



## Relationship Between Anxiety With Quality of Life For Hypertension In UPTD Puskesmas Demangan Kota Madiun

Adelia Kusuma Prasetyo Putri<sup>1\*</sup>, Riska Ratnawati<sup>2</sup>, Avicena Sakufa Marsanti<sup>3</sup>

<sup>1,2,3</sup>Stikes Bhakti Husada Mulia Madiun, Indonesia

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### Abstract

Hypertension is an increase in systolic blood pressure from normal to 140 mmHg and diastolic pressure more than 90 mmHg. This hypertension has an impact on the low quality of life, especially in the domain of physical function. Based on Basic Health Research (Riskesdas) data for 2018, Indonesia has experienced a quite drastic increase in prevalence. From 25.8% in 2013, it has now increased to 34.1%. Depression, anxiety, and stress can also affect the quality of life of people with hypertension. The research to determine the relationship between anxiety and the quality of life of hypertensive patients. This study used a cross-sectional approach. The total population in this study of 137 and 58 samples in the study. Samples were selected based on criteria, namely those who were recorded as sufferers in the area, and sample selection using quota sampling technique. Data collection was carried out using dass-42 and wool scale questionnaires. Data analysis in this study was bivariate using the Kendall Tau test. The results of this study showed that the value (p value= 0.002: Cc=-0.389) means there is a relationship. It can be concluded that there is a relationship between anxiety and the quality of life of hypertension sufferers.

\*Correspondence Address:

Stikes Bhakti Husada Madiun, Jl  
Taman Praja No.25, Madiun  
Indonesia  
E-mail: [adeliakpp3@gmail.com](mailto:adeliakpp3@gmail.com)

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### Introduction

Hypertension is an increase in systolic blood pressure from normal limits with a pressure value of more than 140 mmHg and a diastolic pressure of more than 90 mmHg. In general, hypertension is a disease without symptoms that can be deadly commonly called The Silence Killer. Hypertension also affects the low quality of life. This decrease in quality of life affects the treatment and prevention of complications that lead to a more severe quality of life (Wijaya et al., 2022). Based on data from Basic Health Research (Riskesdas) in 2018, Indonesia experienced a quite drastic increase in prevalence reaching 6.3%, in 2013 people with hypertension by 25.8% have now increased to 34.1%. According to data from East Java Province, it is ranked 6th with a high population of hypertension (Kemenkes RI, 2018).

Quality of life is part of the *Patient Reported Outcome* (PRO) which is assessed subjectively and multi-dimensionally. Quality of life refers to the physical, psychological, and social health domains that are different for each individual (Robertus Surjoseto & Devy Sofyanty, 2022).

Based on the analysis of UPTD profile data at the Demangan Health Center, Madiun City, hypertension is included in category 5 health problems that must be addressed immediately. In 2022, 527 people were recorded as experiencing hypertension, but this number is still mixed with hypertension sufferers who are

outside the Demangan Health Center area. After sorting the data, there were 487 cases of hypertension in the working area of the Demangan Health Center in the last year of 2022. Based on a preliminary study conducted by researchers on Wednesday 22 February 2023, out of 10 people, 6 of them belong to the low quality of life group in the domain of physical health and social relations. Then out of 10 people who fall into the category of low quality of life in the domain of psychological health and environmental health, there are 9. These results are based on the category of the total score obtained. This causes a low quality of life for hypertension sufferers and slows down the patient's recovery

Hypertension sufferers who experience anxiety will affect the recovery rate of hypertension sufferers to be lower. This is related to the low quality of life of hypertension sufferers. Anxiety has a big influence on the development of a person's personality. In addition, these uncertain experiences are generally not unpleasant, which in turn will result in accompanying physiological and psychological changes. For this reason, people with hypertension require a long treatment process and need good self-management.

## Methods

The method used in this research is cross-sectional. This study aims to determine whether there is a relationship between anxiety and the quality of life of hypertension sufferers. The population of this study is 137 and the sample is 58—sampling using a quota sampling technique. The sample was determined based on the criteria, namely hypertension sufferers recorded last year at the Demangan Health Center, Madiun City, Taman sub-district area. The measuring tool used is the DASS-42 questionnaire. Data collected is based on direct land surveys. The data obtained were analyzed using SPSS and bivariate analysis was performed using the Kendall-Tau test.

