

The Level of Knowledge Between the Habit of Medication Consumption and Disease - Hypertension for People Aged 40-60 in the Becora Community Health Center (2025)

Carlos Boavida Tilman, ESE FMCS UNTL, Ana Cristina de Jesus Silveira Martins, DB FCE UNTL, Eduardo Crisógono Gaio, ESE FMCS UNTL, Gregório Belo, DMG FMCS UNTL, Julito dos Santos, DMG FMCS UNTL, Alexandre Gentil Corte Real Araújo, DD FD UNTL.

**Correspondence:* Carlos Boavida Tilman

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Abstract

Introduction: In the era of globalization, hypertension is a public health problem and basically worldwide. Global Health Observatory (GHO, 2024) estimates that hypertension is the cause of death among people, a total of 7.5 million or 12.8% have suffered from all diseases and estimates are made until 2026. Hypertension is a common public health problem in the Southeast Asian region and is the leading cause of cardiovascular disease.

Research Objectives: To find out about the level of knowledge and the relationship between the habit of consuming medications and hypertension disease for adults aged 40-60 years, in Becora Community Health Center, 2025.

Research Methodology: Use the quantitative analytical method with a cross sectional study approach, with the total population and sampling error of 10%, the sample needs to be 96 people and the respondents are 96. We use the questionnaire to collect and analyze using the SPSS computer program.

Discussion Results: The results of the calculation using the Chi-Square test in the SPSS program with the p-value between two variables, the result is (p-value; 0.038) is lower than the alpha value (0.050), meaning that there is a relationship between the habit of consuming medication and hypertension in adults of the age identified in the research carried out.

Conclusion: There is a relationship between the habit of consuming medication and hypertension disease for adults, as identified by 96 adults who attended a consultation at the Becora Community Health Center in the adult office room, which represents bad food consumption habits as 70.9% and respond-

ents with the habit of currently sufficient medication consumption are 29.1%, based on the research result cited by (Tilman CB., et al, 2025).

Keyword: Knowledge level, consumption habits, hypertensive, age 40 - 60 Community Health Center.

Introduction

Hypertension has been characterized as a serious public health problem, responsible for high rates of morbidity and mortality and hospitalization, generating high costs. It is defined as a chronic non-communicable disease, with multifactorial etiology, long latency period, prolonged course, representing one of the main causes of cardiovascular, cerebrovascular and renal diseases, thus contributing to the majority of deaths worldwide (Galvão, et al, 2016). Hypertension is a very common pathology today and constitutes one of the most important risk factors for the occurrence of several clinical situations, such as acute myocardial infarction, stroke and other renal and vascular pathologies according to (Varela, 2016; cited by Tilman CB., et al, 2025).

Hypertension is a common public health problem in Southeast Asia and is the leading cause of cardiovascular disease. Therefore, we need to adapt adult patients to treat and prevent hypertension. Obesity is the leading cause of hypertension in Southeast Asia, and reducing obesity can help reduce the incidence of this disease in the future (WHO, 2015). The prevalence of hypertension disease in the Southeast Asian Region is 25% as the prevalence in Indonesia is much higher when compared to several countries in the world under study such as Singapore (27.3%), Thailand (22.7%) and Malaysia (20%) cited by (Asaria, 2020; Tilman CB., 2023).

Generally, the causes of hypertension are unknown, so it can be treated effectively, lowering blood pressure to normal levels and avoiding serious consequences (Hernandes, 2016). In the era of globalization, hypertension is a public and basic health problem in the world. *The Global Health Observatory* (GHO, 2023) estimates that hypertension causes mortality of people with a total of 7.5 million or 12.8% suffering from all diseases and estimates that by 2025, almost 1.56 million adults will have hypertension. The WHO African Region has the highest prevalence of hypertension (27%), while the WHO Americas Region has the lowest prevalence of hypertension (18%), the prevalence of hypertension is in developing countries with low to middle incomes. Currently, hypertension with a long duration can cause diseases such as heart disease, paralysis, kidney failure and eyes according to (WHO, 2021), emphasizing that hypertension disease should be taken care of control the treatment is very important.

According to data from the Ministry of Health of Timor-Leste, the mortality rate due to hypertension reached 156 or about 2.21% of the total mortality. The mortality rate based on the age category amounted to 24.12 of the population of Timor-Leste. Thus, Timor-Leste occupies 60 numbers in deaths due to hypertension. The total number of people affected by hypertension diseases in 2022 with a total of 4,447 in the annual report (MdS, 2022). It is based on the preliminary data that the researcher collected at the Becora Community Health Center in 2022 with a total of 953 people, male 371 and female 582 who suffered from the hypertension disease indicated in the annual report (CSC Becora, 2025), which closer to the capital Dili there were also many cases.

