

SPIRITUALITY AND SELF ESTEEM IN HEMODIALYSIS PATIENTS**Dwi Prihatin Era¹, Muhammad Imaduddin², Frana Andrianur¹**¹Department of Nursing, Health Polytechnic East Borneo, Samarinda, Indonesia²Pupuk Kaltim Hospital, Bontang, IndonesiaE-mail: portaget97@gmail.com**Abstract**

Chronic kidney disease (CKD) is an end stage disease that requires kidney replacement therapy and causes changes in physical conditions that are not good, that it can affect patient's psychological condition, one of that is self-esteem. Activities related to spirituality are proven to affect individual health and feelings of well-being so that they can increase self-esteem. The purpose to determine the relationship between spirituality and self-esteem of CKD patients undergoing hemodialysis at the Pupuk Kaltim Bontang Hospital in 2021. Method this study is quantitative with analytic study and cross sectional design. The sampling technique was total with a sample of 44 respondents. Data collection interviews using a questionnaire in the form of a Likert scale consisting of 28 statement items. Data analysis using Spearman correlation test with a significance level of 0.05. There was a significant relationship between spirituality and self-esteem (p value = 0.000; r = 0.757). There is a strong and positive relationship between spirituality and self-esteem in patients undergoing hemodialysis. It is hoped that families and communities can maintain the provision of spiritual support to increase the self-esteem of CKD patients.

Keywords: *Chronic kidney disease, hemodialysis, self esteem***INTRODUCTION**

Chronic kidney disease is a condition in which the kidneys cannot carry out their functions to regulate fluid and electrolyte balance and remove metabolic wastes or toxins from the body due to damage to the kidneys, which is characterized by a decrease in the glomerular filtration rate. Chronic kidney disease is a progressive and irreversible kidney disease where the body's ability fails to maintain metabolism and fluid and electrolyte balance, resulting in uremia¹.

According to the World Health Organization (WHO), chronic kidney disease has caused the death of 850,000 people every year. This figure shows that chronic kidney disease is the 12th highest cause of world mortality². Globally, the prevalence of chronic kidney disease sufferers is 13.4% with 48% of the world's population experiencing decreased kidney function³. In Indonesia, in 2018 chronic kidney disease ranked 5th in the category of non-communicable diseases, while the prevalence of chronic kidney disease in the population aged 15 years rose from 2 percent in 2013 to 3.8 percent in 2018⁴. According to data from the Indonesian Renal Registry⁵, the number of CKD patients undergoing hemodialysis was 132,142 with a total of 66,433 new patients. In the province of East Kalimantan the number of CKD patients was 11,919, of which 30.3% underwent hemodialysis therapy⁴. From data obtained from the

medical records of the Bontang PKT Hospital in December 2020 the number of CKD patients undergoing hemodialysis was 54 patients.

Hemodialysis is a process to replace some of the work functions of the kidneys by removing fluids and toxic substances or toxins from the body using a hemodialysis machine and a dialyzer. Hemodialysis therapy is carried out for a very long period of time so that patients often feel worried about their unpredictable illness⁶. The need for regular hemodialysis therapy, taking medication regularly, and lack of mobility due to limited physical abilities make sufferers experience stress and will ultimately affect their self-esteem.

Humans in the concept of the nursing paradigm are seen as whole and complex individuals (holistic beings) consisting of bio-psycho-socio-spiritual⁷. Spirituality is not only associated with worshiping God, but more than that spirituality is defined as faith, hope, transcendence, and forgiveness⁸. The fulfillment of spiritual health in patients will usually help patients cope and adapt to the illness they are suffering⁹. Self-esteem is a feeling of accepting oneself without conditions, as a valuable and important trait in oneself despite mistakes and failures¹⁰. It is one of the nursing problems experienced by chronic kidney disease patients undergoing hemodialysis due to dependence, role changes, changes in self-image and sexual dysfunction⁶. Disorders of self-esteem that can occur in patients with chronic kidney disease such as patients will experience negative feelings towards themselves and lack of confidence in conditions or physical changes that occur as a result of the disease they are experiencing or the side effects of hemodialysis¹¹.

