

# Overview of Lifestyle in Hypertension Sufferers at Exemplary Community Health Centers in 2022

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ARTICLE INFO ABSTRACT Lifestyle is a pattern of life in a person in everyday life such as activities, interests, and treatment. There are several unhealthy lifestyles through one's living habits, for example smoking habits, irregular eating patterns, irregular physical activity or exercise, and stress. The purpose of this study was to identify the lifestyle of hypertension sufferers at the Teladan Health Center in 2022. The population in this study was hypertension sufferers at the Teladan Keywords: Health Center in 2022. The sample in this study was 41 people with random Lifestyle sampling. The measuring instrument used is a questionnaire. Data analysis used Hypertension univariate test. The results of the study based on demographic data obtained data from the age of 45-54 years (12 respondents). those with the highest education from 27 universities, sex determined by men as many as 22 respondents. Lifestyle Description of Hypertension Patients at the Model Health Center in 2022, namely the sufficient category, with a total of 22 respondents (53.7%). Email: Copyright © 2023 Eduhealth Journal. All rights reserved is Licensed under a taniasilitonga29@gmail.com Creative Commons Attribution- NonCommercial 4.0 International License (CC friskaginting20@gmail.com BY-NC 4.0)

#### 1. INTRODUCTION

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Hypertension is the occurrence of an increase in blood pressure in a person above normal limits. Uncontrolled hypertension can result in the risk of kidney failure, heart disease and stroke. The older you get, the more at risk a person will get hypertension due to natural changes in the body's hormones (1). If a person is exposed to high blood pressure for a long time, it can cause damage to blood vessels throughout the body (2). In people with hypertension, lifestyle greatly influences the increase in hypertension which influences this, including consuming alcohol, consuming coffee/caffeine, smoking habits, habits of lack of physical activity and stress (3). Wrong diet can affect the occurrence of hypertension, preserved foods and high amounts of table salt and seasonings, can increase blood pressure because they contain excess amounts of sodium (4).

The risk of developing hypertension in lifestyle in young adults (21-40 years) with the increasing incidence of hypertension is influenced by an unhealthy lifestyle. A lifestyle full of hard work in stressful situations and prolonged stress is the most common thing, which is accompanied by a lack of exercise, smoking, drinking alcohol and coffee so that these can all increase the risk of developing hypertension (5).

According to the World Health Organization (WHO) in 2011, up to one billion people in the world have hypertension and two-thirds of them are in developing countries with low to moderate incomes. Among all WHO member countries, the highest prevalence is in the African region of 46%, and the lowest is in America 35%. In Southeast Asia, 36% of adults suffer from hypertension. Survey results in Indonesia Prevalence in 2016 seems to have increased, from 1.7% (6,098) to 2.6% (7,244) MOH RI, 2016, in Autoridad Nacional del Servicio Civil (2021). And the highest hypertension in Indonesia is in South Kalimantan at 44.1%. The prevalence of hypertension at the age of 18 years and over in the Province of NTB is 24.3% (Riskesdas 2018). The prevalence of hypertension in North Sumatra Province is 24.7%, while the prevalence of hypertension in Medan City is based on measurements of 28.1%.) of the ten biggest diseases in 2016 with visits of 400 visits. Meanwhile, based on the monthly report of the elderly posyandu in March 2017 it was found that the proportion of elderly hypertensive patients who visited during March 2017 was 42.53% (5).

Lifestyle is a very important factor affecting people's lives. An unhealthy lifestyle can cause hypertension to occur as a result of food, physical activity, stress, and smoking. Diet is also very influential with the emergence of hypertension. Types of food that can cause hypertension include

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consuming ready-to-eat foods, containing preservatives, too high salt levels in food, and excess consumption of fat (6).

Hypertension sufferers are very influential on someone who does physical activity, whereas someone who does not do physical activity has a higher heart rate which can result in harder work of the heart muscle (7).

Patients with hypertension can occur because the arterial walls experience thickening which occurs due to a buildup of collagen in the muscle layer, so that the blood vessels will slowly narrow and become stiff. Systolic blood pressure increases due to reduced flexibility in the large blood vessels due to age until the seventh decade, while diastolic blood pressure can increase until the fifth and sixth decades, then it will settle down and may also decrease. The increase in age will cause physiological changes that occur as the elderly experience an increase in peripheral resistance and sympathetic activity. Regulation of blood pressure occurs in the baroreceptor reflex in the elderly whose sensitivity has decreased, while the role of the kidneys can be reduced in renal blood flow and decreased glomerular filtration rate (7).

