# QUALITY OF LIFE IN PATIENTS WITH HYPERTENSION INPUBLIC HEALTH CENTER SIPATANA GORONTALO CITY USING WHOQOL-Breff QUESTIONNAIRE 

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#### Abstract

WHO (2011) notes that one billion people in the world suffer from hypertension and cause nearly 8 million deaths each year worldwide and nearly 1.5 million people each year in Southeast Asia. Basic Health Research (Riskesdas) in 2013 revealed the incidence of hypertension in Indonesia Reached around 25.8\%.

This study aims to Determine what factors are related to the quality of life of Hypertensive Patients as measured using the WHOQOL-BREF questionnaire. This research was conducted in the working region of Sipatana Health Center, Gorontalo City with the research method used was descriptive method with crosssectional design. The research measuring instrument uses the World Health Organization Quality of Life (WHOQOL) -Bref Questionnaire, questionnaire consisting of 26 questions and is divided into four domains items, namely the domain of physical, psychological, social and environmental health quality and conducted by interviewing Patients who are being Examined health at the Sipatana Health Center. The description of the factors related to the quality of life of Hypertensive Patients at the Sipatana Health Center is Described as follows: Education Level Factors, based on the results of the study show that respondents with low education growing niche to have a poor quality of life as much as $66 \%$. Occupational Factor.

In this study, the majority of Hypertensive Patients who did not work / work did not have a poor quality of life, as many as 30 respondents ( $60 \%$ ). Then the Joint Living Factor, based on the Chi-square statistical test, $P=0: 15$ Obtained a value indicating that there was no significant relationship between Hypertensive Patients with the main family living and quality of life. Finally,


Keywords: Quality of Life, Hypertension Patients, WHOQOL-Breff Questionnaire

## INTRODUCTION

WHO (2011) recorded one billion people worldwide suffer from hypertension and the cause of death of nearly 8 million people each year worldwide and nearly 1.5 million people every year in Southeast Asia. Basic Health Research in 2013 suggests the incidence of hypertension in Indonesia reached $25.8 \%$, the highest in the Pacific Islands (30.9\%). Based on diagnosed by
health personnel and the measurement of the visible prevalence of hypertension increases with age (Anonymous, 2013). Hypertension is a silent killer in which patients are often unaware of their interference. The World Health Organization or the World Health Organization (WHO) defines quality of life as "Individuals 'perception of Reviews their position in life in the context of the culture and value systems in the which they live and
in relation to Reviews their goals, expectations, standards and concerns' (WHOQOL Group in Lopez and Synder, 2004). Based on these definitions, it can be seen that the quality of life not only involves an individual assessment of their position in life, but also their social context and the context surrounding environment is also affecting the quality of life. In the study conducted by Trevisol et al (2011) ${ }^{[4]}$ found that in individuals who suffer from hypertension, have a lower quality of life compared to individuals with normal blood pressure. In patients with hypertension but underwent routine treatment also reported to have a higher quality of life compared with individuals with blood pressure uncontrolled and under the influence of drugs. According to Li et al (2005) in individuals with hypertension had a lower quality of life, especially in the physical dimension. Donald (in Urifah, 2012) stating the quality of life is a term that indicates physical health, social and emotional person as well as the ability to perform everyday tasks.

## LITERATURE REVIEW

A study conducted Degl'Innocenti (2002) states that cardiovascular disease caused by hypertension can cause problems in the quality of life of the elderly so that the quality of life of the elderly will be impaired and elderly life expectancy will also decrease. Elderly people can be said to have a good level of quality of life, when a condition stated in inner satisfaction levels, physical, social, as well as the comfort and happiness of his life (Joseph, 2010). Researchers have carried out the initial data capture in Public Health CenterSipatana Gorontalo City, who had hypertension in 2017 a total of 891 inhabitants and in 2018
up to November recorded 949 inhabitants (PHC Siapatana, 2018).

## METHODS

The method used is descriptive method with cross-sectional study design, measuring instrument research using World Health Organization Quality of Life (WHOQOL)Breff questionnaire consisting of 26 of the questions and is divided into four domains, namely domains of quality of physical health, psychological, social relationships and environment and was conducted by interviewing the patients being examined health at Sipatana health center. This research was conducted at the Sipatana Health Center in August until November 2018. The population in this study are all community health centers working area Sipatana who suffer from hypertension. The sample size of this study as many as 50 people. The sampling technique used is sampling with purposive sampling or known sampling technique used considerations that researchers if the researchers have certain considerations in sampling or sampling for specific purposes (Ridwan, 2010). In line with Sugiyono (2005), that is the determination of the sampling techniques with particular consideration. This is because the research subjects who visited the health center directly limited in number so that researchers take hypertensive according to criteria established by the researchers as a research subject. Each of the research results will be calculated the number of frequency bands based on objective criteria univariate. Bivariate analysis was then performed to connect each variable. This analysis was conducted on each of the independent variables and the dependent variable using a Chi-square test
with a significance limit of $\mathrm{p}<0.05$ with a computer statistical program.