The results of research conducted by Lestari & Safuni (2016) at dr. Zainoel Abidin Hospital Banda Aceh found that the fulfillment of spiritual needs in chronic kidney failure patients was in the poor category of 51,4% which consisted of relationships with God in the good category. (51,4%) relationships with oneself in the poor category (57,1%) relationships with others in the poor category (57,1%) relationships with nature in the poor category (65,7%)¹². The results of another study conducted Archentari et al. (2017) on members of the Young Kidney Living community from 34 respondents showed that there was a significant positive correlation between self-esteem and quality of life of CKD patients undergoing hemodialysis (p value = 0.014; r = 0.417)¹³.

A person who has chronic kidney disease undergoing hemodialysis will experience various changes that occur in his life, where this will have an impact on the patient's psychological condition. Changes in chronic kidney disease patients can also have an impact on individuals' perceptions of their present life, including spirituality and perceptions of themselves including self-esteem¹⁴. Fulfillment of spiritual needs in patients with chronic kidney disease is very important as a way to increase meaning and life expectancy, improve quality of life, and increase patient confidence even in unsupportive health conditions and reduce anxiety and fear of death with spiritual activities¹⁵. Until now, the authors have not

found many studies on the extent of spirituality of CKD patients undergoing hemodialysis with their self-esteem.

MATERIAL AND METHODS

The type of research used in this study is an analytical study design with a cross sectional design which aims to determine the relationship between variables where the independent and dependent variables are identified at one time. This research method is called a quantitative method because the research data is in the form of numbers and the analysis uses statistics¹⁶.

Inclusion Criteria: Age > 18 years, free of visual impairments that interfere with communication, duration of hemodialysis > 3 months. Exclusion Criteria: In intensive care, have physical limitations to fill out the questionnaire (cannot read and hear). Sampling method is total sampling, which is a sampling technique where the number of samples is the same as the total population. The number of samples in this study is the same as the total population that was 44 patients.

Researchers started collecting data on respondents in the hemodialysis unit. Respondents who meet the requirements according to the inclusion criteria are given an explanation of the aims and objectives of the study, as well as the research steps. Respondents who experienced health problems at the time of data collection, such as; shortness of breath, fatigue, dizziness, nausea, vomiting, fever, headache, data collection is carried out at the next hemodialysis session when there are no health problems. Furthermore, the researcher gave informed consent for the study, then when the respondent was willing, he was asked to sign the consent form. The researcher was assisted by 2 enumerators who gave questionnaires to respondents to fill in which took about 30 minutes. If the respondent has difficulty when filling out the questionnaire, the researcher helps to read the contents of the questionnaire and the researcher fills out the answers to the questionnaire according to the answers chosen by the respondents. The researcher checks again if the respondent does not fill out the questionnaire completely, the researcher asks the respondent to complete the questionnaire sheet. After completion, the next researcher took the questionnaire again

The questionnaire in this study is divided into 3 parts. The first questionnaire contains 6 (six) questions about the respondent's characteristic data which include; age, gender, education, occupation, length of hemodialysis. The second questionnaire contains 20 questions about the respondent's spiritual level based on the concept proposed by Berman et al. (2008) and adopted from the research on the Relationship of Spirituality with Self-Esteem of Parents Who Have Children with Down Syndrome. The third questionnaire contains 8 questions about the respondents' self-esteem levels based on the concept of Berman et al.

(2008) and adopted from the study of the Relationship between Spirituality and Self-Esteem of Parents Who Have Children with Down Syndrome⁸.

RESULTS

Data collection was carried out from May 17, 2021 to May 25, 2021 in the Hemodialysis Room at the Pupuk Kaltim Bontang Hospital, the following results were obtained:

Profile of Respondents

Table 1. Frequency and percentage of the profile of the respondents

Characteristics	Frequency (n)	Percentage (%)
Age (years)		
18-40	11	25,0
41-60	24	54,5
> 60	9	20,5
Gender		
Male	26	59,1
Female	18	40,9
Level of education		
Elementary	2	4,5
Junior high school	2	4,5
Senior high school	33	75,0
College/university	7	15,9
Marital status		
Married	38	86,4
Unmarried	6	13,6
Occupation		
Occupied	12	27,3
Unoccupied	32	72,7
Time (in years)		
< 2	14	31,8
> 2	30	68,2

Based on table 1 above, it shows the characteristics of respondents by age group with the majority having the age group 41-60 years as many as 24 people (54,5%), in the 18-40 year age group as many as 11 people (25,0%), and a small proportion are age group > 60 years as many as 9 people (20,5%). The characteristics of the respondents are mostly male, amounting to 26 people (59,1%), and some of them are female, amounting to 18 people (40,9%).