Controlling and preventing hypertension must adopt a healthy lifestyle. Lifestyle changes that can be made are such as managing diet, exercising and avoiding consumption of coffee and smoking, as well as stress management (8). Things that can change an unhealthy lifestyle to be healthy are done by maintaining diet, exercise, sodium reactions (restriction of sodium / table salt), diet, stopping smoking, and avoiding stress. The way to reduce hypertension can be pharmacological therapy by taking antihypertensive drugs (9).

#### 2. METHOD

The research design is a research strategy in identifying problems before planning the final data collection. The research design is also used to identify the structure of the research to be carried out (10). The type of research design used in this research is descriptive research which aims to describe (describe) important events that are happening in the present. The population is the subject (eg humans; clients) that meet predetermined criteria (10). The population in this study were all patients at Teladan Health Center as many as 730 patients. The sample is part of the accessible population that can be used as a research subject through sampling. Sampling is the process of selecting a portion of the existing population (10).

The technique used in this study uses *convenience sampling* or *accidental techniques sampling* where the way of determining the sample is by looking for subjects or basic things that are fun or wearing researchers. The subject was chosen because it happened to be found at the same place and time in data collection (10). The sample in this thesis is 41 people with hypertension at the Teladan Health Center.

#### 3. RESULTS AND DISCUSSION

Based on the research conducted aiming to identify the lifestyle of hypertension sufferers at the Teladan Health Center with a total of 41 respondents, the authors obtained the research results as follows:

Table 1. Distribution of Respondents Based on Demographic Data (Age, Gender, Education, Income, Family History of Hypertension)

Characteristics	Frequency(f)	Percentage (%)
Age		
35-44	6	14,6
45-54	12	29,3
55-64	11	26,8
65-74	11	26,8
75-84	1	2,4
Total	41	100.0
Gender		
Man	22	53,7

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Woman	19	46,3
Total	41	100.0
Education		
College Graduate	27	65,9
Graduated from elementary school	3	7,3
Middle school graduate	1	24,4
Graduated from high school	10	2,4
Total	41	100.0
Income		
<idr 500,000="" month<="" per="" td=""><td>3</td><td>7,3</td></idr>	3	7,3
> IDR 1,500,000 per month	36	87.8
Rp. 500,000 – Rp. 1,500,000 per month	2	4,9
Total	41	100.0
Family history of hypertension		
Yes	22	53,7
There isn't any	19	46,3
Total	41	100.0

Based on table 1 above, it is obtained that the majority of respondents are in the age range of 45-54 years, namely 12 respondents (29.3%) and minorities are in the age range 75-84, namely 1 respondent (2.4%).

Based on gender data, it was obtained that the majority were male as many as 22 respondents (53.7%) and the minority female sex as many as 19 respondents (46.3%).

Based on educational data, it was obtained that the majority of respondents had graduated from university with 27 respondents (65.9%) and a minority who graduated from junior high school, 1 respondent (2.4%).

Based on the income data, it was obtained that the majority, namely income > Rp. 1,500,000 per month, was 36 respondents (87.8%) and the minority income was Rp. 500,000 – Rp. 1,500,000 per month.

Based on status data, it was obtained that the majority of statuses were married as many as 34 respondents (82.9%) and minority status as widowers as many as 1 respondent (2.4%).

Based on data from family history with hypertension, it was obtained that the majority Yes 22 respondents (53.7%) and the minority No 19 respondents (46.3%).

Table 2 . Frequency Distribution of Lifestyle Descriptions of Hypertension Patients at Exemplary Health Centers in 2022.

Lifestyle of Hypertension Sufferers	Frequency (f)	Percentage (%)
Good	0	0
Enough	22	53,7
Not enough	19	46,3
Total	41	100.0

Based on table 2, the distribution of the lifestyle frequency of hypertension sufferers at Exemplary Health Centers is mostly in the sufficient category, with 22 respondents (53.7%), the rest in the Less category, with 19 respondents (46.3%), and there is no Good category (0%). So the overall result is 41 respondents (100.0%).

