

# **The Correlation Between Emotional Intelligence And The Quality Of Life On Patients Of Hemodialysis Therapy In Pabatu Hospital, Medan, Indonesia**

\*Anna Wati Dewi Purba

Lecturer at Psychological Faculty, Medan Area University (UMA), Medan, Indonesia  
Corresponding Author: Anna Wati Dewi Purba

---

**Abstract:** Health aims to prevent the disease so as to improve the healthy rate. High healthy rate can affect to the increase of productivity. In order to keep healthy, many treatments will be chosen to treat chronic renal failure, such as alternative medicine, kidney transplant, or hemodialysis therapy.. Based on the results of the analysis of previous discussion at Pabatu Hospital, Medan, Indonesia, it can be concluded the results of correlation  $r$  Product Moment known that there is a positive relationship between emotional intelligence with quality of life in patients of hemodialysis therapy  $r_{xy} = 0.292$  with  $p < 0.05$ . It means that the higher the emotional intelligence will be the higher the quality of life. In general the results of this study states that the correlation of emotional intelligence and quality of life in patients of hemodialysis therapy are high where the value of empirical average above the hypothetic average value in the normal curve. Empirical average value of emotional intelligence = 24.145, while the average value of hypothetical = 13.5, then the value of empirical average quality of life = 23.979 while the average value of hypothetical = 17.5.

**Keywords:** emotional intelligence; quality of life; patients; hemodialysis therapy

---

Date of Submission: 08-08-2017

Date of acceptance: 26-08-2017

---

## **I. INTRODUCTION**

Health is very important for patients with chronic renal failure, health aims to prevent the disease so as to improve the healthy rate. High healthy rate can affect to the increase of productivity. In order to keep healthy, many treatments will be chosen to treat chronic renal failure, such as alternative medicine, kidney transplant, or hemodialysis therapy. However, hemodialysis therapy is mostly chosen by patients with chronic renal failure to survive. While other treatments, such as kidney transplants, have constraints such as the kindness of renal donor, high cost, surgical technique and also treatment after the operation to do.

Hemodialysis can be a severely terrific procedure so that many aspects must be considered when choosing to do this treatment. Patients deciding to choose hemodialysis treatment should be ready for dialysis part up to three times a week, with each parts are being about four hours. Patients may feel tired for routine undergoing hemodialysis therapy, triggering boredom, and also stress. Thus a person who is able to undergo hemodialysis therapy is a person who can understand his condition and the desire of going their life ahead and the expectations of the patients of hemodialisa therapy so they will keep their health.

Based on the description above, the researcher wants to see how the correlation between emotional intelligence and quality of life on patients with chronic renal failure whom are in hemodialysis therapy in Pabatu Hospital, Medan, Indonesia.

## **II. LITERATURE REVIEW**

### **2.1 Patients of Hemodialysis Therapy**

Hemodialysis is derived from the word *hemo* meaning blood, and *dialisa* means separation of solutes. Hemodialysis is a process for removing liquids and wasting products from the body when the kidneys are not able to perform its functions properly (damage to the kidneys). In addition, hemodialysis is also a process of making solutes and fluids from blood through a semi permeable membrane. It is based on the principle of diffusion, osmosis and ultra filtration. Hemodialysis is a process used in patients in acute illness and requires short-term dialysis of several days to several weeks or patients with terminal end-stage renal disease (ESRD) who require long-term therapy or permanent therapy (in Sudoyo , 2009). For patients with chronic renal failure (GGK), hemodialysis will prevent death but can not cure or restore kidney function at all. Patients suffering from renal failure should undergo hemodialysis therapy throughout their life, it is usually done 2-3 times a week

for at least 3 or 4 hours each time therapy or until a new kidney through a kidney transplant surgery. Patients require chronic hemodialysis therapy when this therapy is necessary to maintain survival and to control uremia symptoms (in Sudoyo, 2009).

## **2.2 Understanding the Quality of Life**

WHOQOL Group (in Lopez & Synder, 2003) Quality of life is the individual's perception of the position in life and his / her relationship to a goal, an expectation, a set standards and the attention of a person. In addition, according to Pangkahila (2014) quality of life is a physical and psychological conditions that support daily activities in certain socio-cultural conditions. Quality of life can be judged whether it is very good, good, medium, or bad.

Meanwhile, according to Upton (2012) quality of life is defined as complex, which is associated with individual satisfaction of all aspects of his life ranging from physical to social, and psychological. In addition, according to Coons & Kaplan (in Larasati, 2012) quality of life is a general view consisting of several components and basic dimensions related to health such as physical condition, psychological state, social function and disease and its treatment. According to Zadeh et al (in Sukriswati, 2016) quality of life is the result of individual perceptions about the ability, limitations, symptoms, and the psychosocial nature of individual lives, based on the environmental, cultural and valueable context in carrying out their roles and functions as appropriate, so that everyone has a perception which is not the same.

