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Edukasi Tentang Gout Arthritis Sebagai Upaya Kesadaran Dan Pencegahan Penyakit Asam Urat Di Desa Pasar X Dusun 3

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Abstract

Gout arthritis, or gout, is a joint disorder caused by the buildup of uric acid crystals in the body. This disease often has a negative impact on sufferers' quality of life, with the main symptoms being severe joint pain and inflammation. In the village of Pasar This article aims to educate the public about gout arthritis as an effort to increase awareness and prevent gout. Through health education and education, it is hoped that the public can understand risk factors, such as a high-purine diet, alcohol consumption and obesity, and adopt a healthy lifestyle. With better knowledge, it is hoped that society can be more proactive in preventing and managing gouty arthritis, as well as improving overall health.

Keywords: ***Gout, Education, Prevention***

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INTRODUCTION

Gout, which is clinically called gout, is a joint condition triggered by the accumulation of monosodium urate crystals due to a spike in uric acid levels in the bloodstream (hyperuricemia). Hyperuricemia can occur because the body produces excessive uric acid during the metabolic process, or the body is less effective at removing uric acid. Excess uric acid that continually pools in the blood can trigger the formation of sharp crystals that resemble needles (Fitriani *et al.*, 2021). This condition generally attacks the joints in the toes, fingers, wrists, elbows, heels and knees. This disease is also included in the group of joint disorders or rheumatism. Gout is a non-communicable disease that is chronic, so it can last for years or even a lifetime (Hasibuan and Simamora, 2020). One of the factors that influence the occurrence of gouty arthritis is diet, especially consumption of unbalanced foods, such as protein intake with too high a purine content (Tampubolon *et al.*, 2022). Gout is more common in men, who have a four times higher risk. compared to women. This is because men do not have the hormone estrogen which helps eliminate uric acid through urine. In women, uric acid levels increase after menopause due to a decrease in the hormone estrogen (Mulyani, 2022).

Factors that cause gouty arthritis are divided into two types: those that can be changed and those that cannot be changed. Factors that can be changed include a diet high in purines (such as coffee, tea, organ meats, spleen, intestines, spinach, chips, and seafood), lack of exercise, stress, fatigue, and obesity. Meanwhile, factors that cannot be changed include age, gender, genetic factors and other medical conditions. Symptoms

that indicate high uric acid levels include joint pain, pain in the big toe, severe pain at night, the appearance of lumps around the joints known as tofus, inflammation and redness, discomfort, restricted movement (Lubis and Boy, 2024).

Based on the WHO report (2018), the number of gout cases globally has increased, with a total of 1,370 cases or around 33.3%. In England, the prevalence of this disease rose to 3.2% among adults, while in the United States the prevalence reached 3.9%. Meanwhile, in Korea, the gout prevalence rate increased from 3.49% per 1,000 people in 2007 to 7.58% per 1,000 people in 2015. In Indonesia, gout ranks second after osteoarthritis, with the highest prevalence in coastal areas, due to patterns a diet rich in fish and alcohol consumption (Nofia, Apriyeni and Prigawuni, 2021). It is estimated that in Indonesia, gout occurs in 840 people out of every 100,000 inhabitants. Based on Basic Health Research Data (2013), the prevalence of gouty arthritis in Indonesia, based on diagnosis or symptoms, reached 24.7%. The highest prevalence was recorded in East Nusa Tenggara at 33.1%, while in West Sumatra the prevalence of this disease was 21.8%. Apart from the several provinces mentioned, the same data shows that the prevalence of arthritis in North Sumatra, based on diagnosis from health workers, is 8.4%, and based on diagnosis or symptoms it reaches 19.2%. In Medan City, North Sumatra, the prevalence of arthritis according to health worker diagnosis is 5.1%, while based on diagnosis and symptoms it is 17.2% (Hasibuan and Simamora, 2020) (Riskesdas, 2013).

The World Health Organization (WHO) reports that hyperuricemia sufferers increase every year throughout the world. The prevalence of gout is around 1-4% of the general population, with a higher incidence rate in men than women in Western countries, reaching 3-6%. In a number of countries, the prevalence of gout can reach up to 10% in men and 6% in women aged 80 years and over. The annual incidence of gout is 2.68 per 1,000 people. Globally, gout is showing a gradual increase, caused by unhealthy eating habits, such as improper diet, lack of physical activity, obesity, and metabolic syndrome (Arsa, 2021).

