

## **The Effect of Support On Diet Compliance For Hypertension In The Elderly In Stroke Prevention at Balowerti Community Health Center, Kediri City**

**Hariyono<sup>1\*</sup>, Yuly Peristiowati<sup>2</sup>, Arantriwardani<sup>3</sup>**

<sup>1,2</sup>Universitas STRADA Indonesia

<sup>3</sup>RSUD Kilisuci

**\*Corresponding author:** [hariyonoklh@gmail.com](mailto:hariyonoklh@gmail.com)

### **ABSTRACT**

Disease hypertension is one of disease degenerative which is often experienced by the next age. Symptoms hypertension appear consequence non-compliance sufferer hypertension in running a hypertension diet. Changes in lifestyle life public globally make consumption fresh vegetables and fiber reduced, increased with increasing consumption of salt, fat, sugar increased. Research objectives This is Analyze Influence Support Family According to Friedman's Theory Regarding Compliance Diet Hypertension in Advanced Age In Prevention Stroke Disease in Health Center Balowerti Kediri City. Research design This use approach cross sectional . The population all elderly affected hypertension in the Community Health Center Balowerti Kediri City . Sampling technique using systematic random sampling with the sample a total of 65 people. Independent variable support family and dependent compliance with hypertension diet in the elderly . Research instrument use sheet online questionnaire . Data processing includes editing, coding, scoring, tabulating and statistical testing using chi-square. Research results part large (66.7%) respondents get support good family, a total of 37 people almost from half (68.5%) of respondents obedient on hypertension diet. The chi-square test shows that mark significance p-value  $0.004 < (0.05)$  so  $H_0$  is rejected. Research This can concluded that There is Influence support family According to Friedman's Theory to hypertension diet compliance On Next Age In Prevention Stroke Disease In Health Center Kediri City Hall.

**Keywords :** Diet Hypertension, Friehman Theory,Stroke Prevention, Support Family.

### **INTRODUCTION**

Hypertension is a condition in which blood pressure increases which gives continuous symptoms to a target organ in the body. Uncontrolled hypertension can cause more severe complications, such as stroke, heart disease, left ventricular hypertrophy (Irawati, 2020) . WHO data shows that approximately 1.13 billion people in the world suffer from hypertension, which means that one in 3 people in the world is diagnosed with hypertension. It is also estimated that every year 9.4 million people die from hypertension and complications. Not only globally, hypertension is also one of the most common non-communicable diseases suffered by the Indonesian people (57.6%) (Liawati, Purnairawan and Ihsan, 2024).

The prevalence of elderly people suffering from hypertension according to the World Health Organization (WHO, is 11.7%. Nearly 1 billion or about a quarter of the entire elderly population in the world suffers from high blood pressure or hypertension (Multaqiyah and Desridius, 2023).

Some risk factors that can cause hypertension in the elderly include a history of high blood pressure in the family, obesity, high-salt diet habits, and lifestyle habits such as smoking and drinking alcohol. Excessive sodium consumption causes the body to retain fluids which

can increase blood volume. Excess sodium intake can shrink the diameter of the arteries, causing the heart to pump hard to push blood volume through increasingly narrow spaces, so that blood pressure increases resulting in hypertension. One factor that influences the incidence of hypertension in the elderly is dietary compliance. The hypertension diet for the elderly aims to help lower blood pressure and maintain it towards normal (Li *et al.* , 2013; Multaqiyah and Desridius, 2023).

Compliance with hypertension diet in the elderly cannot be separated from the support of the family role. Several factors that influence the compliance of the elderly with hypertension diet are understanding of how to diet, quality of interaction, family social support, and patient beliefs, attitudes, and personality. Of the four factors, family support is one factor that cannot be ignored, because family support is one of the factors that has a significant contribution and as a reinforcing factor that influences the compliance of the elderly with hypertension (Saputri and Sujarwo, 2017; Irawati, 2020).

Family support according to Friedman is an attitude, action of family acceptance towards family members, in the form of informational support, assessment support, instrumental support and emotional support. So family support is a form of interpersonal relationship that includes attitudes, actions and acceptance towards family members, so that family members feel that someone is paying attention (Kayubi, Asyari and Ruswadi, 2021).

It is expected that elderly with hypertension who receive family support in implementing a hypertension diet will comply with their diet. Elderly compliance in implementing a hypertension diet will be able to control blood pressure so that it is expected to prevent stroke complications. This study aims to analyze the influence Support To Compliance Diet Hypertension in Advanced Age In Prevention Stroke Disease in Health Center Balowerti, Kediri City.

