough; however, the patient reported shortness of breath for two days prior to admission. Breathing rhythm was regular, with vesicular breath sounds.

Cardiovascular examination revealed capillary refill time (CRT) >3 seconds, pale and cold extremities, decreased peripheral circulation, and regular heart rhythm without chest pain.

Neurological examination revealed a GCS of E4V5M6, normal patellar reflexes, isocoric pupils measuring 3 mm, and anemic conjunctiva. The patient reported poor sleep, awakening three times per night, sleeping only 4–5 hours, and feeling

restless; PSQI score was 14, indicating poor sleep quality.

Gastrointestinal examination revealed grade 3 epigastric pain, nausea, decreased appetite, and avoidance of movement due to pain. The patient's BMI was 22.8, classified as normal..

Laboratory results revealed Hb 7.7 g/dL (low), Ht 22% (low), RBC  $2.58 \times 10^6/\text{mm}^3$  (low), albumin 3.3 g/dL (low), urea 89 mg/dL (high), and creatinine 8.47 mg/dL (high).

These findings indicate anemia with uremic metabolic retention, hypertension, and sleep disturbances secondary to shortness of breath and physical discomfort.

c. Timeline

Table 1

Events or clinical information

Patient	Timeline	Events / Clinical Information
Mrs. KD	January 2025	Diagnosed with CKD; central double lumen (CDL) catheter placed for routine hemodialysis twice weekly (Monday–Thursday). Complaints of weakness, pale appearance, and sleep disturbance
	February 27, 2025	Presented to the emergency room and admitted to the internal medicine ward. Laboratory results showed Hb 5.1 g/dL, urea 57 mg/dL, and creatinine 7.42 mg/dL, indicating CKD stage V with severe anemia. Received comprehensive assessment, fluid therapy, antihypertensive medications, and packed red cell (PRC) transfusion.
	February 28, 2025 March 1, 2025	Initiation of SEFT therapy to improve sleep quality. Clinical improvement observed: Hb increased to 10 g/dL, capillary refill time (CRT) improved from >3 seconds to 2 seconds, and sleep duration increased to 6–7 hours per night. Patient was discharged with advice to continue routine hemodialysis and SEFT therapy at home.
Mrs. S	2016	Diagnosed with CKD; undergoing routine hemodialysis twice weekly (Wednesday–Saturday).
	One week before February 28, 2025	Complaints of weakness, dizziness, nausea, heartburn, and sleep disturbance.
	February 28, 2025	Presented to the emergency room in a weak and pale condition. Laboratory results showed Hb 6.2 g/dL, urea 67 mg/dL, and creatinine 5.57 mg/dL, consistent with CKD stage V accompanied by anemia and sleep disturbance.
	Day 1 of admission	Received pharmacological therapy including amlodipine, omeprazole, albumin supplements, and folic acid.
	Day 2	SEFT therapy and education on a low-salt, controlled-protein diet.
	Day 3	Improved condition: reduced digestive complaints, sleep ↑ to 6 hours/night, PSQI score ↓ from 16 → 5.
Mrs. E	2023	Diagnosed with CKD; routine HD twice weekly (Wed–Sat).
	2 days before February 28, 2025	Shortness of breath, weakness, and frequent nighttime awakenings.

Patient	Timeline	Events / Clinical Information
	February 28, 2025	Presented to ER with orthopnea. Lab: Hb 7.7 g/dL, Urea 89 mg/dL, Creatinine 8.47 mg/dL → CKD stage V + hypertension + sleep disturbance.
	Day 1 of admission	Comprehensive assessment; medications: Amlodipine, Candesartan, Omeprazole.
	Day 2	Initiation of SEFT therapy + deep breathing exercises.
	Day 3	Improved calmness, reduced dyspnea, Hb ↑ to 9.5 g/dL, sleep 6–7 hours/night, PSQI ↓ from 14 → 5.

#### d. Diagnostic Assessment

The nursing diagnoses in this study were classified using the Indonesian Nursing Diagnosis Standard (SDKI), with sleep pattern disturbance identified as the primary nursing diagnosis based on nursing assessment.

