

## The Relationship Of Management Balance Lifestyle With The Event Of Hypertension In The Work Area Of The Bima Maroa Health Center, Konawe Selatan Regency

Tawakkal<sup>1</sup>, Andriyani<sup>2</sup>, Ira Nurmala<sup>2</sup>, Dwi Ayu Rahmawati<sup>2</sup>, Via Zakiah<sup>2</sup>, Rizka Mutmainnah<sup>2</sup>

<sup>1</sup>Departement of Hospital Administration, Pelita Ibu Institute of Health Science, Indonesia

<sup>2</sup>Depatemen of Midwifery, Pelita Ibu Institute of Health Science, Indonesia

Corresponding Email: [tawakalpelita17@gmail.com](mailto:tawakalpelita17@gmail.com)

### Abstract

Hypertension cases in 2019 in Southeast Sulawesi Province rank second out of the 10 highest diseases in Southeast Sulawesi, namely as many as 57,160 people (26.8%). Konawe Regency found 3,967 new cases or (74.33%), in 2018 it reached 11,599 cases and found 4,240 new cases or (36.55%), in 2019 it reached 12,021 cases and found new cases as many as 6,259 or (41.1%). This study aims to analyze the relationship between community lifestyle balance management and the incidence of hypertension in the working area of the BimaMaroa Community Health Center, Konawe Selatan Regency. This type of research is a quantitative study, with a cross sectional research design. The population selection in this study was all visits to patients with hypertension cases recorded in the period January-August 2020 with an age range of 35 years to 60 years, totaling 103 people and a sample of 82 respondents. There is a relationship between diet and hypertension, it is known that the P value of 0.01 is smaller than 0.05 and the Chi Square value is 9.847. With a Phi value of 0.373, it is between 0.20-0.399, which means there is a low relationship, there is a relationship between rest patterns and hypertension, it is known that the P value is 0.01 which is smaller than 0.05 and the Chi Square value. is 9.507. With a Phi value of 0.366, it is between 0.20-0.399, which means that there is a low relationship. There is no relationship between exercise management and hypertension where it is known that the P value of 0.68 is greater than 0.05, which means that there is no significant relationship and the Chi Square value is 2.196. and the value of Phi 0.190 is between 0.00-0.199 which means it is very low. There is a relationship between behavior management and hypertensive patients where the known P value is 0.00 less than 0.05 and the Chi Square value is 15.848. With a Phi value of 0.465, it is between 0.40-0.599, which means that there is a moderate relationship. The conclusion of this study is that there is a relationship between lifestyle management (diet management, rest management, behavior management, and hypertension), except exercise management. It is recommended that the agency more socialize about the causes and impacts of hypertension, it is hoped that the community will be more selective in regulating diet and rest. Regular exercise and changing bad behavior for individual and group health.

**Keywords:** Diet Management, Rest Pattern Management, Exercise Management, and Behavior Management.

### Introduction

Hypertension is a problem one of the heart diseases that is still a big job for health around the world. Hypertension is the cause of various heart diseases, such as heart attacks, heart failure, strokes [1].

Basic Health Research (Riskesdas) 2018 that there are 23.7% of 1.7 million deaths due to

hypertension in Indonesia. As much as 34.1%, people aged 18 years and over live with hypertension, the islands of Kalimantan and Java Island dominate, South Kalimantan is the highest prevalence with a range of 44.1%, while Papua Province has the lowest prevalence of 22.2%, but specifically Southeast Sulawesi Province ranks 18th out of 34 provinces with a prevalence of hypertension reaching 29.8% [2].

The Health Office of Southeast Sulawesi Province, noted that the prevalence of hypertension has increased every year. In 2014 hypertension was ranked fourth out of the ten largest diseases in Southeast Sulawesi Province, namely 24,419 cases (9.25%), but in 2015 hypertension was ranked second, namely 19,743 cases (17.67%), and continued to increase in 2016, the prevalence of hypertension cases ranked first in the cases of the ten largest diseases in Southeast Sulawesi Province, namely 18,054 cases (61.57%) and in 2017 The prevalence of hypertension cases occupies position second in the case of the ten largest diseases in Southeast Sulawesi Province, amounting to 11,265 cases (33.62%) [3].

