

## Education Compliance Taking Hypertension Medication to Treatment for Residents in RT. 04 RW. 03 Ngerco Village Kediri Regency, East Java

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### ABSTRACT

Hypertension is defined as a condition in which a person experiences an increase in blood pressure above normal. Hypertension occurs when the results of systolic blood pressure measurements are  $\geq 140$  mmHg or diastolic blood pressure  $\geq 90$  mmHg. From the prevalence of hypertension of 32.3% do not routinely take medication. This community service activity aims to increase understanding and knowledge of residents in RT. 04 RW. 03 Kel. Ngerco, Kab. Kediri, East Java regarding compliance with taking hypertension medication. The purpose of this Community Service is to increase the knowledge of hypertension sufferers about hypertension and the importance of compliance with taking medication and increase the compliance of hypertension sufferers. The results of the Community Service activity are known to be patient knowledge about hypertension and the importance of compliance with taking medication in RT. 04 RW. 03 Kel. Ngerco. This activity was carried out using the counseling method and question and answer session. based on the results of the counseling, local residents were very enthusiastic in asking questions and understanding the importance of taking hypertension medication regularly.

**Keywords:** Education, Hypertension, Medication Compliance

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### INTRODUCTION

Hypertension is a disease that is a national health problem. The incidence of hypertension is quite high, caused by: unhealthy lifestyles. Based on the 2021 Riskesdas, the prevalence of hypertension in Indonesia in the population aged 18 years was 34.1%, This has increased compared to the prevalence of hypertension in the 2013 Riskesdas of 25.8%. It is estimated that only 1/3 of hypertension cases in Indonesia are diagnosed, the rest are undiagnosed. Hypertension is a condition that is often found in primary health care. Hypertension control is inadequate even though effective drugs are widely available. In Indonesia, with a low level of health awareness and in the current era of globalization where there are changes in lifestyle,

many patients do not realize that they have hypertension (Nuridayanti et al., 2015).

Hypertension is a non-communicable disease (NCD) that is of concern to the World Health Organization (WHO). The prevalence of hypertension in developing countries is higher than in developed countries (WHO, 2015). A person can be said to have hypertension if systolic blood pressure is more than or equal to 140 mmHg and diastolic blood pressure is more than or equal to 90 mmHg and does not consume antihypertensive drugs ( *Joint National Committee (JNC) VII*). In Indonesia, the prevalence of hypertension tends to be high. Based on the 2013 Basic Health Research (Riskesdas), the prevalence of hypertension in the population over 18 years of age was around 25.8% and increased by around 34.1% in 2021 (Riskesdas, 2021). Globally, the World Health Organization (WHO) estimates that the prevalence of hypertension will reach 33% in 2023 and two-thirds of them are in poor and developing countries (WHO, 2023). The number of people with hypertension will continue to increase over time and is estimated to reach 1.5 billion people worldwide by 2025 (WHO, 2018). According to WHO in 2021, hypertension in pregnancy contributed to 14% of maternal deaths. Hypertension in pregnancy occurs in 5% of all pregnancies. The prevalence of hypertension in pregnancy has increased in African countries by 46%, the United States, the incidence of pregnancy with hypertension reaches 6-10%, where there are 4 million pregnant women and an estimated 240,000 are accompanied by hypertension in pregnancy each year. According to the Indonesian Riskesdas, (2021) Indonesia has a prevalence of hypertension in pregnant women of 12.7%. Based on data from the 2021 Health Profile, the three highest causes of maternal death in 2020 in East Java were hypertension in pregnancy, which was 26.90% or 152 people.

Hypertension is the number one risk factor for death (10.4 million out of 34.1 million deaths) and the disease with the highest burden (218 million out of 1.21 billion) (Naqiyya, 2020). Hypertension is also a major risk factor for cardiovascular disease (Gebremichael et al., 2019). Cardiovascular disease is the leading cause of death with an incidence of 17.9 million deaths each year, while 9.4 million occur due to complications of hypertension (Say et al., 2014). Grade 1 hypertension still has a risk of cardiovascular disease, as well as being a significant cause of death (Oparil, 2019).

Poor blood pressure control in hypertensive patients can be caused by many factors such as age, gender, education, occupation, marital status, economic status, smoking behavior, salt consumption, alcohol consumption, obesity, low knowledge and medication compliance are factors associated with poor blood pressure control, while vegetable consumption habits and regular physical activity are important behaviors in controlling blood pressure (Animut et al., 2018). Compliance with taking antihypertensive drugs is one of the factors that contributes to uncontrolled blood pressure in hypertensive patients (Niteesh K. Choudhry, MD et al., 2022). To improve compliance, knowledge is needed regarding the importance of a healthy lifestyle and the hypertension medication consumed. One effective action to prevent hypertension complications is education (Nuridayanti et al., 2015). Education is a form of independent nursing action to help hypertension sufferers, both individuals, groups, and communities, in overcoming their health problems through learning activities, in which nurses act as nurse educators. Changing a lifestyle that has become a habit for someone requires a process that is not easy (Nuridayanti et al., 2015). The effectiveness of providing education in preventing and controlling hypertension significantly increases the knowledge and attitudes of hypertension sufferers, but not all types of education are followed by a decrease in blood pressure (Adiatman, 2020). The problem of non-compliance with taking antihypertensive drugs is a major problem for hypertension sufferers. This is what triggers the progression of hypertension in other organs such as the heart and kidneys. Non-compliance with

