

Improving quality of life with mind-body-spirit therapy (islamic concepts) in chronic renal failure patients with hemodialysis

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Abstract

The number of new chronic renal failure patients with hemodialysis therapy continues to increase from year to year in Indonesia. The number of new patients by 2015 is 21050 patients and the number of active patients is 30554 from 249 units of hemodialysis. The quality of life of hemodialysis patients has decreased in physical, psychological, social and environmental dimensions. Mind-body-spirit therapy (Concepts of Islam) focuses on the ability to manage the mindset and psychic that will affect the physical, attitudes and behavior of individuals in addressing their lives. Giving mind-body-spirit therapy to hemodialysis patients to improve quality of life, given for 4 weeks with the frequency twice a week. Pre-experimental study with one group pre-test post-test. The sample of 23 patients with hemodialysis therapy taken by purposive sampling. The WHOQOL-BREF questionnaire was used in this study. Early screening on quality of life was taken in 23 patients (13 men and 10 women, mean age 51.5 years). Mind-body-spirit therapy (Islamic concept) consisted of Tausiyah (cognitive reconstruction), prayer, dhikr and drinking zam-zam water. The quality of life score was evaluated at week 5 after 4 weeks of treatments. All four dimensions of quality of life and quality of life were generally analyzed using Wilcoxon with significant results $p < 0.05$. After the treatments, there is an increase in the quality of life in the physical, psychological, social, environmental, and general quality of life in hemodialysis patients. A mind-body-spirit therapy of 4 weeks is effective for improving the quality of life of patients with chronic renal failure with hemodialysis therapy.

Keywords: *Mind Body Spirit (Islamic Concepts); Hemodialysis; Quality of Life*

INTRODUCTION

Overall prevalence of CKD (Stages 1-5) in the United States (U.S.) in general for adult population was 14.8% in 2011-2014. CKD Stage 3 (6.6%) was the most prevalent (United States Renal Data System, 2017)

The number of new chronic renal failure patients with hemodialysis therapy continues to increase from year to year in Indonesia. The number of new patients by 2015 is 21050 patients and the number of active patients is 30554 from 249 units of hemodialysis. Most of them is patients with End State Renal Deases (ESRD) 89% and



followed by patients with Acute Renal Failure (ARF) 7%. In 2015 there were 1243 patients who died with a long-life hemodialysis between 1 - 317 months (Indonesian Renal Registry, 2015).

Chen (2010) found the fact that from 200 patients with hemodialysis, 35% had depression, 21% had anxiety, and 21.5% with the idea of suicide. The level of depression was higher than fatigue and a decrease in Quality of Life occurs (Chen, et.al., 2010).

The condition of depending on dialysis machines causes changes in the lives of patients with chronic renal failure who undergo hemodialysis therapy. The time needed for hemodialysis therapy will reduce the time available for social activities. This can create conflict, frustration, guilt and depression in the family. Planned lifestyles related to hemodialysis therapy, restrictions on food and fluid intake, difficulty in maintaining work, the decrease in sexual desire and complications of hemodialysis are the basis for lifestyle changes in patients with chronic renal failure underwent hemodialysis therapy (Smeltzer, SC, Bare, BG, 2002) .

Quality of Life (QOL) is becoming an important outcome measure after the initiation of renal replacement therapies. The major therapeutic goal is to improve the functioning ability of these patients so that they can enjoy life to its fullest possible extent. QOL scores in hemodialysis patients were significantly low in the physical, psychological, and social domains compared to those with the healthy condition. The low physical health scores in hemodialysis patients clearly demonstrate that daily activities were disturbed in ESRD patients as they were more dependent on the renal replacement treatment for their survival (Sathvik, 2008)

The National Center for Complementary/Alternative Medicine (NCCAM) uses mind-body-spirit therapy as the alternative complementary therapy. However, from a holistic perspective, spirit is included, as this aspect of human being is an integral part of a number of the therapies, such as prayer, meditation, and yoga. NCCAM defines this category as encompassing therapies that promote the mind's capacity to have an impact on the functioning of the body. In keeping with the perspective of the inclusion of the spirit, this would also encompass the impact that the spirit can be a physical parameters (Snyder, 2010)

