



Anxiety Level and Coping Mechanisms of Hypertension Patients in Wolomage Village, Detusuko District, Ende Regency, East Nusa Tenggara Province

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ABSTRACT

Hypertension sufferers are patients with the highest risk of stroke and cardiovascular disease. A person who feels anxious is four times more likely to suffer from hypertension. Several studies have found that anxiety is related to hypertension. The aim of the research is to find out the level of anxiety and coping mechanisms of hypertension sufferers. Method: This research is a descriptive analytical study with a cross sectional approach to identify the anxiety and coping mechanisms of hypertension sufferers in Wolomage village. The population in this research is all hypertension sufferers in Hamlet II, Wolomage Village, Detusoko District, Ende Regency. The instruments used in this study were the Zung Self-Rating Anxiety Scale questionnaire to measure anxiety, and the Jalowiek Coping Scale / JCS questionnaire to measure coping mechanisms. Data analysis includes univariate analysis and bivariate analysis. The test was carried out using SPSS 25. Result: The research results show that 15 respondents (44,1%) had a level of anxiety regarding hypertension and most respondents have maladaptive coping mechanisms, namely 22 people (64,7%). The conclusion from the research results, Prevention of the occurrence of maladaptive responses is important to do. Health workers, especially nurses, must provide a lot of promotive efforts with counseling. Counseling must be carried out continuously, besides that, it is necessary to educate and motivate the community, especially considering the level of education of respondents to always diligently control their health conditions routinely at the nearest health facility

INTRODUCTION

Hypertension sufferers are patients with the highest risk of stroke and cardiovascular disease. Hypertension causes the death of around 8 million people each year, of which 1.5 million deaths occur in Southeast Asia. The 2018 Basic Health Research showed an increase in the prevalence of hypertension in Indonesia, namely 34.1% compared to 25.8% in the 2013 Riskesdas (Kemenkes, 2018). In Ende Regency, cases of Hypertension that received Health services in 2022 were 12,654 (Dinkes Ende, 2023).

One of the problems with hypertension is the emergence of psychological disorders such as anxiety. There are two symptoms of anxiety, namely physiological symptoms such as rapid heartbeat, headaches, irregular digestion, loss of appetite, insomnia, shortness of breath, sweating, cold fingertips, psychological symptoms such as feelings of worry, fear, inability to concentrate, lack of confidence, restlessness, and confusion. (Kozier & Barbara, 2011).

Stress can trigger high blood pressure through the activity of the sympathetic nervous system which causes an intermittent increase in blood pressure (4). In stressed individuals, the hormone adrenaline will be released, blood pressure will rise through narrowing of the arteries and increased heart rate. If stress continues, blood pressure will remain high. (Suoth et al., 2014).

Anxiety is a subjective feeling of disturbing mental tension as a general reaction to the inability to cope with problems or the absence of a sense of security (Lumi et al., 2018). Research by Bacon et al (2014) and Lestari (2013) stated that anxiety is a risk factor for increasing hypertension (Bacon et al., 2014; Lestari et al., 2013). A person who feels anxious is four times more likely to suffer from hypertension. Several studies have found that anxiety is related to hypertension (Pramana et al., 2016; Ridwan et al., 2017; Situmorang, 2020). Uswandari's research (2017) proved that the blood pressure of anxious people is relatively higher than that of those who are not anxious (Uswandari Dian, 2017).

Coping is an individual's effort to overcome psychological stress. If the coping of hypertension sufferers is not good, it will cause anxiety, fear, stress and pain which can cause sympathetic stimulation, thus triggering an increase in blood pressure, cardiac output, and peripheral frequency (Kozier & Barbara, 2011), and adaptive coping can reduce stress levels for hypertension sufferers (Mad Zaini et al., 2022). So The aim of the research is to find out the level of anxiety and coping mechanisms of hypertension sufferers.

LITERATURE REVIEW

Hypertension

Hypertension is a condition where systolic blood pressure is >140 mmHg and/or diastolic is >90 mmHg¹. Hypertension disease based on its cause can be divided into 2 groups, namely; Essential or primary hypertension and secondary hypertension. The cause of essential hypertension is still unknown, approximately 90% of hypertension sufferers are classified as essential hypertension while 10% are classified as secondary hypertension. Secondary hypertension is hypertension whose cause can be identified, including renal blood vessel disorders, thyroid gland disorders (hyperthyroidism), adrenal gland disease (hyperaldosteronism) and others.

