



COMMUNITY KNOWLEDGE RELATIONSHIP WITH HANDLING OF SYMPTOMS OF INCREASED URIC ACID LEVELS IN KAYEE LEE VILLAGE KECAMATAN WANTING JAYA ACEH BESAR DISTRICT

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ABSTRACT

Gout is one of several diseases that will be a problem for sufferers because it not only interferes with health but can also cause physical disabilities. High uric acid levels in the blood exceeding normal limits cause a buildup of uric acid in the joints and other organs of the body. This buildup of uric acid makes joints ache, sore and inflamed. As humans, they must have different behaviors to deal with their illness according to the behavior they have, the behavior itself has components in which there are knowledge, attitudes, and actions. This study aims to determine the relationship between community knowledge and treatment of symptoms of increased uric acid levels in Kayee lLee Village, Wanna Jaya District, and Aceh Besar District. The design of this study will use a cross-sectional type of analytics. The population in this study were those who actively participated in the elderly Posyandu and had been diagnosed with gout as many as 32 people. The sampling technique used a total sampling technique of 32 respondents. The reason for using total sampling is because the population is less than 100. This research was conducted on June 12 - July 18, 2023, using a questionnaire sheet measurement method. Data processing was carried out using the Chi-Square test. The results showed that most of the respondents with good knowledge of handling were 18 (78.3%) respondents, and those with good knowledge but no handling were 5 (21.7%). While the majority of respondents who had sufficient knowledge with handling 1 (11.1%) respondents, and those who had sufficient knowledge but no treatment were 8 (88.9%) respondents. The results of the chi-square test p-value 0.001 ($p < 0.05$) so that it can be concluded that H_a is accepted, indicating that there is a significant relationship between knowledge and treatment of symptoms of increased uric acid levels.

Keywords: *Knowledge, acid*

INTRODUCTION

Gout, commonly known as gout, is a disease caused by the accumulation of monosodium urate crystals in the body. Uric acid is the final metabolic product of purines, which is a component of nucleic acids found in the nucleus of body cells. The cause of crystal buildup in the joint area is due to its purine content which can increase blood uric levels between 0.5 – 0.75 g/ml of purines consumed (Jaliana and Suhadi, 2018).

Uric acid is the end substance of purine metabolism in the body. Excessive uric acid will not be accommodated and completely metabolized in the body resulting in increased levels of uric acid in the blood which is also known as hyperuricemia. Increased uric acid levels can cause disturbances in the human body such as a feeling of aching pain in the joint area and is often accompanied by the emergence of extreme pain for the sufferer (Karuniawati, 2019).

Important gout diseases are pain, joint stiffness and inflammation, joint movement problems, and decreased muscle strength. This pain is exacerbated during activities that involve the joints and is relieved by rest. Joint pain is generally felt in the morning followed by inflammation, redness in the painful area, and weakness (Liana, 2019). Gout pain is generally most common in the joints of the feet and joints of the hands which can cause inflamed pain because of this there is an accumulation of purine substances that trigger crystals and cause pain. decrease in physical activity (JI Health et al., 2020).

The feeling of sciatica or pain that is felt occurs due to several factors. Eating habits are important factors that affect a person's health status and physical abilities. The amount of high-purine foods consumed will further increase the risk of developing gout. The risk of developing gout will increase if it is accompanied by an unbalanced eating pattern (Kussoy, et al, 2019).

According to WHO (World Health Organization), uric acid levels in men are 3.5-7 mg/dl and 2.6-6 mg/dl in women. Gout is categorized as a disease that often occurs. If there is an accumulation that exceeds normal limits in the human body it is called hyperuricemia (Anies, 2018)

The prevalence of uric acid in Indonesia ranks second after osteoarthritis. The prevalence of uric acid in the US population 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 at the age of 55-64 years is 45%, aged 65-74 years is 51.9%, and age ≥ 75 years is 54.8% (Risksedas, 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).

The data obtained from the 2018 Basic Health Research Results (Risksedas) shows that the highest prevalence of joint disease in Indonesia is based on doctor's diagnoses, 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).