Based on the explanation of experts opinion above it can be concluded that the quality of life is the individual's perception to the position in their life and its relationship with goals, expectations, standards set and attention of a person ranging from physical, psychological, social to support the activities of a person in daily life.

## **2.3. Understanding Emotional Intelligence**

The term of emotion is derived from the word *movere* which is Latin meaning to move or moving, added the prefix *e* to give the meaning of moving away, implying that the tendency to act is absolute in emotion. This emotion is the root of the urge to act apart from the reactions that appears in the eye (Goleman, 2002).

Goleman (2002) says that emotional intelligence is a self-control, passion, perseverance, self-motivating ability, and empathy. Another expert opinion, Davis (in Saam, 2014) also says that emotional intelligence is the ability to recognize, to understand, to organize, and to use emotions in an effective way. Patton (in Notoatmodjo, 2012) Emotional intelligence is the power behind intelligence or intellectual ability. This emotional intelligence is the basis for the formation of emotions that include certain skills.

Waruwu (2003) says in essence, his emotional intelligence is a compenent that makes a person become smart using emotions. He further said that human emotions are in the region of feelings of the heart, hidden instincts and emotional sensations that, when recognized and respected, emotional intelligence provides a deeper and more complete understanding of ourselves and others.

## **2.4 The Correlation Between Emotional Intelligence and Quality of Life on the patients of Hemodialysis Therapy**

Each individual has a different quality of life depending on each individual in addressing the problems that occur in their life. If they face it well, it will be good also for their life, in otherwise if they face it wrong, it will be negative side also for their life. Coons & Kaplan (in Larasati, 2012) quality of life is a general view consisting of several components and basic dimensions related to health, physical condition and function, psychological state, social function and disease and its treatment. This is strongly influenced by psychological factors that include emotional intelligence. For each human being in thir life will have problems. A dependence of patients on hemodialysis machine for their entire life, role change, and jobless are stressors that can cause depression of patients of hemodialisa therapy (Septiwi, 2010). Emotional intelligence greatly affects a person's behavior in perceiving the stimuli that he receives, where each individual will show their attitude in a line with individual character. The perception of each individual in facing his problem depends on his emotional intelligence. Based on the description above can be concluded that emotional intelligence is a series of personal, emotional and social capabilities that involve the ability to monitor feelings and emotions both in yourself and others, self-control, motivation and self-motivation, not affected by heredity, but the concept which is meaningful and a person's ability to succeed in overcoming demands and pressures in the environment (Goleman, 2002). Coons & Kaplan (in Larasati, 2012) quality of life is a general view consisting of several components and basic dimensions related to health such as physical condition and function, psychological state, social function and disease and its treatment. Therefore, the individual's success in perceiving problems in his life can be affected by emotional intelligence. In daily for individual life, the quality of life is very important in implementing the purpose of his life. This is because patients of hemodialysis therapy with high emotional intelligence will have a higher quality of life when compared with patients with low emotional intelligence.

This is same within (Campbell in Larasati, 2012) which highlights about the importance of subjective perception in the measurement life quality. In this case it is expressed that the quality of life is shaped by an idea that consists of cognitive and affective aspects because the individual's assessment of a cognitive condition effectively affects and reacts to the individual's emotions.

### **III. RESEARCH METHODOLOGY**

One of crucial element in this research is the existence of a method that is used to solve the problems so that the results will be accountable. On that basis, then in this chapter will be described: (A) Research Type, (B) Research Identification, (C) Operational Definition of Research Variables, (D) Population and Sampling Method, (E), Data Collection Method, (F) Validity and Reability of Measuring Instruments, and (G) Data Analysis Methods.

#### **3.1 Type of Research**

The method used in this research is quantitative research method. The research method is according to Sugiono (2009), quantitative research methods or statistics that is ready for the hypothesis that has been set. In this study, the type is descriptive correlational. According Sugiono (2009), correlational descriptive research is a study that is stating the relationship between two or more variables.

#### **3.2 Identification of Research Variables**

The variables used in this research are:

1. Free Variable (X): Emotional Intelligence
2. Dependent Variable (Y): Quality of Life

#### **3.3 Operational Definition of Research Variables**

It is necessary to define the research variables in order to avoid the large inclusion towards definition and review of the term used. Based on the theory that has been described previously, the researchers formulate this definition of operational research as follows:

- a. Emotional intelligence is a set of personal, emotional and social abilities that influence one's ability to succeed in overcoming the demands and pressures of the environment, such as the ability to recognize, mamahami, manage, self-control, morale and self-motivation by using emotions effectively. Emotional intelligence can be seen through several aspects, namely to recognize the emotions of self, manage emotions, to motivate yourself, to recognize the emotions of others, to foster relationships (Goleman, 2002).
- b. Quality of life is the individual's perception of the position in life and its relationship with goals, expectations, established standards and attention of a person ranging from physical, psychological, social to support individual activities in daily. The quality of life can be seen through several dimensions, namely the dimensions of physical health, the dimensions of psychological wellbeing, dimensions of social relations, dimensions of relations with the environment (WHOQOL in Lopez & Synder, 2003).

