

## Overview of Dietary Compliance in Hypertensive Patients at Haji Adam Malik Hospital Medan in 2022

Vina Yolanda Sari Sigalingging<sup>1</sup>, Rotua Elvina Pakpahan<sup>2</sup>, Wilda Satriana Gea<sup>3</sup>  
<sup>1,2,3</sup> STIKes Santa Elisabeth Medan

---

### ARTICLE INFO

#### Keywords:

*Hypertension,  
Diet, Compliance Diet*

---

#### Email :

[vina.ysigalingging@gmail.com](mailto:vina.ysigalingging@gmail.com)  
[rotuaelvina@gmail.com](mailto:rotuaelvina@gmail.com)  
[wildasatrianagea20@gmail.com](mailto:wildasatrianagea20@gmail.com)

---

### ABSTRACT

High blood pressure is an abnormal increase in blood pressure in the arteries over a period of time. According to WHO, the normal limit for blood pressure is 140/90 mmHg, while a person is declared to have hypertension if his blood pressure is >160/95 mmHg. One of the factors that can affect controllable blood pressure is lifestyle or lifestyle, including the application of diet. The purpose of this study is to determine the description of diet compliance in hypertensive patients at Haji Adam Malik General Hospital Medan 2022. This study uses a descriptive method. Sampling technique using purposive sampling with a sample of 39 respondents. The measuring instrument uses is a questionnaire. The results of this study show that the category of adherence to the hypertension diet is (97.4%), and the category of non-adherence to the hypertension diet is (2.6%). It is expected that people with hypertension will maintain and improve their diet compliance better, reduce consumption of drinks and foods with high blood pressure.

Copyright © 2022 Jurnal Eduhealth. All rights reserved is Licensed under a [Creative Commons Attribution- NonCommercial 4.0 International License \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)

---

## 1. INTRODUCTION

Hypertension is one of the health problems that is quite dangerous in the world, because hypertension is a major risk factor that leads to cardiovascular diseases such as heart attack, heart failure, stroke and kidney disease which in 2016 ischemic heart disease and stroke are the two main causes of death in the world.

Factors that influence the occurrence of hypertension are divided into two groups, namely congenital or irreversible factors such as gender, age, genetics and modifiable factors such as diet, exercise habits and others. One of the factors that can affect the control of blood pressure is a lifestyle or lifestyle, including the application of a diet. Intake of foods that contain high sodium is one of the main risk factors for hypertension. The frequency of eating, the type of food consumed, fast food, and foods that are high in salt and low in fiber will trigger hypertension and vascular disease.

WHO data (2018) shows that around 1.13 billion people in the world suffer from hypertension, meaning that 1 in 3 people in the world is diagnosed with hypertension. The number of people with hypertension continues to increase every year, it is estimated that in 2025 there will be 1.5 billion people affected by hypertension, and it is estimated that every year 10.44 million people die from hypertension and its complications (Hidayat et al., 2021). In Indonesia, hypertension is a disease that ranks first every year, it is estimated that around 80% of hypertension cases will increase, especially in developing countries in 2025, from 639 million cases in 2000 (Huwae et al., 2021). Hypertension occurs in the age group 31-44 years (31.6%), age 45-54 years (45.3%), age 55-64 years (55.2%). The prevalence of hypertension in Indonesia is 31.7%, which means that almost 1 in 3 people aged 18 years and over suffers from hypertension.

The hypertension diet aims to help lower blood pressure and maintain it towards normal. In addition, the diet is also intended to reduce other risks such as excess body weight, levels of fat,

cholesterol and uric acid in the blood. Diet food is highly recommended for people with hypertension to avoid and limit foods that can increase blood cholesterol levels and increase blood pressure.

Hypertension diet is carried out by hypertensive patients throughout their lives so that the patient's willingness and compliance are needed to carry out dietary therapy. Dietary non-compliance is caused by lifestyle changes, consuming foods high in fat, cholesterol, smoking and high stress. Diet non-compliance in hypertensive patients is also caused by lack of education so that patients do not understand the impact of non-compliance with diet, another cause is due to low economic level so that food needs are adjusted to income or income .

Dietary Approches to Stop Hypertension (*DASH*) is a diet therapy recommended by the American Heart Association (*AHA*). Therefore, efforts are needed to comply with diet, because diet is very important for people with hypertension and can reduce complications for people with hypertension.