## RESULTS AND DISCUSSION

## Univariate analysis

The univariate analysis aims to explain or describe the characteristics of each variable studied. This data is the primary data collected through questionnaires conducted on 50 respondents. The univariate data consisting of gender, age, religion, and the independent variables include education, marital status, living together and work and quality of life as the dependent variable.
a. characteristics of Respondents

Characteristics description is given on the following table following:

Table 4.1
DistributionCharacteristicsofrespondents

| variables | amount <br> $(\mathbf{N})$ | Percentage <br> $(\%)$ |
| :--- | :---: | :---: |
| Gender |  |  |
| Male | 33 | 66.0 |
| Female | 17 | 34.0 |
| Age |  |  |
| 45-59 | 9 | 18.0 |
| Years | 41 | 82.0 |
| $\geq 60$ years |  |  |
| Religion |  |  |
| Muslim | 50 | 100 |
| Non- | 0 | 0 |
| Muslims |  |  |

Based on table 4.1 above shows that $66 \%$ of respondents are male, most respondents aged> 60 years is $82 \%$ and all Islamic religious respondents ( $100 \%$ ).

## b. Independent variable distribution

Overview distribution of independent variables include education, employment, living together and marital status can be seen in the table below:

Table 4.2
Distributionof Independent Variables

| variables | amount <br> $(\mathbf{N})$ | Percentage <br> $(\%)$ |
| :--- | :---: | :---: |
| Level of <br> education |  |  |
| High | 12 | 24.0 |
| Low | 38 | 76.0 |
| Living together |  | 63 |
| Main family <br> Not main family | 17 | 34.0 |
| Occupation | 13 | 26.0 |
| Work <br> Does not work | 37 | 74.0 |
| Marital status <br> Married | 38 | 76.0 |
| Not / do not <br> Married <br> (widower <br> widow) | 12 | 24.0 |

Based on Table 4.2 illustrates that $76 \%$ of respondents less educated, $66 \%$ live in main families, $74 \%$ of respondents do not have a job or are not working and $76 \%$ of respondents are still living with their spouse (husband/wife).

## c. Dependent variable distribution

Overview distribution quality of life is the dependent variable in this study can be illustrated in the following table:

Table 4.3
The distribution of the dependent variable

| variables | amount <br> $(\mathbf{N})$ | Percentage <br> $(\%)$ |
| :--- | :---: | :---: |
| Quality of |  |  |
| Life |  |  |
| Well | 12 | 24.0 |
| Not good | 38 | 76.0 |

Based on Table 4.3 illustrates that $76 \%$ of respondents have a poor quality of life, while $24 \%$ have a good quality of life.

## Bivariate analysis

The bivariate analysis was conducted to see the relationship between the independent variables and the dependent variable characteristics of the respondents.

The statistical test used in this study were Chi-square with a degree of confidence that is used is $95 \%(\alpha=0.05)$. If P -Value less than $\alpha(\rho<0.05)$ means that there is a significant relationship (significant) of the two variables studied.

## a. Relationships Education Level on the Quality of Life

Description of the relationship of education level of respondents on quality of life can be seen in table 4.4 below:

Table 4.4
Relationships level of education on quality of life

| Variab les | Quality of Life |  |  | $\begin{gathered} \mathrm{X} 2 / \rho \\ (95 \%, \mathrm{CI}) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Well |  | Less |  |  |
|  | N | \% | N | \% |  |
| Education |  |  |  |  |  |
| High | 7 | 14 | 5 | 10 | p: |
| Low | 5 | 10 | 33 | 66 | 0:01 |
| Total | 12 | 24 | 38 | 76 |  |

The table above shows that of the 50 respondents were sampled in this study, samples with low education with less good quality of life as much as 33 respondents or $66 \%$ while the sample is highly educated with a poor quality of life is only five respondents or $10 \%$.
Results of analysis relationships through statistical tests"Chi-square" with a confidence level of 0.95 significance level
$(\alpha)=0.05$ obtainedvalue $\rho: 0.01$, depicting the relationship of the education level of the quality of life of patients suffering from hypertension in Sipatana.

