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Consumption Pattern Counseling About “Anti Hypertension and Anti Diabetes” and Exercise for the Elderly to Avoid Hypertension in Tenaru Village

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A B S T R A C T

The aging process as an accumulation of damage at the cellular and molecular levels that occurs over a long period of time is often associated with the occurrence of non-communicable diseases. Various studies have shown that age is one of the risk factors for non-communicable diseases, such as those often experienced by the elderly, namely hypertension and diabetes. Implementation method health promotion to the community, especially vulnerable communities such as the elderly through blood pressure checks and Random Blood Sugar (GDA) tests and also providing counseling on consumption patterns about "Anti-Hypertension and Anti-Diabetes" and Elderly Exercise to Avoid Hypertension which was carried out at the Tenaru Village Hall. After the elderly have been done, they already know a little about the symptoms and what can cause high blood pressure. In addition, KKN Group 14 students of Nahdlatul Ulama University Surabaya also provide education on elderly exercise to avoid hypertension and village midwives also provide medication to reduce symptoms of hypertension and lower blood pressure. The community (elderly) participated in attending counseling, exercise, and also tests that had been created by UNUSA KKN Group 14 to prevent hypertension or diabetes.

INTRODUCTION

WHO predicts an increase in the number of elderly people in various parts of the world, Indonesia is one of the countries facing a trend of increasing numbers of elderly people, the central statistics agency released data on the number of elderly people based on the results of the 2016 inter-census population survey, it is estimated that the number of elderly people (aged 60 years and over) in Indonesia is 22,630,882 people. This figure is estimated to increase to 31,320,066 people in 2022. The aging process as an accumulation of damage at the cellular and molecular levels that occurs over a long period of time is often associated with the occurrence of non-communicable diseases. Various studies have shown that age is a risk factor for non-communicable diseases, such as those often experienced by the elderly, namely hypertension and diabetes (Ministry of Health of the Republic of Indonesia, 2022). The risk of diabetes increases with age, especially over the age of 40, because glucose intolerance increases at this age. The aging process reduces the ability of pancreatic beta cells to produce insulin. In addition, in older people, mitochondrial activity in muscle cells decreases by 35%. This is associated with a 30% increase in fat content in muscles, which causes insulin resistance (Ministry of Health of the Republic of Indonesia, 2022).

The results of the 2018 Riskesdas showed that the prevalence of hypertension worldwide was 26.4% in adults (Ramakrishnan et al., 2019). The Ministry of Health (2018) stated that in Indonesia the prevalence of hypertension increased from 7.6% in 2013 to 9.5% in 2018 (Riskesdas, 2018). Based on the main results of the 2018 East Java Province Riskesdas, Surabaya City was ranked 12th out of 38 districts in the city (Dinkes, 2018). The prevalence of diabetes worldwide is 63.50% (Akın and Bölük, 2020), while in East Java, the prevalence of diabetes diagnosed by doctors at any age is 2.02% (Dinkes, 2018).

One of the factors causing high blood pressure in Tenaru Village is poor lifestyle and unhealthy eating habits. This should be the focus of stakeholder intervention because current community behavior has shifted to consuming high-salt foods, including the elderly who are very susceptible to the risk of hypertension. Risk factors for high blood pressure are age, gender, family history, genetics (risk factors that cannot be changed/controlled), smoking habits, obesity, inactivity, stress, estrogen use and one of the factors that can cause high blood pressure is salt. habit of drinking while drunk from (RiskesDas, 2018).

The high prevalence of hypertension and diabetes in the elderly requires the role of health workers in health promotion and prevention efforts. Monitoring blood pressure, blood sugar, and exercise in the elderly is part of an effort to reduce recurrence in people with hypertension and diabetes. Controlled blood pressure and blood sugar and regular physical activity (exercise for the elderly) can improve physical and mental quality of life. Physical quality of life can improve glucose metabolism, strengthen bones and muscles, and lower blood cholesterol levels (Frida, et al., 2020).

METHOD

To achieve the expected goals of the KKN program in Tenaru Village, KKN Group 14 students of Nahdlatul Ulama University Surabaya conducted health promotion to the community, especially vulnerable communities such as the elderly through blood pressure checks and Random Blood Sugar (GDA) tests and also providing counseling on consumption patterns about "Anti Hypertension and Anti Diabetes" and Elderly Exercise to Avoid Hypertension which was carried out at the Tenaru Village Hall.

RESULT AND DISCUSSION

After conducting a health screening in the form of blood pressure (tension) examination and a random blood sugar test (GDA), it was found that most elderly people suffer from hypertension, and most of the elderly are not aware that they suffer from hypertension and also do not know the symptoms and causes of hypertension. However, after being conducted, the elderly already know a little about the symptoms and what can cause high blood pressure. In addition, KKN Group 14 students from Nahdlatul Ulama University Surabaya also provided education on elderly exercise to avoid hypertension and village midwives also provided medication to reduce symptoms of hypertension and lower blood pressure.

1. Implementation Image

Image of implementation of counseling on consumption patterns regarding "Anti-Hypertension and Anti-Diabetes" and Elderly Exercise to Avoid Hypertension as well as blood pressure (tension) checks and random blood sugar tests (GDA).

a.



b.



c.



d.



Fig. 1 (a) counseling on consumption patterns about “Anti Hypertension and Anti Diabetes”; (b) Blood Pressure Check; (c) Random Blood Sugar Test (GDA) (d) Elderly Exercise to Avoid Hypertension

CONCLUSION

Based on the discussion above, it can be concluded that the UNUSA KKN Group 14 program in promoting health to the community, especially vulnerable communities such as the elderly through blood pressure checks and Random Blood Sugar (GDA) tests and also providing counseling on consumption patterns about "Anti Hypertension and Anti Diabetes" and Elderly Exercise to Avoid Hypertension went well where the community (elderly) participated in attending counseling, exercise, and also tests that had been created by UNUSA KKN Group 14 to prevent hypertension or diabetes.

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REFERENCES

Akın, S. and Bölük, C. (2020) 'Prevalence of comorbidities in patients with type-2 diabetes mellitus', *Primary Care Diabetes*, pp. 10–13. doi: 10.1016/j.pcd.2019.12.006.

- Dinkes (2018) 'Main Results of East Java Basic Health Research 2018', Jakarta: Health Research and Development Agency, Ministry of Health of the Republic of Indonesia, pp. 1–82.
- Ministry of Health of the Republic of Indonesia. (2022). Empowered Elderly, Prosperous Nation. (H. Habibi, Editor.) Pusdatin.
- Frida, I., Farida, Irawandi, D., Anik Rustini, S., Wiwiek, L., & Faridah. (2020). Application of elderly exercise to control blood pressure and blood sugar. CARADDE: Journal of Community Service,
- Ramakrishnan, S. et al. (2019) 'Prevalence of hypertension among Indian adults: Results from the great India blood pressure survey', Indian Heart Journal, 71. doi: 10.1016/j.ihj.2019.09.012.
- Riskesdas, K. (2018) 'Main Results of Basic Health Research (RISKESDAS)', Journal of Physics A: Mathematical and Theoretical, 44(8), pp. 1–200. doi: 10.1088/1751- 8113/44/8/085201.