Research Objectives: To find out about the level

of knowledge about the relationship between consumption habits and hypertension disease for adults aged 40-60 years, in the Becora Community Health Center, by 2025, it is necessary to consider improving the quality of life for people who suffer from this disease.

Theoretical Framework

Consumption habits involve practices, beliefs, behaviors, taboos, that is, they are related to the anthropological, cultural, socioeconomic and psychological aspects that involve each individual's environment. Eating behavior, in turn, is understood as the attitudes related to these eating practices and together with the sociocultural attributes involved with food or the act of eating (Toral, et al, 2019). Eating habits are the most important behavior that influences nutritional status. This is due to the quantity and quality of food and beverages consumed, which influences nutritional intake in a way that will affect the health of individuals and society. Optimal nutrition is essential for normal growth, as well as for the physical and intellectual development of babies, children and all age groups.

The modern lifestyle adopted by humans today tends to make them fond of instant things. As a result, they tend to be lazy and exercise, consume instant foods, which are high in sodium. Implementing a healthy diet cannot guarantee that one will be free from diseases, but at least paying attention to the daily patterns of food consumption, the day is able to minimize the risk of one getting sick according to (Tilman CB., et al, 2025). A good diet for those suffering from hypertension is: avoid foods high in saturated fat, processed foods with sodium salt, pickled foods, foods prepared using sodium salt, pickled foods, ready-to-eat foods and increase fiber-rich foods such as fruits and vegeta-

bles that contain potassium according to (Tilman CB., 2024; Kurniati, 2014).

Arterial hypertension (AH) is a noncommunicable disease (NCD) defined by oppressive levels, in which the benefits of treatment (non-medication and/or medication) outweigh the risks. It is a multifactorial condition, which depends on genetic/epigenetic, environmental and social factors, characterized by persistent elevation of blood pressure (BP), that is, systolic BP (SBP) greater than or equal to 140 mmHg and/or diastolic BP (DBP) greater than or equal to 90 mmHg, measured with the correct technique, on at least two different occasions, in the absence of antihypertensive medication. It is advisable, when possible, to validate such measurements by assessing BP outside the office using Ambulatory Blood Pressure Monitoring (ABPM), Existential Blood Pressure Monitoring (HBPM) or Self-Medication of Blood Pressure (BPM). (Barroso et al., 2021). Arterial hypertension (AH) is a multifactorial clinical condition characterized by a sustained elevation of oppressive levels ≥ 140 and/or 90 mmHg. It is frequently associated with metabolic disorders, functional and/or structural alterations of target organs, and is aggravated by the presence of other risk factors (RF), such as dyslipidemia, abdominal obesity, glucose intolerance and diabetes mellitus (Guideline, 2016).

According to the World Health Organization (WHO, 2023) in Table 1. Hypertension classifications are:

Categorical	Systolic	Dystolic
Normal	120-130	80-85
Not normal	131-135	85-90
Hypertension stadium I	140-159	90-99
Hypertension stadium II	160-180	100-109
Hypertension stage III	>180	>110

The symptom that would be the most frequent and specific observed in a hypertensive individual is headache. Subcostal, pulsatile headache, which occurs in the early hours of the morning and disappears as the day goes on, is said to be characteristic, but any type of headache can occur in a hypertensive individual. Rapidly progressing arterial hypertension (malignant hypertension) is associated with drowsiness, mental confusion, visual disturbance, nausea and vomiting (arteriolar vasoconstriction and cerebral edema), characterizing hypertensive encephalopathy. Other symptoms, such as epistaxis and scintillating scotomas, tinnitus and fatigue, are also nonspecific and are no longer considered pathognomonic for the diagnosis of arterial hypertension (Origina, 2014; WHO, 2022), on the website <https://www.who.int>

Hypertension can occur at any age. However, it is estimated that 50% of people over the age of 64 have hypertension, because aging of the arteries causes them to harden and decrease their ability to stretch. Elderly people have stiffer blood vessels, which are less elastic and more susceptible to ruptures, aneurysms and ischemia. Men are most affected by the disease up to the age of 50, and women, as they produce female hormones that are protective factors, tend to have a low incidence before menopause, which increases from the sixth decade of life onwards. Everyone has heard that high cholesterol is a risk factor for myocardial infarction because excess cholesterol in the blood causes fatty plaques to be deposited in the blood vessels, a process called atherosclerosis. A heart attack occurs when the obstruction of the coronary artery is complete, causing the blood supply to the muscle to be zero, or so low that it is not enough even for the minimum functioning of the human heart, according to (Santos et al, 2020).