## b. Employment relationship with Quality of Life

Description aboutEmployment relationship with the quality of life of respondents can be seen in table 4.5 below:

## Table 4.5

Relationships evels of employment and quality of life

| variables | Quality of Life |  |  | $\begin{gathered} \mathrm{X} 2 / \mathrm{\rho} \\ (\mathbf{9 5 \%}, \mathrm{CI}) \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Well |  | Less |  |  |
|  | N | \% | N | \% |  |
| Occupation |  |  |  |  |  |
| Work |  | 10 | 8 | 16 | p. |
| Does not work |  | 14 | 30 | 60 | 0:1 |
| Total | 12 | 24 | 38 | 76 |  |
| variables | Quality of Life |  |  | $\begin{gathered} \mathrm{X} 2 / \rho \\ (95 \%, \mathrm{CI}) \end{gathered}$ |  |
|  | Well |  | Less |  |  |
|  | N | \% | N | \% |  |
| Occupation |  |  |  |  |  |
| Work | 5 | 10 | 8 | 16 | $\rho$ : |
| Does not work | 7 | 14 | 30 | 60 | 0:1 |
| Total | 12 | 24 | 38 | 76 |  |

The above table shows that of the 50 respondents were sampled in this study, a sample that does not work with the poor quality of life for as many as 30 respondents or $60 \%$ while the sample that works with poor quality of life of only 8 respondents or $16 \%$.

The results of the analysis of relationships through statistical tests"Chisquare" with a confidence level of 0.95 significance level $(\alpha)=0.05$ obtainedvaluep: 0.16 that showed no correlation with the employment status of
quality of life of patients suffering from hypertension in Public Health CenterSipatana.

## c. Relations Living with Quality of Life

Description of the relationship live with the quality of life of respondents can be seen in the following table:
Table 4.6
Relationships live withquality of life

| variables | Quality of Life |  | $\begin{gathered} \mathrm{X} 2 / \rho \\ (95 \%, \mathrm{CI}) \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Well |  | Less |  |  |
|  | N | \% | N | \% |  |
| Living together |  |  |  |  |  |
| Main family | 10 | 20 | 23 | 46 | $\begin{gathered} \rho: \\ 0: 15 \end{gathered}$ |
| Not Main <br> Family | 2 | 4 | 15 | 30 |  |
| Total |  | 24 |  | 76 |  |

The above table shows that of the 50 respondents were sampled in this study, samples that lived with family core with less good quality of life as much as 23 respondents or $46 \%$, while the samples were staying with family instead of a core with less good quality of life for as many as 15 respondents or $30 \%$.The results of the analysis of relationships through statistical tests"Chisquare" with a confidence level of 0.95 significance level $(\alpha)=0.05$ obtainedvalue $\rho$ : 0.15 that showed no correlation with the main family living with quality of life of patients suffering from hypertension in Public Health Center Sipatana.

## d. Marital Status relationship with Quality of Life

Descriptionof relationship with the marital status the quality of life of respondents can be seen in table 4.7 below:

## Table 4.7

Marital status relationship to quality of life

| variables | Quality of Life |  |  | $\begin{gathered} \mathrm{X2} / \mathrm{\rho} \\ (95 \%, \\ \text { CI) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Well |  | Less |  |
|  | N | \% | N \% |  |
| Marital status |  |  |  |  |
| Married | 12 | 24 | 2652 | $\rho$ : |
| Yet / Not | 0 | 0 | 1224 | 0025 |
| Married (Widower widow) |  |  |  |  |
| Total | 12 | 24 | 3876 |  |

The table above shows that of the 50 respondents were sampled in this study, the sample with married status (spouse is still alive) to the quality of life is not good by 26 respondents or $52 \%$ while the sample with a status not / not married (divorced / widowed) with quality of life unfavorable as many as 12 respondents or $24 \%$.

Results of analysis relationships through statistical tests"Chi-square" with a confidence level of 0.95 significance level $(\alpha)=0.05$ obtainedvalue $\rho: 0.025$ indicating marital status relationship with the quality of life of patients suffering from hypertension in Public Health CenterSipatana.

## 1. Discussion

a. The correlation between education and quality of life

According to the dictionary of education that education is a process in which a person develops the ability of attitudes and forms-forms of behavior in the community where he lives, a social process in which people exposed to environmental influences selected and controlled (especially those from the school) so as to obtain, or experience development of social skills and the ability of individual optimum.

The education level of patients with hypertension is the source of the patient's ability to understand and interpret a phenomenon in his life, the environment or the life and encourage hypertensive patients to choose the best way to confront the phenomenon. The level of formal education to help patients with hypertension to determine the quality of life both in terms of physical, psychological, social relationships and environment. Potter and Perry (2007) explain that the level of education a person has a relationship with the ability to examine a variety of information into knowledge base on the actions to be done. In this study, the majority of hypertensive patients as respondents with low education ie 38 respondents or $76 \%$.

Based on the results of this study showed that respondents with lower education tend to have a poor quality of life that is as much as $66 \%$, according to the researchers it could be due to the level of formal education does one determinethe quality of thinking and sense of life as an essential to encourage life, the existence of a variety of physical and mental experiences that an individual can change subsequently existence of such individuals when faced with a problem or a disease.

