



**THE RELATIONSHIP BETWEEN COMMUNITY BEHAVIOR AND
TREATMENT OF SYMPTOMS OF INCREASED URIC ACID
LEVELS IN KAYEE LEE VILLAGE, WANT JAYA DISTRICT, ACEH
BESAR REGENCY**

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ABSTRACT

The body's purine levels are too high, causing the body's uric acid levels to increase, crystals forming in the joints, causing joint discomfort. If there is too much uric acid in the blood, crystals form in the joint fluid. Gout develops into a disease. Gout is characterized by pain, stiffness and inflammation of the joints, problems with joint movement, and decreased muscle strength. This pain is worsened when doing activities that involve the joints and is reduced when resting. Joint pain is generally felt in the morning followed by inflammation, redness in the painful area, and weakness. The first treatment for gout joint pain in general is pharmacological. Pharmacological drugs are the most frequently used form of pain control. Pharmacological drugs consumed too often will affect the action of the drug in the body because the elderly have experienced various changes in body function. This research is descriptive analytical with a cross sectional approach, the population in this study is the people of Kaye Lee village who have been diagnosed with gout and are active in posyandu activities, totaling 32 people. Based on the results of research from 32 respondents, it was found that of the 23 respondents (100%) who had good knowledge, of which the majority had treatment, 18 (78.3%) respondents, of the 24 (100%) respondents who had a positive attitude, the majority had treatment. 18 (75.0%) respondents, of the 21 (100%) respondents who had the majority action, 16 (76.2%) respondents had treatment. The results of statistical tests obtained a p value of 0.001, it can be concluded that there is a relationship

between community behavior and handling of symptoms of increased uric acid levels in Kayee Lee Village, Want Jaya District, Aceh Besar Regency.

Keywords: *Behavior, Society, Treatment, Gout*

INTRODUCTION

Uric acid is the final metabolic product of purines, which are one of the nucleic acid components found in the nuclei of body cells. The cause of the accumulation of crystals in the joint area is due to the purine content which can increase urate levels in the blood between 0.5 – 0.75 g/ml of purine consumed (Jaliana and Suhadi, 2018).

The main causes of gout are pain, stiffness and inflammation of the joints, problems with joint movement, and decreased muscle strength. This pain is worsened when doing activities that involve the joints and is reduced when resting. Joint pain is generally felt in the morning followed by inflammation, redness in the painful area, and weakness (Liana, 2019). Gout pain is generally found mostly in the joints of the feet and the joints of the hands which can cause inflamed pain due to the accumulation of purine substances which trigger crystals and cause pain. If the pain that is felt is not resolved it will cause problems with daily physical activity such as decreased physical activity (J. I. Health et al., 2020).

The prevalence of gout in Indonesia is in second place after osteoarthritis. The population prevalence of gout in the USA is predicted to be 13.6/100,000 people, while in Indonesia it is predicted to be 1.6-13.6/100,000 people, this prevalence increases with increasing age (Anggraini & Yanti, 2019). In Indonesia, the prevalence of gout problems in those aged 55-64 years is 45%, aged 65-74 years is 51.9%, aged ≥ 75 years is 54.8% (Riskesdas, 2013). A complaint that is often felt by the elderly is joint pain. The incidence of gout in East Java is 26.4% (Zahroh & Faiza, 2018).

Data obtained from the 2018 Basic Health Research Results (Riskesdas) shows that the prevalence of joint disease in Indonesia based on doctor's diagnosis is the highest, namely, Aceh (13.26%), Bengkulu (12.11%), Bali (10.46%), Papua (10.43%), and West Kalimantan (9.57%) (Ministry of Health of the Republic of Indonesia, 2018).

The causative factors for gout are genetics or family history, one of which is also triggered by increased intake of foods such as purines. Purines are abundant in the nuclei of living cells, therefore these chemicals are found in almost all sources of dietary protein intake, such as meat, organ meats, seafood, vegetables, grains, nuts, and lack of water intake, which results in renal elimination. The glomerulus will filter purines easily and excrete them through urine. When the body's purine levels are too high, the body's uric acid levels increase, causing crystals to form in the joints, causing joint discomfort. If there is too much uric acid in the blood, crystals will form, and if there is too much

uric acid in the joint fluid, gout will form. Gout will develop if this disease is not treated (Fitri Fauziah Nurislami, Esti Widiasih, 2021).