Non-specific complaints in hypertension sufferers include: Headache, anxiety, heart palpitations, dizziness, blurred vision, chest pain, fatigue, and others. Symptoms due to complications of hypertension that have been encountered are as follows: impaired vision, nerve disorders, heart disorders, impaired kidney function, cerebral disorders that cause seizures and bleeding of blood vessels in the brain so that paralysis, impaired consciousness to coma can occur.

Control of coronary heart disease risk factors that can mutually influence the occurrence of hypertension include overcoming obesity/reducing excess weight, reducing salt intake in the body, creating a relaxed state, doing regular exercise, quitting smoking and Reducing alcohol consumption.

Concept of Anxiety

Anxiety is a subjective feeling of disturbing mental tension as a general reaction to the inability to overcome problems or the absence of a sense of security⁹. Research by Bacon et al., (2014)¹⁰ states that anxiety is one of the risk factors for increasing hypertension. Someone who feels anxious has a fourfold risk of suffering from hypertension. Pramana et al., (2016)¹¹ states that anxiety is related to hypertension. Research by Uswandari, (2017)¹² proves that the blood pressure of anxious people is relatively higher than those who are not anxious. Anxiety disorders in the elderly are characterized by difficulty sleeping, restlessness, frequent shaking, worry, disappointment, and often being alone¹³.

Coping Mechanism

Coping is an effort to reduce stress. Each person has different coping mechanisms¹⁶. Coping is a step/method of an individual to overcome problems and reduce the stress they feel. Someone who has an adaptive coping mechanism will be able to solve problems well and avoid prolonged stress. Therefore, the lower a person's stress coping, the higher the risk of hypertension recurrence. However, for people with hypertension, it is not enough to just control good coping mechanisms and stress control, but it must also be accompanied by a healthy lifestyle as a preventive measure and pharmacological and non-pharmacological management to overcome hypertension if it has occurred¹⁷. Therefore, there needs to be a contribution from health workers, especially members of the community who suffer from hypertension regarding skills and knowledge about stress coping, with the hope that the level of hypertension cases can be further suppressed.

Coping is an individual's effort to overcome psychological stress. If the coping of hypertensive patients is not good, it will cause anxiety, fear, stress and pain which can cause sympathetic stimulation, thus triggering an increase in blood pressure, cardiac output, and peripheral frequency³. Coping is declared successful if it can reduce heart rate, blood pressure, pulse rate and respiratory system.

METHODOLOGY

This research is a descriptive analytical study with a cross sectional approach to identify the anxiety and coping mechanisms of hypertension sufferers in Wolomage village. This research will be carried out in the traditional area of Wolomage village, Detusoko District. The population in this research is all hypertension sufferers in Hamlet II, Wolomage Village, Detusoko District, Ende Regency. The sample in this study was people all hypertension sufferers in Hamlet II, Wolomage Village, Detusoko District who met the inclusion criteria. The instruments used in this study were the Zung Self-Rating Anxiety Scale questionnaire to measure anxiety, and the Jalowiek Coping Scale / JCS questionnaire to measure coping mechanisms. Data analysis includes univariate analysis and bivariate analysis. The test was carried out using SPSS 25.

RESULTS

After the data has been collected through the process described in the research methodology, the next step is to carry out data analysis. Data analysis is carried out to provide meaning or meaning that is useful for solving research problems. Next, the data is presented descriptively and then analyzed quantitatively using statistical methods.

Respondent Demographic Characteristics

The demographic characteristics of respondents identified in this research activity were age, gender, religion, marital status, education level, occupation and income.

Table 1. Characteristics of Respondents

Characteristics	n (%)
Gender	
Female	19 (55,9)
Male	15 (44,1)
Job	
Retired teacher	1 (2,9)
Housewife	12 (35,3)
Farmer	19 (55,9)
Driver	2 (5,9)
Income	
< 500.000/month	22 (64,7)
500 s.d 1.000.000/month	10 (29,4)
> 2.000.000/month	2 (5,9)
Education	
Elementary School	25 (73,5)
Junior High School	6 (17,5)
High School	2 (5,9)
College	1 (2,9)
Marital Status	
Not married	5 (14,7)
Married	29 (85,3)

Source: Primary Data 2024

In table 1, it is found that the largest number of respondents were women, namely 19 people (55,9%), most of the respondents were farmers, namely 19 people (55,9%), the income of the largest number of respondents was less than IDR 500,000/month, namely 22 people (64,7%), almost all respondents were elementary school graduates, namely 25 people (73,5%) and many respondents were married, namely 29 people (85,3%).