Hypertension cases in 2019 in Southeast Sulawesi Province ranked second out of the 10 highest diseases in Southeast Sulawesi, totaling 57,160 people (26.8%). The highest cases of hypertension in Konawe Islands Regency were 88.8%, Wakatobi 50.3%, Central Buton 45.3%, North Konawe, 42.3%, Kendari City 41.2%, South Konawe 41.1%, Muna 37.2%, West Muna 29.2%, North Kolaka 28.4%, East Kolaka 27.9%, Kolaka 27.6%, North Buton 26.4%, Konawe 25.3%, Bau-Bau City 21.3%, South Buton 14.8%, Bombana 13.1% and hypertension with a prevalence with a small amount of hypertension, namely Buton Regency with a total of 3.5% [3]

Hypertension cases are also found in South Konawe Regency where data on hypertension cases in 2017 reached 5,337 cases, and the 3rd highest was Muna Regency and Konawe Regency and found new cases as many as 3,967 or (74.33%), in 2018 it reached 11,599 cases and found new cases as many as 4,240 or (36.55%), in 2019 it reached 12,021 cases and found new cases as many as 6,259 or (41.1%), South Konawe Regency ranks 6th most in all regencies and cities of Southeast Sulawesi Province, thus it is known that every year it is almost an increase for new cases, according to data from the Non-Communicable Disease Management Program (P2PTM) is the most cases and the second order of the data on the 10 largest diseases in South Konawe Regency after cases of Upper Respiratory Tract Infection (ISPA) [4].

Based on data at the Bima Maroa Health Center which also houses 9 villages and 1 village, the highest case of hypertension was found in South

Konawe Regency. It is known that hypertension cases in 2017 reached 775 cases or (14.52%), in 2018 it increased to 979 cases or (8.44%), in 2019 there were 459 cases or (3.81%), the last recap in June 2020 it was known that the number of visits with hypertension cases was 135 people, this hypertension case occurred in patients with an age range of 35 years to 60 years [5].

Based on a preliminary survey conducted on May 11-13, 2020, several respondents at the Bima Maroa Health Center after interviews obtained information that patients with a history of unhealthy diets there were 5 (55.5%) patients from 9 visits, with a history of poor rest patterns totaling 5 (55.5%) patients from 9 visits and there were 7 (77.7%) patients from 9 visits had a history of lack of activity or exercise. In addition, information was also obtained from the Head of the Bima Maroa Health Center, the dominant case of hypertension was caused by dietary factors, physical activity patterns of lack of rest patterns and bad habit behavior, but there were several other factors such as the discovery of a combination of hypertension with other diseases such as heart defects and kidney disorders.

The management of a healthy lifestyle greatly affects the quality of life of a person where management participation is a plan for the purpose of obtaining an increase in health levels. Some indicators of a person being naturally healthy, including humans have a healthy mindset, healthy behavior patterns, healthy eating patterns and healthy movement patterns, thus the management balances lifestyle can help overcome the incidence of hypertension in the Bima Maroa Health Center Work Area, South Konawe Regency.

## Methods

The selection of types in this study is a form of Quantitative research using a cross sectional Study design, this design involves more than one case in one process and also involves several variables to see the pattern of relationships but these variables are measured through historical records [6].

## Results and Discussion

### Univariate Analysis

Univariate analysis aims to see the frequency distribution and percentage of variables studied both independent and dependent variables.