#### **3.4 Population And Sample**

According to Hadi (2000), the population is all residents or individuals who have at least the same aptitude or characteristics. Population in this research is patient of hemodialysis therapy in Pabatu hospital which amounted to 48 people. In determining the size of the sample, the researcher is guided by the opinion of Arikunto (1999) which states that if the population is below 100 people, it is better to take everything so that the research is the total population research. Based on the opinion above, the researchers take the whole population as a sample of 48 people.

#### **3.5 Data Collection Technique**

Researcher use the scale in collecting data in which there is a set of questionnaires compiled previously. The used scale is the Guttman scale, to obtain the interval data or the dichotomy ratio (two alternatives) Yes or No so that the researcher hopes to get a appropriate answer to the problem.

The answers of the research respondent subjects can be made the highest score 1 and the lowest score 0, for alternative answers in scale. The researcher sets the category for each positive statement, ie Yes = 1 and No = 0. In this study the Guttman scale used is a checklist.

#### **3.6 Test Validity and Reliability**

According to Arikunto (2012) the data in this study can have the highest position, because it is a depiction of the researched variables, and serves as a tool to prove hypothesis. Therefore, whether or not the data, depending on whether or not the data collection instrument. A good instrument must meet two important requirements, namely valid and reliable.

**Test Validity**

Arikunto (2012) states that a data collection instrument is said to be valid if it is able to measure what is desired. An instrument is said to be valid if it can reveal data from the variables studied appropriately. The high degree of instrument validity indicates the extent to which the data collected does not deviate from the description of the validity in question.

After obtaining the instrument test data, the researchers are tabulated the Guttman table by compiling the items according to the highest score of the answers to the lowest score. Since the instruments in this study are using Guttman scale then to obtain the level of validity of the questionnaires instrument researchers using the reproducibility of coefficients and coefficients of Scalability. The formula for calculating the Keithability of Reproducibility and Scalability keofisien, as follows:

The coefficient of reprability (kr) of the formula is:

$$Kr = 1 - e / n$$

Information:

Cr: Reproducibility Coefficient

E: Number of errors / error values

N: Total number of answer choices (number of questions x number of respondents)

The scalability coefficient (Ks) of the formula is:

$$Ks = 1 - e / x$$

Information:

Ks: Scalability Keofisien

E: Number of errors / error values

X: 0,5 ( {number of questions x number of respondents} - number of answers "Yes")

**Test Reliability**

Reliability of measuring instrument is to find and to know the extent into which the measurement results can be trusted. Reliable can also be said belief, stability, consistency and so on. Measurement results can be trusted if it is in several times the implementation of measurements on the same subject group obtained relatively similar results as long as in the subject that the measurement has not changed (Azwar, 2012).

The reliability test in this instrument test is by Guttman.

The formula is:

$$a = \left( \frac{k}{k-1} \right) \left( 1 - \frac{s_r^2 - \sum s_i^2}{s_x^2} \right)$$

Information :

Q : Alpha Cronbach reliability coefficient

K : Number of tested question items

[[Σs] ] \_i ^ 2 : The number of item variance scores

S\_x ^ 2 : Variance score 0 test score (all items K)

**3.7 Data Analysis Technique**

Data analysis technique which used in this research is *product moment* correlation technique from Karl Pearson. The reason for the usage of this correlation technique because in this study has a purpose to see the relationship between a free variable with one dependent variable.

$$r_{xy} = \frac{\sum xy - (\sum x)(\sum y)}{\sqrt{\left\{ (\sum x^2) - \frac{(\sum x)^2}{N} \right\} \left\{ |\sum Y^2| - \frac{(\sum Y)^2}{N} \right\}}}$$

Information :

Rxy : The correlation coefficient between independent variables (Emotional Intelligence) with Dependent variable (Quality of Life)

Σxy : Number of multiplication results between variables x and y

Σx : Total score of all independent variables x

Σy : Total score of all free variables y

Σx2 : The sum of squares of scores x

Σy2 : The sum of squares of score y

N : Number of subjects

Before the data is analyzed with Product Moment correlation technique, then it is firstly tested the assumptions to the research data which include:

- a. Normality test, is to know whether the distribution of research data for each variable that is Emotional Intelligence and Quality of Life has spread normally.
- b. Linearity test, is to determine whether the data of emotional intelligence has a linea relationship with the quality of life in patients of hemodialysis therapy.

