



Relationship between characteristics and the level of public knowledge about hypertension self-medication in kepala sungai village, dusun iii kayu lima, secanggang district, 2023

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ABSTRACT

Self-medication is the biggest effort made by the community to deal with health complaints independently, starting from recognizing the symptoms and illnesses they are experiencing to choosing a treatment method. The level of public knowledge about the use of medicines and types of herbal plants are known to be able to treat various diseases because they have relatively few side effects compared to chemical medicinal compounds. Hypertension is a degenerative disease and is a disease that is experienced by many people. Self-medication is the method most people use to deal with health problems before going to health service units in several areas or buying medicines at the nearest pharmacy without advice from a doctor. This study aims to determine the level of non-recommendation from a doctor. This research aims to determine the level of community knowledge about hypertension self-medication in the village of Head Sungai Dusun III Kayu Lima Secanggang District in 2023. This research is non-experimental with a quantitative descriptive type of research and the type of data used is primary data with the tool used in the form of a questionnaire with the average community aged 35 -70 years. Characteristics of respondents based on knowledge, the majority with a sufficient level of knowledge were 21 people (48.80%) and the minority with a good level of knowledge was 3 people (7.00%). The conclusion from this research is that there is no significant relationship between sociodemographics

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1. Introduction

WHO (World Health Organization) plans a healthy lifestyle by going back to nature. The recommendation is to increase high-fiber foods from plants without preservatives, dyes, flavors, developers and aroma enhancers. With this recommendation, the use of herbal medicines has begun to be developed compared to chemical compound drugs in the hope of minimizing degenerative diseases and accelerating the healing process of diseases suffered by the community (ANDRIANI, n.d.), (Asri, Imran, & Adam, 2020). The prevalence of self-medication varies in various countries and regions of Indonesia from 38.5% to 92%. A survey by the Central Research Agency in 2020 showed that 72.19% of the

Indonesian population and 75.38% in North Sumatra Province in 2021 carried out self-medication. Hypertension is a condition in which there is an increase in blood pressure which gives symptoms to a target organ such as the brain, coronary heart disease, heart, and right ventricular hypertrophy of the heart muscle (Kuswinarti, Utami, & Sidqi, 2022), (Faisal, Lazwana, Ichwansyah, & Fitria, 2022). Hypertension is a fairly serious medical condition which can significantly increase the risk of liver, brain, kidney, and heart disease. Hypertension occurs when blood pressure is greater than the walls of the arteries and blood vessels themselves. In Indonesia, with a lower level of health awareness, the number of patients who are unaware that they have hypertension and do not comply with taking medication is likely to be greater (Wulandari, Sari, & Ludiana, 2023), (La Ode Alifariki, 2020).

This disease is responsible for high medical costs due to the high number of visits to the doctor, hospitalization and/or long-term use of medication. The community's efforts to treat themselves are known as self-medication (Fandinata & Ernawati, 2020), (Sulaiman, 2022). Self-medication is usually done to overcome complaints and minor illnesses that are widely experienced by the community. Self-medication is an alternative taken by the community to increase the affordability of treatment (Efayanti, Susilowati, & Imamah, 2019), (Chusun & Lestari, 2020). Several types of traditional medicinal plants, herbal plants that are currently widely used by the community to treat hypertension include; bay leaves, avocado leaves, celery, etc. These plants are easily found in the community environment. From the results of a study conducted on the relationship between the level of knowledge of mothers and the use of family medicinal plants in Naman Jahe village, Tanjung Langkat Health Center area in 2021, it was found that out of 93 respondents, 56 respondents (60.2%) did not use family medicinal plants, this shows that there are still many mothers who have a low level of knowledge regarding the use of family medicinal plants (MILENIA, 2022), (Rosdiyanti, 2015).