Therapies used to reduce uric acid levels and reduce pain are divided into 2, namely pharmacological and non-pharmacological therapies (Zuriati, 2017). Pharmacological treatment is with non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, naproxen and allopurinol (Wilda & Panorama, 2020). To overcome the joint pain felt, elderly people often use pharmacological therapy, namely non-steroidal anti-inflammatory drugs (NSAIDs) for the reason that they quickly reduce pain complaints. The first treatment for gout joint pain in general is pharmacological. Pharmacological drugs are the most frequently used form of pain control. Pharmacological drugs consumed too often will affect the action of the drug in the body because the elderly have experienced various changes in body function. So, to reduce the excessive effects of pharmacological therapy, the elderly can use non-pharmacological therapy (Sundari, Wahyuni & Nurhidayat, 2019).

Based on the description above, the author feels it is necessary to conduct research on the relationship between community behavior and treatment of symptoms of increased uric acid levels in Kayee Lee Village, Want Jaya District, Aceh Besar Regency.

METHODS

The type of research used in this research is descriptive analytical with a cross sectional approach where the independent variable in this research is handling increased uric acid levels and the dependent variable is behavior. Carried out in Kayee Lee Village, Want Jaya District, Aceh Besar Regency. The population in this study was the people of Kaye Lee village who had been diagnosed with gout and were active in posyandu activities, totaling 32 people. The population was taken from data obtained from Kaye Lee Village, Want Jaya District, Aceh Besar Regency.

RESULTS AND DISCUSSION

This research was conducted on 32 respondents with the title of the relationship between community behavior and the treatment of symptoms of gross increases in uric acid in Kayee Lee Village, Want Jaya District, Aceh Besar Regency. Based on research, the following results were obtained.

Table 1. Frequency Distribution of Age of Respondents in Kayee Lee Village Want Jaya District, Aceh Besar Regency

<i>No</i>	<i>Age</i>	<i>F</i>	<i>%</i>
1	35-50	15	46,9

2	51-70	15	46,9
3	71-80	2	6,3
Total		32	100

Data source: processed in 2023

Based on table 4.1 above, it was found that almost half of the respondents studied were in the 35-50 year age range, totaling 15 respondents (46.9%), and in the 51-70 year range, there were 15 respondents (46.9%). Meanwhile, a small portion of those studied were in the age range 71-80 years, amounting to 2 respondents (6.3%).

Table 2. Frequency distribution of the relationship between knowledge and treatment of symptoms of increased uric acid levels In Kayee Lee Village, Want Jaya District, Aceh Besar Regency

No	Knowledge	Handling				Total	P Value
		There is		There isn't any			
		N	%	N	%		
1	Good	18	78,3	5	21,7	23 (100%)	0,001
2	Enough	1	11,1	8	88,9	9 (100%)	

Data source: processed in 2023

Based on the table above, it can be seen that of the 23 respondents (100%) who have good knowledge, the majority have treatment, 18 (78.3%) respondents, and those who have sufficient knowledge, 9 respondents (100%) have no treatment, 8 (88.9%) respondents. The statistical test results obtained a p value of 0.001, it can be concluded that there is a significant relationship between knowledge and treatment of symptoms of increased uric acid levels.

Table 3. Frequency Distribution of the Relationship between Attitudes and Treatment symptoms of increased uric acid levels In Kayee Lee Village Ingin Jaya District, Aceh Besar Regency

No	Attitude	Handling				Total	P Value
		There is		There isn't any			
		N	%	N	%		

1	Positive	18	75,0	6	25,0	24 (100%)	0,003
2	Negative	1	12,5	7	87,5	8 (100%)	

Data source: processed in 2023

Based on the table above, it can be seen that of the 24 (100%) respondents who had a positive attitude, the majority had treatment 18 (75.0%) respondents, while those who had a negative attitude were 8 respondents (100%), where the majority of respondents had no treatment 7 (87.5%) respondents. The statistical test results obtained a value (p value 0.003) and it can be concluded that there is a significant relationship between attitude and treatment of symptoms of increased uric acid levels.

