

HEALTH PROMOTION OF STAR FRUIT TO LOWER BLOOD PRESSURE IN HYPERTENSION

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ABSTRACT

Educational activities on the use of star fruit to lower blood pressure in hypertension are community service activities. The purpose of this community service is to increase public knowledge about the use of star fruit to lower blood pressure in hypertension. The implementation of community service in Jombatan Village, Kesamben District, Jombang Regency on December 3, 2022. The activities carried out were in the form of education with lecture methods and question and answer discussions. The media used are Audio visual aids and leaflets for educational participants. This activity is prepared about 1 month before it is carried out. Licensing and coordination with the Kesamben Health Center and the Jombatan village government and the implementation time contract are the preparatory stages carried out. The involvement of health cadres and community leaders is carried out in this community service. This activity was attended by 80 residents of Jombatan village. As an evaluation of activities, participants enthusiastically follow the activities to the end and are satisfied with the activities carried out.

Keywords: *Star Fruit, Blood Pressure, Hypertension*

INTRODUCTION

Hypertension is a condition in which a person experiences an increase in blood pressure above normal which results in increased morbidity and mortality. Blood pressure of 140/90 mmHg is based on two phases in each heartbeat, namely the systolic phase 140 to the phase of blood that is being pumped by the heart and the diastolic phase 90 indicates the phase of blood returning to the heart. Hypertension is often ignored because it does not show symptoms that can be seen from the outside so it is called the silent killer. Hypertension is a serious problem in the world that is often found in the community, because its prevalence continues to increase from year to year (Vino Rika Novia et al., 2018).

The World Health Organization (WHO) limits blood pressure that is still considered normal 140/90 mmHg, while blood pressure 160/95 mmHg is considered hypertension. WHO estimates that the number of hypertensions will continue to increase along with the growing population. In 2025, it is projected that around 29% or around 1.6 billion people worldwide have hypertension. This disease kills 9.4 million people worldwide every year. When heart disease and stroke due to hypertension are combined, these two diseases are the number one cause of death in the world (WHO, 2014). The results of Riskesdas (2018) stated the prevalence of hypertension based on the results of measurements in the population aged ≥ 18 years. The estimated number of hypertension cases in Indonesia is 63,309,620 people, while the death rate in Indonesia due to hypertension is 427,218 deaths. Hypertension occurs in the age group of 31-44 years (31.6%), age 45-54 years (45.3%), age 55-64 years (55.2%).

Untreated hypertension can reduce the quality of life a person has. The causes of hypertension in general, based on the causes are divided into 2, namely primary and secondary hypertension. Hypertensive disease is a disease that can be experienced by all age groups, and socioeconomic

groups, although the level of risk varies. Hypertension is not always present with the aging process (Yunita, 2014). Hypertensive disease if not treated properly immediately can lead to various complications such as hypertensive crisis, peripheral artery disease, dissecting aortic aneurysm, CHD, angina pectoris, myocardial infarction, heart failure, kidney failure, arrhythmia, transient ischemic attack (TIA), stroke, retinopathy, hypertensive encephalopathy and sudden death these conditions must get prompt treatment (Dasuki et al., 2018).

Hypertension can be overcome both with pharmacological and non-pharmacological treatment. Pharmacological treatment is by taking antihypertensive drugs and non-pharmacological treatment by applying a healthy lifestyle in the form of weight loss, exercise, quitting smoking, diet modifications such as consuming fruits and vegetables, reducing salt intake, and reducing alcohol consumption (PERKI, 2015).

Treatment of hypertension with non-pharmacology can be an alternative treatment or can be a complementary therapy, through natural medicine contains many high potassium levels and low sodium (Ainurrafiq, Risnah, Azhar, 2019). One of the efforts that can be done by people with hypertension is to consume star fruit. Sweet star fruit (*Averrhoa carambola* Linne) is a fruit that is often used as a medicinal plant. starfruit is one of the non-pharmacological treatments that is very useful in helping lower blood pressure. Star fruit can also be used as a treat for diabetes, paralysis and dizziness (Nathalia et al., 2017).

Star fruit is a fruit that is rich in vitamin C and oxalic acid. As well as containing various other nutrients, such as saponins, alkaloids, C-glycosides, tannins and high antioxidant activity (Leelarungrayub et al., 2016). The results of research researched by Ardiani and Mila Sari (in 2019), about the effectiveness of giving sweet star fruit juice on blood

pressure of people with hypertension.