#### IV. DISCUSSION

##### 4.1 Orientation of Research Scene

This research is conducted at PT. Prima Medica Nusantara Unit Pabatu Poliklinik Hemodialisa at Kedai Damar street, Pabatu Village, Tebing Tinggi subdistrict, Serdang Bedagai regency, North Sumatra. This hospital is a healthy service center that serves all employees / employee, retired PTPN IV employees and open to the public. This hospital was established since 1994. Currently, the hospital is led by dr. Suhalni Nurul 'Aini, M.Kes. Adapaun Vision, Mission and Motto is applied in this hospital is, Vision is a mainstay hospital in PTPN IV environment and the surrounding environment. The mission is to provide health services professionally in accordance with national health standards, to expand the reach of hospital services to the general public outside the employees of PTPN IV, to reduce the morbidity rate due to work in the environment of PTPN IV, to improve the quality of hospital human resources for the achievement of quality and professional services, and Motto is smile-spry, steady, innovative, gentle, and empathy.

##### 4.2 Implementation of Research

###### Data Collection Administration

Before the research is carried out firstly which is done preparations related to the administration of this research, which includes the problem of licensing from the hospital. The steps are started from requesting permission from the Hospital Leader, then requesting permission from the Head of the Hemodialisa Polytechnic Room, and to request willingness to conduct research. After approval from the Head of the Hospital and the Head of the Hemodialisa Clinic, the researcher takes care of the research introduction letter from the UMA Faculty of Psychology. Preparation in question is to prepare a measuring instrument that will be used for research, the scale of Emotional Intelligence and Life Quality scale.

###### A) Emotional Intelligence Scale

The scale of emotional intelligence is based on aspects proposed by Goleman (2000) which states that aspects of emotional intelligence consists of five aspects, such as recognizing the self-emotions, managing emotions, motivating oneself, recognizing the emotions of others, and fostering relationships. Recognizing self-emotion, the individual's ability to recognize feelings in accordance to what's happening, is able to monitor feelings over time and feel in tune to what is felt. Managing emotions, that is, the ability to handle feelings so that feelings can be appropriately captured, the ability to be calm down, break away from anxiety, moodiness and anger. Self-motivation, the ability to regulate emotions as a means to an end, delayed satisfaction and relaxed impulses, are able to be in the flow stage. Here is a distribution table of emotional intelligence scale.

**Table 1** Distribution of Spreading Emblem of Emotion Scale Statement Before Analysis

No.	Aspects	Indicator	Number	Total
1.	know self-motivation	Knowing feeling	1, 11, 21	3
		Monitoring feeling	2, 12, 22	3
2.	Manage emotion	Handling feeling	3, 13, 23	3
		Controlling emotion	4, 14, 24	3
3.	Motivate self-ones	Setting emotion	5, 15, 25	3
		Widespreading motivation	6, 16, 26	3
4.	Know one's feeling	Knowing one's feeling	7, 17, 27	3
		Adjusting	8, 18, 28	3
5.	Construct relationship	Managing one's feeling	9, 19, 29	3
		Interact smoothly to other people	10, 20, 30	3
<b>TOTAL</b>			<b>30</b>	

###### B) Quality of Life Scale

The quality of life scale is based on the dimensions according to WHOQOL (in Lopez & Synder, 2003) including physical health, psychological well-being, social relations, and environmental relations. The dimensions of physical health include pain and discomfort, rest and fatigue, daily activities, dependence on drugs. The dimensions of psychological wellbeing include positive feelings, self-esteem, bodily image, spiritual. The dimensions of social relationships include personal relationships, social support, sexual activity, emotional support. The dimensions of environmental relationships include financial resources, care and social care, recreation, access to new information, and skills. The following is a distribution table of Life Quality scale:

**Table 2** Distribution of the Spreading Item of Quality Life Score Statement Before Analysis

No.	Dimensions	Indicators	Number	Total
1.	Physical health dimension	Sick and uncomfortable	1, 17	2
		Resting and tired	2, 18	2
		Daily activities	3, 19	2
		Dependence on medical treatment	4, 20	2
2.	Psychological well-being dimension	Positive feeling	5, 21	2
		Self-Esteem	6, 22	2
		Bodily Image	7, 23	2
		Spiritual	8, 24	2
3.	Social relation dimension	Personal relation	9, 25	2
		Social support	10, 26	2
		Sexual activity	11, 27	2
		Emosional support	12, 28	2
4.	Environmental relation dimension	Financial resource	13, 29	2
		Medical treatment and Social Care	14, 30	2
		Doing picnic	15, 31	2
		An oppurtunity to get new information and skill	16, 32	2
<b>TOTAL</b>			<b>32</b>	

**4.3. Implementation of Research**

Implementation of data retrieval is begun by contacting the head of the Hemodialisa Polyclinic Room to determine the data retrieval mechanism. This research was conducted from April 10, 2017 to April 17, 2017 to 48 patients, of whom 48 were patients with chronic renal failure who underwent hemodialysis therapy at the hospital. Data collection system by way of spreading the questionnaire which begins with accompanied by the head of Hemodialisa Clinic Clinic. Come with the head of the room, researcher comes to every patient in the room. There are two rooms that researchers come in. In each room, researcher provides information on the intent and purposes of the researcher spreads the scale. The researchers conducts data collection by reading one by one scale to each patient.