Heart failure is a condition that occurs when the heart muscles are unable to pump blood effectively. When a patient has high blood pressure, the heart needs to work harder to overcome the resistance of the blood vessels and distribute blood throughout the body. Prevention of hypertension involves trying to maintain a healthier lifestyle, to organize the factor that can be controlled by patients (WHO, 2023; Santos et al, 2020) with methods:

- a. Reduce salt intake (reduce salt by 5g each day);
- b. I consume more fresh vegetables and fruits;
- c. Active in doing physical activity regularly;
- d. Avoid tobacco consumption;
- e. Reduces alcohol consumption;
- f. Limit the intake of lipids such as saturated fats;
- g. Elimination of trans lipids in the diet.

According to (Carvalho; 2017; WHO, 2023) the treatment for hypertension is as follows:

Diuretic

Diuretics are a group of medications used to modify the volume and composition of body fluids in various clinical pathologies. By reducing sodium reabsorption and increasing water excretion, they cause important hemodynamic changes in the long term, resulting in a decrease in RVP and consequently in a reduction in BP (example of hydrochlorothiazide medications).

Calcium channel antagonists

Its function is to lower blood pressure and also open the artery. Examples of medications such as amlodipine and nifedipine

Beta blocker

Its function is to reduce blood pressure and also make the artery more open and slow down the heart rate, as exemplified by medications such as

atenolol and bisoprolol.

ACE inhibitor

Lowering blood pressure with a method that makes the blood vessel wall more relaxed, for example with medications such as captopril and ramipril.

Antiorescia-2 receptor blocker (ARB)

Its function is as an ACE inhibitor, which reduces the risk of blood vessel wall becoming stiffer. Between two medications you can't give at the same time like they posed and waltzed.

Research Methodology

It uses a quantitative method with a descriptive cross-sectional approach and a probability sampling technique, with the sampling type applied to accidental sampling. with sample are 96 people. This research the inclusive criteria are: Patients who accept to be respondents; patients registered with hypertension disease; and adult patients who have a certain age (40-60 years). We use the collection of questionnaires, the data analysis technique is Univariate analysis to explain or describe the characteristics of each research variable (sex, age, and level of education). Generally, the objective of univariate analysis is to obtain the result of frequency and percentage distribution of each variable and analysis. Bivariate to perform between two variables that are thought to be related or correlated. Statistical test use Spearman Rank $\alpha = 0.05$, the significant level with 5% with rules such as $p < \alpha$ (0.05) means there is a relationship and as $p > \alpha$ means there is no relationship. In this study, conducts data entry using the computer program SPSS (Statistical Package for the Social Sciences) version 24.

Result And Discussion

The Research conducted at the Becora Community

Health Center starts on Thursday, October 24, 2024 until Tuesday, November 26, 2024. In this Research there are 96 respondents who are registered patients of hypertension disease, collected through the interview of the FFQ (Food Frequency Questionnaire) with the way of offering the respondent to be filled. Before offering FFQ to the respondent, first introduce the objectives and nature of the research and ask for the availability of the respondents (Informed Consent).

According to the result in table 2 below, it shows that the characteristic of the respondents is based on sex in this survey with the total respondent being female with a total of 64 (66.7%).

Table 2. Sex distribution in the study carried out.

Node	Sex	Frequency (n)	Percentage (%)
1	Masculine	32	33.3
2	Feminine	64	66.7
Total		96	100

According to the result in table 2 below, it shows that the characteristic of respondents is based on age with the majority being 50-59 years old with a total of 36 (37.9%).

Table 3. Age distribution and research object.

Node	Age	Frequency (n)	Percentage (%)
1	40-49 years old	29	29.9
2	50-59 years old	36	37.9
3	60 years	31	32.2
Total		96	100

According to the result table 3 below, it shows that the characteristic of respondents is based on the level of education majority with the level of education without education with total 35 (35.9%), according to the research result of 2025.

Table 4. Distribution of education level in the study.

Node	Education	Frequency (n)	Percentage (%)
1	Uneducated	35	35.9
2	Primary	25	25.8
3	Pre-secondary	11	11.9
4	Secondary	21	21.7
5	Bachelor's degree	4	4.7
Total		96	100

According to the result in table 4 below, it shows that the respondent characteristics based on hypertension disease with majority mild hypertension with total 55 (57.3%).

Table 5. Hypertensive category and frequency

Node	Category	Frequency (n)		Total	Percentage (%)
		Masculine	Feminine		
1	Mild Hypertension 140-159/90-99 mmHg	24	31	55	57.3
2	Moderate Hypertension 160-179/100-109 mmHg	7	20	27	28.1
3	Severe Hypertension 180-209/100-119	1	13	14	14.6
Total				96	100

According to the result in table 5 below on the respondent characteristics based on the habit of consuming medicines, the majority less with a total of 69 (70.9%).

Table 6. Distribution of knowledge on the habit of medication consumption.