##### 1) Mrs. KD

Diagnostic assessment was performed through physical examination, laboratory tests, and the PSQI questionnaire. Physical examination showed general weakness, pallor, and CRT > 3 seconds with cold extremities. Hematology and clinical chemistry laboratory tests showed Hb 5.1 g/dL, hematocrit 16%, erythrocytes  $2.05 \times 10^6/\text{mm}^3$ , albumin 2.7 g/dL, urea 57 mg/dL, and creatinine 7.42 mg/dL, indicating severe anemia and renal dysfunction. The PSQI score of 14 indicates poor sleep quality.

Possible differential diagnoses include normochromic-normocytic anemia due to CKD, secondary sleep pattern disturbance due to uremia and fatigue, and ineffective peripheral perfusion. The nursing diagnosis established is:

a) Sleep Pattern Disturbance related to lack of sleep control as evidenced by the patient complaining of difficulty sleeping both at home and in the hospital, the patient saying they often wake up during sleep, the patient saying they are not satisfied with their sleep, the patient saying they only sleep 2-3 hours each night, the patient complains of insufficient rest, the patient appears restless, the patient seems weak, the patient appears to yawn frequently, the lower eyelids appear dark, urea 57 mg/dL, and creatinine 7.42 mg/dL.

b) Ineffective Peripheral Perfusion related to decreased hemoglobin concentration, increased blood pressure as evidenced by the patient complaining of weakness, CRT >

3 seconds, decreased peripheral circulation, pale and cold extremities, pale skin, decreased skin turgor, BP 139/88 mmHg, hemoglobin 5.1 g/dL, hematocrit 16%, erythrocytes (RBC)  $2.05 \times 10^6/\text{mm}^3$ , and albumin 2.7 g/dL.

c) Fatigue due to a physiological condition (CKD), as the patient stated that her energy levels were challenging to increase due to insufficient rest, the patient complained of feeling constantly tired, the patient complained of feeling weak, and the patient appeared lethargic.

The patient's prognosis is good with improvement after PRC transfusion and SEFT therapy.

##### 2) Mrs. S

Physical examination shows general weakness, pallor, cold extremities, and epigastric pain. Laboratory tests showed Hb 6.2 g/dL, hematocrit 18%, erythrocytes  $2.15 \times 10^6/\text{mm}^3$ , albumin 3.1 g/dL, urea 67 mg/dL, and creatinine 5.57 mg/dL, indicating severe anemia and renal dysfunction. The patient complained of sleeping only 3–4 hours/night, accompanied by nausea and epigastric pain, with a PSQI score of 16 (poor sleep).

Differential diagnoses included hypoproliferative anemia due to CKD, sleep pattern disturbance secondary to fluid imbalance, and nausea and vomiting due to uremic metabolite retention. The nursing diagnoses established were:

a) Sleep Pattern Disturbance related to lack of sleep control as evidenced by the patient complaining of difficulty sleeping due to pain, the patient complaining of frequent awakenings during sleep, the patient stating dissatisfaction with sleep due to changing positions to find comfort during sleep, the patient complaining of insufficient rest due to only sleeping 3-4 hours per night, the patient yawns several times, dark circles appear

under the eyes, the patient appears weak and lethargic, the patient appears restless, creatinine 5.57 mg/dL, and urea 67 mg/dL.

b) Acute pain due to physiological injury (ischemia) d.d. The patient complains of difficulty sleeping due to pain in the pit of the stomach, the patient complains of pain, P: when moving, Q: stabbing, R: pit of the stomach, S: Scale 3, T: comes and goes, appears to move carefully, the patient seems to avoid pain, the patient appears to grimace, appears restless, states difficulty sleeping, N: 88 beats/minute, Hemoglobin 6.2 g/dL, Hematocrit 18%, Red Blood Cells (RBC)  $2.16 \times 10^6/\text{mm}^3$ , Albumin 3.1 g/dL, Urea 67 mg/dL, Creatinine 5.57 mg/dL, Chest X-ray results (28/02) diagnosed with cardiomegaly.

c) Nausea due to biochemical disorders (uremia) as the patient complains of feeling nauseous, the patient says they do not want to eat because they feel nauseous, the patient says they want to vomit, the patient appears to be holding their mouth, and the patient appears pale.

d) Ineffective Peripheral Perfusion due to decreased hemoglobin concentration, increased blood pressure. The patient complained of feeling weak and dizzy, with a CRT greater than 3 seconds, decreased peripheral circulation, pale and cold extremities, pale skin, and decreased skin turgor. Hemoglobin 6.2 g/dL, hematocrit 18%, erythrocytes (RBC)  $2.16 \times 10^6/\text{mm}^3$ , albumin 3.1 g/dL.