**Table 1. Frequency Distribution of Respondents with Hypertension**

| Hypertension | Frequency (f) | Percentage (%) |
|--------------|---------------|----------------|
|--------------|---------------|----------------|

|           |    |       |
|-----------|----|-------|
| Yes       | 54 | 65.85 |
| Not       | 28 | 34.15 |
| Total (n) | 82 | 100   |

**Table 2. Frequency Distribution of Respondents' Diet Management**

| Diet Management | Frequency (f) | Percentage (%) |
|-----------------|---------------|----------------|
| Less            | 50            | 60.97          |
| Good            | 32            | 39.03          |
| Total (n)       | 82            | 100            |

**Table 3. Frequency Distribution of Respondents' Rest Pattern Management**

| Rest Management | Frequency (f) | Percentage (%) |
|-----------------|---------------|----------------|
| Less            | 47            | 57.32          |
| Good            | 35            | 42.68          |
| Total (n)       | 82            | 100            |

**Table 4. Frequency Distribution of Respondents' Sports Management**

| Sports Management | Frequency (f) | Percentage (%) |
|-------------------|---------------|----------------|
| Less              | 31            | 37.81          |
| Good              | 51            | 62.19          |
| Total (n)         | 82            | 100            |

**Table 5. Frequency Distribution of Respondents' Behavior**

| Behavior Management | Frequency (f) | Percentage (%) |
|---------------------|---------------|----------------|
| Less                | 44            | 53,66          |
| Good                | 38            | 46,34          |
| Total (n)           | 82            | 100            |

**Inferential Analysis**

Inferential analysis with the aim of knowing the meaning of the relationship between dependent variables and independent variables is to use the

Chi Square Test to determine the significance of the comparative hypothesis and independent samples (two samples are not paired).

**Table 6. Relationship of Dietary Management with the Incidence of Hypertension in the Bima Maroa Health Center Work Area, South Konawe Regency.**

| Diet<br>Manageme<br>nt | Hypertension |      |     |      | Σ  | %   | Chi-<br>Squar<br>e | φ         | P Value |
|------------------------|--------------|------|-----|------|----|-----|--------------------|-----------|---------|
|                        | Yes          |      | Not |      |    |     |                    |           |         |
|                        | f            | %    | f   | %    |    |     |                    |           |         |
| Less                   | 40           | 80.0 | 10  | 20.0 | 50 | 100 | 9.847              | 0.37<br>3 | 0.01    |
| Good                   | 14           | 43.8 | 18  | 65.3 | 32 | 100 |                    |           |         |
| Total (n)              | 54           | 65.9 | 28  | 34.1 | 82 | 100 |                    |           |         |

Source: Primary data processed SPSS 16

From table 6 above, it is known that respondents stated that their diet management was lacking but had hypertension as much as 40 (80.0%), and not hypertension as much as 10 (20.0%). For respondents by stating that their diet management is good by continuing to have hypertension as

many as 14 (43.8%), and those who do not experience hypertension as many as 18 (65.3%).

It is also known that there is a relationship between dietary management and Hypertension, known to be a P Value of 0.01 smaller than 0.05 and a Chi Square value of 9,847 . With a Phi value of 0.373

lies between 0.20-0.399 which means there is a Low relationship.

**Table 7. Relationship of Rest Pattern Management with Hypertension Incidence in the Bima Maroa Health Center Work Area, South Konawe Regency**

| Rest Pattern<br>Management | Hypertension |      |     |      | $\Sigma$ | %   | Chi-Square | $\phi$ | P Value |
|----------------------------|--------------|------|-----|------|----------|-----|------------|--------|---------|
|                            | Yes          |      | Not |      |          |     |            |        |         |
|                            | f            | %    | f   | %    |          |     |            |        |         |
| Less                       | 38           | 80.9 | 9   | 19.1 | 47       | 100 | 9.507      | 0.366  | 0.01    |
| Good                       | 16           | 45.7 | 19  | 54.3 | 35       | 100 |            |        |         |
| Total (n)                  | 54           | 65.9 | 28  | 34.1 | 82       | 100 |            |        |         |

Source: Primary data processed SPSS 16

From table 7 above, respondents are known by stating that there is a lack of Rest pattern management but experiencing hypertension as much as 38 (80.9%), and not hypertension as much as 9 (19.1%). For respondents by stating the existence of Good Rest pattern management by experiencing hypertension as many as 16 (45.7%), and those who are not hypertensive as many as 19 (54.3%).

It is also known that there is a relationship between Rest pattern management and hypertension, known P Value value 0.01 less than 0.05 and Chi Square value 9,507. With a Phi value of 0.366 lies between 0.20-0.3 99 which means there is a low relationship.