Node	Category	Frequency (n)	Percentage (%)
1	Good	0	0
2	Enough	28	29.1
3	Less	68	70.9
Total		96	100

Table 6. Habit of medication consumption that influences hypertension disease for adults aged 40-60 years in Becora Community Health Center.

Table 7. Analyze by daily medication consumption habit under study.

No	Hypertension	Consumption habit						Total		p-value
		Good		Enough		Less		F	P (%)	
		F	%	F	P	F	%			
1	Mild Hypertension	0	0 %	7	12.7%	48	87.3	55	100	0.038
2	Moderate Hypertension	0	0 %	6	22,2%	21	77,8	27	100	
3	Hypertension Severe	0	0 %	6	42,9%	8	57,1	14	100	
Total		0	0 %	19	19,8%	77	80,2	96		

According to the results in table 4.6 above, it shows that the respondents with mild hypertension and the habit of sufficient consumption are 7 (12.7%) and bad consumption habits are 48 (87.3%). The respondents with moderate hypertension and the habit of sufficient consumption are 6 (22.2%) and bad habits with a total of 21 (77.8%). Thus, for the respondents who have severe hypertension and their habits of sufficient medication consumption are 6 (42.9%) and the bad consumption habit are 8 (57.1%). The results of the calculation that uses Chi-Square test in the SPSS version 24 program as a statistical analysis tool with the p-value between two variables the result is (p-value ; 0.038) is lower than the alpha value (0.050), it means that there

is a relationship between the consumption habit and hypertension in adults it is very important to know the prevention measures in advance according to (Tilman CB., et al, 2025).

According to the table above, it shows that the majority of adults have mild hypertension, 55 (57.3%), respondents with moderate hypertension, 27 (28.1%) and a minority of respondents with severe/high hypertension, 14 (14.6%). Thus, depending on the result of this research, the researcher concludes that the food intake that adults consume is not balanced and does not meet the needs that individuals have, and does not give importance to the food they consume, and a poor lifestyle can cause hypertension. The analysis conducted to verify the relationship between consumption habits and hypertension shows that the respondents of this research were 96 adults who attended the consultation at the Becora Community Health Center in the office. Based on the result of the research, it shows that the respondents with mild hypertension and with the habit of sufficient consumption are 7 (12.7%) and the poor/less habit of consumption are 48 (87.3%) according to the research carried out.

Respondents with moderate hypertension and the habit of consuming sufficient medication are 6 (22.2%), and those with bad/poor consumption habits are 21 (77.8%). And respondents with severe/high hypertension and good consumption habits are 6 (42.9%) and those with bad habits are 8 (57.1%). The results of this research show us that there is a relationship between consumption habits and hypertension, since most adults do not pay attention to correct consumption habits such as frequency of consumption and quantity of consumption. Adults prefer to consume foods that are already ready and easy so that they can quickly resume their activities with consumption habits that are not healthy and balanced.

Hypertension in adult patients depends on consumption habits, so from the statistical results of Chi-square (X^2) with a value (p -value: 0.038) lower than the alpha value ($p < 0.050$), it is concluded that the hypotheses have a relationship or statically there is a relationship between consumption habits and hypertension in adults at the Becora Community Health Center. From the analysis of the questionnaire, many respondents have bad consumption habits and high blood pressure due to the consumption of unhealthy foods and do not follow the standards. From this result, the researcher can conclude that consumption habits become a determining factor that can influence the blood pressure of adults. The result is similar to the result of the research carried out by Menda R. (2019) in his research that of 96 respondents, there were 70.8% of adults who had the habit of consuming less, that is, 68 people. Of the 70.8% or 68 people, there were 60.3% or 41 people who have hypertension. Therefore, there is a significant relationship between consumption habits and hypertension. The chi-square result shows that the p -value is $0.002 < 0.05$. There is a relationship between consumption habits and hypertension in adults who are better off taking a look at the procedures for preparing good quality food and sufficient food in the food sales market, which need to be in good condition according to (Menda R, 2019; Tilman CB., et al, 2025), on the official website <https://www.ajmcrr.com>

Conclusion

In this research, 96 adults were identified who attended a consultation at the Becora Community Health Center in the adult consulting room, which represents bad consumption habits as 70.9% and

respondents with the habit of consuming sufficient medication are 29.1%. The majority of respondents have mild hypertension (57.3%), respondents with moderate hypertension (28.1%) and a minority of respondents with severe/high hypertension (14.6%). It is based on the results of the chi-square statistical test showed that the p-value; 0.038 is lower than the alpha value 0.050, which means that there is a relationship between the habit of consuming medication and hypertension in adults. It is important to know whether life should always prioritize food care and also preventative measures in adequate and well-controlled food (Tilman CB., et al, 2025).

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