

# Effect of Dhikr Therapy on Quality of Life in Hemodialysis Patients with Chronic Kidney Disease

Viqy Ayulia<sup>1\*</sup>, Rahmat Hidayat<sup>2</sup>

<sup>1</sup>Nursing Science, Faculty of Public Health, Indonesian Muslim University, Makassar, Indonesia

<sup>2</sup>Nursing Study Program, Faculty of Public Health, Indonesian Muslim University, Makassar, Indonesia

## Abstract

\*Corresponding author: **Viqy Ayulia**, Nursing Science, Faculty of Public Health, Indonesian Muslim University, Makassar  
Email: [viqy.ayulia@gmail.com](mailto:viqy.ayulia@gmail.com)

### Article info:

Received: 2024-09-29

Revised: 2024-10-27

Accepted: 2024-11-26

e-ISSN: 3047-6054  
Volume 1(4): 129-135, November 2024

**Background:** Patients with chronic kidney disease undergoing hemodialysis require continuous treatment to maintain life expectancy. Beyond physical care, these patients also need psychological, social, and spiritual support, which aligns with the principles of palliative care. Dhikr therapy, as a form of spiritual intervention, may improve patients' quality of life by reducing psychological distress and enhancing spiritual well-being.

**Objective:** This study aimed to examine the effect of dhikr therapy on the quality of life of patients with chronic kidney disease undergoing hemodialysis at Labuang Baji Hospital, Makassar.

**Methods:** This quasi-experimental study employed a pretest-posttest design without a control group. A total of 30 respondents were selected using purposive sampling. Quality of life was measured using the WHOQOL-BREF instrument. Dhikr therapy was provided in four sessions over two weeks. Data were analyzed using paired sample t-test with a significance level of  $\alpha = 0.05$ .

**Results:** The influence test used was a paired sample t test, with a significance level of  $\alpha < 0.05$ . The results of this study show that there is an effect of dhikr therapy on the quality of life of chronic kidney failure patients undergoing hemodialysis at Labuang Baji Hospital Makassar.

**Conclusion:** Dhikr therapy has a significant positive effect on improving the quality of life of patients with chronic kidney disease undergoing hemodialysis. It is recommended that spiritual interventions such as dhikr be integrated into routine care for hemodialysis patients as part of holistic nursing practice.

**Keywords:** Chronic kidney disease; dhikr therapy; hemodialysis; quality of life; spiritual care

## Introduction

Chronic Kidney Disease (CKD) has become a significant global health concern. According to the World Health Organization (WHO, 2018), more than 500 million people worldwide suffer from CKD. The United States Renal Data System (USRDS, 2020) reports approximately 100,000 new cases annually, with around 20 million adults undergoing dialysis each year. In Indonesia, the 2018 Basic Health Research (Riskesdas) recorded a CKD prevalence of 3.8%, with the highest reaching 6.4%. The Indonesian Nephrology Association (Pernefri, 2014) noted that between 4,000 and 5,000 patients undergo hemodialysis, although many are unable to access treatment due to high costs.

CKD is a progressive and irreversible impairment of kidney function, indicated by a glomerular filtration rate (GFR) of less than 60 ml/min/1.73 m<sup>2</sup> for more than three months (Black & Hawks, 2009). In the end-stage, also known as End-Stage Renal Disease (ESRD), patients require lifelong hemodialysis to survive (Smeltzer & Bare, 2016). Beyond physical symptoms, patients often face psychological distress, social isolation, and spiritual crises, all of which affect their overall quality of life (Suparti & Solikhah, 2016; Smeltzer et al., 2016).

Palliative care has therefore become essential in addressing the multidimensional needs

of CKD patients. One effective spiritual intervention is dhikr therapy, an Islamic practice involving remembrance of God, which has been shown to promote calmness, hope, and emotional stability (Mardiyono, Songwathana, & Petpichetchian, 2011; Subandi, 2009). Regular dhikr has also been associated with increased endorphin release, which enhances feelings of peace and well-being (Himawan, Suparjo, & Cuciati, 2020).

Dhikr therapy can also help patients develop effective coping mechanisms, foster spiritual resilience, and improve their quality of life. It provides not only psychological comfort but also spiritual strength, encouraging acceptance and adaptation to chronic illness (Kusumaastuti, Iftayani, & Noviyanti, 2017; Herliawati et al., 2014). In group settings, dhikr therapy may foster peer support and shared spiritual experiences that further contribute to mental and emotional healing.

Quality of life itself encompasses physical health, psychological state, social relationships, level of independence, and environmental context (Kurniawati & Asikin, 2018). At Labuang Baji Hospital Makassar, the number of outpatient visits for CKD patients continues to rise, reaching 2,029 visits in 2023 with 216 patients. These increasing numbers underscore the need for supportive interventions that address not only physical health but also spiritual well-being. Based on this context, the researcher aims to investigate the effect of dhikr therapy on the quality of life of patients with chronic kidney disease undergoing hemodialysis at Labuang Baji Hospital Makassar in 2024.

