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Free Counseling and Examination of Blood Pressure, Glucose, and Uric Acid in The Context of Unusa's Real Work Lecture in The Village Randegansari, Driyorejo District, Gresik

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A B S T R A C T

One form of higher education's concern for the social and cultural environment (Tri Dharma Perguruan Tinggi) is through the Community Service Program (KKN). With the establishment of a harmonious relationship between Higher Education and the community, it is hoped that it can provide input for improving the quality of Higher Education needed by the community. On August 4 2023, the Work Program for Free Checking blood pressure, glucose and uric acid was carried out. Health checks were carried out on 50 people in the Kalimaya Elderly Posyandu, Randegansari Village. From the results of the examination, there were 29 people (58%) with high blood pressure, 6 people (12%) with high blood sugar levels, and 15 people (30%) with high uric acid levels. Hypertension, Gout, and Blood Sugar Disease from the results of the examinations conducted, it shows that many people still experience this disease and the cause is because people do not care and do not want to carry out health checks on health workers or independently. Health workers need to provide education to the community in the Posyandu Elderly Kalimaya Village of Randegansari regarding health checks to know and control blood pressure, blood sugar, and uric acid so that they can prevent possible diseases that will arise such as hypertension, diabetes and so on.

INTRODUCTION

To realize the vision of the Ministry of Health towards an "Independent and Fair Healthy Society", the government has made various efforts through certain policies, one of which is the participation of universities in government programs in the health sector (Sarifudin et al., 2022). To implement the Tri Dharma of Higher Education, the Rector of Nahdlatul Ulama University Surabaya collaborated with the Gresik government to build Gresik Regency towards an independent Regency through KKN students.

Hypertension, high blood glucose, and gout are diseases caused by a decline in the function of the human body's organs. This disease can be affected by unhealthy lifestyle patterns such as lack of exercise, consuming unhealthy foods, and even stress (Hamria et al., 2020). In the modern era, there has been a surge in the findings of this disease which is often suffered by the age group of 30-40 years. According to a report by the World Health Organization (WHO), degenerative diseases have added to the complexity of the health conditions of some countries in the world. Due to daily work routines, people often neglect their health and do not conduct check-ups at community health centers (Wahyuningsih & Arsi, 2021).

Whereas disease generative get detected in early over with the increasing age of the community. One of the diseases that often occurs is hypertension, which can be measured with special tools. This disease can cause permanent disability, sudden death and fatal consequences. Therefore, efforts to prevent and control

hypertension need to be carried out by increasing public awareness and changing lifestyles to be healthier (Yundini, 2006). Diabetes Mellitus (DM) is a type of non-communicable degenerative disease that is a serious problem for public health in Indonesia and the world (Susanti & Bistara, 2023).

Gout or in medical terms called pirai disease or gout disease (arthritis gout) is a joint disease caused by high levels of uric acid in the blood. Uric acid levels that exceed normal limits will cause a buildup of uric acid in joints and other organs of the body, which will eventually cause pain, pain, and inflammation in the joints (Savitri, 2017). The purpose of this KKN activity is to conduct initial screening of people with hypertension, blood glucose, and gout as an effort to increase public awareness regarding the early detection of the disease.

METHOD

Participants

Participants of the activity involved members of the elderly posyandu, namely residents of Kalimaya housing, Randegansari Village, Driyorejo District, Gresik Regency with an age range between 38-70 years. The participants of the activity were mostly dominated by There are 47 women and 3 men. So, the number of people who participated in counseling was 50 people.

Time and Place of Activity

The implementation of the activity was carried out on Friday, August 4, 2023, at 08.00 – finished WIB. The implementation of the activity was carried out at RW 09 Kalimaya hall, Randegansari Village, Driyorejo District, Gresik Regency.

Activity Flow

Before carrying out the activity, the committee first prepared the equipment to be used. The briefing was held one day before the implementation of the activity led by the group leader. Then for the flow of participants, they are first directed to the registration post and the provision of medical record forms. Then it was followed by height and weight measurements, waist circumference measurements, and blood pressure checks. Furthermore, the second post is the examination of glucose and uric acid (or choose one of them). And the last is the consultation post and the administration of drugs as well as the distribution of consumption.