## 2. METHOD

This type of research design is descriptive research. The sampling technique used was purposive sampling using the Vincent formula with a sample of 39 respondents at Haji Adam Malik Hospital Medan. The measuring instrument used is a questionnaire and analysis of research data using univariate analysis.

## 3. RESULTS AND DISCUSSION

Based on the research that has been carried out, the results of research on dietary compliance in hypertensive patients at Haji Adam Malik Hospital in Medan 2022 are described. The number of respondents in this study were 39 people. This research was started from May 12, 2022 to May 18, 2022 at Haji Adam Malik General Hospital, Medan.

The results showed that the frequency distribution of dietary compliance in hypertensive patients at Haji Adam Malik General Hospital Medan 2022 was as follows:

**Table 1. Distribution of Frequency of Dietary Compliance in Hypertensive Patients at Haji Adam Malik Hospital Medan 2022 (n=39)**

Diet Compliance Category	frequency (f)	Percent (%)
Obey	38	97,4
Not obey	1	2,6
<b>Total</b>	<b>39</b>	<b>100</b>

Based on the table above, it was found that 38 people (97.4%) were respondents in the hypertension diet adherence category, and 1 person (2.6%). The results of this study indicate that the majority of respondents are obedient in carrying out a hypertension diet. This is due to the characteristics of a healthy lifestyle, experience and sufficient knowledge about the things that must be done in maintaining health. Adherence is the degree to which the patient follows the clinical advice of the treating doctor. Adherence is simply defined as extending behavior related to taking medication, following diet and changing lifestyle according to medical instructions.

This study is in line with Nita's research (2018), that of the 81 respondents the majority of patients adhered to their hypertension diet, namely 54 people (66.7%) and 27 people who did not adhere to their hypertension diet (33.3%). And Imran's research (2017) showed the results were mostly compliant with the diet as many as 19 respondents (63.3%), non-compliant as many as 11 people (36.7%).

According to the researcher's assumptions, respondents are obedient because they can accept what is suffered by hypertensive patients, and in accordance with the recommendations of medical personnel so that it is not in accordance with the patient's condition and Respondents who are disobedient because they do not comply. still not able to control the appetite to not consume foods that need to be limited or reduced by the sufferer. hypertension. From some positive statements that patients consume green vegetables more often, where green vegetables are a good source of fiber. Eating vegetables regularly can lower high blood pressure. Low fiber intake will cause obesity and can have an impact on hypertension.

This study is in line with Susanti (2021), the respondents in this study were 45 respondents. This study shows that the intake of nutritious food, one of which is eating vegetables every day, can reduce hypertension. In addition to the fiber contained in vegetables, potassium is also associated with lowering high blood pressure.

In this study, in addition to higher vegetable consumption, the statement of consuming garlic became one of the highest points of the research results. Researchers assume that non-pharmacological treatment can reduce high blood pressure, one of which is by consuming garlic. Utilizing herbs to treat high blood pressure, garlic has a number of properties that are very beneficial for the body.

This research is supported by Yasril's research, (2020) The results obtained by research respondents, the average systolic blood pressure before consuming garlic was 133 mmHg (SD = 6749), lower than the systolic blood pressure before consuming garlic, which was 149 mmHg. (SD = 7,379). Garlic bulb extract at a dose of 2.4 g/individual/day was able to reduce blood pressure in patients with hypertension. The decrease in blood pressure occurred 5-14 hours after treatment. The extract contains 1.3% allicin.

In addition to a number of positive statements, there were also negative statements answered by respondents in the obedient category. In the statement of consuming beef jerky, the researchers found that the respondents answered that they had never consumed beef jerky again, stating that they had complied with clinical recommendations. Jerky is one of the causes of high blood pressure, consuming beef jerky will aggravate hypertension because beef jerky has a high sodium intake. Excessive sodium intake can be harmful to health, triggering high blood pressure. Darmawan's research (2018) found that respondents with good sodium intake tended to have mild hypertension as many as 10 people (83.3%) while samples with sodium intake were more likely to have moderate hypertension as many as 12 people (75%).

#### 4. CONCLUSION

From the results of this study with a sample of 39 respondents regarding dietary compliance in hypertensive patients at Haji Adam Malik Hospital Medan in 2022 it can be said: Dietary compliance in hypertension patients at Haji Adam Malik Hospital Medan 2022 is in the category of dietary compliance as many as 38 people (97.4 %).