The patient's prognosis is good with significant improvement after pharmacological therapy and SEFT intervention.

3) Mrs. E

Physical examination showed vital signs of BP 153/107 mmHg, HR 86 bpm, RR 21 bpm. The patient appeared short of breath, pale, and comfortable in a semi-sitting position. Laboratory tests showed Hb 7.7 g/dL, hematocrit 22%, urea 89 mg/dL, creatinine 8.47 mg/dL, and albumin 3.3 g/dL, indicating anemia and severe

metabolic retention. The patient reported poor sleep, waking up three times per night, with a PSQI score of 14 (indicating poor sleep quality).

Differential diagnoses considered included sleep pattern disturbance due to dyspnea, ineffective peripheral perfusion due to anemia, and chronic fatigue due to stage V CKD. The primary nursing diagnoses were:

a) Sleep Pattern Disturbance related to lack of sleep control as evidenced by the patient complaining of difficulty sleeping, the patient saying that their sleep is interrupted, the patient saying that they wake up 3 times during the night, the patient saying that they only sleep 4-5 hours, the patient says they are dissatisfied with their sleep because they are thinking about a comfortable sleeping position, the patient says they do not get enough rest, the patient appears weak, the patient appears restless, the patient is seen sleeping in a semi-Fowler position, creatinine 8.47 mg/dL, and urea 89 mg/dL.

b) Ineffective Breathing Pattern due to breathing difficulties. Patient complains of shortness of breath, patient says breathing feels uncomfortable, patient appears to take long breaths during exhalation, RR 21x/minute, tachypnea, orthopnea, 2 LPM nasal cannula attached, Chest AP Radiography Examination results (28/02): Cardiomegaly with pulmonary edema and bilateral pleural effusion

c) Ineffective Peripheral Perfusion due to decreased hemoglobin concentration, increased blood pressure. The Patient complains of feeling weak, CRT > 3 seconds, reduced peripheral circulation, pale and cold extremities, pale skin, dry mucosa, decreased skin turgor, BP 153/107 mmHg, hemoglobin 7.7 g/dL, erythrocytes (RBC)  $3.58 \times 10^6/\text{mm}^3$ , and Albumin 3.3 g/dL. The patient's prognosis is relatively good, as he has shown improved sleep quality and reduced shortness of breath after undergoing SEFT therapy and practicing deep breathing exercises.

## e. Therapeutic Intervention

### 1) Mrs. KD

Pharmacological Interventions	Ringer's Lactate 500 mL IV; Amlodipine 10 mg PO OD; Candesartan 16 mg PO OD; Folic acid 1 mg PO OD; PRC transfusion (3 × 200 cc IV); Calos Chewable OD; Vipalbumin OD; Curcuma OD
Nursing and Non-Pharmacological Interventions	Circulatory monitoring (BP, pulse, CRT, skin color); semi-Fowler position; extremity warming; energy management; sleep environment control
SEFT Intervention (Duration and Frequency)	SEFT performed for 10–20 minutes per session, once nightly for three consecutive days before bedtime
Outcomes	Hb ↑ to 10 g/dL; CRT improved to 2 s; sleep duration ↑ to 6–7 h/night

### 2) Mrs. S

Pharmacological Interventions	Amlodipine 5 mg PO OD; Omeprazole 40 mg PO OD; Folic acid 1 mg PO OD; Calos Chewable OD; Vipalbumin OD
Nursing and Non-Pharmacological Interventions	Nausea management; semi-Fowler positioning; warm fluids; sleep hygiene; low-protein, low-salt diet education
SEFT Intervention (Duration and Frequency)	SEFT performed for 10–20 minutes per session, once nightly for three consecutive days before bedtime
Outcomes	Nausea reduced; sleep duration ↑ to 6 h/night; PSQI ↓ from 16 to 5