antihypertensive treatment can affect up to 80% of the progression of hypertension and is a major problem in controlling blood pressure (Unger et al., 2020). Education is expected to influence knowledge and have an impact on improving blood pressure conditions (Oliveros et al., 2020). The results of previous studies on the effect of providing education on increasing knowledge in the Manado community with an increase in percentage of 14.4% (Nelwan, 2019). Research by Masruroh et al., (2019) shows that there is an effect of health education using animation media on knowledge about preventing complications in people with hypertension.

Pharmacists as the frontline in pharmaceutical services, especially in the community, have an important role in overcoming the high incidence of stroke due to the large number of hypertension sufferers. In developed countries, pharmacists in the community, through a pharmaceutical care approach, play a role in identifying, assessing, educating, providing referrals *and* monitoring the success of therapy.

The Faculty of Health Sciences, Kadiri University, through this Community Service program can contribute to efforts to provide education to the community to prevent hypertension in the community by providing health education to the community about compliance in taking hypertension medication.

## **METHODS**

The method used is a socialization method through the delivery of materials and distribution of leaflets related to the importance of compliance in taking medication for hypertension sufferers to the community of RT.4 RW.3, Ngerco Village, Kediri Regency. In this community service activity, the media used in the activity is by conducting counseling to the community. This activity lasts for 1 day, starting from morning until the event is finished. In this socialization, information is also provided regarding the use of antihypertensive drugs and several drug interactions that are often caused, as well as information regarding healthy lifestyles for hypertension sufferers in the community of RT.4 RW.3, Ngerco Village, Kediri Regency.

Evaluation is carried out in one stage, namely by conducting an evaluation during the activity: Direct observation and interviews with participants to obtain feedback on the extension material.

## **RESULTS**

Activity Devotion To the Community with theme "Education Compliance Taking Hypertension Medication To Treatment for Residents in RT. 04 RW. 03 Kelurahan Ngerco Kediri Regency , East Java" which was implemented with method counseling with using power point media and leaflets/ brochures with the aim is to be able to help public in understand about compliance drink drug hypertension and treatment hypertension . This Community Service activity is an activity that aims to help certain communities in several activities. In general, this program was designed by Kadiri University (UNIK) to make a real contribution to the community, especially in developing the welfare and progress of Indonesian society. Community service activities are one part of the Tridharma of Higher Education that must be carried out by lecturers. This activity basically begins with the presentation of material related to compliance with hypertension patient medication. then the material given to the community discusses the definition of hypertension, symptoms of hypertension, factors causing hypertension, classification of hypertension, and the level of compliance in taking medication for hypertension patients.



Figure 1. Residents Filling Out the Attendance Registration Form



Figure 2. Education related to compliance in taking hypertension medication in RT. 04 RW. 03 Ngerco Kab. Kediri,

## DISCUSSION

Disease Hypertension This marked with increasing pressure blood systolic  $>140$  mmHg with symptoms vary like Sick head , restless , easy fatigue , nausea vomiting , shortness of breath breath and can also cause complications disease others . The causes of hypertension are age, genetics, weight, stress, poor diet, such as consuming a lot of salt and smoking. This socialization activity also emphasizes the level of compliance in taking medication in hypertensive patients so that *the outcome* of treatment therapy can be achieved. Non-compliance in taking antihypertensive drugs will have an impact on uncontrolled blood pressure, so this will also cause complications of hypertension such as stroke and heart disease. In addition to taking antihypertensive drugs, patients must also adopt a healthy lifestyle such as exercising regularly, eating healthy foods and avoiding consuming a lot of salt and avoiding stress (Jabbar et al., 2023).

Based on the Q&A session in the discussion, the knowledge of residents regarding medication compliance, especially antihypertensive drugs, is still very minimal, the community does not understand the dangers caused by non-compliance in taking medication, residents also do not pay attention to lifestyle so that several participants are known to have



fluctuating systolic and diastolic examination values. This socialization is expected to be able to raise awareness among residents regarding the importance of medication compliance so that therapeutic outcomes are achieved and patients can enjoy a better life (Jabbar et al., 2023).

## CONCLUSION

This PKM activity was welcomed good by society specifically residents of RT. 04 RW. 03, Ngerco Village Kediri Regency. Education compliance drink drug like This attempted become continuous activity so that it can improve knowledge public related importance level compliance in consume drug antihypertensive so that the outcome of therapy treatment can be achieved, besides That after socialization patient hypertension capable apply pattern life healthy and can also take advantage of material from natural For treat hypertension. By implementing this program in the community, hopefully it can help the community, both hypertension sufferers or families of hypertension sufferers, to implement compliance in taking this hypertension medication to avoid more severe risks.

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