#### REFERENCES

- [1] A. Agrina, S. S. Rini, and R. Hairitama, "Kepatuhan Lansia Penderita Hipertensi Dalam Pemenuhan Diet Hipertensi," *Sorot*, vol. 6, no. 1, p. 46, 2011, doi: 10.31258/sorot.6.1.2001.
- [2] A. M. Ahmad Asyrofi, Setianingsih, "PERBEDAAN PENATALAKSANAAN DIET HIPERTENSI PADA BERBAGAI TINGKAT PENGETAHUAN DAN DUKUNGAN KELUARGA Ahmad Asyrofi, Setianingsih, Ahmad Munthoha," vol. 5, pp. 169–176, 2017.
- [3] A. Yasril, "Pengaruh Bawang Putih (Rubah) Terhadap Tekanan Darah Di Padang Gamuak Kelurahan Tarok Dipo Tahun 2020," *Empower. Soc. J.*, vol. 1, no. 2, pp. 77–88, 2020.
- [4] D. Gajewska, J. Niegowska, and A. Kucharska, "Compliance to da SH diet by patients with essential hypertension," *Polish J. Food Nutr. Sci.*, vol. 60, no. 1, pp. 71–76, 2010.
- [5] B. Mukti, M. P. Dokter, F. Kedokteran, and U. Lampung, "Penerapan DASH (," pp. 1–6, 2018.
- [6] B. Mutmainnah, D. Djalal, and A. Suyuti, "Edukasi Bahaya Hipertensi , ' The Silent Killer ' dan Cara Pemeriksaan Tekanan Darah pada Mahasiswa FIK UNM," pp. 284–286, 2021.
- [7] F. N. Kholifah, S. Bintanah, and E. Handarsari, "Serat dan Status Gizi Kaitannya dengan Tekanan Darah pada Pasien Hipertensi Rawat Inap di Rumah Sakit Umum Daerah Tugurejo Semarang," *J. Gizi Unimus*, vol. 5, no. 2, pp. 21–30, 2015, [Online]. Available: <https://jurnal.unimus.ac.id/index.php/jgizi/article/view/2362>.
- [8] H. Darmawan, A. Tamrin, and N. Nadimin, "Hubungan Asupan Natrium dan Status Gizi Terhadap Tingkat Hipertensi Pada Pasien Rawat Jalan Di RSUD Kota Makassar," *Media Gizi Pangan*, vol. 25, no. 1, p. 11, 2018, doi: 10.32382/mgp.v25i1.52.
- [9] I. A. H. Tumenggung, "Hubungan Pengetahuan Dengan Kepatuhan Diet Pasien Hipertensi Di Rsd M.M. Dunda Limboto Kabupaten Gorontalo," *Heal. Nutr. J.*, vol. III, no. 2, pp. 2549–

- 7618, 2017.
- [10] J. Rekursif and D. Puspitaningrum, "Sistem pakar perencanaan diet bagi penderita hipertensi menggunakan metode fuzzy mamdani," vol. 2, no. 2, 2016.
  - [11] N. Susanti, P. A. Siregar, and R. Falefi, "Determinan Kejadian Hipertensi Masyarakat Pesisir Berdasarkan Kondisi Sosio Demografi dan Konsumsi Makan," vol. 2, no. 1, pp. 43–52, 2020.
  - [12] R. Yashawant, K. Nitesh, P. Shatrughan, K. Vijay, and S. Ankur, "Medication Adherence: Assess Compliance and Associated Factors among Hypertensive Patients," *J. Hypertens. Manag.*, vol. 6, no. 1, pp. 8–12, 2020, doi: 10.23937/2474-3690/1510048.
  - [13] Susanti, "KEPATUHAN DIET DENGAN KEJADIAN KOMPLIKASI PADA PENDERITA," vol. 5, no. 1, 2019.
  - [14] Y. Nita, "1,2 1, 2," vol. 6, no. 1, pp. 90–97, 2018.
  - [15] Y. Taqiyah and R. Ramli, "Manajemen Nutrisi dan Terapi Diet pada Pasien Hipertensi," vol. 1, no. 1, pp. 11–15, 2021.