# The correlation between spiritual coping with the lifestyle of hypertension patients in Ploso Kuning village 

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## ABSTRACT

Introduction: The lifestyle of patients with hypertension is an important factor in treating hypertension, but in fact, the lifestyle of patients with hypertension is still quite bad. A bad lifestyle triggers complications and increases the prevalence of hypertension. The purpose of the study was to analyze the relationship between spiritual coping and the lifestyle of hypertension sufferers.
Methods: The research method uses observational analytics, the independent variable is spiritual coping, the dependent variable is the lifestyle of people with hypertension, and the sampling technique uses simple random sampling. The sampled population is all hypertension sufferers in Ploso Kuning village who are between 26 to 65 years old, can read and are willing to be respondents. The sampling technique used is simple random sampling with a sample size of 108 respondents. Data analysis using Spearman rank correlation test.
Results: The results showed that spiritual coping had a significant effect on the lifestyle of hypertension sufferers with a p -value of 0.000 .
Conclusion: The lifestyle of patients with hypertension can be improved by increasing the spiritual coping of the sufferer.

> Keywords: Spiritual Coping, Life Style, Hypertension.
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## INTRODUCTION

Lifestyle is a very important aspect in the treatment of hypertension and the prevention of complications in hypertensive patients. However, in reality, the lifestyle of people with hypertension is still relatively bad, including noncompliance of patients carrying out treatment programs, awareness if they suffer from hypertension, diet, activity patterns, and awareness of controlling blood pressure. ${ }^{1}$

The prevalence of hypertension sufferers tends to increase, according to Whelton's research the American population aged over 20 years suffering from hypertension has reached 74.5 million people, but almost $90 \%-95 \%$ of cases have no known cause. ${ }^{1}$ Data from the World Health Organization 2015 shows that around 1.13 billion people in the world have hypertension, meaning that 1 in 3 people in the world is diagnosed with hypertension. ${ }^{1}$ The number of people with hypertension continues to increase
every year, it is estimated that by 2025 there will be 1.5 billion people affected by hypertension and it is estimated that every year 10.44 million people die from hypertension and its complications. ${ }^{2}$ Riskesdas data 2013 shows the prevalence of hypertension in Indonesia is $25.8 \%$ and in 2018 it increased to $34.1 \%$, where high blood pressure in women (36.9\%) was higher than in men (31.3\%). ${ }^{3}$

The prevalence of hypertension in East Java in 2013 was $26.2 \%$ and in 2018 it increased to $36.3 \%$, this prevalence is above the national prevalence of $34.1 \% .^{3}$ Patients with hypertension in Lamongan Regency in 2020 amounted to $96.5 \%$ or around 306,719 residents, with the proportion of men being $92.5 \%$ (140,566 residents) and women at $100.1 \%(166,153$ residents) with an estimated number of sufferers of 317,967 people aged 15 years. ${ }^{3}$

A study conducted by Peltzer on a population aged $>18$ years as many as 29,965 people, resulted in $33.4 \%$ suffering from hypertension ( $31.0 \%$ occurring in men and $35.4 \%$ occurring in women). ${ }^{4}$

Of these hypertension patients, 42.9\% had awareness if they had hypertension, $14.3 \%$ had their blood pressure controlled and $11.5 \%$ were treated with hypertension drugs. The results of the Riset Kesehatan Dasar Provinsi Jawa Timur (2018), based on the proportion of history of taking medication and reasons for not taking medication, only $56.07 \%$ of hypertension patients regularly took medication, $29.23 \%$ did not take medication regularly and $14.70 \%$ did not take medication. the reason for not taking medicine is because they feel they are healthy as much as $64.14 \%$, do not routinely seek treatment by $28.52 \%$, the rest are due to taking traditional medicine, often forgetting, can't stand side effects and others. ${ }^{3}$

According to WHO, efforts to prevent hypertension are carried out by reducing salt intake, consuming lots of fruits and vegetables, being active in physical and regular activities, avoiding tobacco and alcohol consumption, and limiting intake containing saturated fat. Efforts to manage people with hypertension can be done by
reducing and managing stress, checking blood pressure regularly, and treating high blood pressure and other comorbidities. ${ }^{2}$

Changes and modifications in the lifestyle of people with hypertension are the first-line treatment recommendations for people with increased blood pressure. ${ }^{1}$ A good lifestyle helps control blood pressure. Changing and modifying the lifestyle requires self-regulation by the sufferer, the better the self-regulation, the better the lifestyle. Self-regulation has an important role in achieving a healthy lifestyle. ${ }^{5}$ Following Leventhal's selfregulation, the problem-solving process occurs through three stages, namely interpretation, coping, and appraisal. ${ }^{6}$ According to Leventhal (2003) problems can be interpreted by accessing individual disease cognition, therefore symptoms and social messages will contribute to the development of disease awareness, which is then used to help understand the disease and guide coping responses. This cognitive representation of the problem gives meaning to the problem and allows the individual to develop and consider appropriate coping strategies. Therefore, any coping strategy must relate to the cognition of the disease and the emotional state of the individual. Spirituality has a direct effect on mental and physical health, as it influences coping strategies and health behaviors, which in itself creates different risks or also improves the burden of disease. ${ }^{6-9}$

Good coping is one of the steps toward good self-regulation. Spiritual affects coping, someone who has high spirituality can handle problems well. Spiritual coping is a person's way of dealing with stressors and behavioral tendencies by using religious values guidelines. Spiritual coping is built through positive thinking, positive acting, and positive hoping indicators. ${ }^{10}$ The study aimed to analyze the relationship between spiritual coping and the lifestyle of hypertension sufferers.

