

Hypertension in Riverside Communities

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Abstract

In addition to being influenced by hereditary factors, increased blood pressure is closely related to the eating habits of the respondents. Riverside Communities fulfill their daily needs from the river, such as eating, bathing, washing, and so on. How does the life of the riverside community affect hypertension?. This research method used a cross-sectional study with data collection using a questionnaire and observation of the people in the riverside areas. Communities on the outskirts of the river have eating habits that affect the incidence of hypertension. The eating habits of the people in the riverside areas include excessive fat consumption, high salt consumption, meat, and fried foods. Conclusion: the people in the riverside areas have eating habits that pose a risk of hypertension.

Keywords: River Banks, Hypertension, Diet.

Hypertension or commonly called high blood pressure is an increase in systolic blood pressure above the normal limit of more than 140 mmHg and diastolic blood pressure of more than 90 mmHg (WHO, 2023). Hypertension is also one of the most common degenerative diseases and has a fairly high mortality rate and affects a person's quality of life and productivity. Based on the cause of its occurrence, hypertension is divided into two parts, namely: Primary (Essential) and Secondary Hypertension. This type of primary hypertension often occurs in the adult population between 90% - 95%. Primary hypertension has no identifiable clinical cause, and it is also possible that this condition is multifactorial (Lewis, Dirksen, Heitkemper, & Bucher, 2014). Primary hypertension cannot be cured. However, it can be controlled with appropriate therapy. In this case, genetic factors may play an important role in the development

of primary hypertension and a form of high blood pressure that tends to develop gradually over the years (Bell, Twigg, & Olin, 2015). specific causes, such as narrowing of the renal arteries, pregnancy, certain medications, and other causes. Secondary hypertension can also be acute, which indicates that there is a change in cardiac output (Rossi, et al, 2023), and secondary hypertension is characterized by increased blood pressure and accompanied by specific causes, such as narrowing of the renal arteries, pregnancy, certain medications, and other causes.

Sudano, (2023), stated that secondary hypertension is hypertension whose cause can be known, often associated with several diseases such as kidney, coronary heart and diabetes, and central nervous system disorders. While the causes of primary hypertension are emotional disorders, obesity, excessive alcohol

consumption, diet, drugs, and heredity. Generally, new symptoms are seen after the occurrence of complications. Complications that occur if high blood pressure is not treated and managed, then in the long term it will cause damage to the arteries in the body to the organs that receive blood supply from these arteries. Complications of hypertension can occur in the heart, brain, kidneys, and eyes, which can lead to heart failure, stroke risk, kidney damage, and blindness.

Data from the World Health Organization (WHO) in 2015 showed that around 1.13 billion people in the world have hypertension, meaning that 1 out of 3 people in the world is diagnosed with hypertension. High blood pressure or hypertension kills 9.4 million people worldwide each year. The World Health Organization (WHO) figures estimate that the number of people with hypertension will continue to increase in line with the growing population. In 2025, it is projected that around 29% of world citizens will be affected by hypertension. The percentage of hypertension sufferers is currently the most common in developing countries. Global Status Report on Noncommunicable Diseases 2010 data from WHO states that 40% of developing economic countries have hypertension sufferers, while only 35% of developed countries. The African region holds the top position of hypertension sufferers as much as 46%. While the Americas occupy the distended position with 35%. For the Asian region, this disease has killed 1.5 million people each year.

Results and Discussion

Table 1. Conditions of hypertension

No	Blood Pressure Conditions	Frequency	Percentage
1.	Mild hypertension	171	45
2.	Moderate hypertension	171	45
3.	Severe hypertension	38	10
	Amount	380	100

The prevalence of hypertension in Indonesia according to the 2018 RISKESDAS number of cases is 63 million people, while the death rate in Indonesia due to hypertension is 427,218 deaths. According to RISKESDAS in 2013 South Kalimantan (30.8%), and RISKESDAS in 2018 South Kalimantan the highest was (44.1%) from here you can see that hypertension from 2013-2018 has increased (Mahdalena, 2022)

The eating habits of the people living along the river can be said to be quite good because for their daily meal, they can take fish from the river, but there are also unhealthy eating habits that can affect hypertension such as consuming oily food, salted fish which has a high salt content, and coconut milk. From there arise complications such as kidney disorders, dementia, and cardiovascular disease (stroke, DVT (deep vein thrombosis), and cardiomyopathy). (Kutbi, 2022)

Based on the explanation of the background above, how is the life of the riverside community, especially eating habits that affect hypertension?