**Table 8. The Relationship between Sports Management and the Incidence of Hypertension in the Bima Maroa Health Center Work Area, South Konawe Regency**

| Sports<br>Managem<br>ent | Hypertension |      |     |      | Σ  | %   | Chi-<br>Squar<br>e | φ     | P Value |
|--------------------------|--------------|------|-----|------|----|-----|--------------------|-------|---------|
|                          | Yes          |      | Not |      |    |     |                    |       |         |
|                          | f            | %    | f   | %    |    |     |                    |       |         |
| Less                     | 24           | 77.4 | 7   | 22.6 | 31 | 100 | 2.196              | 0.190 | 0.68    |
| Good                     | 30           | 58.8 | 21  | 41.2 | 51 | 100 |                    |       |         |
| Total (n)                | 54           | 65.9 | 28  | 34.1 | 82 | 100 |                    |       |         |

Source: Primary data processed SPSS 16

From table 8 above, respondents are known by stating that there is insufficient sports management but experiencing hypertension as much as 24 (77.4%), and not hypertension as much as 7 (22.6%). For respondents by stating the existence of good rest pattern management of people with hypertension as much as 30 (58.8%), and those who are not hypertensive as many as 21 (41.2%).

It is also known the relationship between sports management and Hypertension where it is known that the P Value value of 0.68 is greater than 0.05 which means it does not have a significant relationship and the Chi Square value is 2,196. With a Phi value of 0.190 is located between 0.00-0.199 which means it is very low.

**Table 9. The Relationship between Behavior Management and the Incidence of Hypertension in the Bima Maroa Health Center Work Area, South Konawe Regency**

| Behavior<br>Managemen<br>t | Hypertension |      |     |      | Σ  | %   | Chi-<br>Squar<br>e | φ         | P Value |
|----------------------------|--------------|------|-----|------|----|-----|--------------------|-----------|---------|
|                            | Yes          |      | Not |      |    |     |                    |           |         |
|                            | f            | %    | f   | %    |    |     |                    |           |         |
| Less                       | 38           | 86.4 | 6   | 13.6 | 44 | 100 | 15.848             | 0.46<br>5 | 0.00    |
| Good                       | 16           | 42.1 | 22  | 57.9 | 38 | 100 |                    |           |         |
| Total (n)                  | 54           | 65.9 | 28  | 34.1 | 82 | 100 |                    |           |         |

Source: Primary data processed SPSS 16

From table 9 above, it is known for respondents by stating that there is poor behavior management with hypertension as many as 38 (86.4%), and those who are not hypertensive as many as 6 (13.6%).respondents by stating the existence of good behavior management but experiencing hypertension as many as 16 (42.1%), and not Hypertension as many as 22 (57.9%).

It is also known that there is a relationship between behavior management and patient hypertension where it is known that the P value of 0.00 is less than 0.05 and the Chi Square value is 15,848. With a Phi value of 0.465 it is located between 0.40-0.599 which means there is a moderate relationship.

### **Relationship of Dietary Management with the Incidence of Hypertension in the BimaMaroa Health Center Work Area, South Konawe Regency**

The results showed that there was a relationship between dietary management and hypertension, it was known that the P value was 0.01 less than 0.05 and the Chi Square value was 9.847. With a Phi value of 0.373, it is located between 0.20-0.399, which means there is a low relationship.

Diet is a person's eating habits every day seen from the type and frequency of eating. Every individual needs a healthy and balanced diet to maintain health. An unbalanced diet in the amount, frequency and type of food, such as high-fat foods, less consumption of vegetables and fruits, high-sodium foods, can increase the risk of hypertension. The habit of consuming saturated fat is closely related to increasing body weight which is at risk of hypertension. Consumption of saturated fat also increases the risk of atherosclerosis, which is associated with increased blood pressure. Sources of saturated fat are found in animal protein, if excessive animal protein intake tends to increase blood cholesterol levels [7].