Based on table 1 above, it shows the characteristics of respondents based on their latest education, most of them have senior high amounting to 33 people (75,0%), college/university as many as 7 people (15,9%), and a small part with junior high school education amounting to 2 people (4,5%), and 2 people have elementary education (4,5%). The

characteristics of respondents based on marital status, most of the respondents are married amounting to 38 people (86,4%), a small proportion are unmarried amounting to 6 people (13,6%).

Based on table 1 above, it shows the characteristics of respondents based on work, some of the respondents amounted to 32 people (72,7%) unoccupied, and a small part occupied amounted to 12 people (27,3%). The characteristics of respondents based on the length of time undergoing hemodialysis, the majority of respondents who underwent hemodialysis > 2 years were 30 people (68,2%), and a small proportion of respondents who underwent hemodialysis < 2 years were 14 people (31,8%).

Analysis Bivariate

Spirituality variable

Table 2. Spirituality variable analysis

		Frequency				Average
		<i>Always</i>	<i>Frequent</i>	<i>Seldom</i>	<i>Never</i>	
SP1	N	39	5	0	0	3,89
	%	88,6%	11,4%	0,0%	0,0%	
SP2	N	36	8	0	0	3,82
	%	81,8%	18,2%	0,0%	0,0%	
SP3	N	22	17	4	1	3,36
	%	50,0%	38,6%	9,1%	2,3%	
SP4	N	5	8	27	4	2,32
	%	11,4%	18,2%	61,4%	9,1%	
SP5	N	40	4	0	0	3,91
	%	90,9%	9,1%	0,0%	0,0%	
SP6	N	39	5	0	0	3,89
	%	88,6%	11,4%	0,0%	0,0%	
SP7	F	39	5	0	0	3,89
	%	88,6%	11,4%	0,0%	0,0%	
SP8	F	26	4	8	6	3,14
	%	59,1%	9,1%	18,2%	13,6%	
SP9	F	16	15	11	2	3,02
	%	36,4%	34,1%	25,0%	4,5%	
SP10	F	31	10	2	1	3,61
	%	70,5%	22,7%	4,5%	2,3%	
SP11	F	26	13	2	3	3,41
	%	59,1%	29,5%	4,5%	6,8%	

Based on the results of the descriptive analysis in the table above, it shows that of 44 CKD patients undergoing hemodialysis in the Hemodialysis room at the Pupuk Kaltim Bontang Hospital, with an average of 3,89, it shows that most of the respondents stated that they always sincerely worship in life. The average item was 3,82, indicating that most of the respondents

stated that they always take lessons from every test given by God. The average item is 3,36, indicating that most of the respondents stated that they always do worship even when they are in sick condition. The average item was 2,32, indicating that most of the respondents stated that because of illness, they were rarely unable to carry out religious orders perfectly. The average item was 3,91, indicating that most of the respondents always stated that even in difficult circumstances, they still remember God. The average item was 3,89, indicating that most of the respondents stated that they always believed that God would give them strength. The average item was 3.89, indicating that most of the respondents stated that they always believed that God would make things easier. The average item was 3,14, indicating that most of the respondents often stated that they did not believe that the difficulties they were experiencing were destiny from God. The average item of 3,02 indicates that most of the respondents stated that they often produce something meaningful in life. The average item was 3,61, indicating that most of the respondents stated that they always gave up with the difficulties they experienced. The average item was 3,41, indicating that most of the respondents stated that they always did not lose their enthusiasm even though they were in difficult circumstances. In this study, the average spirituality value of respondents was 71,20, which means that the respondents' spirituality was in the high category.

Table 3. Self-Esteem Variable Analysis

		<i>Frequency</i>				<i>Average</i>
		Always	Frequent	Seldom	Never	
<i>HD1</i>	F	35	9	0	0	3,80
	%	79,5%	20,5%	0,0%	0,0%	
<i>HD2</i>	F	37	7	0	0	3,84
	%	84,1%	15,9%	0,0%	0,0%	
<i>HD4</i>	F	29	15	0	0	3,66
	%	65,9%	34,1%	0,0%	0,0%	
<i>HD5</i>	F	10	15	11	8	2,61
	%	22,7%	34,1%	25,0%	18,2%	
<i>HD6</i>	F	30	14	0	0	3,68
	%	68,2%	31,8%	0,0%	0,0%	
<i>HD7</i>	F	21	14	9	0	3,27
	%	47,7%	31,8%	20,5%	0,0%	
<i>HD8</i>	F	25	15	4	0	3,48
	%	56,8%	34,1%	9,1%	0,0%	