In Langkat Regency, especially in the village of Kepala Sungai, Secanggang village, medicinal plants or self-medication are still used as an alternative treatment that has long been applied by village communities and is considered one type of medicine that can overcome hypertension when compared to chemical compound drugs which are considered to have side effects (Agussani, 2020), (Sudianto, 2020). The development of traditional medicine has accelerated so that technology and the digital era have developed so that the lowest levels through community groups. Community knowledge about self-medication for hypertension using family medicinal plants is the community's choice compared to chemical drug compounds. Traditional medicine remains the community's choice (Wiweko, Utama, Anggraningrum, Hasan, & Hidayat, 2023), (LEGISLASI & INDONESIA, n.d.). Based on the results of a preliminary survey conducted in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, the author obtained data from 411 residents, 43 people (26.22%) were found to suffer from hypertension, and hypertension treatment was carried out without consultation from medical personnel or self-medication. In Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, in several places it is still easy to find herbal medicine sellers who are believed to improve the quality of public health, this strengthens the researcher's reason for raising the research title "Relationship between Characteristics and Level of Public Knowledge about Self-Medication for Hypertension in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District.

2. Methods

The method of the research conducted in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District was carried out using the total sampling technique to facilitate data collection. The data collected in this study are primary data using a questionnaire. Data collection begins with determining a sample from the population in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District. Respondents are given an explanation of the research to be conducted, such as the objectives and benefits of the research. When respondents agree to participate in the study, respondents fill out an informed consent (approval sheet) and continue with filling out a questionnaire about self-medication for hypertension by respondents, this study, the method of measuring the level of public knowledge about self-medication for hypertension is classified based on the theory that the scale of measuring the level of knowledge is divided into 3 categories as follows: (a) Knowledge level in the Good category if

the correct statement answers are 11 to 15. (b) Knowledge level in the Sufficient category if the correct statement answers are 6 - 10 (d) Knowledge level in the Less category if the correct statement answers are 1-5

Instrument The research instrument used was made in the form of a questionnaire, which aims to obtain information and data from respondents. Questionnaire is a type of measurement used by researchers by formally collecting data from subjects to answer questions in writing. The instrument used in this study was a questionnaire, which was divided into two parts, namely: data on characteristics and level of knowledge of self-medication for hypertension consisting of 15 statement items about self-medication for hypertension. In filling out the characteristic instrument, respondents simply give a check mark (✓) on the appropriate choice, and for the statement of the level of knowledge about self-medication for hypertension, respondents give a check mark (✓) in the correct column if the statement is considered correct and give a check mark (✓) in the wrong column if the statement is considered incorrect.

3. Results and Discussion

3.1 Results

In this study, sociodemographic characteristics include age, gender, last level of education, occupation, and income level. The percentage results of sociodemographic characteristics of each respondent can be seen in the following table. In this study, sociodemographic characteristics include age, gender, last level of education, occupation, and income level. The percentage results of sociodemographic characteristics of each respondent. The bivariate analysis used in processing the data in this study is correlation analysis to determine the relationship between independent variables and dependent variables. The correlation test that will be carried out is Chi-square and Spearman rank. The Chi-square test is used to see the relationship between characteristics such as age, education, gender, occupation, income with knowledge, used for ordinal data types. The type of data is presented in the form of a table as follows:

Table 1. Relationship between Age and Knowledge of Self-Medication for Hypertension in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency

Respondent Age	Level of Knowledge						Total		P Value
	Good (11-15)		Sufficient (6-10)		Less (0-5)		n	%	
	n	%	n	%	n	%			
Adult (35 years to 45 years)	0	0	8	18,60	4	9,30	12	27,91	0,18
Early elderly (46 years to 55 years)	1	2,32	4	9,30	1	2,32	6	13,95	
Late elderly (56 years to 66 years)	1	2,32	3	6,97	9	20,93	13	30,23	
Seniors (> 65 years)	1	2,32	6	13,95	5	11,63	12	27,91	
Total	3	4,65	21	48,84	19	44,19	43	100	

From the data in table 1. The relationship between age and level of knowledge of self-medication for hypertension, it was found that the majority of knowledge levels were lacking in the late elderly age (56 years to 66 years) as many as 9 people (20.93%) and the minority with a good level of knowledge with the early elderly age (46 years to 55 years) as many as 0. The results of the statistical test obtained a p value of 0.18 so that it can be concluded that there is no significant relationship between age and the level of knowledge of self-medication in the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency.

Table 2. The Relationship between Gender and Knowledge of Self-Medication for Hypertension in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency.