There are several risk factors that can cause hypertension, including individual characteristics (age, gender, history of hypertension), diet (habits to consume fat, sodium, and potassium), and lifestyle (smoking habits, alcohol consumption, stress, coffee consumption). and physical activity), the state of hypertension when uncontrolled can cause complications of other organ damage. To prevent complications that cause damage to other organs in the elderly who suffer from hypertension, prevention can be done through several aspects, including dietary regulation such as a low salt diet, obesity regulation and lifestyle modification. Lifestyle changes are closely related

to the knowledge of each individual to prevent hypertension [8].

Most cases of hypertension are idiopathic which is also known as essential hypertension. It is known that increased salt intake increases the risk of developing hypertension based on a person's genetic ability to respond to salt. (Iqbal, & Jamal, 2020). About 50 to 60% of patients are sensitive to salt and therefore tend to develop hypertension [9].

It is known that the population in the working area of the Bima Maroa Health Center for fast food consumption is almost non-existent, but the consumption of fried food and salted food is almost all respondents consume, and the intake of nutrients from vegetable sources is also widely consumed by respondents, but the management system is on average. cooking by sauteing and coconut milk with a frequency of more than 3 times a week even almost every day, consuming foods with a high content of coconut milk and oil is an increase in saturated fat in the body which has the potential for atherosclerosis so that hypertension occurs.

Diet management starts from awareness based on sufficient knowledge to set goals and identify problems, then make decisions with an organized system such as consuming healthy, nutrient-rich and nutritional foods according to their needs and not consuming foods according to their wishes, while maintaining a healthy lifestyle. coordinate with local health workers or nutritionists. Dietary management in principle fulfills nutrition only according to needs and not according to wishes, this also has an impact on a more economical and healthy value.

In this study it can be concluded that diet has factors related to the incidence of hypertension, both a diet with high salt intake and saturated fat which can interfere with blood circulation in the blood vessels, but other factors can also affect the occurrence of hypertension such as stress, rest. who lack sports and have bad habits such as consuming alcohol and smoking.

### **Relationship of Rest Pattern Management with Hypertension Incidence in the Bima Maroa Health Center Work Area, South Konawe Regency**

It is known in this study that there is a relationship between Resting Pattern Management and Hypertension, it is known that the P value is 0.01 less than 0.05 and the Chi Square value is 9.507. With a Phi value of 0.366 located between 0.20-0.399 which means there is a low relationship

The relationship between sleep and hypertension occurs due to sympathetic nerve activity in blood vessels so that a person will experience insignificant changes in cardiac output at night. The decrease in peripheral vascular resistance causes a normal nocturnal decrease in arterial pressure. Sympathetic nerve activity during sleep increases significantly and varies greatly during REM (Rapid Eye Movement) compared to wake time. Blood pressure approaches wakefulness levels as long as the components of the REM stage are passed, and sensitivity only increases during sleep. However, such conditions are more effective at increasing maintenance of blood pressure during REM episodes occurring at the end of the sleep period than the previous night. This has to do with sleep patterns. Abnormal sleep is implicated in the pathogenesis of non-dipping prehypertension and subsequently in hypertensive disorders of sleep quality leading to hypertension [10].

Everyone needs rest and sleep in order to maintain status, health at an optimal level. In addition, the process of sleep can repair various cells in the body. The fulfillment of rest and sleep needs is especially very important for people who are sick to recover faster to repair damage to cells [11].

The modern health world now knows the term The Triumvirate of Good Health which means the three main components of health. These three are physical fitness, nutritional balance and sleep health. Exercise and keeping the food menu are not enough. Sleep has a close relationship with human health and quality of life. Improving sleep health can improve quality of life and health [12].

Research shows that people who get enough rest in the middle of work can actually be more productive, have lower stress levels, have a lower risk of fatigue, and can sleep better than those who do not use rest time well in the office [13].

The majority of people in the working area of the BimaMaroa Community Health Center have a habit of being active in the morning to late afternoon as farmers, and the average complaint is insomnia at night or insomnia with at least 6 hours of sleep at night and no more than 2 hours of rest during the day. to sleep, on the other hand there is an age factor and comorbidities such as DM which requires you to get up often at night to urinate.