Mind-body-spirit therapy (Islamic Concept) is a religious and spiritual methods based on Islamic conceptual approach by having a prayer to (Allah Ta'la), opening hearts and communicating with Allah with an Islamic approach to self-healing, establishing a relationship with the creator to strengthen the heart and lean and trust in Allah. The patients seek refuge, be humble and show tenderness and pray to Allah to get healing done by understanding the aspects of wisdom (tausiah), prayer, dzikr and drinking zam-zam water (Cita, 2016)

RESEARCH METHODS

The population of this study were chronic renal failure patients underwent hemodialysis therapy at the dialysis unit of an hospital in Yogyakarta Indonesia. Sample if this study were 23 patients selected using Purposive Sampling Techniques. The criteria of patients in this study are 1) Getting treatment according to hospital standards, 2) Can communicate with others, 3) Have good hearing, 4) Islam, 5) Get hemodialysis therapy twice a week, 6) At least 18 years old .

The design of this study is pre-experimental design using one group pre-test and post test design. Interventions were given for one month, each patient received mind-body-spirit (islamic concept) therapy twice a week during the process of hemodialysis therapy.

Data instruments consisted of socio-demographic data and quality of life. WHOQOL-Bref questionnaire is used to collect the data. The quality of life of patients is evaluated twice. WHOQOL-Bref instrument is given before intervention of mind-body-spirit and re-evaluated in the 5th week after the intervention of mind-body-spirit therapy.

The WHOQOL-Bref instrument contained of 26 items consisted of physical, psychological, social, and environmental dimensions. The answers of WHOQOL-Bref, are obtained with a five-point Likert scale and depends on the contents of the question. They are analyzed by four types of scales: intensity, capacity, frequency and level of satisfaction. The results of the score on the quality of life means that the higher the score, the better the quality of life. The scale chosen is 0 to 100, because these values are easily interpreted by the reader in general, considering their relation to the percentage value.

Mind-body-spirit therapy (islamic concept) consisted of *tausiyah* (cognitive reconstruction), prayer, *dhikr* and drinking zam-zam water, provided for 4 weeks with a frequency of twice a week. Quality of life scores were evaluated at week 5 after 4 weeks of therapy.

1. *Tausiyah*

This technique is designed to reduce negative thoughts and maladaptive behavior, focusing on the ability to manage mindset and psychics that will have an impact on the physical, attitudes and behavior of individuals in addressing their lives. Patients are given information and understanding about how to respond to life and their sick condition based on the concept of Islam.

2. *Pray and dhikr*

Perform requests to the highest substance (Allah Ta'la) by opening hearts and communicating with Allah with an Islamic approach for self-healing, and establish a relationship with the creator aiming to strengthen the heart, lean and trust God, seek refuge, be humble and show gentleness of heart before Him, pleading with Him, and praying to God for healing.

3. *Drink Zam-Zam Water*

Patients started the therapy with a prayer to God (Allah ta'ala). Patients can pray with any other prayer that they want. At the end of each therapy, patients drank 50 ml of zam zam water.

This systematic and structured mind-body-spirit therapy (islamic concept) is explained in a special handbook (one for patients and one for therapists) and adapted for patients with Chronic Kidney Failure. The handbook is based on a model previously tested in patients with chronic renal failure with hemodialysis (Cita, 2016).

The data in this study are illustrated by showing the number of subjects, the median of each group, the minimum and maximum of each group and the p-value. The mean and standard deviation values are reported to provide additional information about the characteristics of data distribution, even though the results are not normal. Analysis test in this study used Wilcoxon test analysis.

RESULTS AND DISCUSSION

The sample of this study were patients with chronic renal failure underwent hemodialysis therapy twice a week with a minimum three-months of hemodialysis therapy and minimum age of 18 years old. The characteristics of respondents in this study can be seen in table 1.