Table 3. Distribution of Smoking Frequency in the Lifestyles of Hypertension Patients at Exemplary Community Health Centers in 2022.

Smoke	Frequency (f)	Percentage (%)
low exposure to secondhand smoke	32	78.0



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high exposure to cigarette smoke	9	22.0
Total	41	100.0

Based on table 3 the distribution of smoking frequency in the lifestyle of hypertensive patients in model health centers is included in the category of low exposure to cigarette smoke, as many as 32 respondents (78.0%).

Table 4. Frequency Distribution of Physical Activity in the Lifestyles of Hypertension Patients at Model Health Centers in 2022.

Physical Activity	Frequency (f)	Percentage (%)
Enough	31	75,6
not enough	10	24,4
Total	41	100.0

Based on table 4 the distribution of the frequency of physical activity in the lifestyle of hypertension sufferers at the exemplary public health center is included in the sufficient category, with 31 respondents (75.6%).

Table 5. Frequency Distribution of Eating and Drinking Habits in the Lifestyles of Hypertension Patients at Model Health Centers in 2022.

Eating and Drinking Habits	Frequency (f)	Percentage (%)
Good	30	73,2
Not good	11	26,8
Total	41	100.0

Based on table 5. the distribution of the frequency of eating and drinking habits in the lifestyle of hypertensive patients at the model health center in 2022 with the results of the data that can be included in the good category of 30 respondents (73.2%).

Table 6. Distribution of Stress Frequency in the Lifestyles of Hypertension Patients at Model Health Centers in 2022.

Contents in 2022.		
stress	Frequency (f)	Percentage (%)
21-22 moderate	1	2,4
14-20 mild	3	7,3
<14 not stressed	37	90.3
Total	41	100.0

Based on table 6. the distribution of the frequency of stress on the lifestyle of hypertensive sufferers at the exemplary health center in 2022 the results obtained by respondents did not experience stress as many as 37 respondents (90.3%).

Researchers assume that people with hypertension are caused by several factors, namely smoking habits, physical activity, eating and drinking habits, and stress. The lifestyle of hypertension sufferers at the exemplary health center is in the sufficient category, which is caused by a high exposure to cigarette smoke by 9 respondents (22.0%), then not enough or not doing enough physical activity by 10 respondents (24.4%), and not good in maintaining eating patterns or eating and drinking habits as many as 11 respondents (26.8%) and on stress the respondents did not experience stress. The cause of hypertension due to a bad lifestyle with smoking can trigger the heart muscle to work faster because it contains dangerous nicotine. Physical activity also affects because to improve blood flow, at least 3 times a week can do sports. Eating and drinking habits or eating patterns include consuming excessive salt which can cause high sodium to become a natrioretic hormone which results in an increase in blood pressure, and consuming alcoholic beverages which can damage internal organs such as the heart and damage to blood vessels. Even though there was no stress on the respondent,

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sometimes stress can also cause an increase in blood pressure which occurs when thoughts are not controlled by oneself, there are social, family, and economic problems that can also affect stress.

Supported by Wiwiek et al, (2021) after the age of 45 years and over the arterial walls will experience thickening (11). The process of thickening is due to a buildup of collagen in the muscle layer so that this can cause blood vessels to narrow and stiffen, causing an increase in blood pressure. At the age of 45 and over a person is also prone to experiencing increased stress which can trigger the release of the hormones cortisol and epinephrine resulting in increased blood pressure and heart rate, uncontrolled stress will result in hypertension (11).

Ngurah and Yahya (2015) from the results of their research found that the most sufferers of hypertension experienced in men due to the risk of developing hypertension in men at the age of 30 years and over (12) and there are several factors driving the risk of hypertension in men such as irregular eating patterns, fatigue, stress at work, and lifestyle that cannot be controlled so that it triggers higher hypertension in men aged 30 years and over, whereas in women increased occurrence of hypertension during menopause (13).