Organized rest every day by identifying problems with sleep disturbances that have the potential for hypertension, thus starting from the respondent's awareness to determine these problems which aim to make decisions according to management principles starting from planning by scheduling

regular and structured sleep and rest and delegating personally with a commitment to provide adequate rest time.

This study seems to conclude that a prolonged lack of rest can interfere with physical and psychological health, and has the potential for hypertension, this is influenced by the presence of several organs that work more than 8 hours, resulting in weak antibodies and the cardiovascular system which is marked by an increase in blood pressure. Thus, the use of rest periods or management of rest patterns needs to be applied even between work and at home.

### **The Relationship between Sports Management and the Incidence of Hypertension in the Bima Maroa Health Center Work Area, South Konawe Regency**

The results of this study are known between the exercise management variable and hypertension, it is known that the statistical test results with a P value of 0.68 greater than 0.05 which means that it does not have a significant relationship and is strengthened by the Chi Square test value of 2.196 which is lower than the r table of 3.841, and The Phi value of 0.190 lies between 0.00-0.199 with a very low or unrelated meaning.

Doing physical activity (exercise) is one of the preventive measures to reduce hypertension. but this action is still not realized by the public in general. There are various things that underlie them not exercising, such as busy working, taking care of the household or family, not being used to sports in their family, there is no place for exercise and the sports instructor has stopped. It also appears that there is not much difference between hypertension status, education level and occupation in sports activities. Most of them rarely or never exercise. Of course, there are many things that underlie their behavior [14].

Sports activities affect a person's level of fitness. Sports activities in the form of aerobic exercise, resistance or resistance training and flexibility training can improve body fitness. Exercise is done with moderate intensity frequency 3 times per week and duration of 30 minutes. The importance of one's body fitness should get more attention. Especially in improving the quality of the ability of physical conditions such as cardiovascular endurance, muscle strength and endurance, body flexibility. In this case a person can do the maximum exercise for the physical condition [15].

Walking exercises are indeed very light and simple, but if done in a programmed, systematic

and structured manner, it will have positive results on fitness and health levels. This means that the effect is not much different from other aerobic sports. In the implementation of this study, walking exercise which is intended to help reduce systolic and diastolic blood pressure in patients with hypertension is with an intensity of 30 minutes of exercise [16].

The sport referred to in this study is structured and measurable physical activity of not less than 30 minutes a day and not excessive until the person is too tired, as a community with the majority of farmer work it is found that male respondents with excessive physical activity are also prone to hypertension. as well as found in housewives with hypertension due to other factors, namely lack of physical activity, fat accumulation or excess BMI and poor management of food consumption patterns.

The purpose of exercise management is to reduce the incidence of hypertension where problems are detected both within themselves and their environment related to hypertension, the individual automatically sets the goal of solving the problems found by making decisions to exercise both in the form of measurable and organized daily activities, starting with by planning and taking the time to make the decision to exercise regularly and structured.

Efforts to prevent hypertension through regulating the type of food are the main thing, but physical activity also plays a major role in preventing hypertension. A meta-analysis study has shown that physical activity is effective in lowering blood pressure in individuals with normal weight and overweight and in those with pre-hypertension and hypertension, structured and regular exercise in this case management in exercise is highly desirable for people who potential for hypertension.

### **The Relationship between Behavior Management and the Incidence of Hypertension in the BimaMaroa Health Center Work Area, South Konawe Regency**

In this study, it is known that there is a relationship between behavioral management variables and patient hypertension where it is known that the P value of 0.00 is less than 0.05 and the value of Chi Square is 15,848. The Phi value of 0.465 lies between 0.40-0.599, which means that there is a moderate relationship.

Operationally, behavior can be interpreted as an organism's response to certain stimuli from outside the subject. This response takes the form of two

kinds, namely: Passive form or covert behavior is an internal response that occurs within humans and cannot be directly seen by others, Active or overt behavior, if this behavior can clearly be seen [17].