### 3) Mrs. E

Pharmacological Interventions	Furosemide 40 mg IV; Ecosol NaCl 500 mL IV; Amlodipine 10 mg PO OD; Candesartan 8 mg PO OD; Omeprazole 40 mg PO OD; Calcium Chewable OD
Nursing and Non-Pharmacological Interventions	Perfusion monitoring; semi-Fowler position; respiratory support; sleep environment control; deep breathing exercises
SEFT Intervention (Duration and Frequency)	SEFT performed for 10–20 minutes per session, once nightly for three consecutive days before bedtime (combined with deep breathing exercises)
Outcomes	Dyspnea reduced; Hb ↑ to 9.5 g/dL; sleep duration ↑ to 6–7 h/night; PSQI ↓ from 14 to 5

## f. Follow-up and Outcomes

### 1) Mrs. KD

After three days of treatment, a follow-up evaluation was conducted through physical examination, laboratory tests, and the PSQI questionnaire. The results showed significant improvement in clinical condition. Hemoglobin increased from 5.1 g/dL to 10 g/dL, CRT improved from greater than 3 seconds to 2 seconds, and the patient appeared fresher and less pale. Urine output was stable at approximately 25–30 mL/hour, and fluid balance was well maintained.

The patient reported an increase in sleep duration from 2–3 hours to 6–7 hours per night, accompanied by a reduction in PSQI

score from 14 to 5, indicating improved sleep quality. No drug-related side effects or allergic reactions to PRC transfusions were observed.

Based on the evaluation, blood pressure remained stable (130/80 mmHg), peripheral perfusion improved, and the patient was assessed as being in a stable compensated condition. The patient demonstrated good adherence to the hemodialysis schedule and SEFT therapy. To enhance visual clarity, changes in PSQI scores before and after SEFT therapy are presented in a comparative chart across all patients. After discharge, follow-up was continued through patient education and self-reporting; Mrs. KD committed to performing SEFT



independently at home before bedtime as part of her long-term sleep management strategy.

## 2) Mrs. S

Follow-up evaluation showed marked improvement in the patient's condition after three days of treatment. Hemoglobin increased from 6.2 g/dL to 9.8 g/dL, urea levels decreased to 58 mg/dL, and blood pressure stabilized at 120/80 mmHg. Symptoms of heartburn and nausea gradually subsided following omeprazole therapy and dietary education on low-salt and low-protein intake.

The patient reported improved sleep quality, with sleep duration increasing from 3–4 hours to 6 hours per night, and PSQI scores decreasing from 16 to 5. No adverse reactions to pharmacological therapy were noted. Further evaluation revealed improved peripheral perfusion and nutritional status, although mild weakness persisted due to dietary adjustment. The patient was cooperative and compliant with both pharmacological treatment and SEFT exercises.

A before-and-after comparison of PSQI scores for all three patients is illustrated in a chart to improve data visualization. Post-discharge follow-up indicated that Mrs. S remained compliant with SEFT relaxation exercises at home and planned to continue their regular use to maintain sleep quality.

## 3) Mrs. E

Follow-up results demonstrated progressive clinical improvement. After three days of treatment, hemoglobin increased from 7.7 g/dL to 9.5 g/dL, urea levels decreased from 89 mg/dL to 70 mg/dL, and blood pressure decreased to 135/90 mmHg. The patient reported reduced shortness of breath, improved tolerance for light activity, and increased sleep duration from 4–5 hours to 6–7 hours per night. The PSQI score decreased from 14 to 5, reflecting improved sleep quality.

The patient tolerated diuretic and antihypertensive therapy well, with no significant side effects. Deep breathing exercises combined with SEFT therapy were effective in reducing anxiety and promoting relaxation before sleep.

Medical evaluation confirmed improved peripheral perfusion, hemodynamic stability, and reduced fluid retention. The patient showed strong adherence to the

hemodialysis schedule and supportive therapies.

Changes in PSQI scores before and after intervention are summarized in a comparative chart to enhance interpretability across patients. Following discharge, Mrs. E reported continued practice of SEFT and breathing exercises at home, indicating sustained engagement with non-pharmacological sleep management strategies.