The scale that has been compiled as 48 copies, the time for this resarch is shorter. Then after completion of the data which is collected the scoring of the scale by making format as provided sheet on each sheet. Then the score which is the choice on each item statement is transferred to a Microsoft Excel program that is formatted according to the need of tabulation of the data.

This data collection uses *try out* because the number of samples is very limited for only 48 people. The following test results validity, reliability of emotional intelligence scale and quality of life.

**A) Validity of the Scale of Emotional Intelligence and Quality of Life**

The result of the research using the scale of emotional intelligence is 30 questions, it is known that there are 3 questions that fall and 27 questions valid is 0.300 upward and the result of life quality measuring instrument is 32 questions, it is known that there are 7 questions that fall and 25 valid is upper 0.300.

Furthermore, from the results of measuring the scale of emotional intelligence views validity is 27 items with Guttman scale technique (Lambda). From the validity test shows the value of moving validity coefficient from 0.387 to 0.689. While the results of life-quality scale validity research is 25 items with the technique Guttman (Lambda). From the validity test shows the value of moving validity coefficient from 0.326 to 0.776.

**B) Reliability of the Emotional Intelligence Scale and Quality of Life**

The technique used to determine the reliability of the scale of Emotional Intelligence and Quality of Life is a Guttman scale technique (Lambda), from the reliability test shows that the value of Emotional Intelligence Reliability is 0.907 and the value of Quality Reliability Life is 0.883. Thus the two scales can be said to be reliable.

**Table 3** Distribution of Spreading Emblem of Emotion Scale Statement After Analysis

No.	Aspects	Indicator	Numbers		Total
			Valid	Invalid	
1.	Knowing self-emotion	Knowing feeling	1, 11, 21	-	3
		Monitoring feeling	2, 12, 22	-	3
2.	Managing emotion	Handling feeling	3, 13, 23	-	3
		Controlling emotion	4, 14, 24	-	3
3.	Self-Motivating	Managing emotion	5, 15, 25	-	3
		Widespreading desire	6, 16, 26	-	3
4.	Knowing others' emotion	Knowing others' emotion	7, 17, 27	-	3
		Adjusting	8, 18	28	2
5.	Constructing relationship	Managing others' emotion	9, 19,	29	2
		Interacting smoothly to other people	10, 20	30	2
<b>TOTAL</b>			<b>27</b>		

**Table 4** Distribution of Spreading Items of Quality Life Score Statement After Analysis

No.	Dimensions	Indicator	Numbers		Total
			Valid	invalid	
1.	Psychal healthy dimension	Sick and uncomfortable	1	17	1
		Resting and tired	2	18	1
		Daily activity	3, 19	-	2
		Dependence on medicine	4, 20	-	2
2.	Psychological well-being dimension	Positive feeling	5, 21	-	2
		Self-Esteem	22	6	1
		Bodily Image	7	23	1
		Spiritual	8, 24	-	2
3.	Dimension of social relationship	Personal relation	9, 25	-	2
		Social support	10, 26	-	2
		Sexual activity	27	11	1
		Emotional support	12, 28	-	2
4.	Dimension of environmental relationship	Financial resource	13, 29	-	2
		Medical treatment and Social Care	14, 30	-	2
		Doing picnic	31	15	1
		An oppurtunity to get information and skill	16	32	1
<b>TOTAL</b>			<b>25</b>		

#### 4.4 Research Results

Data analysis technique used in this research is Product Moment Correlation Analysis technique. This is done according to the research title and the identification of the variables. Product Moment Correlation Analysis is used to analyze the relationship between one independent variable and one dependent variable. However, before it is analyzed with Product Moment Correlation Analysis technique, it is firstly done for assumption test to variable which become objects, that is data of dependent variable of quality of life and independent variable of emotional intelligence, involving test of distribution normality, and test of linearity relation.

#### A. Assumptions Test

##### Spread Normality Test

The distribution normality test is performed to prove that the spread and research of the center of attention, it is spreading based on the principle of normal curve. The distribution normality test is analyzed by using One Kolmogorov - Smirnov test. It is distributed in a line with the principle of normal curve as the criterion when  $p > 0,050$  then the distribution is declared normal, otherwise if  $p < 0,050$  the distribution is not normal (Hadi, 2000). Table 5 below is a summary of the results of calculation of distribution normality test.