Irene et al (2019) from the results of her research found that smoking is a part of people's life that is often encountered. Smoking is part of people's lives. Where from a health perspective, no one agrees or sees the benefits it contains and it is not easy to reduce and eliminate it, because lifestyle is one of the health problems and is considered a risk factor for developing hypertension. (14)

M. Aminuddin (2016) according to the results of his research, it was found that respondents consumed foods containing salt in the low category, but it would also be possible for salt containing sodium to be used to carry out bodily functions. Excessive salt intake will trigger high blood pressure due to fluid retention and increased blood volume (15).

Nofri et al (2017) according to the results of his research that there is a relationship between heredity and the incidence of hypertension. Inherited genes play a major role in determining blood pressure, although hereditary history does not always cause hypertension. Of course, it is also influenced by other environmental factors, which then causes a person to suffer from hypertension. Therefore, it is necessary to maintain health and prevent hypertension as early as possible (16).

## 4. CONCLUSION

Based on the results of the study with a sample of 41 respondents regarding the Lifestyle Description of Hypertension Patients at the Exemplary Health Center in 2022, it can be concluded that hypertension sufferers at the Exemplary Health Center have an adequate category for hypertension sufferers as many as 22 respondents (53.7%) from 41 respondents.

### **REFERENCES**

- [1] Sampara N, Saleng H, Triananinsi N. Gymnastics as a Treatment for Hypertension in the Elderly at Galungbokong Pustu, Kabba Village, Pangkep Regency. J Abdimas Health Pioneer. 2020;2(1):42–6.
- [2] Muharni S, Christya Wardhani U. Reducing Blood Pressure in Elderly Hypertension with Ergonomic Exercise. J Endur. 2020;5(1):71.
- [3] RI Ministry of Health. Hypertension Info. Jakarta Ministry of Health Republic of Indonesia. 2014:
- [4] Damayanti NMA, Suardana IW, Manafe NO, Putra IGY. Description of Lifestyle in Patients with Hypertension at Health Center II West Denpasar. J Health Med Udayana. 2019;5(1):26–40.
- [5] Fadhli WM. Relationship between Lifestyle and Hypertension in Young Adults in Lamakan Village, Karamat District, Buol District. J HEALTH. 2018;7(6):1–14.
- [6] Z A. Description of the Diet of Children Aged 3-5 Years with Malnutrition at the Tri Sakti Balong Tani Maternity Boarding School, Jabon Sidoarjo Midwiferia District. 2015;
- [7] Purbasary EK, Nelafika R. Lifestyle Description of Hypertension Sufferers: Literature Review Lifestyle Description of People with Hypertension: Literature Review Introduction Hypertension can occur without causing signs and symptoms or complaints so that many people are not aware. 2021;28(3):11–9.

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E-ISSN. 2808-4608

- [8] Ratnawati A, Hendarsih S, Pratiwi AI. Lifestyle in Hypertension Patients in the Work Area of the Wates Health Center, Kulon Progo Regency. J Health Researcher Suara Forikes Vol VIII Number. 2017;2:82–6.
- [9] Roni F. Well being, Vol. 3 No. 2, 2018 18. 2018;3(2):18–32.
- [10] Nursalam H, Hons MN. Writing Literature Reviews and Systematic Reviews in Health Education (Example). Acad edu. 2020;
- [11] Natalya W, Oktaviani H. Characteristics of Age, Stress Level and Lifestyle of Hypertension Clients in the Work Area of the Wonopringgo Health Center, Pekalongan Regency. 13 th Univ Res Colloqium 2021. 2021; (Riskesdas 2018):1110–5.
- [12] Setiawan PYB, Wartana IGNAW, Yuliasih NW. The Effect of Mannitol and Maltodextrin Fillers on the Quality of Instant Drink Powder Extract of Katuk Leaves and Pandan Wangi Leaves as Antioxidants. J Integrated Health. 2020;4(1):18–24.
- [13] Zuhartul Hajri H. Lifestyle of Hypertension Sufferers. J Ilm PANNMED (Pharmacist, Anal Nurse, Nutr Midwivery, Environ Dent. 2021;16(2):326–30.
- [14] Momomuat S, Kundre R. At the Kawangkoan Health Center. 2019;3(1):1–8.
- [15] Caries R, At G, Class S, Sdn AND, From D, Food K, et al. Journal of Health Stake Earth Borneo (. 2019;2(1):31–6.
- [16] Juwita R. Al Tamimi Public Health. J Public Heal Sci. 2018;7(1):42–51.