## Results

### Characteristics of respondents

**Table 1.** Table Of Characteristics Of Respondents With Hypertension

Characteristics of respondents	n (%)
<b>Age</b>	
- Productive age (16-65) years	35 (60.3%)
- Unproductive age (> 64) years	23 (39.7%)
<b>Gender</b>	
- Female	36 (62.1%)
- Male	21 (36.2)
<b>Level Of Education</b>	
- Middle Education	39 (67.2%)
- Basic Education	17 (29.3%)
- Not Attending School	2 (3.4%)
<b>Analysis Univariate</b>	
<b>Anxiety State</b>	
- Normal	10 (17.2%)
- Anxiety	48 (82.8%)
<b>Quality of Life</b>	
- Low	18 (31.0%)
- Medium	30 (51.7%)
- High	10 (17.2%)

Table 1 shows the characteristics of respondents based on age, gender, and level of education. Hypertensive patients with productive age (16-65) years were higher with a total of 35 (60.3%), while hypertension sufferers at unproductive age (> 64) years with a total of 23 (39.7%). If based on gender, it is known that the gender of hypertension sufferers from the sample is higher in females than males. The percentage of females is 62.1% while males are 36.2%. And at the level of education, it is known that the education level of hypertension sufferers from the sample is the majority is secondary education with a

total of 39 (67,%). Then at the elementary level, there were 17 (29.3%) and respondents who did not go to school were 2 (3.4%).

According to the Ministry of Education and Culture, basic education takes the form of elementary schools (SD) and madrasah ibtidaiyah (MI) or other equivalent forms as well as junior high schools (SMP) and madrasah tsanawiyah (MTS) or other equivalent forms. Secondary education is the level of education after basic education, namely Senior High School (SMA) and Vocational High School (SMK) for 3 years of study time.

### Analysis Univariate

Based on the results of research on the anxiety category, there were 48 (82.8%) hypertensive patients who experienced anxiety while in the normal category, there were 10 (17.2%). In this study, it was said to be normal if the total DASS-42 score was 0-7, and it was said to be anxious if the total DASS-42 score was 8-42). From the results of research conducted by respondents with a low quality of life there were 18 (31.0%), in the medium quality of life category there were 30 (51.7%), and in the high quality of life category, there were 10 (17.2%). Of the four domains, respondents have a low quality of life in the psychological health domain with a percentage (75.9%), this is because it is difficult for respondents to concentrate on something. As well as feelings of anxiety and loneliness experienced by respondents.

A person's quality of life is categorized as low if there is a lack of social support, lack of finances, or inadequate daily needs, both from basic needs to additional information related to health. even in an environment where the level is lacking or inadequate.

**Table 2.** Relationship between anxiety and quality of life of hypertensive patients Bivariate analysis table using the Kendall-Tau test

Anxiety State	Quality Of Life								Sig	Cc
	Low		Medium		High		Total			
	n	%	n	%	n	%	n	%		
Normal	1	10.0	3	30.0	6	60.0	10	100	0.002	-0.389
Anxiety	17	35.4	27	56.2	4	8.3	48	100		

Based on the table data above, it can be seen that there is a significant relationship between anxiety and quality of life, which has a significance value of 0.002, which means that the value is less than  $\alpha < 0.05$  with a Correlation Coefficient value of -0.389. On the anxiety scale, respondents who fall into the normal category with a low quality of life are 1 (10.0%), in the moderate category are 3 (30.0%), and in the high category are 6 (60.0%). Meanwhile, on the anxiety scale, there were 17 (35.4%) in the anxiety category with low quality of life, 27 (56.2%) in the moderate category and 4 (8.3%) in the high category.

### Discussion

Anxiety disorders were classified as neurosis nearly as late as the 19th bald. Anxiety has a major influence on the development of one's personality. Both normal behavior and deviant, disturbed behavior are expressions, appearances, and explanations of anxiety (Andri, 2014). In addition, these uncertain feelings are generally not blamed which will always cause physiological and psychological changes (Saleh, 2019).

According to (Hanifah M, M.S.I, 2020) anxiety is divided into four levels, including mild anxiety, anxiety, moderate, severe anxiety, and panic. Anxiety has a major influence on the development of one's personality. The return to normal behavior and deviant behavior, which is disturbed, are both statements, appearances, and translations of defense against anxiety. In addition, the feeling of uncertainty is generally unpleasant which will cause or be accompanied by physiological and psychological changes. Anxiety or anxiety is an experience that is subjective, unpleasant, frightening, and worrying about the possibility of danger or threat of danger and is often accompanied by certain symptoms or physical reactions due to increased autonomic activity (Suwanto, 2015)

Quality of life is a complex multidimensional concept with various indicators. According to WHO, quality of life is an individual's perception of the life he lives following the culture and values where the individual lives and compares his life with the goals, expectations, standards, and goals set by the individual. Quality of life itself is divided into 4 domains, including the domains of physical health, psychological health, social relationships, and environmental health (WHOQOL, 1998).

Physical health includes activities of daily living, dependence on drugs and medical aid, energy and fatigue, mobility (easiness to move), pain and discomfort, sleep and rest, and work capacity. Psychological

well-being includes bodily image and appearance, positive feelings, negative feelings, self-esteem, spiritual/religious/personal beliefs, thinking, learning, memory, and concentration.