**Table 5** Summary of the results of calculation of distribution normality test.

Variable	RERATA	SD	K-S	p	explanation
Quality of life	23,979	6,541	1,418	0,200	Normal

**Explanation :**

- RERATA : Average
- K-S : Kolmogorov-Smirnov Coefficient
- SB : Standard deviation (Standard Deviation)
- P : Opportunity Occurrence Error

**Relationship Linearity Test**

Linearity test is to find out whether the distribution of research data, the variable of emotional intelligence and quality of life has a linear relationship. From result of linearity test indicates that emotional intelligence variable correlation linearly with life quality variable, shown by linearity coefficient  $F = 4,067$  with  $p < 0,05$ . Linearity test is done by using interactive graph technique that produces scatter diagram (plot) and by analysis of Variance (ANAVA) by using SPSS for Windows 18.0.

**Table. 6** The result of account of relation linearity test

Correlation	F difference	p difference	Explanation
X – Y	4,067	0,002	Linier

**Information :**

- X : Emotional Intelligence
- Y : Quality of Life
- F DIFFERENCE : Linearity Coefficient
- P DIFFERENCE : Proportion of Chance of Opportunities

**B. The Result of Data Analysis Calculation**

**Product Moment Correlation Analysis**

Higher emotional intelligence is be higher the quality of life of the patient. In otherwise, lower the emotional intelligence, then the quality of life of patients is also lower. Based on the results of analysis with Product Moment Correlation Analysis Method, it is known that there is a significant positive relationship between Emotional Intelligence with Quality of life, where  $r_{xy} = 0,292$ ;  $P = 0,002 < 0,050$ . It means that the higher the emotional intelligence, the higher the quality of life, and the lower the emotional intelligence, the lower the quality of life. From the results of this study, the proposed hypothesis is accepted.

The determinant coefficient ( $r^2$ ) of the relationship between the independent variable X and the dependent variable Y is equal to  $r^2 = 0,085$ . It shows that the quality of life is shaped by emotional intelligence of 8.5%. Table 7 below is a summary of the results of product moment r calculations.

**Table. 7** The summary of the results of product moment r calculations

Statistic	coefficient ( $r_{xy}$ )	Determinant coefficient ( $r^2$ )	P	BE%	Explanati on
X-Y	0,292	0,085	0,002	8,5%	Signifikan

**Information :**

- X : emotional intelligence
- Y : Quality of scale
- $R_{xy}$  : The correlation coefficient between variable X to Y
- $R^2$  : Coefficient of determinant X to Y
- P : Opportunities for errors
- BE% : Effective Sumabangan Weight X against Y in percent
- S : Significant at a significant level of 5% or  $p < 0,050$ .

Summary of Parent Statistics can be seen in Table 8 below:

**Table. 8** Main Statistics

Variable	Mean	SD	N
X1	23,979	6,541	48
X2	24,145	5,701	48



**Information :**

- X1 : Emotional Intelligence
- X2 : Quality of Life
- Average: Average
- SD : Standard Deviation

**C.The Result of Hypotetic Mean account and Mean Empirical Mean**

**Hypothetical Mean**

For the Emotional Intelligence variable, the number of valid items is 27 items formatted with Guttman scale in 2 answer choices, then the hypothetical mean is  $\{(27 \times 0) + (27 \times 1)\} : 2 = 13.5$ . Then for the Quality of Life variable, the number of valid items is 25 items formatted with Guttman scale in 2 answer choices, the hypothetical mean is  $\{(25 \times 0) + (25 \times 1)\} : 2 = 12.5$ .

**The Empirical Mean**

**1. Emotional Intelligence**

The overall total score of subjects for emotional intelligence is 1159 divided by the number of subjects 48 people, then the empirical mean is  $1159 : 48 = 24.145$ .

**2. Quality of Life**

The total score of the whole subject for quality of life is 1151 divided by the number of subjects 48 people, then the empirical mean is  $1151 : 48 = 23.979$ .

**D. Criteria**

In an effort to know the condition of Emotional Intelligence and Quality of Life, it is necessary to compare between the mean / value of empirical mean and the mean / value of hypothetical average with regard to the magnitude of SB or SD number of each variable. For the variable of Emotional Intelligence SB or SD value is 5.701, while for the Quality of Life variable is 6,541. From the magnitude of the SB or SD number, for the Emotional Intelligence variable, if the mean / mean value hypothetical <mean / empirical average value, where the difference exceeds the number of one SB / SD, it is stated that the individual Emotional Intelligence is high, If the mean / mean value of hypothetical > mean / value of empirical average, where the difference exceeds the number of one SD / SB, it is stated that the individual Emotional Intelligence is low.

Furthermore, for Life Quality variables, if the mean / mean value of hypothesis <mean / average empirical value, where the difference exceeds the number of one SB / SD, it is stated that the quality of life of individuals is high, whereas if the mean / average value of hypothetical > Mean / value of empirical average, where the difference exceeds the number one SD / SB, it is stated that the individual has a low quality of life. The full picture of comparison of mean / mean hypothetical value with mean / value of empirical average can be seen in table 9 below.