## b. Relationships work on quality of life

Working a routine activity in everyday life that can generate income in the form of money (Colela, et .al, 2005). Berhungan job with quality of life. Quality of life of someone who is still actively work looked better than those who did not work either included in their daily lifestyle (Abdurachim, 2007).In this study, the majority of patients with hypertension do not work / are not working have less good quality of life for as many as 30 respondents
(60\%). According to the assumptions of researchers, patients with hypertension who are not working tend to decrease the quality of life both in terms of physical quality, psychological conditions, social relationships and environment. Patients with hypertension whose work has a high level of mobilization compared with those who did not work. Mobilization in the form of physical movement to increase Physical poor living conditions Health, includes the activities of daily living, which is one indicator of quality of life assessment of hypertensive patients. By working in hypertensive patients can improve and maintain interpersonal relationships with social relationships with other segrelatives or coworkers. Neither the impact on psychological health, they do not work will find it worthless to others, especially families that can affect the psychologicall health of patients with hypertension. Although statistical analysis showed no significant relationship between the variables of employment status with the quality of life of patients with hypertension in this study, but according to the assumptions of researchers it is probably due to most of the respondents are a group of non-productive age, aged> 60 years as many as 41 respondents or $82 \%$.

## c. Relationship live together with quality life

The main family is a family consisting of father, mother and children living in a house established by legal sanctions in matrimony (Harmoko, 2012). Health status and quality of life can be affected by lack of support from family and those closest to the patient. The support of the family in this case the parents, children and close relatives can give encouragement and strength to the
patient in taking every good decision on his health problems and may increase the value of the quality of life, especially on a psychological component (Rahman, et.al, 2013)

Based on the statistical test Chi-square values obtained $\mathrm{P}=0.15$ indicates that there is no significant relationship between hypertension patients living with a main family with quality of life. According to the researchers this is due to the assumption of hypertensive patients in health centers working area Sipatana have good support from family members even if not of the main family. Social and cultural systems greatly affect the pattern of an area of support between family members. According to GM Foster (2007), the cultural aspect can affect a person's health whether it is to do with the traditions, norms and values in a society.

## d. Marital status relationship with quality of life

Those who have a spouse generally has a good quality of life, it is because a life partner is one of the most decisive support systems within the family. Support spouse can be a concern and can give encouragement and strength to the patient in taking every good decision on his health problems.

Based on the statistical test Chi-square values obtained $\mathrm{P}=0.025$ indicates that there is a significant relationship between hypertension patients who have a spouse living with quality of life. According to research by Stanley et al, 2011) that there is a decline in the quality of life especially in hypertensive patient psychological dimensions that impact on the quality of life of patients.

## CONCLUSION

From the research that has been done, it can be concluded that:
a) Hypertensive patients in Public Health CenterSipatana have the quality of life is poor.
b) Formal education levels have been associated with quality of life of patients with hypertension in Public Health CenterSipatana.
c) Marital status has a relationship with the quality of life of patients with hypertension in Public Health CenterSipatana

## REFERENCE

[1] Rachmawati Y, Perwitasari DA, Adnan, 2014, Validation Questionnaire SF-36 versionof Indonesia toward Hypertension Patients in Community Health Center in Yogyakarta, J Pharmacy; 11 (01), 14-25
[2] Stein DJ, Brown GC, Brown, MM Sharma S, Hollands H, Stein HD 2002, The Quality of Life of Patients with Hypertension, J Clin Hypertens, 4; 181188
[3] The National HealthMeasurement Study (NHMS). 2008. Explanation of Computed Variables. University of Wisconsin-Madison Department of Population Health Sciences.
[4] Trevisol DJ, Moreira LB, Kerkhoff A, SC Fuchs, Fuchs FD 2011, Healthrelatedqualityoflifeandhypertension: a systematicreviewand metaanalysisofobservationalstudies, J Hypertens. 29 (2): 179-88.
[5] Vanstel HF, Buskens E, 2006, Comparisonofthe SF-6D andthe EQ-5D in Patients with coronary heart disease. Health Qual Life Outcomes. 25 (4), 1-9 SJ Walters, Brazier JE, 2005, Comparison of the minimally important difference of health state utilities for two measures: EQ-5D-6D andSF. Qual Life Res. 14 (6), 1523-32.

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[6] Ware JE, http://www.sf- comparison of Euro QoL 5th dimension 36.org/tools/sf36s. html. SF-36® Health Survey Update, accessed on February 12, 2015
[7] Wu J, Han Y, Zhao FL, Zhou J, Chen Z, Sun H, 2014, Validation and
(EQ-5D) and Short Form-6 dimension
(SF-6D) among stable angina Patients.
Health Qual Life Outcomes, 25 (12), 156.