Health Screening

The health checks carried out include weight and height measurements, waist circumference measurements, blood pressure measurements, blood glucose, and uric acid. This event was carried out in four stages. The first stage is registration, the second stage is weight and height measurement, waist circumference measurement and blood pressure measurement using a manual meter and

sphygmomanometer. Then in the third stage, blood glucose and uric acid are examined using a POCT measuring device using the stick method. Blood samples are taken from the fingertips as the test material. After the examination, participants also can consult with officers or midwives related to the results of the examination. The implementers of this activity are elderly posyandu cadres and KKN Group 11 2023 students.



Figure 1. Registration Documentation



Figure 2. Measurement documentation



Figure 3. Documentation of the PEMTIS committee

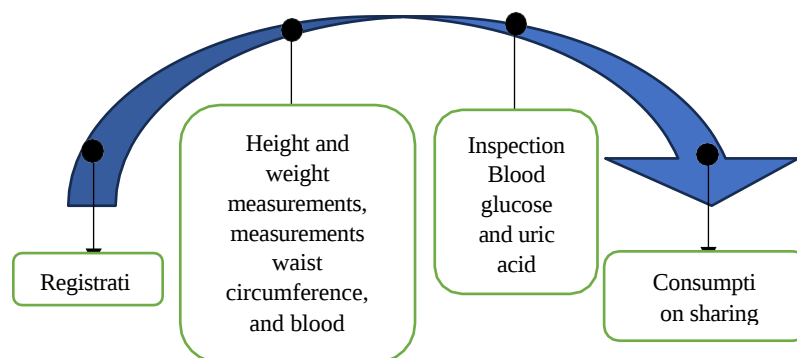


Figure 4. Examination Flow

RESULT AND DISCUSSION

Table 1. Characteristics of Respondents

No.	Characteristics of Respondents	Frequency	%
1.	Age		
	<50 years	15	30 %
	50-72 years old	35	70 %
2.	Gender		
	Man	3	6 %
	Woman	47	94 %
Sum		50	100 %

Based on table 1, it shows that most of the participants are > 50 years old at 70%, female gender is 94%.

Table 2. Health Check Results

No.	Types of Examinations	Sum
1.	High Blood Pressure	29
2.	High Blood Glucose	6
3.	High Gout	15
Sum		50

Based on table 2, it shows that most of the check results experienced high blood pressure, as many as 29, high blood glucose 6, and uric acid as much as 15.

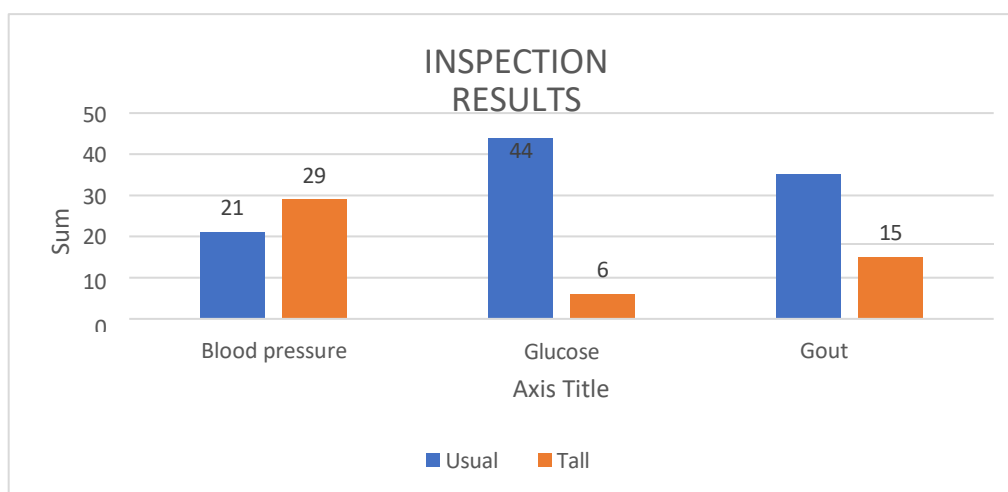


Figure 5. Examination Results

Both table 2 and figure 7 show that quite a lot of people experience high blood pressure, this is proven based on the diagram above, as well as blood glucose high, and gout. This condition is not good for health, because it has a high risk or complications that can worsen health. This poor health condition can be caused by several things. The first can be due to age, the age of most is 50-72 years which means that this age group is very vulnerable to various diseases. Apart from getting older, the second thing that can have an impact on health conditions is the gender of women. Most women admitted that they rarely or never did

a health check as done above (blood pressure measurement, blood glucose test and uric acid test). So preventive efforts for health are still relatively low and only come to the doctor when the illness is severe.