**Table 9** The Result of Hypotetic Mean and Empirical Mean

Variable	SB/SD	Average		Explanation
		Hypotetic	Empirical	
Emotional intelligence	5,701	13,5	24,145	High
Quality of life	6,541	17,5	23,979	High

Based on the comparison of both average values (hypothetical mean and empirical mean) above, it can be stated that the patient has a high Emotional Intelligence and a High Quality of Life as well. Based on the results of correlation r Product Moment can be seen that there is a positive relationship between emotional intelligence and quality of life in patients hemodialysis therapy  $r_{xy} = 0.292$  with  $p < 0.05$ . It means that based on the results of this study, it can be stated that there is a positive relationship on the relationship between emotional intelligence with quality of life in patients of hemodialisa therapy with higher results of emotional intelligence, the higher the quality of life. Based on these results, the hypothesis that has been proposed in this research is declared acceptable.

From this research, we can conclude that emotional intelligence owned by the patients of hemodialysis therapy has an effect on the quality of life, which means that the higher the emotional intelligence possessed by the patients of hemodialysis therapy, the higher the quality of life. It explains that the patient has found the quality of his life, they know what should be done in that condition. In bad conditions, they are still able to take a positive attitude, directing their thoughts on positive things. According to the WHOQOL Group's statement that supports this assertion that quality of life as an individual's perception of the position in life and its relationship to the goals, expectations, standards set by a person (in Lopez & Synder, 2003).

The results of this research illustrate that 8.5% quality of life is shaped by emotional intelligence. It means that there is a 91.5% contribution from other factors or variables to the quality of life. Other factors include physical health, social relations and environmental relations according to WHOQOL (in Lopez and Synder, 2003), besides other factors influencing the quality of life according to Prodono (in Hanifah, 2015) such as age, Gender, education, employment, mental disorders, economic status (income), family support, and coping skills.

Other results obtained from this research, it is known that emotional intelligence owned by the patients of hemodialysis therapy in Pabtu hospital is quite high. This is based on the obtained empirical average value of 24.145 is greater than the hypothetical average value of 13.5 within the difference that exceeds the SD or SB value of 5.701. Furthermore for the variable of quality of life, it is known that patients of hemodialysis disease in Pabtu hospital has a high quality of life, because the value of empirical average obtained is 23.979 greater than the average value of hypotheticals that is 12.5 with the difference that exceeds the value of SD or SB of 6,541.

## V. CONCLUSION

Based on the results of correlation  $r$  Product Moment known that there is a positive relationship between emotional intelligence with quality of life in patients of hemodialysis therapy  $r_{xy} = 0.292$  with  $p < 0.05$ . It means that the higher the emotional intelligence will be the higher the quality of life. In general the results of this study states that the correlation of emotional intelligence and quality of life in patients of hemodialysis therapy are high where the value of empirical average above the hypothetical average value in the normal curve. Empirical average value of emotional intelligence = 24.145, while the average value of hypothetical = 13.5, then the value of empirical average quality of life = 23.979 while the average value of hypothetical = 17.5. The results of this study illustrated that 8.5% quality of life is shaped by emotional intelligence. This means that there is a 91.5% contribution from other factors or variables to the quality of life. These factors include physical health, social relations and environmental relations, and other factors affecting quality of life, such as age, gender, education, occupation, mental disorders, economic status (income), family support, and coping ability.