Social relationships include personal relationships, social support, and sexual activity. Relations with the environment include financial resources, freedom, security, physical safety, health care, and social care including accessibility and quality of the home environment, opportunities to obtain new information and skills, participation, and opportunities to do recreation and fun activities in leisure time, physical environment including pollution/noise/water conditions/climate, and transportation.

In this study, it was said to be normal if the total DASS-42 score was 0-7, and it was said to be anxious if the total DASS-42 score was 8-42). After analyzing the data using the Kendall Tau test, it shows that there is a significant relationship between anxiety and quality of life which has a significance value of 0.002, which means that the value is less than the value  $\alpha < 0.05$  with a Correlation Coefficient value of -0.389. The Correlation Coefficient value has a perfect negative linear relationship correlation. This means if the level of anxiety is high, then the low quality of life will also be high.

The correlation coefficient value is -0.389 indicating a moderate negative linear relationship between the two variables observed. This shows that when one variable increases, the other variable tends to decrease, and vice versa. Correlation coefficient values range from -1 to 1, and the closer the value is to -1 or 1, the stronger the linear relationship between the variables. In this case, the value of -0.389 indicates a moderately strong relationship between the two variables, although not too strong. There is a complex relationship between anxiety and the quality of life of hypertensive patients.

This is in line with the research conducted by Yuldensia Avelina and Irmina Yuliyanti Natalia. The results of bivariate analysis using the Lambda test obtained a significance value of  $0.001 < \alpha$  (0.05%), this indicates that  $H_0$  is accepted, which means there is a relationship between anxiety levels and the quality of life of patients. hypertension in Lenandareta Village, the working area of the Paga Health Center, Paga District, Sikka Regency. This is due to the factor of old age low level of education and not knowing clearly about hypertension and the impact of hypertension that they experience (Avelina & Natalia, 2020).

Anxiety can be expressed through physiological responses, namely the body responds by activating the autonomic nervous system (sympathetic and parasympathetic). The sympathetic nervous system will activate the body's response, while the parasympathetic nervous system will minimize the body's response (Wijaya et al., 2022). Anxiety is an emotional response that can be experienced by anyone, including people with hypertension. When someone experiences anxiety, it can affect many aspects of their daily life, including their quality of life. Hypertensive patients who experience anxiety tend to have a lower quality of life compared to hypertensive patients who do not experience anxiety (Dwi Rahmawati, 2023).

Based on the results of observations in the field, people with hypertension in the Taman Kelurahan UPTD Demangan Health Center lack good control over their anxiety. This is because the respondents have indications of lack of rest, fear of physical/general places, and psychological determination in terms of being classified into the aspect of situational anxiety. Apart from that, indications of anxiety such as being easily startled, excessive fear, and psychological tension.

There is a complex relationship between anxiety and the quality of life of hypertensive patients. Anxiety is an emotional response that can be experienced by anyone, including people with hypertension. When someone experiences anxiety, it can affect many aspects of their daily life, including their quality of life. Hypertensive patients who experience anxiety tend to have a lower quality of life compared to hypertensive patients who do not experience anxiety.

In this category, the majority of hypertensive patients experience anxiety compared to normal. This is because the respondents have indications of lack of rest, fear of physical/public places, and psychological pressure in terms of being classified into the aspect of situational anxiety. Apart from that, indications of anxiety such as being easily startled, excessive fear, and psychological tension.

It is important to overcome anxiety in people with hypertension to improve their quality of life. Therapeutic approaches that include medical treatment, psychological support, and healthy lifestyle changes can help reduce anxiety and improve the quality of life for people with hypertension. Consult a medical professional or mental health professional for appropriate assistance in managing anxiety and hypertension.

Hypertension sufferers often experience excessive anxiety with various disorders such as dry mouth, irregular breathing, panic easily, and worry about something that will happen. In this case, anxiety is one of the factors that support the severity of hypertension sufferers because anxiety is an experience of worrying or anxiety, which means something bad will probably happen. Patients with hypertension with a low quality of life coupled with the anxiety they experience can trigger hypertension in the long term. If this anxiety persists in the sufferer, it will worsen the quality of life for the patient with hypertension. The importance of overcoming anxiety in people with hypertension to improve their quality of life.

## Conclusion

In this study, it can be concluded that there is a relationship between anxiety and the quality of life of hypertension sufferers. The resulting correlation is very significant, namely obtaining a p-value of 0.002 with a correlation coefficient value of -0.389. The majority of people with hypertension belong to the productive age group and are female.

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## Institutional Review Board Statement

Please add "The study was conducted following the Declaration of Helsinki, and approved by the Institutional Review Board (or Ethics Committee) of STIKES BHAKTI HUSADA MULIA MADIUN (no. 009/E-KEPK/STIKES/BHM/III/2023 date of approved 14 March 2023)."

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