Gout in Indonesia has increased. Based on diagnosis by health workers in Indonesia (11.9%) and based on diagnosis or symptoms (24.7%) based on age over 75 years (54.8%). In female patients (8.46%), while in male patients (6.13%) (Risikesdas, 2018). The highest prevalence of uric acid is in East Nusa Tenggara (33.1%), West Java (32.1%), and Bali (30%), while in Central Java it is 25.5% (Risikesdas, 2018) (Ministry of Health RI, 2019).

Several aspects can affect the increase in gout content to be high, including unhealthy lifestyle behaviors, for example consuming foods high in purines, consuming liquor, and obesity (JI Kesehatan et al., 2020).

The causative factor for gout is genetic 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 kidney elimination. The glomerulus will easily filter purines and dispose of them in the 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, uric acid will form.

The impact of a client with gout paying less attention to regular medication, than the patient experiencing joint pain such as arthritis and joint disability. If there is repeated inflammation of the joints, it will experience a relapse one day, because the longer the joints will ache and the number of crystals that are formed will enlarge and then break, then these crystals will appear in the urinary tract and result in kidney failure. (Sani & Afni, 2019). In addition, the impact of high uric acid on physical function will decrease in the lower extremities, and decreased quality of life and work productivity will result in a high risk of heart disease, kidney disease, and death (Indrayani & Roesmono, 2021).

The knowledge possessed by humans is the result of efforts made by humans in finding the truth or problem they face. Activities or efforts made by humans to seek truth or problems faced are the nature of humans themselves or better known as desires. The desire possessed by humans will encourage humans themselves to get everything they want. What distinguishes one human from another is the effort that humans make to get what they want. (Sangadji, 2018).

This is also to the results of previous research conducted by Firman Ardhiatma et al (2017) entitled "Relationship between Knowledge of Gout and Gout Prevention Behavior in the Elderly" that the results of the Spearman Rank test obtained $p = 0.001$ so it was concluded that there is a relationship between knowledge of the elderly about gout arthritis with gout prevention behavior at the Budi Mulia Ngebel Posyandu, Ngebel District, Ponorogo Regency. From the results of the study, it can be assumed that the behavior of the elderly in preventing gout is good if the knowledge of the elderly about

gout is good because knowledge greatly influences the behavior of the elderly about gout. gout.

The results of the initial survey that the author conducted on February 28 by interviewing elderly cadres and participating in the posyandu on March 16, 2023, obtained information that there were 60 to 70 more people who actively participated in the posyandu, out of the 10 elderly people I interviewed do not know what causes gout and what foods can increase uric acid, and how to treat it.

Based on the description above, the authors are interested in researching the relationship between people's behavior and the treatment of symptoms of increased uric acid levels.

METHODS

The research design will use a cross-sectional type of analytic which aims to determine the relationship between variables where the independent (free) and dependent (dependent) variables are identified at one time unit. This research was conducted in Kayee Lee Village, Want Jaya District, Aceh Besar District in June 2023. The population in this study were those who actively participated in the elderly Posyandu and had been diagnosed with goutas many as 32 people. The sampling technique uses the techniquetotal samplingas many as 32 respondents.

The reason for using total sampling is because the population is less than 100.

RESULTS AND DISCUSSION

Based on the results of the research, it is obtained

1. Univariate analysis

a. Age

Table 1. Age Frequency Distribution Of Respondents

No	Age	F	%
1	35-50	15	46,9
2	51-70	15	46,9
3	71-80	2	6,3
Total		32	100

The results of the above study indicate that the number of respondents who were studied was based on age, namely 15 respondents (46.9%) aged 35-50 years, 15 respondents (46.9%) aged 51-70 years, 2 respondents aged 71-80 years (6,3%).

b. Gender

Table 2. Gender Frequency Distribution

No	Gender	F	%
1	Woman	32	100
Total		32	100

The Results Of The Above Research Show That Out Of 32 Respondents, Namely Female, 32 Respondents (100%).

c. Education

Table 3. Frequency Distribution of Respondents' education

No	Education	F	%
1	SD/MIN	8	25,0
2	SMP/MTs	18	56,3
3	SMA/MA	5	15,6
4	S1	1	3,1
Total		32	100

The results of the research above show that the number of respondents who were studied based on education, namely SD/MIN as many as 8 people (25.0%), SMP/MTS as many as 18 people (56.3%), SMA/MA as many as 5 people (15.6%), GRADUATE 1 person (3.1%).