Based on the results of the descriptive analysis in the table above, it is stated that of 44 CKD patients undergoing hemodialysis in the Hemodialysis room at the Pupuk Kaltim Bontang Hospital with an item average of 3.80, it shows that most respondents always state that they can accept their situation as they are. The average item was 3,84, indicating that

most of the respondents stated that even though they were sick, they were always accompanied by their closest people. The average item was 3,66, indicating that most of the respondents stated that they were always appreciated by others even though they were sick and had to undergo hemodialysis. The item average of 2,61 indicates that most respondents stated that when they were diagnosed with chronic kidney disease and had to undergo hemodialysis, they often found it difficult to communicate with many people. The average item was 3,68, indicating that most of the respondents stated that they were always appreciated by others even though they had chronic kidney disease and had to undergo hemodialysis. The average item was 3,27, indicating that most of the respondents stated that they always felt worthless because of their current illness. The average item was 3,48, indicating that most of the respondents stated that they always felt ashamed/low self-esteem with their illness that required hemodialysis. The respondent's self-esteem value obtained an average of 24,34, which means that the patient's self-esteem in this study was in the high category.

Analysis of the relationship between spirituality and self-esteem was carried out using Spearman rank correlation with the following hypothesis which H₀ : There is an insignificant relationship between spirituality and self-esteem and H₁: There is a significant relationship between spirituality and self-esteem. The test criteria state that if the probability is level of significance (alpha = 5%) then H₀ is rejected, so it can be stated that there is a significant relationship between spirituality and self-esteem.

The results of the analysis of the relationship between spirituality and self-esteem is correlation coefficient 0,757 with the p value 0,000. This indicates that there is a positive (unidirectional) relationship and a strong relationship between spirituality and self-esteem. It can be said that the better spirituality is followed by an increase in self-esteem, and conversely the worse spirituality is followed by a decrease in self-esteem.

DISCUSSION

Based on the results of the study, it showed that there was a significant relationship between spirituality and self-esteem of chronic kidney disease patients undergoing hemodialysis at Puduk Kaltim Hospital. Patients who have good spirituality have good self-esteem and patients who have less spirituality have less self-esteem. The results of this study are in line with the results of research of Nuhita in 2018 on 84 type 2 diabetes mellitus patients in the work area of the Jenggawah Health Center, Jember Regency which stated that there was a significant relationship between spirituality and coping strategies.

Studies have shown that spirituality is a genuine help for many adult individuals with mental problems, serving as a primary coping medium and a source of meaning and

coherence in their lives or helping to provide social networks¹⁷. Spirituality generally involves belief in a relationship with something higher, powerful, has creative and divine power, or has unlimited energy⁸.

In this study, spirituality affects self-esteem of chronic kidney disease patients undergoing hemodialysis. The patient reveals that illness is a test and a trial given by God, the patient's illness is a gift from God, then God also provides healing. This is in accordance with the respondent's answer where in general the patient believes in the power and power of God, and remembering God can reduce suffering from his illness. According to the researcher's assumption, their attention to spirituality increases with age, and the belief that spirituality can provide a way for solving life's problems and can calm their minds so that they can increase their self-confidence even though they are in chronic pain conditions.

Religion is a highly organized system of beliefs and practices. According to Vardey (1996), organized religion includes (a) a sense of being bound by beliefs in general; (b) study the Book (Torah, Bible, Qur'an, or others); (c) the implementation of worship; (d) the use of discipline and practice, commandments, and worship; and (e) ways of taking care of the mind (such as fasting, prayer and meditation)¹⁸.

Religion is a guide or guide to achieve eternal life. In the daily practice of hearing the word religion, many people's minds must have different images. Some see religion as a way and a way of life; religion is belief in a thing or reality that is higher than human beings; religion is a series of specific actions such as prayer, worship and ceremonies carried out gracefully or without coercion; and there is another who considers religion to be a feeling of absolute dependence on a reality that transcends itself.

Patients with chronic kidney disease in general will experience problems with physical weakness, loss of social support systems, feeling alienated so that someone is at risk of leaving worship according to religious orders. But for those who still carry out religious rituals, spiritually they still have peace and acceptance of their illness.