Overview of Blood Pressure Check Results

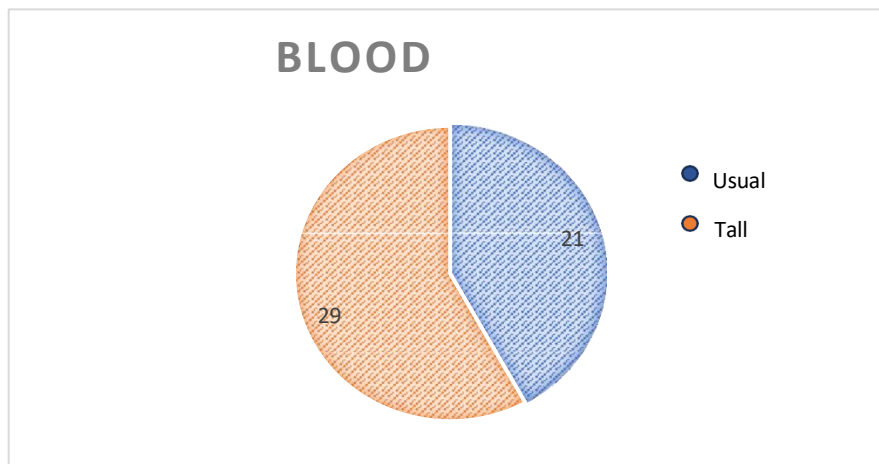


Figure 6. Blood Pressure Test Results

Of the 50 participants who were checked for blood pressure, most of the participants experienced high blood pressure, which was 29%. This percentage is more than half of the participants, which means that they are not good and need attention. If they are older than <50 years old, guidance or education is needed to participants related to the need to carry out health checks so that efforts can be made to prevent and minimize more severe health conditions.

Overview of Blood Glucose Level Test Results

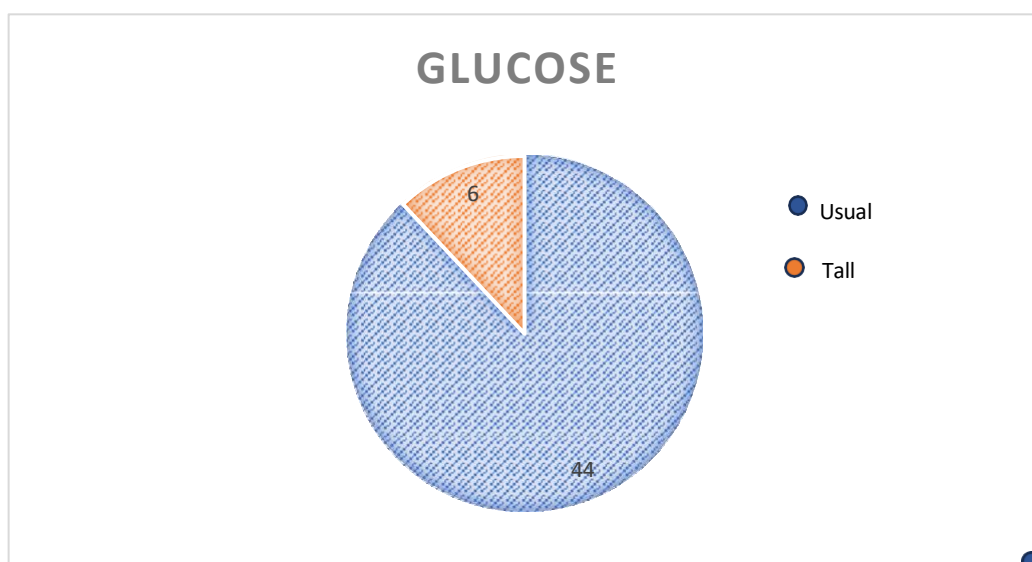


Figure 7. Glucose Test Results

Of the 50 participants who were examined for blood glucose levels, most of the participants had high blood glucose levels, which was 6%. This means that more than half of the participants experienced high blood glucose levels, and from the results of the check most were 50-72 years old. This means that with increasing age, it is necessary to make preventive efforts by doing health checks, either coming to the health center or doctor, or it can also be done independently at home.