According to epidemiological studies, normal uric acid levels are less than 7 mg/dl for men and less than 6 mg/dl for women (Ega Fadila *et al.*, 2023). Excessive uric acid levels in the body can cause a buildup of crystals in the joints and capillaries. These crystals will rub against each other and move within each joint cell, which can cause gouty arthritis. As a result, there will be intense pain and disturbing comfort. If gout is not treated and exceeds safe limits, it can cause serious complications in the kidneys and heart. The condition of hyperuricemia can increase the risk of forming uric acid stones and calcium oxalate stones in the kidneys. Both types of stones can increase pressure in the kidneys and blood vessels, making blood vessel walls thicker and reducing blood flow to the kidneys, which can ultimately cause kidney damage (Nofia, Apriyeni and Prigawuni, 2021).

Gout treatment is usually divided into two types: pharmacological and non-pharmacological. Pharmacological treatment involves the use of drugs such as diuretics, thiazides, benzbromarone, uricosurics, NSAIDs, COX-2 inhibitors, and colchicine. Meanwhile, non-pharmacological treatment includes therapy and the use of traditional medicines (Lindawati R. Yasin, Rona Febriyona and Andi Nur Aina Sudirman, 2023).

Rural communities often have limited access to information and health facilities, which means their knowledge about gout and how to prevent it is still low. In fact, with adequate knowledge, people can be more proactive in maintaining their health, including identifying risk factors and adopting a healthy lifestyle to prevent gout.

Various steps can be taken to prevent gouty arthritis, such as avoiding foods and drinks that can trigger gout, losing weight, and drinking enough water. Disease prevention will be more effective if a person has adequate knowledge, which can be obtained through various sources of information, including health education or counseling (Kuwa *et al.*, 2024) (Songgigilan, Rumengan and Kundre, 2019).

METHODS

Implementation of educational activities about gouty arthritis in Pasar This activity uses educational posters as the main means of conveying health information. These posters are designed in language that is easy to understand and equipped with clear pictures and illustrations, so that they can help people to better understand the material presented. The poster content includes the definition of gouty arthritis, causes, symptoms, risk factors, as well as preventive and treatment steps that people can take to reduce the risk of developing this disease. The educational poster was distributed to every resident who was present during the activity. This activity received a positive response and was enthusiastically welcomed by the local community, attended by 20 participants who actively took part in the counseling. After the counseling session, uric acid levels were checked for the participants present, of which 18 people had uric acid levels checked. The results of this activity show the high level of community participation and enthusiasm, while also emphasizing the importance of continuous education to increase health awareness in Pasar X Dusun 3 Village.

RESULTS & DISCUSSION

Results

After carrying out counseling and examination, the following results were obtained:

NAME	AGE	URIC ACID RATE (N= Women (6) and Men (7))
Ibu WA	41 Years	6,4 mg/dl
Ibu SB	40 Years	5,8 mg/dl
Bapak MS	44 Years	6,.5 mg/dl
Ibu LBS	45 Years	7,6 mg/dl
Ibu S	42 Years	6,7 mg/dl
Ibu SBG	57 Years	6,9 mg/dl
Ibu MS	37 Years	10 mg/dl
Ibu VS	23 Years	7,3 mg/dl
Ibu I	40 Years	4,5 mg/dl
Ibu NS	80 Years	5,5 mg/dl
Ibu SBS	69 Years	5,8 mg/dl

Ibu P	69 Years	5,7 mg/dl
Ibu T	54 Years	6,5 mg/dl
Ibu BS	30 Years	5,4 mg/dl
Ibu FD	29 Years	5,8 mg/dl
Ibu LS	45 Years	6,2 mg/dl
Ibu TS	61 Years	6,4 mg/dl
Ibu IB	47 Years	6,6 mg/dl

After carrying out the examination, the following results were obtained :

- Number of Participants: 18 people, 1 man and 17 women
- Number of Participants with High Uric Acid Levels: 10 people, all women

Of the total of 18 participants who took part in the examination, 10 people were identified as having hyperuricemia, and all of them were women. This shows that 55.6% of all participants experienced hyperuricemia, with particular prevalence in the female group. Of the total 17 female participants who took part in the examination, 10 showed high uric acid levels. This means that 58.8% of all female participants experienced hyperuricemia. This percentage indicates that more than half of the female participants are at high risk of gout, thus emphasizing the importance of further education and prevention efforts among the female community to reduce the risk of health complications associated with this condition.

These results indicate that the majority of female participants had high uric acid levels. This highlights the importance of extra attention in health management, especially for women, as well as the need for regular monitoring and appropriate preventive measures to prevent complications from gout.

CONCLUSION

The implementation of educational activities about gouty arthritis in Pasar This activity involved 20 participants who participated in the counseling enthusiastically and ended with checking uric acid levels. Of the 18 participants who took part in the uric acid level examination, 1 man showed normal uric acid levels. Of the 17 female participants, 10 experienced high uric acid levels. Thus, 58.8% of the total female participants had high uric acid levels, indicating an urgent need for stricter health monitoring and more effective preventive measures, especially for the female group.