One of the bad behavior towards the incidence of hypertension is the habit/behavior of smoking cigarettes and having smoked in the respondent's life. The data is categorized into two, namely smoking if the respondent currently has a smoking habit/behavior and/or has had a smoking habit/behavior before, whether it is a light smoker, a moderate smoker, or a heavy smoker. And do not smoke if the respondent states that he does not have a smoking habit/behavior and or has never had a smoking habit/behavior before. Toxic chemicals such as nicotine and carbon monoxide that are inhaled through cigarettes that enter the bloodstream can damage the endothelial lining of the arteries, resulting in the process of atherosclerosis and high blood pressure. In an autopsy study, it was proven a close relationship between smoking habits and the presence of atherosclerosis in all blood vessels. Smoking also increases the heart rate and the need for oxygen to be supplied to the heart muscles. Smoking in people with high blood pressure increases the risk of damage to the arteries [18].

Alcohol consumption is also a habit/behavior of drinking alcohol and has ever drank alcohol in the respondent's life. In this study, the data are categorized into two, namely consuming alcohol if the respondent currently has a habit/behavior of consuming alcohol and or has had a habit/behavior of consuming alcohol before. The mechanism of the increase in blood pressure caused by alcohol is still unclear. However, it is suspected that an increase in cortisol levels, and an increase in red blood cell volume and blood viscosity play a role in raising blood pressure. Several studies show a direct relationship between blood pressure and alcohol intake, and some report that the effect on blood pressure only appears when consuming about 2-3 standard-sized glasses of alcohol per day [19].

Currently, lifestyle changes are undergoing a slightly better formation, one of which we can meet someone in the Fitness Center area who does sports with the aim of minimizing actions that are detrimental to health such as not drinking alcohol, eating foods that contain lots of fat, sugar or salt, changing lifestyle that is happening today because someone wants to get the benefits of sports as well as recreation in the fitness area [20].

It was found that respondents with behaviors that could potentially cause hypertension in the

working area of the Bima Maroa Health Center, namely the majority of smokers for men with reasons as relaxation for work which can actually be at risk of hypertension, where the majority of cigarette consumption is pure tobacco cigarettes which is estimated to run out on average 2 packs in a day, and for female respondents are passive smokers because in their family environment there are on average active smokers, for consumption of liquor, hypertension is almost not found by having bad behavior by consuming liquor (alcoholic).

The steps and functions of management start from identifying problems in everyday life and in themselves, so that in a structured way the individual sets goals for solving the problems found by making decisions to change bad behavior starting from planning, structured and making decisions to change behavior for the better. in preventing hypertension and its healing process.

In this study, it can be illustrated that a person's behavior, both passive and active, on individual and group health greatly affects the incidence of hypertension where in addition to sources of information that make a person's behavior change, it is also influenced by family support together to take the initiative to change this behavior.

## Conclusion

There is a relationship between dietary management and Hypertension, it is known that the P Value of 0.01 is smaller than 0.05 and the Chi Square value is 9,847. With a Phi value of 0.373 located between 0.20-0.399 which means there is a Low relationship. There is a relationship between Rest pattern management and hypertension, it is known that the P Value of 0.01 is smaller than 0.05 and the Chi Square value is 9,507. With a Phi value of 0.366 it is located between 0.20-0.399 which means there is a low relationship. There is no relationship between sports management and Hypertension where it is known that the P value of 0.68 is greater than 0.05 which means it does not have a significant relationship and the Chi Square value is 2,196. and the Phi value of 0.190 is located between 0.00-0.199 which means it is very low. There is a relationship between behavior management and hypertension patients where it is known that the P value of 0.00 is less than 0.05 and the Chi Square value is 15,848. With a Phi value of 0.465 it is located between 0.40-0.599 which means there is a moderate relationship.

## Suggestion

It is recommended to health agencies, especially the BimaMaroa Health Center, to better socialize related to the causes and impacts of hypertension, as well as improve the quality of services, especially in integrated health services for people who have the potential to occur hypertension. For people with hypertension, it is expected to be more selective in managing diet, rest, regular exercise and changing bad behavior for individual and group health. For health workers, especially in the field of containment of the Non-Communicable Diseases program, it is expected to tend to provide Health Education to minimize the occurrence of hypertension

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