CONCLUSION

Based on the research that has been done, it can be concluded as follows: the characteristics of the respondents which include age, most are 41-60 years old as many as 24 people (54.5%), for the gender group most are men as many as 26 people (59.1%), most of the last education was senior high school as many as 33 people (75.0%), marital status were mostly married as many as 38 people (86.4%), most of the work unoccupied as many as 32 people (72.7%), and most of them underwent hemodialysis >2 years as many as 30 people (68.2%). The average spirituality value of respondents was 71.20. Respondents' self-esteem values obtained an average of 24.34. There is a significant relationship between

spirituality and self-esteem of patients with chronic kidney disease undergoing hemodialysis at Pupuk Kaltim Hospital, which shows a positive relationship and has a strong correlation.

REFERENCE

1. Purwanto H. Keperawatan Medikal Bedah II. Jakarta: Badan PPSDMK Kementerian Kesehatan RI; 2016. 411 p.
2. Luyckx VA, Tonelli M, Stanifer JW. The global burden of kidney disease and the sustainable development goals. *Bull World Health Organ.* 2018;96(6):414-422C.
3. Hill NR, Fatoba ST, Oke JL, Hirst JA, O'Collaghan CA, Lasserson DS, et al. Global Prevalence of Chronic Kidney Disease – A Systematic Review and Meta-Analysis. *PLoS One.* 2013;67(5):103–16.
4. Kementerian Kesehatan RI. Hasil Utama Riset Kesehatan Dasar (RISKESDAS). *J Phys A Math Theor.* 2018;44(8):1–200.
5. PERNEFRI. 11th Report Of Indonesian Renal Registry 2018. Irr [Internet]. 2018;1–46. Available from: https://www.indonesianrenalregistry.org/data/IRR_2018.pdf
6. Smeltzer, Bare. Buku Ajar Keperawatan Medikal Bedah Brunner dan Suddarth. 8th ed. Jakarta: Penerbit Buku Kedokteran EGC; 2012.
7. Budiono S. Konsep Dasar Keperawatan. Jakarta: Bumi Medika; 2016.
8. Berman MG, Jonides J, Kaplan S. The cognitive benefits of interacting with nature. *Psychol Sci.* 2008 Dec;19(12):1207–12.
9. Amir S. Hubungan Antara Kesehatan Spiritual Dengan Kesehatan Jiwa Pada Lansia Muslim Di Sasana Tresna Werdha KBRP Jakarta Timur. [Internet]. 2010. Available from: http://lontar.ui.ac.id/file?file=digital/20282452-T_Amir_Syam.pdf
10. Stuart G, Sunden S. Buku Saku Keperawatan Jiwa. Jakarta: Penerbit Buku Kedokteran EGC; 2006.
11. Suliswati. Konsep Dasar Keperawatan Jiwa. Jakarta: Penerbit Buku Kedokteran EGC; 2005.
12. Lestari I, Safuni N. Pemenuhan kebutuhan spiritual pada pasien gagal ginjal kronik di Rumah Sakit Umum Aceh. *J Ilm Mhs Fak Keperawatan [Internet].* 2017;1(1):1–7. Available from: <http://www.jim.unsyiah.ac.id/FKep/article/view/1482/1792>
13. Archentari KA, Gasela V, Ariyani N, Nuriyyatiningrum H, Iskandarsyah A. Harga Diri Dan Kualitas Hidup Pada Pasien Dengan Chronic Kidney Disease yang Menjalani Hemodialisis. *Psikologi.* 2017;16(2):138–46.
14. Clarke AL, Yates T, Smith AC, Chilcot J. Patient's perceptions of chronic kidney disease and their association with psychosocial and clinical outcomes: A narrative review. *Clin Kidney J.* 2016;9(3):494–502.
15. Muzaenah T, Makiyah SNN. Pentingnya Aspek Spiritual Pada Pasien Gagal Ginjal Kronik Dengan Hemodialisa: a Literature Review. *Herb-Medicine J.* 2018;1(2).
16. Dharma KK. Metodologi Penelitian Keperawatan. Jakarta Timur: Trans Info Media (TIM); 2011.
17. Videbeck SL. Buku Ajar Keperawatan Jiwa. Jakarta: Penerbit Buku Kedokteran EGC; 2008.
18. Vardey L. *God in All Worlds : an Anthology of Contemporary Spiritual Writing.* Knopf Doubleday Publishing Group; 1996. 896 p.