Research methods

This study uses a cross-sectional approach to look at risk factors and effects. Data collection techniques using questionnaires and observation sheets. The sample used was 380 people in the riverside areas. The data obtained were analyzed descriptively and analytically using logistic regression.

Table 2. Eating habits of riverside communities

No.	Eating habit	Frequency	Presentation
1.	Excessive consumption of fat.	164	43
2.	Excessive salt consumption.	110	29
3.	- Consumption of salted fish, dried shrimp, mandai	53	14
4.	Consumption of fried foods	53	14
	Less consumption of fruits and vegetables		
		380	100

Table 2 shows the eating habits of the people living on the riverbanks above, showing the habit of consuming high-fat consumption, such as coconut milk, and the habit of consuming excess salt, namely, they like to consume salted fish, and mandai and consume fewer fruits and vegetables. Riverside communities usually look for fish in rivers and rice fields, because they have lots of fish, and the fish are preserved by making salted fish. This salted fish becomes a side dish throughout the year if you are in a condition where you don't have fresh fish. In addition, the people on the banks of the river also make mandai as a side dish. Mandai is made from cempedak skin which is preserved by salting it. The habit of consuming salted and mandai fish is one of the triggers for hypertension.

From the results of statistical testing with the region test, it was found that consumption of fat, excess salt consumed salted fish more than once a day, consumed fried foods more than once,

Consuming fatty foods has a risk of developing hypertension 8 times compared to those who do not consume fatty foods.

Consuming salty food has a risk 3 times compared to those who do not consume salty food.

From the analysis above, eating habits that affect hypertension in riverside communities are the habit of consuming fat, the habit of consuming salt, the habit of consuming salty food more than once per day, and the habit of eating fatty, cholesterol, and fried foods more than once a day. And the eating habits that affect hypertension in mainland society are bad (fatty, excess salt), meat, and alcohol consumption.

High consumption of fat can also cause blockage of blood vessels known as atherosclerosis. Fats derived from cooking oil are composed of long-chain saturated fatty acids (long-saturated fatty acids). Excess presence in the body will cause the buildup and formation of plaque in blood vessels. The blood vessels become narrower and less elastic. Other fat or oil content that can harm health if the amount is excessive is cholesterol (normal cholesterol in the blood 160 – 200 mg/dL), triglycerides, and low-density lipoprotein (LDL) (Abdul Hafidz et al., 2016).

Treatment of hypertension is usually aimed at preventing morbidity and mortality due to hypertension. The choice of drug for each hypertensive patient depends on the metabolic and subjective side effects caused, the presence of other diseases that may be improved or worsened for the selected antihypertensive, the presence of other drugs that may interact with the given antihypertensive (Abdul Hafidz et al., 2016).

Salty foods containing sodium are consumed the most by the public with an average score of 1.27 of the total score of all respondents with the highest frequency of eating once a day, namely 79 people, this is due to the use of salt as a flavor enhancer in cooking. This study shows that there is a relationship between the consumption of salty foods and the incidence of hypertension. This is to the existing theory that sodium intake that is too high continuously can cause sodium balance to be disrupted. 2012 in (Amin Kutbi et al., 2023).

Another cause of increased blood pressure is consuming high-fat foods, where saturated fat

can increase the risk of atherosclerosis. Fats derived from animals, including saturated fatty acids (low-density lipoprotein) with levels of 25 to 60% have a risk of increasing blood cholesterol (Suroto et al., 2019). Fatty foods can increase the risk of hypertension. The type of fat that is dangerous for increasing blood pressure is the type of saturated fat found in animal foodstuffs (Kutbi, 2023)

The high hypertension is in line with increasing age which is caused by structural changes in the large blood vessels, so that the lumen becomes narrower and the blood vessel walls become more rigid, as a result, systolic

blood pressure increases (RI Department of Health, 2006). Diastolic blood pressure also tends to increase with age, but at a lower rate than systolic pressure, its average value decreases after the age of 50 years (Fahriadi, et al., 2023).

Conclusion

The eating habits of the people on the riverbanks who suffer from hypertension include the habit of consuming high-fat, fried foods, consuming salt, salty foods, grilled foods, and smoking.

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