Overview of Gout Test Results

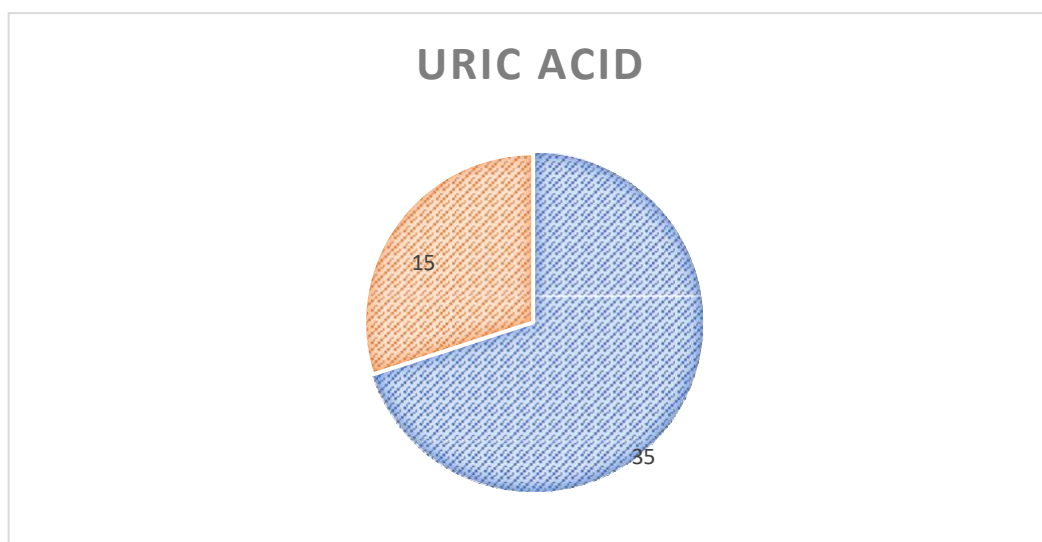


Figure 8. Gout Test Results

Of the 50 participants who were examined for uric acid, most of the participants had high uric acid levels, which was 15%. This shows that half of the participants had high uric acid. Most of the participants who experienced high uric acid levels were 50-72 years old and female. Age and gender are related to gout based on the results of research conducted by Imbar et al., (2018), that there is a close relationship between age and sex and gout. The older a person gets, the more likely a female sex is 2.5 times greater. Hypertension is one of the most common non-communicable diseases suffered by the Indonesian people with a percentage of 34,1% (Halim & Sutriyawan, 2022). Of the total 50 people examined, 29 people had hypertension. In the uric acid examination, there were 16 people who had high uric acid. Gout will develop into kidney disorders, hypertension, hyperlipidemia, cancer, diabetes and obesity if not treated quickly (Karwiti et al., 2023). Blood glucose tests show that 6 out of 50 people have high blood glucose. High blood glucose levels can be caused by the consumption of high fat, simple carbohydrates and processed foods with less physical activity (Susanti & Bistara, 2023). A person who has high blood pressure, high blood glucose, and high uric acid has a high chance of being caused by an unhealthy lifestyle and food consumed, especially fast food that is easy to find everywhere.

Hereditary factors also affect high blood glucose and uric acid levels. Therefore, a person's health is greatly affected by the food consumed. Most diseases come from food. An unhealthy lifestyle and consumption of food can lead to a wide variety of diseases.

CONCLUSION

Based on the results of the health examination by the elderly posyandu located at the RW 09 Kalimaya hall, of the 50 people examined, it can be stated that 29 people have hypertension, 6 people show high blood glucose levels, and 15 people show high uric acid. Health workers need to provide education to the community in Randegansari Village about health checks either by visiting health service places or doing it independently to know and control blood pressure, blood sugar and uric acid so that they can prevent possible diseases that will arise such as hypertension, diabetes and so on.

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