d. Work

Table 4. Frequency Distribution of Respondents' work

No	Work	F	%
1	Housewife	32	100
Total		32	100

The results of the research above indicate that the number of respondents who were examined was based on work, namely housewives 32 respondents (100%)

e. Knowledge

Table 5. Frequency Distribution of Respondents' knowledge

No	Knowledge	F	%
1	GOOD	23	71,9
2	ENOUGH	9	28,1
Total		32	100

The results of the research above show that the number of the majority of Good knowledge possessed by respondents is 23 (71.9%) and respondents, sufficient knowledge is 9 (28.1%) of respondents

2. Bivariate Analysis

- a. The relationship between knowledge and treatment of symptoms of increased uric acid levels

Table 6. Relationship between Knowledge and Handling of Symptoms of Increased Uric Acid Levels in Kayee Lee Village, Want Jaya District, Aceh Besar District

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%)	

The results showed that of the 32 (100%) respondents, the majority of respondents who had good knowledge with handling were 18 (78.3%) respondents, and those with good knowledge but no handling were 5 (21.7%). While the majority of respondents who had sufficient knowledge with handling 1 (11.1%) respondents, and those who had sufficient knowledge but no treatment were 8 (88.9%) respondents. The results of the Chi-Square statistical test (Person Chi-Square) at a degree of confidence of 95% ($\alpha = 0.05$) obtained a p Value = 0.001 ($p < 0.05$) which means that H_a is accepted and H_o is rejected so it can be concluded that there is a relationship knowledge with handling symptoms of increased uric acid levels in Kayee Lee Village, Want Jaya District, Aceh Besar District.

Discussion

- a. Connection Knowledge with treatment of symptoms of increased uric acid levels

The results conclude that based on the chi-square test with 32 respondents to the knowledge variable with treatment for symptoms of increased uric acid levels, the p-value was 0.001. With a value of 0.05 which means that ($0.001 < 0.05$) it can be concluded that H_a is accepted, indicating that there is a significant relationship between knowledge and treatment of symptoms of increased uric acid levels.

The results of this study are in line with research conducted by

Amiruddin (2019: 244) that the level of knowledge is a risk factor for the incidence of gout with a p value = 0.001. It can be concluded that there is a significant relationship between the level of knowledge and the incidence of gout.

The results of this study are also in line with the research of Lestariningsih, et al. 2017 with the title relationship between knowledge and gout on gout prevention behavior in the elderly, with the Spierman rank test results obtained $p = 0.001$ so it can be concluded that there is a significant relationship between elderly knowledge about gout and gout prevention behavior at the Budi Mulia Posyandu Ngebel, Ngebel District, Ponorogo Regency.

The results of this study contradict research conducted by Utami (2015: 306) that there is no significant relationship between the level of knowledge about a low purine diet and purine intake in women aged 45 years at the Bali Pontianak village health center with a p value = 0.518. This can be caused by differences in the level of knowledge of the respondents studied, and the level of knowledge studied by Utami (2015).

Based on this interpretation, this can be proven by the results of research conducted by the authors, 18 (78.3%) respondents who had good knowledge but also handled it, and 5 (21.7%) respondents who had good knowledge but did not handle it while 1 (11.1%) respondents who had sufficient knowledge but also carried out treatment and 8 (88.9%) respondents who had sufficient knowledge but did not also carry out treatment.

Researchers assume that there are many factors that can affect a person's level of knowledge, namely education, work, age, interests, experience, culture of the surrounding environment, and information. In this study using the approach of several factors, namely age, education, and work. Providing health education to a person, both a patient who is suffering from gout, the patient's family, the community, and health service providers, so as to increase their knowledge about the disease and its management (treatment) and care.

CONCLUSION

From the results of research and discussion, the conclusions of this study are as follows:

1. Most of the majority of respondents who had good knowledge with handling were 18 (78.3%) respondents, and those with good knowledge but no handling were 5 (21.7%). While the majority of respondents who had sufficient knowledge with handling 1 (11.1%) respondents, and those who had sufficient knowledge but no treatment were 8 (88.9%) respondents.
2. There is a relationship between knowledge and treatment of symptoms of increased uric acid levels with a p-value of 0.001 ($p < 0.05$) so that it can

be concluded that H_a is accepted, indicating that there is a significant relationship between knowledge and treatment of symptoms of increased uric acid levels.

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