The role of potassium along with chloride in star fruit helps maintain osmotic pressure and acid-base balance. Potassium maintains osmotic pressure in intracellular fluid and is partially bound to protein, potassium also helps activate enzyme reactions such as pyruvate kinase that produces pyruvic acid in the process of carbohydrate metabolism, and giving star fruit to hypertensive patients can make a relaxing effect for the body and can reduce sodium levels in the blood so as to control blood pressure (Ainurrafiq, Risnah, Azhar, 2019).

The method carried out in this community service is by lectures directly by extension workers to participants with leaflet tools. With health promotion, it is expected to increase the success of the importance of the use of star fruit as an effort to reduce hypertension in the community in Jombatan Village, Kesamben District, Jombang Regency.

OBJECTIVES

General Purpose

Provide understanding to the public about the Utilization of Star Fruit for Reducing Hypertension.

Special Purpose

1. Increase knowledge about hypertension for the community
2. Increase public knowledge about early detection, prevention and assistance in hypertensive emergencies.
3. Increase knowledge about the use of star fruit to reduce hypertension for the community

PLAN OF ACTION

Strategy Plan

This community service activity applies the following planning strategies:

1. Manage a community service permit letter from STIKES Husada Jombang addressed to the Jombatan village government and Kesamben Health Center.

2. After obtaining a service permit, it is continued with coordination with related parties, namely the village government, village midwives and health cadres in Jombatan Village, Kesamben sub-district
3. Contract the time of implementation of activities with related parties and distribute invitations to the community.
4. Prepare media, location of activities and conduct clean gladhi
5. Carry out activities in accordance with the plan that has been determined

Implementation

Community service activities with the theme Utilization of Star Fruit for Hypertension Reduction began by proposing activities to STIKES Husada Jombang and received a service implementation permit number 110 / STIKES / HSD / XII / 2022. Coordinating with several parties including the Kesamben health center, Jombatan village government, village midwives, health cadres and community leaders in Jombatan village. After obtaining a time contract with the Jombatan village government and the parties, the activity was carried out as planned. Implementation of this community service activity by providing education to the community directly face-to-face.

Settings

This education activity on the use of star fruit to reduce hypertension was carried out on December 3, 2022 at the Jombatan village hall, kesamben district, Jombang regency.

Target

The target of this activity is residents of Jombatan village who are willing to attend the activity. This activity was attended by 80 residents of Jombatan village, Kesamben sub-district, Jombang regency.

RESULTS AND DISCUSSION

Community service activities are carried out according to plan and begin about 4 weeks before the educational activities are carried out. The deliberative stage discussed priority health issues in Jombatan Village, Kesamben - Jombang District, to an agreement on planning educational activities. Education offered by the organizing committee Education about hypertension, education about early detection, prevention and help in hypertensive emergencies. Education on the use of star fruit to lower blood pressure in people with hypertension.

The problem raised in community service activities here is based on the results of health data that shows that there are still people in Jombatan Village, Kesamben District, Jombang Regency who do not understand the use of star fruit as an effort to reduce blood pressure in hypertension. Education in community service aims to be able to convey information related to the aims and objectives to foster a sense of trust in the community, this is one of the most important parts to provide an understanding of the importance of using star fruit as an effort to reduce hypertension in the community at large, because with the education provided to the community, the community naturally takes care of each other in prevention and as an effort to reduce blood pressure in hypertension. This activity is well supported by all parties.

A total of 80 Jombatan villagers participated in the educational activity to completion. Participants seemed enthusiastic to participate in the activity and followed the question and answer well. From the results of the evaluation of activities carried out directly, a fairly high level of satisfaction was obtained regarding this activity. Participants who take part in this activity can receive and understand the material that has been delivered well.



Figure 1. Participant Registration Healthpromotion of star fruit to lower blood pressure in hypertension in Jobatan Village, Kesamben District, Jombang Regency



Figure 2. Question and answer discussion with speaker Health promotion of star fruit to lower blood pressure in hypertension in Jobat Village, Kesamben District, Jombang Regency

CONCLUSION

Community service activities carried out in Jombatan Village, Kesamben District - Jombang by raising the issue of the Utilization of Star Fruit for Hypertension Reduction received high enthusiasm both by residents and cooperation partners, namely Puskesmas. This activity can go according to plan. As far as the activity is carried out, there is no significant loss either to the committee, cooperation partners, or participants. The results of interviews with their community members said that the education provided was very useful and gained new experiences related to the use of star fruit to lower blood pressure.

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