Table 1. Sociodemography of total population (patients with chronic kidney failure with hemodialysis)

Characteristics	Total Populasi	
	n = 23	Persentase (%)
Gender		
Male	13	56.52
Female	10	43.48
Age		
Average (Years)	51.5	
Minimum-maximum (years)	(25-67)	
Marital status		
Married	22	95.65
Single	1	4.35
Education		
Elementary school	4	17.39
Middle school	2	8.70
High school	13	56.52
Postgraduate	4	17.39
Occupation		
Government employee	7	30.43
Private Employee	6	26.09
Entrepreneur	5	21.74
Housewife	5	21.74
Hemodialysis Period		
3 month-12 month	9	39.13
1-5 year	14	60.87

Table 2. Quality of life score, mean, standard deviation and variance domain of total population before intervention and after Intervention of mind-body-spirit therapy (islamic concept)

Domain	Quality of life					
	Pre-intervention n:23			Post-Intervention n :23		
	Mea n	SD	95%CI	Mea n	SD	95%CI
Physical	48.2 6	6.8 2	45.31- 51.21	58.7 8	7.6 0	55.49- 62.07
Psychological	51.9 6	8.4 5	48.30- 55.61	63.1 7	8.0 4	59.69- 66.65
Social Relationship	50.2 6	9.3 2	46.23- 54.29	56.7 8	9.6 1	52.62- 60.93
Environment	55.0 4	9.2 5	51.04- 59.04	61.7 8	1.1 3	56.87- 66.69
General Quality of Life	51.3 8	5.8 6	48.5- 53.91	60.1 3	6.8 96	57.15- 63.11

Table 3. Results of wilcoxon test analysis of the quality of life of patients with chronic kidney failure before and after mind-body-spirit therapy (islamic concept)

Domain	n	Quality of Life				ρ
		Pre-intervention		Post-Intervention		
		Me dia n	Minimum - Maximu m	Med ian	Minimum- Maximum	
Physical	23	44	38- 63	56	44- 75	0.000
Psychological	23	50	44- 69	63	44- 81	0.002
Social Relations	23	50	31- 69	56	44- 75	0.011
Environment	23	56	38- 75	56	50- 88	0.03
General Quality of Life	23	51.5	41- 66	57.7 5	52- 77	0.000

Table 4. Overview of changes in quality of life after mind-body-spirit therapy (islamic concept) in patients with chronic kidney failure with hemodialysis

Domain	Quality of Life After Mind Body Spirit Therapy n : 23		
	Decrease (%)	Steady (%)	Increase (%)
Physical	4.35	13.04	82.61
Psychological	4.35	5.56	78.26
Social Relationship	17.39	26.09	56.52
Environment	8.7	21.74	69.57
General Quality of Life	8.7	0	91.3

Socio-demographic data from table 1 shows that in this study the average patient's age was 51 years old and 95.6% were married. The majority of patients underwent hemodialysis for more than one year at 60.87% with a frequency of twice a week.

In Table 2, the data shows changes in the average score of quality of life before and after underwent mind-body-spirit therapy (Islamic concept) twice a week for 4 weeks. The results show that there is an increase in the average score of quality of life on physical, psychological, social, environmental dimensions and general quality of life, compared to before patients underwent intervention mind-body-spirit therapy (Islamic concept).

Table 3 is Wilcoxon test results, obtained a significance value of 0.000 ($p < 0.05$). Thus it can be concluded that "there is a significant difference in quality of life before and after giving Mind-Body Spirit therapy intervention (Islamic concept). Table 3 shows an increase in the mean and minimum-maximum values in the quality of life scores in each dimension of quality of life after mind-body-spirit therapy was given.

Table 4 shows that from 23 patients there were changes in the improvement of quality of life after giving intervention mind-body-spirit therapy (Islamic concept) for 4 weeks with a frequency of 2 times a week. The quality of life of the physical dimension increased by 82.61%, the quality of life of the psychological dimension increased by 78.8%, the quality of life dimension of social relations increased by 56.52%, the quality of life in the environmental dimension increased by 69.57 and the general quality of life increased by 91.3%

CONCLUSION

This study shows that the therapy of mind-body-spirit (Islamic concept) which consisted of tausiyah, prayer, dhikr and drinking zam-zam water can improve the quality of life. An increase occurs in all dimensions of quality of life; physical, psychological, social and environmental relationships after giving 4 weeks of therapy with a frequency of twice a week. Prayer will lead to self-confidence, a sense of optimism, bring calm, peace and feel the presence of God Almighty so that by remembering, one's faith will increase and there will be a sense of peace, peace in the soul (Hawari, 2011). If someone does not open his heart to pray and dhikr, then his heart is always hesitant, the feeling is miserable, his mind is frantic, always restless, his desires become weak (Jawas, 2005).