## MATERIALS AND METHODS

This research used the observational analytic method, to analyze the correlation between spiritual coping and the lifestyle of hypertensive patients. The location of research was carried out in Ploso Kuning Village. The time of study was
carried out from April 2022 to May 2022. The sampling technique in this study is simple random sampling with a sample size of 108 respondents. The inclusion criteria in this study were all hypertension sufferers in Ploso Kuning Village who were aged between 26 to 65 years, could read, were willing to be respondents, and the exclusion criteria is less cooperative respondents.

The independent variable is spiritual coping as measured by a questionnaire made based on the spiritual coping component and tested for validity and reliability with valid and reliable results, the dependent variable is the lifestyle of people with hypertension measured by the questionnaire that has been tested for validity and reliability with valid and reliable results. The data was analyzed using the rho-spearman correlation coefficient.

## RESULTS

Table 1 shows that of the 108 respondents, most $(41.7 \%)$ of the respondents were aged 46-55 years old (late adult), and most (79.6\%) were female. Based on the results of the study, most of the respondents ( $89.8 \%$ ) had basic education from elementary school to junior high school. Most of them have suffered from hypertension ( $60.2 \%$ ) for 1-5 years. Based on the results of blood pressure measurements, most of them suffered from grade 2 hypertension (42.6\%), while almost all of them had never been hospitalized because of hypertension (98.1\%).

Table 2 shows that most of the respondents (76.9\%) have good spiritual coping and most (55.6\%) of the respondents have a good lifestyle.

Table 3 shows that from 25 respondents $18.5 \%$ had sufficient spiritual coping and lifestyle, and $4.6 \%$ had sufficient spiritual coping and good lifestyle. From 83 respondents, $25.9 \%$ had good spiritual coping and adequate lifestyle and $55.6 \%$ had good spiritual coping and good lifestyle.

## DISCUSSION

The results showed that most of the respondents (41.7\%) were aged 46-55 years old. As people age, there is a lot of
decline in body functions caused by the aging process, both changes in physical, psychological, and psychosocial functions, one example of physiological changes that occur is disturbances. in the cardiovascular system where there is a narrowing of the blood vessels and the quality of the walls of the blood vessels which results in disrupted blood flow thereby triggering an increase in blood pressure. ${ }^{11}$ In line with a study conducted by Peltzer the prevalence of hypertension at the age of 40 years and over is higher in women than men. This happens because of the prevalence of obesity, the occurrence of menopause, and hormonal factors. ${ }^{4}$

The result shows most (79.6\%) are female, referring to the opinion of Everett \& Zajacova which states that men have higher levels of hypertension than women, but men have a lower level of awareness of hypertension than women where men tend to be less concerned, do not want to maintain, control or check their health regularly to health services so that the incidence of hypertension is more detected in women than men. ${ }^{12}$ In addition, women are at risk of developing hypertension after menopause at the age of over 45 years. In accordance opinion of Peltzer the prevalence of hypertension at the age of 40 years and over is higher in women than men. This happens because the prevalence of obesity in women continues to increase, and women experience menopause and hormonal factors. ${ }^{4}$

The result shows most of the respondents (89.8\%) had primary education from elementary school to junior high school. Respondents who had low education were likely to be less able to absorb information about their illness, this could lead to low knowledge and ultimately lead to unhealthy behavior and lifestyle. In line with the opinion of Notoatmodjo, a person's level of education will affect a person's knowledge, the more information can affect the level of knowledge, the more a person will behave according to the knowledge he has. ${ }^{13}$ Most ( $60.2 \%$ ) work as housewives, and doing complex household chores can take up most of the time from the housewives themselves, especially if the housewives do not use the services of housemaids. It is the overload of household work that can