## REFERENCES

- [1] Arikunto, S. 2012. *Prosedur Penelitian*. Jakarta: Rineka Cipta
- [2] Azwar, S. 2012. *Validitas Dan Reliabilitas Edisi IV*. Yogyakarta: Pustaka Pelajar
- [3] Beck, A. 1994. *The Cognitive Theory Of Depression*. New York. Guilford Press
- [4] Cahyaningsih, ND. 2008. *Hemodialisis (Cuci Darah) Panduan Praktis Perawatan Gagal Ginjal*. Mitra Cendekia Pres. Yogyakarta
- [5] Chaplin, JP. 2006. *Kamus Lengkap Psikologi*. Penerjemah: Kartini Kartono. Jakarta: PT. Rajagrafindo Persada
- [6] Corwin, EJ. 2009. *Buku Saku Patofisiologi*. EGC. Jakarta
- [7] Goleman, D. 2000. *Kecerdasan Emosional untuk Mencapai Puncak Prestasi*. Jakarta: Gramedia Pustaka Utama
- [8] Goleman, D. 2001. *Kecerdasan Emosional*. Jakarta: Gramedia Pustaka Utama.
- [9] Goleman, D. 2002. *Kecerdasan Emosional*. Jakarta: Gramedia Pustaka Utama.
- [10] Gottman & Declaire. 2003. *Kiat-Kiat Membesarkan Anak Yang Memiliki Kecerdasan Emosional*. Jakarta: PT. Gramedia Pustaka Utama
- [11] Hadi, S. 2000. *Metodologi Research*. Yogyakarta: Andi offset
- [12] Hanifah, M. 2015. *Kualitas Hidup Pada Penderita Kanker Dengan Status Sosial Ekonomi Rendah*. Jurnal. Fakultas Psikologi Univ. Muhammadiyah Surakarta.
- [13] Junaidi, I. 2013. *Living Good & Healthy (sehat Lahir Batin)*. Yogyakarta: Penerbit ANDI
- [14] Khairani, M. 2016. *Psikologi Umum (edisi revisi, cetakan II)*. Yogyakarta: Aswaja Pressindo
- [15] Kiptiya, M. 2014. *Pengaruh Harapan Terhadap Kualitas Hidup Yang Diperantarai Dukungan Sosial Pada Penyandang Cacat Netra Unit Pelaksana Teknis Rehabilitasi Sosial Cacat Netra Malang*. Skripsi. Fakultas Psikologi Univ Islam Negeri Maulana Malik Ibrahim Malang.
- [16] Larasati, T. 2012. *Jurnal Kualitas Hidup Wanita Yang Sudah Memasuki Masa Menopause*. Fakultas Psikologi Univ. Gunadarma
- [17] Lopez & Snyder. 2003. *Positive Psychological Assessment*. Washington, DC. American Psychological Association.
- [18] Mar'at, S. 2005. *Psikologi Perkembangan*. Bandung: PT Remaja Rosdakarya.
- [19] Nurani, VM. 2013. *Gambaran Makna Hidup Pasien Gagal Ginjal Kronik Yang Menjalani Hemodialisa*. Jurnal Psikologi, Vol. 11 Nomor 1
- [20] Notoatmodjo, S. 2012. *Promosi Kesehatan Dan Perilaku Kesehatan*. Jakarta: Penerbit Rineka Cipta
- [21] Pangkahila, W. 2014. *Seks dan Kualitas Hidup*. Jakarta: PT Kompas Nusantara

- [22] Pieter, dkk. 2011. Pengantar Psikopatologi untuk Keperawatan. Jakarta: Kencana
- [23] Price & Wilson. 2005. Patofisiologi: Konsep Klinis Proses-Proses Penyakit. Edisi 6, Vol 2. Alih Bahasa Oleh U.Endith, EGC. Jakarta
- [24] Provin. 2010. Jurnal Psikologi. ISSN 1978-3655. Volume 7 Nomor 2. Hlm.1-105. Juni 2011
- [25] Rochmayanti. 2011. Analisis Faktor-Faktor Yang Mempengaruhi Kualitas Hidup Pasien Penyakit Jantung Koroner Di Rumah Sakit Pelni Jakarta. Thesis. Fakultas Ilmu Keperawatan Program Studi Magister Ilmu Keperawatan Universitas Indonesia
- [26] Rohmah, dkk. 2012. Kualitas Hidup Lanjut Usia. Jurnal Keperawatan. Fakultas Ilmu Kesehatan Universitas Muhammadiyah. ISSN 2086-307. Hal: 120-132
- [27] Saam & Wahyuni. 2014. Psikologi Keperawatan. Jakarta: PT. Raja Grafindo Persada
- [28] Shapiro, LA. 1997. Mengajarkan Emotional Intelligence pada Anak. Jakarta: Gramedia Pustaka Utama.
  
- [29] Smeltzer & Bare. 2002. Buku Ajar Keperawatan Medikal Bedah, Jakarta : EGC.
- [30] Sudoyo, dkk. 2009. Buku Ajar Ilmu Penyakit Dalam, jilid II (edisi kelima). Jakarta: InternaPublishing
- [31] Sulistiawan, dkk. 2014. Kualitas Hidup Pasien Gagal ginjal Kronik Di Ruang Hemodialisa Rumah Sakit Umum Soedarso Pontianak. Jurnal. Fakultas Ilmu Kesehatan Universitas Muhammadiyah Pontianak. Vol. 1 No. 1
- [32] Sugiono. 2009. Statistika Untuk Penelitian. Bandung: CV. ALFABETA.
- [33] Sobur, A. 2003. Psikologi Umum dalam Lintasan Sejarah. Bandung: CV. Pustaka Setia.
- [34] Upton, P. 2012. Psikologi Perkembangan. Jakarta: Penerbit Erlangga
- [35] Waruwu, dkk. 2003. Mendidik Kecerdasan Pedoman Bagi Orang Tua dan Guru dalam Mendidik Anak Cerdas. Jakarta: Media Grafika

Anna Wati Dewi Purba. "The Correlation Between Emotional Intelligence And The Quality Of Life On Patients Of Hemodialysis Therapy In Pabatu Hospital, Medan, Indonesia." IOSR Journal Of Humanities And Social Science (IOSR-JHSS) , vol. 22, no. 8, 2017, pp. 86–96.