When faced with a severe illness, believing the afterlife and that Allah is merciful will decrease fear from nothingness (Yucel, 2010). Spirituality can have an impact on one's coping style that focuses on control of perception (Cornah, 2006). The study about religious spiritual coping methods (Santos, et.al., 2017) suggests that religious and spiritual methods of coping are associated with quality of life and depression among HD patients. These findings have clinical implications for the health-care team to mitigate depressive symptoms and improve patients' quality of life by encouraging patients to utilize religious resources and incorporating psycho-spiritual interventions to minimize religious struggles (negative religious spiritual coping) among HD patients.

Table 4 shows that the quality of life in the psychological domain of 78.6% of patients has increased after the therapy of mind-body-spirit (Islamic concept). This research also shows that there is a significant effect of mind-body-spirit therapy on the psychological status of the quality of life domain with a p value of 0.002 in table 3. Therapy of mind-body-spirit (Islamic concept) as a spiritual and religious method provided a new method for patients in addressing a problem, and the illness they experienced. This therapy taught the attitude, gratitude and prohibition of being hopeless about the pain they experienced. In Islam, all conditions, happiness and sadness are considered good in the presence of Allah Ta'ala if we embrace these conditions, being patient and not despairing. This therapy also provides an understanding that the purpose of someone's life that will come after death is being in the paradise, so the conditions experienced now in this world is a path for the heaven if we react patiently, thankfully and pleased with the provisions that God gives us. And this will have a good impact that people will have a peace of mind and free from stressful conditions.

During illness, patients may be confronted by hopelessness. Nevertheless, in Islamic creed, God is regarded as the best companion and hope in times of adversity, misfortune and fear for God sees us and looks after us and does not allow the activities of the servants to be in futility; and he is kind and generous towards them (quran 14:49). Hopelessness can lead to mental break down. According to the Quran, desperation for the mercy of God is considered paganism and a deadly sin (quran, 12:87). It is quoted by the holy Prophet Muhammad, peace be upon him, that "whenever you are ill, He heartens you to health and long life. However, this heartening does not affect the will of God (Allah); it delights the patient and bring him calmness and relief". Depression is the main predictor of health-related quality of life in patients of chronic renal failure, associated negatively with all of its components. The degree of concern

and the use of passive coping strategies for stress such as helplessness-hopelessness, and fatalism are also associated with lower levels of Health-related quality of life. By contrast, self efficacy, optimism, social support, and fighting spirit were associated with higher levels health-related quality of life (Perales, 2012).

Table 3 shows that the therapy of mind-body-spirit (Islamic concept) had a significant effect on the quality-of-life in the physical domain $p = 0.000$, social relations $p = 0.01$ and environment $p = 0.03$. There was an increase in the quality-of-life score for the physical domain in 82.61% patients, social relations in 56.52% patients and the environment in 69.57% patients after the Mind-body-spirit (Islamic concept) Therapy. This therapy can improve the patient's sleep quality, enthusiasm for creativity and increase confidence to engage in social relations with others (Cita, 2016).

Marzband (2016) reviewed Quran and Shie'h's narrations (Hadiths), and found the concept of spiritual care. The research suggested that spiritual care involves spiritual capacities or skills to help patients in achieving purified life (Hayate-tayebah). This includes providing prayer conditions for patients, giving hope to the patients, helping them to understand the concept of illness, finding hope, nurturing relationships, and caring for patients in end-of-life experiences.

The study conducted by Muhsin *et.al.* suggested that spiritual coping and religiosity were significantly associated with quality of life and health status among HD patients. Religiosity, especially religious coping and organized religiosity, play an important role in both quality of life and health status of HD patients (Saffari, *et.al.*, 2013). Spiritual well-being was the strongest predictor of mental health, psychological distress, sleep disturbance, and psychosomatic complaints. Poor mental health was associated with lower spiritual well-being (Martínez, B, & Custódio, R 2014). Ebrahimi H, et al. (2014) found a significant relationship between some aspects of quality of life and spiritual well-being. There was a significant positive correlation between spiritual existential aspect of well-being and the dimensions of fatigue, emotional health, social functioning and general health and social performance.

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