Table 4. Frequency Distribution Relationship between actions and treatment for symptoms of increased uric acid levels In Kayee Lee Village Ingin Jaya District, Aceh Besar Regency

No	Action	Handling				Total	P Value
		There is		There isn't any			
		N	%	N	%		
1	Done	16	76,2	5	23,8	21 (100%)	0,021
2	Are not done	3	27,3	8	72,7	11 (100%)	

Data source: processed in 2023

Based on the table above, it can be seen that of the 21 (100%) respondents who had action, the majority had treatment, 16 (76.2%) respondents, while those whose action was not taken were 11 respondents (100%) where the majority had no treatment, 8 (72.7%). %) respondents. The statistical test results obtained a p value of 0.021, it can be concluded that there is a significant relationship between action and treatment for symptoms of increased uric acid levels.

Research Discussion

Based on table 2, it can be seen that of the 23 respondents (100%) who had good knowledge, the majority had treatment, 18 (78.3%) respondents, and those who had sufficient knowledge, 9 respondents (100%) had no treatment, 8 (88.9%) %) respondents. The statistical test results obtained a p value of 0.001, it can be concluded that there is a significant relationship between knowledge and treatment of symptoms of increased uric acid levels.

Based on table 3, it can be seen that of the 24 (100%) respondents who had a positive attitude, the majority had treatment, 18 (75.0%) respondents,

while those who had a negative attitude were 8 respondents (100%), where the majority of respondents had no treatment 7 (87.5%) respondents. The statistical test results obtained a value (p value 0.003), it can be concluded that there is a significant relationship between attitude and treatment of symptoms of increased uric acid levels.

Based on table 4, it can be seen that of the 21 (100%) respondents who had action, the majority had treatment, 16 (76.2%) respondents, while those who had not taken action were 11 respondents (100%) where the majority had no treatment, 8 (72.7%). %) respondents. The statistical test results obtained a p value of 0.021, it can be concluded that there is a significant relationship between action and treatment for symptoms of increased uric acid levels.

The results of this research are in line with research conducted by Adi Aryanto Sibudian (2017) entitled *The Relationship between Knowledge and Attitudes towards Preventive Measures for Increased Uric Acid Levels in Patients in Three Villages, Paranginan District*. With statistical test results with testsChisquare, shows that there is a significant relationship between knowledge and measures to prevent increased uric acid levels in patients in three large villages in Paranginan District, it is known that the significant value is 0.000 which is less than 0.5 ($p < 0.05$).

This research is also in line with research conducted by Saiful A (2020) with the title *The relationship between knowledge and attitudes and efforts to prevent gout in Wawondula Village, North Mori District, North Morowali Regency*. The results of statistical tests using chi-square obtained a p-value of 0.006 ($p\text{-value} < 0.05$), meaning that there is a relationship between knowledge and efforts to prevent gout in Wawondula Village, North Mori District, North Morowali Regency.

There are many factors that can influence a person's level of knowledge, namely education, employment, age, interests, experience, culture of the surrounding environment, and information. However, by providing health education to someone, whether a patient suffering from gout, the patient's family, the community, and health service providers, they can increase their knowledge about the disease and its treatment and care.

According to researchers' assumptions, gout is a common disease suffered by the elderly, so the treatment of gout is well understood by society in general. The majority of people know what gout is, how to prevent it, normal uric acid levels, what the symptoms of gout are, and foods that should be avoided. This is also supported by posbindu activities for the elderly. Respondents who have good knowledge about gout tend to have good treatment for gout, whereas respondents who have sufficient knowledge have poor treatment. Respondents who did not take action but only carried out treatment because according to research it was difficult to exercise due to taking care of the house and so on, so they preferred a practical method, namely taking medication to reduce the symptoms of increased uric acid levels. From the research results, it was found that respondents actively attended posyandu,

therefore their knowledge was not lacking because they received information about their illness from health services.

CONCLUSION

Based on the research results and statistical analysis of the data that has been collected, the following conclusions can be drawn

There is a relationship between knowledge and treatment of symptoms of increased uric acid levels in Kayee Lee village, Want Jaya sub-district, Aceh Besar district, with a value obtained of 0.001 ($p < 0.05$).

There is a relationship between attitude and treatment of symptoms of increased uric acid levels in Kayee Lee village, Want Jaya subdistrict, Aceh Besar district, with a value obtained of 0.003 ($p < 0.05$).

There is a relationship between action and treatment of symptoms of increased uric acid levels in Kayee Lee village, Want Jaya sub-district, Aceh Besar district, with a value obtained of 0.021 ($p < 0.05$).

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