## Methods

### Study Design

This research employed a quasi-experimental design to assess the effect of dhikr therapy on the quality of life of chronic kidney disease (CKD) patients undergoing hemodialysis. This design enables the observation of intervention effects in natural settings while lacking full randomization.

### Samples

The study population consisted of chronic kidney failure patients undergoing hemodialysis at Labuang Baji Regional General Hospital, Makassar. A total sampling technique was applied, involving all eligible patients who met the inclusion criteria. The final sample size was 30 participants, determined based on the total number of patients undergoing regular hemodialysis at the time of study implementation. Inclusion criteria included patients aged  $\geq 18$  years, able to communicate, and willing to participate. Patients with cognitive impairments, psychiatric conditions, or unstable clinical status were excluded.

### Instruments

The instrument used to assess quality of life was the World Health Organization Quality of Life-BREF (WHOQOL-BREF), an internationally validated tool comprising 26 items across four domains: physical health, psychological well-being, social relationships, and environmental context. Responses were recorded on a 5-point Likert scale. Scores for each domain were transformed into a scale ranging from 0 to 100, where higher scores represent better perceived quality of life. The Indonesian version of WHOQOL-BREF has been previously validated and shown to be reliable, with Cronbach's alpha coefficients reported between 0.70 and 0.88 across domains (Purba et al., 2018). The instrument was deemed appropriate for use in the Indonesian CKD population in this study.

### Interventions

The dhikr therapy intervention was administered over a 14-day period. Participants were guided to perform dhikr five times per day, with each session lasting approximately 15 minutes. The content included recitations of istighfar, tahlil, and sholawat, led in a calm, focused setting conducive to spiritual reflection. The sessions were conducted in a group environment under the supervision of trained facilitators to ensure consistency.

## Data Collection

Primary data were collected through face-to-face interviews using the validated WHOQOL-BREF questionnaire before and after the intervention. Respondents completed the questionnaire with the support of trained data collectors when needed. Secondary data on participants' clinical profiles were obtained from the hospital's medical records, including duration of hemodialysis and comorbid conditions.

## Data Analysis

Data were analyzed using both univariate and bivariate approaches. Univariate analysis was used to describe participant characteristics and domain-level quality of life scores. Bivariate analysis was conducted to evaluate pre- and post-intervention differences using the paired sample t-test, with a significance threshold set at  $p < 0.05$ .

## Ethical Considerations

This study obtained ethical approval from the Research Ethics Committee of the Muslim University of Indonesia (UMI), as documented in the ethics approval letter No. 075/EC-FKMUMI/V/2024. Informed consent was obtained from all participants after providing a clear explanation of the study's objectives, procedures, risks, and benefits. Participant confidentiality and voluntary participation were ensured throughout the study.

## Results

A total of 15 patients with chronic kidney failure undergoing hemodialysis at Labuang Baji Hospital Makassar participated in this study. As shown in Table 1, the majority of respondents were aged 41–50 years (46.7%), followed by those aged 51–65 years (33.3%), and 20.0% were aged 35–40 years. Most participants were female (66.7%) and had attained graduate level of education (46.7%). In terms of occupation, the largest group comprised civil servants or employees (33.3%), followed by self-employed individuals (20.0%), and others (26.7%). These demographic characteristics provided a varied but balanced participant profile for evaluating the effect of dhikr therapy on quality of life.

Table 1. Distribution of respondents by age in patients with chronic kidney failure at Labuang Baji Hospital Makassar

Characteristics of respondents	n	%
Age		
Adults 35-40	3	20.0
Adult Ljt 41-50	7	46.7
Ages 51-65	5	33.3
Gender		
Man	5	33.3
Woman	10	66.7
Education		
No School	2	13.3
Elementary School	1	6.7
Senior High School	5	33.3
Graduate	7	46.7
Work		
Not Working	2	13.3
Self Employed	3	20.0
Employees	5	33.3
Pensioner	1	6.7
Other	4	26.7

Source: SPSS Processed Data, 2024

Based on Table 2, among patients with chronic kidney failure undergoing hemodialysis, 7 respondents (46.7%) had a body weight of 40–50 kg, while 8 respondents (53.3%) had a body

weight of 51–61 kg. In terms of height, 4 respondents (26.7%) were 140–150 cm tall, 7 respondents (46.7%) were 151–160 cm, and 4 respondents (26.7%) were 161–170 cm. Regarding the duration of hemodialysis, 7 respondents (46.7%) had been undergoing treatment for 3–5 months, and 8 respondents (53.3%) for 6–11 months.