Table 2. Distribution of Respondents Based on Family History of Hypertension

Family History of Hypertension	n	Percentage(%)
None	20	58,8
Yes	14	41,2

In table 2, it was found that 14 people (41,2%) had a family history of hypertension and 20 people (58,8%) did not have a family history of hypertension.

Anxiety Level

Tabel 3. Distribution of Respondents based on Anxiety Level

Anxiety Level	n	Percentage(%)
None	19	55,9
Yes	15	44,1

In table 3, it was found that 15 respondents (44,1%) had a level of anxiety regarding hypertension and 19 respondents (55,9%) did not have a level of anxiety regarding hypertension.

Coping Mechanisms

Tabel 4. Distribution of Respondents based on Coping Mechanisms

Coping Mechanisms	n	Percentage(%)
Maladaptive	22	64,7
Adaptive	12	35,3

In table 4, it is found that most respondents have maladaptive coping mechanisms, namely 22 people (64,7%), while adaptive coping mechanisms are 12 people (35,3%).

DISCUSSION

The results of the study showed that most respondents were elementary school graduates, namely 25 people (73,5%). Education is one of the factors of elderly anxiety. This is because with education, a person will get information about something. A person with a high education is better able to use their understanding, adaptively compared to the group of respondents with low education. This condition shows that severe anxiety responses tend to be found in respondents with low education because their low understanding forms a frightening perception. Education for each person has its own meaning. Education is generally useful in changing thought patterns, behavior patterns and decision-making patterns. A sufficient level of education will make it easier to identify stressors within oneself and from outside oneself (Kalsum & Giri, 2018).

Table 3 shows that those who have anxiety levels towards hypertension are 15 people (44,1%) and those who do not have anxiety levels towards hypertension are 19 people (55,9%). Anxiety is a disturbance in feelings characterized by feelings of fear or deep and ongoing worry, no disturbance in assessing reality, personality remains intact, behavior can be disturbed but still within normal limits (Hawari, 2012). Most respondents in this study are included in normal anxiety, which is a response to a threatening situation but this anxiety does not interfere too much with the activities and physical condition of the respondents. Efforts made by hypertension sufferers are usually to pray more often and often ask for advice from family members or closest relatives on how to reduce anxiety about hypertension suffered by respondents, so that they can avoid even more severe anxiety.

Table 4 shows that most respondents have maladaptive coping mechanisms 64,7%. This is certainly very worrying because maladaptive coping can cause problems in society because individuals are unable to solve the problems faced in their lives, especially health problems that occur in the individual. Maladaptive coping is shown by someone who tends to avoid the problems they face.

Maladaptive coping mechanisms can also inhibit a person's integration, communication and interaction functions, decreasing abilities and tending to control the environment. A person who experiences maladaptive coping is shown by an attitude that is less able to solve problems and tends to experience prolonged stress (Ajmain & Prastian, 2021). This study is in line with Ariaste's research (2016), the majority of respondents have maladaptive coping mechanisms as much as 50.8% (Ariasti & Pratiwi, 2016).

Coping is an effort to reduce stress. Each person has different coping mechanism (Puspanegara, 2019). Coping is a step / method of an individual to be able to overcome problems and reduce the stress felt (Puspanegara, 2019). Someone who has an adaptive coping mechanism will be able to solve problems well and avoid prolonged stress (Abdul & Abdul, 2011). Therefore, the lower a person's stress coping, the higher the risk of hypertension recurrence. However, for people with hypertension, it is not enough to just control good coping mechanisms and stress control, but it must also be accompanied by a healthy

lifestyle as a preventive measure and pharmacological and non-pharmacological management to overcome hypertension if it has occurred (Widya Sari et al., 2018).

CONCLUSIONS AND RECOMMENDATIONS

In this study, it was found that the respondents' maladaptive coping mechanisms were very large. Prevention of the occurrence of maladaptive responses is important to do. Health workers, especially nurses, must provide a lot of promotive efforts with counseling. Counseling must be carried out continuously, besides that, it is necessary to educate and motivate the community, especially considering the level of education of respondents to always diligently control their health conditions routinely at the nearest health facility.

FURTHER STUDY

This study still has limitations, so further research is needed related to the topic of Anxiety Level and Coping Mechanisms of Hypertension Patients in Wolomage Village, Detusuko District, Ende Regency, East Nusa Tenggara Province in order to perfect this study and increase insight for readers.

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