The education provided through posters, which includes definitions, causes, symptoms, risk factors, as well as steps to prevent and treat gout arthritis, is welcomed by the public. The poster is designed with simple language and illustrations that make it easy to understand, so that participants can clearly understand the information presented. The results of this activity emphasize the importance of ongoing education and routine examinations to manage uric acid levels and prevent complications that may arise from this disease. The positive response from the community shows that effective health education can increase awareness and encourage preventive action, as well as improve the quality of life of the community in Pasar X Dusun 3 Village.

CONFLICT OF INTEREST

Regarding the research, writing, and publication of this paper, the authors declare that there is no potential conflict of interest.

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REFERENCES

Arsa, P.S.A. (2021) 'Profil Karakteristik Individu Terhadap Kejadian Hiperuresemia', *Jurnal Ilmiah Kesehatan Media Husada*, 10(1), pp. 28–33. Available at: https://doi.org/10.33475/jikmh.v10i1.244.

Ega Fadila *et al.* (2023) 'Hubungan Faktor-Faktor Risiko Dengan Hiperurisemia Pada Pasien Batu Saluran Kemih Di Rumah Sakit Ibnu Sina Makassar Tahun 2020-2022', *Fakumi Medical Journal: Jurnal Mahasiswa Kedokteran*, 3(5), pp. 326–334. Available at: https://doi.org/10.33096/fmj.v3i5.196.

Fitriani, R. *et al.* (2021) 'Hubungan Pola Makan Dengan Kadar Asam Urat (Gout Artritis) Pada Usia Dewasa 35-49 Tahun', *Jurnal Ners*, 5(23), pp. 20–27. Available at: http://journal.universitaspahlawan.ac.id/index.php/ners.

Hasibuan, D.C. and Simamora, F.A. (2020) 'Efektifitas Rebusan Daun Sirsak Terhadap Penurunan Skala Nyeri Pada Penderita Gout Arthritis', *Jurnal Kesehatan Ilmiah Indonesia (Indonesian Health Scientific Journal)*, 5(2), p. 74. Available at: https://doi.org/10.51933/health.v5i2.319.

Kuwa, M.K.R. *et al.* (2024) 'Penyuluhan Dan Pemeriksaan Kesehatan Asam Urat Di Dusun Pemonago Desa Detusoko Barat Kecamatan Detusoko', *Jurnal Pengabdian Masyarakat*, 3, pp. 138–143.

Lindawati R. Yasin, Rona Febriyona and Andi Nur Aina Sudirman (2023) 'Pengaruh Air Rebusan Kumis Kucing Terhadap Penurunan Asam Urat Di Desa Manawa Kecamatan Patilanggio', *Jurnal Rumpun Ilmu Kesehatan*, 3(1), pp. 49–59. Available at: https://doi.org/10.55606/jrik.v3i1.1223.

Lubis, U.K. and Boy, E. (2024) 'PENGABDIAN MASYARAKAT Pemeriksaan dan Penyuluhan Kepada Masyarakat mengenai Gout Arthritis pada Lansia', 5(1).

Mulyani, N.S. (2022) 'Risk Factors Affecting Uric Acid Levels in Hyperurisemia Patients', *Jurnal Riset Gizi*, 10(1), pp. 29–36. Available at: https://doi.org/10.31983/jrg.v10i1.7763.

Nofia, V.R., Apriyeni, E. and Prigawuni, F. (2021) 'Pendidikan Kesehatan Tentang Arthritis Gout Di Puskesmas Dadok Tunggul Hitam Padang', *Jurnal Abdimas Saintika*, 3(1), p. 130. Available at: https://doi.org/10.30633/jas.v3i1.1108.

Riskesdas (2013) 'Riset Kesehatan Dasar (RISKESDAS) 2013', *Laporan Nasional 2013*, p. 1. Available at: http://www.dof.gov.my/en/c/document_library/get_file?uuid=e25cce1e-4767-4acd-afdf-67cb926cf3c5&groupId=558715.

Songgigilan, A.M.., Rumengan, I. and Kundre, R. (2019) 'Hubungan Pola Makan Dan Tingkat Pengetahuan Dengan Kadar Asam Urat Dalam Darah Pada Penderita Gout Artritis Di Puskesmas Ranotana Weru', *Jurnal Keperawatan*, 7(1), pp. 1–8. Available at: https://doi.org/10.35790/jkp.v7i1.24325.

Tampubolon, C.M. *et al.* (2022) 'Penyuluhan Tentang Asam Urat Kepada Keluarga Di Dusun Ii Desa Paku Kecamatan Galang Kabupaten Deli Serdang', *Jurnal*

Ilmiah Pengabdian Kepada Masyarakat (Ji-SOMBA), 2(1), pp. 28–31. Available at: https://doi.org/10.52943/ji-somba.v2i1.1143.