Table 2. Distribution of respondents by length Hemodialysis

<b>length Hemodialysis</b>	<b>n</b>	<b>%</b>
<b>Weight</b>		
40-50 kg	8	53.3
51-61 kg	7	46.7
<b>Height</b>		
140-150	4	26.7
151-160	7	46.7
161-170	4	26.7
<b>Long HD</b>		
3-5 Months	7	46.7
6-11 Months	8	53.3

Source: SPSS Processed Data, 2024

Based on Table 3, the quality of life of all 15 respondents undergoing hemodialysis was categorized as poor before the dhikr therapy intervention (mean = 2.00, SD = 0.00). After receiving dhikr therapy, the respondents showed an improvement, with all reporting a good quality of life (mean = 1.00, SD = 0.00). This indicates a significant positive change in quality of life following the intervention.

Table 3 Quality of Life of Respondents Before the Dhikr Therapy Pretest and Respondents' Quality of Life After Posttest Dhikr Therapy

	Mean	N	Std. Deviation	Std. Error Mean
Quality	2.0000a	15	.00000	.00000
<b>Pre Life</b>				
Quality	1.0000a	15	.00000	.00000
<b>Life Post</b>				

Source: SPSS Processed Data, 2024

Based on the results of the normality test shown in Table 4, the data were analyzed using both the Kolmogorov-Smirnov and Shapiro-Wilk tests. The Shapiro-Wilk test for post-intervention quality of life yielded a p-value of 0.824 ( $p > 0.05$ ), indicating that the data are normally distributed. Although the pre-intervention data showed a p-value of 0.033, which is  $< 0.05$ , the Kolmogorov-Smirnov test presented a p-value of 0.088, supporting the assumption of normality for small sample sizes. Therefore, based on these results and following Nursalam (2018), the data are considered normally distributed, justifying the use of a parametric paired sample t-test for further analysis.

Table 4. Data Normality Test

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	Df	Sig.	Statistics	Df	Sig.
Quality Pre Life	.206	15	.088	.870	15	.033
Quality Life Post	.157	15	.200	.968	15	.824

Source: SPSS Processed Data, 2024

The bivariate analysis was conducted to assess the effect of dhikr therapy on the quality of life among chronic kidney failure patients undergoing hemodialysis. As shown in Table 3, the paired sample t-test revealed a statistically significant difference between pre-test and post-test scores. The analysis yielded a t-value of -26.007 with 14 degrees of freedom and a p-value  $< 0.001$  (two-tailed), which is below the significance level of  $\alpha = 0.05$ . Therefore, the null hypothesis is rejected, and it can be concluded that dhikr therapy significantly improves the quality of life of chronic kidney failure patients undergoing hemodialysis at Labuang Baji Hospital Makassar.

Table 3 Test Paired Sample t Test

Paired Sample T Test	Upper	t	Df	Sig. (2-tailed)
Pre-Post Quality of Life	-43.24633	-26.007	14	<.001

Source: SPSS Processed Data, 2024

## Discussion

The results of this study indicate a significant improvement in the quality of life of chronic kidney failure patients undergoing hemodialysis after receiving dhikr therapy. Initially, all 15 respondents (100%) were classified as having poor quality of life. Following the intervention, all participants shifted to a good quality of life category. These findings support Palos and Loredana (2017), who stated that persistent negative thinking can lead to health deterioration, reduced adaptability, and declining quality of life. Similarly, Bherking and Whitley (2018) emphasized the role of the prefrontal cortex in reinforcing negative thought patterns. Dhikr therapy, which centers on focusing the mind through repetitive, positive phrases, may help break this cognitive cycle (Newberg & Waldman, 2018).

These results are consistent with prior studies. Fitri (2015) reported improved quality of life in hemodialysis patients following dhikr therapy, with an increase in respondents who experienced the best quality of life. Veronica (2016) also noted that spiritual relaxation through dhikr enhanced physical and psychological well-being, although some decline was observed in patients with long-term fatigue. Subandi et al. (2013) demonstrated that psychoreligious therapy combining prayer and dhikr significantly reduced anxiety in elderly patients, supporting the current study's conclusion that spiritual interventions may improve mental health outcomes and quality of life. According to Jauhari (2016), dhikr activates the psycho-neuro-endocrine network, enhancing immunity and emotional balance.

The findings also resonate with Sukaca (2018), who described dhikr as a practice integrated into daily life that reinforces a sense of spiritual connectedness. Dhikr promotes calmness, surrender, and positivity, counteracting despair and stress (Subandi, 2009; Newberg & Waldman, 2018). In Islamic belief, dhikr represents acceptance and gratitude, helping patients develop coping mechanisms to endure long-term therapy and illness. Studies by Ellen et al. further showed that prayer positively influences mood and well-being, especially in women undergoing hemodialysis, highlighting the universal benefits of spiritual engagement.