Gender	Level of Knowledge	Total P	P
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	Good (11-15)		Sufficient (6-10)		Less (0-5)		Total		Value
	n	%	n	%	n	%	n	%	
Male	0	0	11	25,58	9	20,93	20	46,51	0,13
Female	3	6,97	10	23,25	10	23,25	23	53,49	
Total	3	6,93	21	48,83	19	44,18	43	100	

From the data in table 2, the relationship between gender and level of knowledge of self-medication for hypertension was obtained that the majority of the level of knowledge was sufficient for males as many as 11 people (25,58%) and the minority with a good level of knowledge with males as many as. The results of the statistical test obtained a p value of 0.13 so that it can be said that there is no significant relationship between age and the level of knowledge of self-medication in the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency.

Table 3. The Relationship between Education Level and Knowledge of Self-Medication for Hypertension in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency

Education	Level of Knowledge						Total	P.Value	
	Good (11-15)		Sufficient (6-10)		Poor (0-5)				
	n	%	n	%	n	%	n		%
Not attending school	3	6,97	3	6,97	8	18,60	14	32,54	0,02
Elementary School	0	0	8	18,60	4	9,30	12	27,90	
Junior High School	0	0	2	6,65	4	9,30	6	15,95	
Senior High School	0	0	4	9,30	3	6,97	7	16,27	
Higher Education	0	0	4	9,30	0	0	4	9,30	
Total	3	6,97	21	44,17	19	43,27	43	100	

From the data in table 3, the relationship between education level and knowledge level on self-medication for hypertension is obtained that the majority of the level of knowledge is lacking at the level of no education as many as 8 people (18.60%), sufficient at the elementary school level as many as 8 people (18.60%) and the minority with a good level of knowledge with an education level of elementary school, junior high school or equivalent, senior high school or equivalent, college each as many as 0. The results of the statistical test obtained a p value of 0.02 so that it can be said that there is no significant relationship between the level of education and the level of knowledge of self-medication of the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency.

Table 4. Relationship between Work and Knowledge of Self-Medication for Hypertension in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat

Occupation	Knowledge Level						Total	P Value	
	Good (11-15)		Sufficient (6-10)		Poor (0-5)				
	n	%	n	%	n	%	n		%
Unemployment	2	4,65	3	6,97	4	9,30	9	20,92	0,022
Farmer/Laborer	1	2,32	6	13,95	9	20,93	16	37,20	
Civil Servant	0	0	3	6,97	0	0	3	6,97	
Entrepreneur	0	0	3	6,97	3	6,97	6	13,94	
Employee	0	0	6	13,94	3	6,97	9	20,92	
Total	3	6,97	21	48,81	19	44,17	43	100	

From the data in table 4. The relationship between work and level of knowledge of self-medication for hypertension, it was obtained that the majority of the level of knowledge was lacking by working as laborers/farmers as many as 9 people (20.93%), and the minority with a good level of knowledge with civil servant jobs, entrepreneurs, employees with each as many as 0. The results of the

statistical test obtained a p value of 0.02 so that it can be said that there is no significant relationship between work and the level of knowledge of self-medication of the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency.

Table 5. Relationship between income level and knowledge about self-medication for hypertension in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency

Income/month	Knowledge Level						Total	P	
	Good (11-15)		Sufficient (6-10)		Poor (0-5)				
	n	%	n	%	n	%	n	%	
< Rp. 1.000.000	3	6,97	6	13,95	9	20,93	18	41,86	
Rp. 1.000.000 s/d Rp. 2.000.000	0	0	11	25,58	8	18,60	19	44,18	0,023
Rp.2.000.000 s/d Rp.3.000.000	0	0	3	6,97	2	4,65	5	11,62	
>Rp>3.000.000	0	0	1	2,33	0	0	1	2,33	
Total	3	6,96	21	48,82	19	44,18	43	100	

From the data in table 5 The relationship between income and level of knowledge of self-medication for hypertension, it was found that the majority of the level of knowledge was lacking in income <Rp.1,000,000 as many as 9 people (20.93%) and the minority with a good level of knowledge with income of Rp. 1,000,000 to 2,000,000, income of 2,000,000 to 3,000,000, income > 3,000,000 each as many as 0. The results of the statistical test obtained a p value of 0.23 so that it can be said that there is no significant relationship between age and the level of knowledge of self-medication in the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency.