Table 1. Distribution of general data respondent

| Variables | $\mathbf{N}=\mathbf{1 0 8}$ | \% |
| :--- | :---: | :---: |
| Age | 1 | 0.9 |
| $\quad$ Late teens | 4 | 3.7 |
| Early adult | 13 | 12.0 |
| Late adult | 45 | 41.7 |
| Early elderly | 25 | 23.1 |
| Late elderly | 20 | 18.5 |
| $\quad$ Seniors |  |  |
| Gender | 22 | 20.4 |
| $\quad$ Male | 86 | 79.6 |
| $\quad$ Female |  |  |
| Education | 97 | 89.8 |
| $\quad$ Basic education | 11 | 10.2 |
| $\quad$ Secondary education |  |  |
| Long-suffering | 65 | 60.2 |
| 1-5 years | 42 | 38.9 |
| 6-10 years | 1 | 0.9 |
| >11 years | 1 |  |
| Blood pressure | 44 | 0.9 |
| $\quad$ Normal | 46 | 40.7 |
| Grade 1 hypertension | 16 | 42.6 |
| Grade 2 hypertension | 1 | 14.8 |
| Grade 3 hypertension |  | 0.9 |
| Isolated systolic hypertension | 2 | 1.9 |
| Hospitalization history | 106 | 98.1 |
| Been hospitalized |  |  |
| Never been hospitalized |  |  |

Table 2. Distribution of spiritual coping and lifestyle

| Variables | n | \% |
| :--- | :---: | :---: |
| Spiritual Coping |  |  |
| $\quad$ Enough | 25 | 23.1 |
| $\quad$ Good | 83 | 76.9 |
| Life Style |  |  |
| $\quad$ Enough | 48 | 44.4 |
| Good | 60 | 55.6 |

Table 3. Analysis correlation between spiritual coping and lifestyle

| Spiritual coping | Life style |  | P value |
| :--- | :---: | :---: | :---: |
|  | Enough | Good |  |
| Enough | $20(18.5)$ | $5(4.6)$ | $<0.001$ |
| Good | $28(25.9)$ | $55(50.9)$ |  |

cause stress and then trigger high blood pressure. ${ }^{14}$

Most of them have suffered from hypertension ( $60.2 \%$ ) for 1-5 years. The longer a person suffers from a disease, the more he will understand and adapt to the disease he is suffering from. Patients who have had hypertension for a long time have more understanding of the condition, symptoms, and treatment compared to those who have recently suffered from hypertension. In addition,
the characteristics of hypertension are idiopathic and asymptomatic, patients who have suffered from hypertension for a long time have adapted to their disease so that sometimes sufferers do not realize that they are sick, as a result, awareness to maintain health by complying with the treatment being undertaken tends to decrease. In line with the results of the research by Ihwatun which states that the longer the respondent suffers from hypertension, the lower the level
of compliance in undergoing treatment, this is because hypertensive patients feel bored and bored with treatment and other therapies that must be undertaken. ${ }^{15}$

Spiritual coping has a significant effect on the lifestyle of hypertension sufferers. Lifestyle can be improved by increasing the sufferer's spiritual coping. In line with the research of Roche \& Hesse spirituality can change a person's behavior to improve physical, mental, social, and spiritual health. ${ }^{16}$ According to Pargament, people who have a strong religious orientation are more likely to use a larger religious approach as coping. Religion provides resources for dealing with stress and increasing positive emotions over the possible negative effects of stress. ${ }^{17}$

Efforts to achieve high spiritual coping in people with hypertension can be done through the first way of positive thinking by opening the chest and thinking clearly in treating the disease, thinking well about the health patterns that must be lived and the treatment patterns that must be lived for life. Second, positive acting, namely trying hard to follow a positive lifestyle, starting to maintain eating patterns, activity patterns, and sleeping patterns, being obedient to taking medication, and carrying out regular controls that are carried out correctly. Boredom undergoing long therapy still makes sufferers keep trying to do it. The last step is positive hoping, praying, and putting your trust in Allah SWT regarding the hope and meaning of life that has been dreamed of, living a prosperous life without complaining about the illness you are suffering from, being happy to undergo all therapy programs and making it a part of your daily lifestyle.

The lifestyle of hypertension sufferers increases when spiritual coping is good. Spiritual coping in chronic disease is a tendency to act to reduce the risk of complications and help reduce the symptoms of the disease experienced, so that sufferers have high independence and compliance in carrying out treatment without having to be supervised. This can be an effort to prevent complications caused by hypertension and reduce the prevalence of hypertension. As the results of a study conducted by Cozier spiritual coping is associated with a
decrease in hypertension, a person who involves his religion a lot in dealing with stressors shows a decrease in the risk of hypertension. ${ }^{18}$ According to opinion of Arafat sufferers who involve God as a partner, always seek and appreciate God's love and care in overcoming the problems they experience ${ }^{19}$, in line with the opinion of Miller \& Thoresen who argue that spiritual coping gives birth to selfimprovement, deepening relationships with others, building a sense of oneness with nature or attachment and belief in God. ${ }^{20}$

## CONCLUSION

The life style of patients with hypertension can be improved by increasing the spiritual coping of the sufferer, the result of this study is expected to health workers, especially nurses can apply spiritual-based nursing care in treating hypertension patients.

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## CONFLICT OF INTEREST

We as the author declare that we have no competing financial interests or personal relationships that can affect the work reported in this paper.

## ETHICAL STATEMENT

This research has passed the ethical due diligence from KEPK UNUSA No. 057/ EC/KEPK/UNUSA/2021.

## AUTHOR CONTRIBUTION

All authors contributed equally to this study.

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