## Discussion

The three patients with stage V Chronic Kidney Disease (CKD) treated at Hospital, Palembang, presented with typical clinical manifestations, including weakness, pallor, fatigue, elevated urea and creatinine levels, and sleep disturbances. Sleep problems in CKD patients are closely associated with uremia, anemia, and physiological stress related to repeated hemodialysis. Uremia leads to the accumulation of metabolic toxins that disrupt neurotransmitter balance and suppress melatonin secretion, thereby impairing sleep regulation. This finding is consistent with studies by Amini et al. (2016) and Sudijanto and Arofiati (2022), which reported that approximately 40–85% of CKD patients experience poor sleep quality as measured by the Pittsburgh Sleep Quality Index (PSQI).

Physical examinations of all three patients revealed signs consistent with impaired tissue perfusion secondary to anemia, including prolonged capillary refill time, pale skin, weak peripheral pulses, and unstable blood pressure. These findings support the nursing diagnoses of ineffective peripheral perfusion (D.0009) and sleep pattern disturbance (D.0055), which frequently coexist in patients with advanced CKD. Laboratory findings demonstrated urea levels exceeding 60 mg/dL and creatinine levels above 5 mg/dL, indicating a marked decline in glomerular filtration rate and meeting the criteria for end-stage CKD as described by Rambe (2025).

Therapeutic management combined pharmacological interventions—such as packed red cell transfusion, antihypertensive agents, diuretics, and antacids—with the non-pharmacological intervention of Spiritual Emotional Freedom Technique (SEFT). SEFT promotes relaxation through parasympathetic nervous system activation, leading to reduced stress responses and improved sleep regulation. In line with Fajrianti et al. (2025), the application

of SEFT in this case series was associated with a marked reduction in PSQI scores, decreasing from baseline values of 14–16 to 5 after three days of intervention, indicating an improvement from poor to good sleep quality.

Beyond sleep improvement, SEFT contributed to reduced anxiety and enhanced emotional calmness before bedtime. The use of spiritual affirmation during the Set-Up and Tune-In phases supports emotional regulation by attenuating limbic system activity, reducing muscle tension, and stabilizing blood pressure, as previously described by Anggraini and Safinatunnajah (2021). Compared with other spiritual or relaxation-based nursing interventions—such as dzikir therapy, guided imagery, or Benson relaxation—SEFT uniquely integrates spiritual affirmation with somatic stimulation, allowing patients to actively engage both cognitively and physically in the relaxation process. This integrative mechanism may explain the rapid improvement observed in a short intervention period.

Improved sleep quality in these patients was accompanied by better hemodynamic stability and tissue perfusion, reflected by increased hemoglobin levels (from 5–7 g/dL to 9–10 g/dL) and reduced blood pressure values (from approximately 160/90 mmHg to 130/80 mmHg). These findings suggest that improved rest and reduced physiological stress may positively influence overall clinical stability in CKD patients. Data validity in this case report was supported by the use of the standardized PSQI instrument, daily monitoring of vital signs, and serial laboratory evaluations before and after intervention. Nevertheless, the small sample size and lack of a control group limit generalizability. Potential confounding factors, including environmental noise, psychological stress related to laboratory results, and variability in hemodialysis duration, were not fully controlled.

Overall, this discussion indicates that integrating holistic nursing care with SEFT therapy may provide meaningful benefits for CKD patients experiencing sleep disturbances. Nurses play a key role in implementing spiritual and relaxation-based interventions, reinforcing sleep hygiene, and objectively monitoring outcomes. While these findings are promising, further controlled studies with larger samples are needed to confirm the effectiveness of SEFT compared with other non-pharmacological interventions.

## Patient perspective

### 1) Mrs. KD

The patient said that during her treatment in the internal medicine ward, she felt she received great spiritual and emotional support through SEFT therapy. The patient admitted that at first she had difficulty sleeping and was often restless because she was afraid of the results of hemodialysis and her weak physical condition. After following SEFT for several days, the patient felt calmer, fell asleep more easily, and no longer woke up at night. She also felt lighter and more peaceful after doing affirmations and prayers during therapy. The patient stated that this therapy provided inner peace and renewed enthusiasm to continue treatment. She plans to continue practicing SEFT independently at home because she feels it greatly improves the quality of her rest and her acceptance of her illness.

### 2) Mrs. S

The patient said that before undergoing SEFT therapy, she often felt anxious, nauseous, and had difficulty sleeping due to heartburn and discomfort during hemodialysis. After undergoing SEFT therapy for several sessions, the patient began to feel calm and peaceful. She said that praying and tapping on meridian points made her feel "closer to God" and reduced the anxiety that often arose before bedtime.