3.2 Discussion

a. Relationship between Age and Knowledge of Hypertension Self-Medication.

From the results of the analysis of the relationship between age and the level of knowledge of Hypertension self-medication, it was found that the majority of knowledge levels were lacking in the late elderly (56 years to 66 years) as many as 9 people (20.93%) and a minority with a good level of knowledge with the early elderly (46 years to 55 years) as many as 0. The results of the statistical test obtained a p value of 0.18 so that it can be concluded that there is no significant relationship between age and the level of self-medication knowledge of the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency. The results of Zujfah Noor Fadilah's research, (2021) concluded that age can affect knowledge of hypertension self-medication, if studied in more detail, a person's age is related to life experience so that a person is able to understand hypertension self-medication.

b. Relationship between Gender and Knowledge of Self-Medication for Hypertension

The relationship between gender and level of knowledge of self-medication for hypertension was obtained that the majority of the level of knowledge was sufficient for males as many as 11 people (25.58%) and the minority with a good level of knowledge with males as many as. The results of the statistical test obtained a p value of 0.13 so that it can be said that there is no significant relationship between age and the level of self-medication knowledge of the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency. According to Ari Susiana Wulandari (2019), in the Indonesia Pharmacy and Natural Medicine Journal from the results of statistical calculations, it shows that there is a relationship between the level of respondent knowledge about self-medication for hypertension and gender.

c. Relationship between Education Level and Knowledge of Self-Medication for Hypertension

The relationship between education level and knowledge level of self-medication for Hypertension was obtained that the majority of knowledge level was lacking at the level of no education as many as 8 people (18.60%), sufficient at the elementary school level as many as 8 people (18.60%) and a minority with a good level of knowledge with an education level of Elementary School, Junior High School or equivalent, Senior High School or equivalent, College each as many as 0. The results of the statistical test obtained a p value of 0.02 so that it can be said that there is no significant relationship between education level and the level of self-medication knowledge of the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency. According to Najla Firsty Sofia Ahmad (2019), in the Indonesian Pharmacy and Natural Medicine Journal from the results of statistical calculations, it shows that there is a relationship between the level of respondent's knowledge about self-medication for hypertension and gender.

d. Relationship between Job and Knowledge about Self-Medication Hypertension

The relationship between work and the level of knowledge about self-medication for hypertension was obtained that the majority of the level of knowledge was lacking by working as laborers/farmers as many as 9 people (20.93%), and the minority with a good level of knowledge with civil servant jobs, entrepreneurs, employees with each as many as 0. The results of the statistical test obtained a p value of 0.02 so that it can be said that there is no significant relationship between work and the level of self-medication knowledge of the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency. According to Putri Anggraini Aswad, et al. (2019), in the Journal of Health & Science Integration, based on the results of a study conducted in Taman Sari Village, Bandung City, data was obtained that there was no relationship between work and knowledge. This is in line with what the author has stated.

e. Relationship between Income and Knowledge of Self-Medication for Hypertension

The relationship between income and level of knowledge of self-medication for Hypertension was obtained that the majority of knowledge levels were lacking in income <Rp.1,000,000 as many as 9 people (20.93%) and a minority with a good level of knowledge with income of Rp. 1,000,000 to 2,000,000, income of 2,000,000 to 3,000,000, income > 3,000,000 each as many as 0. The results of the statistical test obtained a p value of 0.23 so that it can be said that there is no significant relationship between age and the level of knowledge of self-medication for the community in Kepala Sungai Village, Dusun III Kayu Lima, Secanggang District, Langkat Regency.

4. Conclusion

The results of the study on the level of knowledge about self-medication for hypertension can be concluded that the community in Kepala Sungai Village, Hamlet III Kayu Lima, Secanggang District, Langkat Regency still has few people who do self-medication for hypertension. The level of knowledge of the community in Kepala Sungai Village, Hamlet III Kayu Lima, Secanggang District, Langkat Regency. About hypertension medication and the most in the sufficient category as many as 21 people (48.80%). There is no significant relationship between sociodemographics and the level of knowledge of self-medication for hypertension in Kepala Sungai Village, Hamlet III Kayu Lima, Secanggang District, Langkat Regency.

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