Demographically, this study aligns with the Indonesian Nephrology Association data (PERNEFRI, 2011), which found that the majority of dialysis patients are women and elderly. The majority of respondents in this study were aged 41–50 years, also consistent with national prevalence patterns of hemodialysis patients, as described by Wagiyo and Widowati (2011).

Despite the positive findings, this study has several limitations. The small sample size (n=15) and single-site design limit generalizability. The intervention duration was relatively short (14 days), and the absence of a control group makes it difficult to rule out other contributing factors. Additionally, while the WHOQOL instrument was used, the specific validation status in the local context was not confirmed, which may affect internal validity.

Further research with larger, multi-center samples, longer follow-up periods, and randomized controlled designs is recommended to strengthen evidence regarding the effectiveness of dhikr therapy on the quality of life in chronic illness populations.

## Conclusion

This study demonstrated that dhikr therapy significantly improves the quality of life among patients with chronic kidney failure undergoing hemodialysis at Labuang Baji Hospital Makassar. Prior to the intervention, all 15 respondents reported a poor quality of life. After receiving dhikr therapy for 14 days, all participants transitioned to a good quality of life category, with statistical analysis (paired sample t-test) confirming a significant difference ( $p < 0.001$ ). These findings suggest that dhikr therapy can be a beneficial complementary intervention in nursing care, particularly in the palliative management of chronic illness. Nurses and healthcare providers are encouraged to incorporate spiritual practices like dhikr into holistic patient care to address not only physical but also psychological and spiritual dimensions of well-being. Further research is recommended with larger, multi-center samples, the inclusion of a control group, and longer follow-up durations to assess the long-term effects of dhikr therapy. Additionally, studies should explore the integration of dhikr within structured nursing interventions and its potential to reduce psychological distress such as anxiety and depression among chronic disease populations.

## References

- Bherking, & Whitley. (2018). *Affect Regulation training: A Practitioner* New York London. 1- 5.
- Cheers. (2018). *The 9 Golden Habits For Brighter Muslims*. Yogyakarta: PT. Benteng Pustaka.
- Himawan, F., Suparjo, S., & Cuciati, C. (2020). The Effect of Dhikr Therapy on Depression Levels in Chronic Kidney Failure Patients Undergoing Hemodialysis. *Journal Of Holistic Nursing Science* <https://doi.org/10.31603/nursing.v7i1.3036>, 10-20.
- Jauhari, J. (2016). The Effect of Religious Therapy: Prayer and Dhikr on Reducing Stress Levels in Patients with Kidney Failure. *Journal of Health*, 45-56.
- Kurniawati, A., & Asikin, A. (2018). Overview of the Level of Knowledge of Kidney Disease and Kidney Diet Therapy and Quality of Life of Hemodialysis Patients at Rumkital Dr.Ramelan Surabaya Amerta Nutrition. *Journal of Health* <https://doi.org/10.20473/amntv2.2018>, 125-131.
- Newberg, A., & Waldman, M. (2018). *Born To Believe: Faith Genes in the Brain*. (Translated by Nukman, E.F.) Bandung, Mizan. 4-8.
- Palos, R., & Loredana, V. (2017). Automatic Negative Thought and Unconditional Self Acceptent In Rheumatoid Arthritis. *ISRN Otholaryngology*, 1-5.
- PDSPD, P. D. (2016). *Internal Medicine Textbook*. Jakarta: EGC.
- Rafi, M. S., Amin, K. ., & K, H. . (2024). The Relationship Between Family Support and the

- Quality of Life of Patients with Diabetes Mellitus. *Omni Health Journal*, 1(1), 01-06. <https://omnijournal.id/index.php/health/article/view/9>
- RISKESDAS, K. K. (2018). Health Research and Development Agency of the Ministry of Health of the Republic of Indonesia. Jakarta.
- Smeltzer, S., & Bare, B. (2013). *Medical Surgical Nursing Textbook Vol.1*. Jakarta: EGC.
- Subandi, M. (2009). *The Psychology of Dhikr*. Yogyakarta: Student Library.
- WHO Organization, W. H. (2018). Global Status Report On Noncommunicable Disease.
- Widyaastuti, R., & Karuningtyas, M. (2019). The application of dhikr relaxation to stress in patients with chronic kidney failure undergoing hemodialysis. *Journal of Nursing Care Management*, 8-14.
- Widyawati, D., & L, N. (2015). Improving Quality of Life in Patients with Chronic Kidney Failure Undergoing Hemodialysis Therapy Through Psychological Intervention at the Hemodialysis Unit of Gmabiran Kediri Hospital. *Journal of Medical Surgery*, 3.6-11.
- Yurissa, & Wella. (2008). *Health Research Ethics*. Riau: FKUR.