The patient also reported that she began to sleep longer and wake up feeling refreshed, despite still undergoing dialysis twice a week. According to her, SEFT is not only a sleep therapy but also a way to learn to surrender and accept illness wholeheartedly. She expressed her gratitude for receiving this therapy and hoped that the hospital could implement it routinely for other CKD patients.

### 3) Mrs. E

The patient said that her complaints of shortness of breath and difficulty sleeping often made her afraid to sleep because she was worried she would not be able to breathe easily. After receiving SEFT therapy and practicing deep breathing exercises, the patient reported feeling a sense of calm and comfort that she had never experienced before. She found it easier to sleep, her breathing was more regular, and her mind felt lighter.

The patient also mentioned that SEFT therapy helped her shift her focus away from pain and shortness of breath toward prayer and gratitude.

According to her, this therapy provided spiritual strength to accept her physical condition with patience. She expressed her desire for this therapy to continue, as it not only calmed her but also made her more optimistic about undergoing hemodialysis. There were no complaints or side effects felt during the therapy, and the patient stated that she wanted to practice SEFT herself at home with her family.

### Informed Consent

The patients were given a comprehensive explanation of the objectives, benefits, procedures, and potential risks associated with the intervention to be carried out, particularly regarding the application of SEFT therapy as part of a non-pharmacological nursing intervention.

Before the intervention began, each patient was given time to consider participation and had the full right to refuse or withdraw from participation without any consequences on the medical services received.

After a thorough explanation, the three patients voluntarily agreed to participate in the entire series of therapies and evaluations designed as part of their nursing care. Consent was obtained verbally and in writing through an informed consent form, which was signed by the patient or their immediate family under the supervision of the nurse in charge of the treatment room.

The implementation of therapy and data collection was carried out in accordance with the Health Research Ethics Code (KEPK) and the Indonesian Nursing Professional Ethics Code (PPNI, 2018), which emphasize the principles of autonomy, beneficence, nonmaleficence, and justice in every nursing action. The patient's personal identity has been kept confidential (de-identified) by using only initials in this case report.

During the intervention, no side effects or adverse events were observed, and all actions were carried out with the patient's safety and comfort as the top priority. Thus, this informed consent process ensures that the patient's participation in SEFT therapy and the case reporting process is both ethical and voluntary, and is based on a thorough understanding of the risks and benefits.

### Conclusion

The application of the Spiritual Emotional Freedom Technique (SEFT) as a non-pharmacological intervention in patients with chronic kidney disease (CKD) and sleep disturbances suggests potential benefits, including improved sleep quality, reduced anxiety, and favorable physiological changes such as increased hemoglobin levels and more stable blood pressure. These findings indicate that spirituality-based therapy may serve as a supportive, complementary approach in medical-surgical nursing practice, particularly for patients with chronic conditions who require psychological and spiritual support.

However, given the limited number of cases included in this report, the findings should be interpreted with caution and cannot be generalized to broader populations. Nevertheless, the consistent improvements observed across the three cases highlight the importance of addressing patients' spiritual and emotional needs in nursing care and support the need for further research using experimental designs and larger sample sizes to more robustly evaluate the effectiveness of SEFT in diverse clinical settings.

### Consent for publication

Detailed written consent has been obtained from the legal guardians of all three patients for the publication of this case report, including relevant clinical details and accompanying images. The legal guardians have been assured that the patients' identities will remain confidential through a process of de-identification.

### Declarations

#### Ethics approval and consent to participate

The authors confirm that all ethical standards for research involving human subjects have been adhered to in accordance with the Declaration of Helsinki. Comprehensive verbal and written information regarding the purpose, procedures, benefits, and potential risks of the Spiritual Emotional Freedom Technique (SEFT) as a complementary nursing intervention was provided to each patient and their legal guardians. Participation was entirely voluntary, and the decision to withdraw at any time would not affect the standard of care received. Patients and their guardians signed informed consent forms allowing the collection and use of anonymized clinical data for academic and publication purposes. Although efforts were

made to ensure anonymity, complete confidentiality cannot be guaranteed.

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