## METHODS

**Types of research** This is analytic with approach *Cross-Sectional Study*, which was conducted in the work area Health Center Bolowerti Kediri City. **Population in the study** This is All over Patient elderly Hypertension in the Work Area Health Center The number of residents of Kediri City is as many as. **Retrieval sample use technique** systematic random sampling of 65 respondents. **Independent variables in the study** This support family and variables dependency hypertension diet compliance in elderly. **Research instrument use** sheet online questionnaire. **Data processing includes** editing, coding, scoring, tabulating and statistical testing using *chi-square*. **Validity test use** Pearson Product Moment formula and **reliability test use** Cronbach's Alpha formula with results  $<0.05$ . In the study This For determine reliability an instrument using criteria reliability according to Guilford. The instrument is stated reliability If  $r$  value  $\geq 0.40 - 0.69$  or reliability Enough strong (Rosyada, Faizin and Noviasari, 2023).

## RESULTS

In the research This obtained results research that explained in Table 1, namely to describe about characteristics respondents including age, type gender, religion, marital status, education, occupation, and family history disease. In Diagram 1 explain about distribution Frequency Support Elderly Family with Hypertension and in Diagram 2 explains Distribution Frequency Hypertension Diet Compliance and Table 3 explains statistical test results *chi-square* Influence Support Family to Hypertension Diet Compliance in the Elderly.

Table 1. Characteristics Elderly Respondents Suffering Hypertension in the Work Area Health Center Kediri City Election 2024

	Respondents	
	n	%
Age (Years)		
Early Elderly ( 46-55 Years )	10	15.3%
Elderly ( 56-65 Years )	34	52.3%
Seniors ( > 65 Years )	21	32.3%
Gender		
Male	32	49.2%
Female	33	50.2%
History of Hypertension		
There is	65	100%
No	0	0%
History of Diabetes Mellitus		
There is	45	69.2%
No	20	30.7%
Medical history heart		
There is	24	36.9%
No	41	63.0%
History of Stroke		
There is	16	24.6%
No	49	75.3%
Average Systolic Blood Pressure	171.6 mmHg	
Diastolic Blood Pressure	85.0 mmHg	

Diagram 1. Identification Support Elderly Family Sufferers Hypertension in the Work Area Health Center Kediri City Election 2024

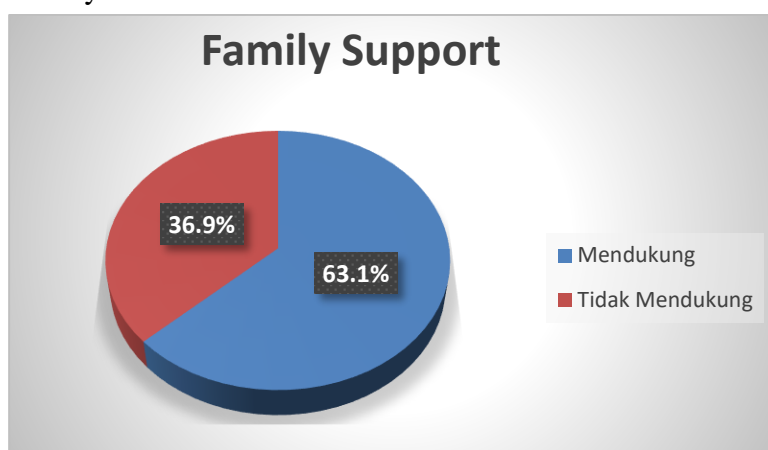


Diagram 2. Identification Diet Compliance of Elderly Hypertension Sufferers Hypertension in the Work Area Health Center Kediri City Election 2024

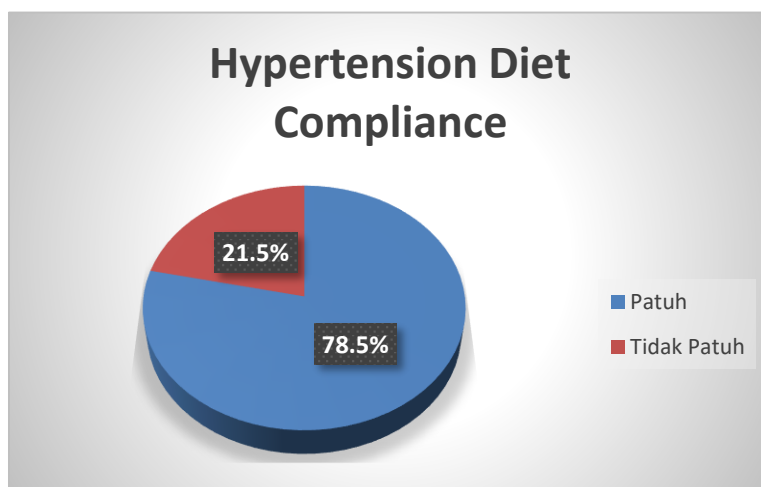


Table 2. Analysis Results Statistics statistical test results *chi-square* Influence Support Family to Hypertension Diet Compliance in Elderly Sufferers Hypertension in the Health Center Area Kediri City Election 2024

Chi-Square Tests							
	Value	df	Asymptotic Significance (2- sided)	Exact Sig (2- sided)	Exact Sig (1- sided)		
Pearson Chi-Square	9.122 <sup>a</sup>	1	.003				
Continuity Correction <sup>b</sup>	7.331	1	.007				
Likelihood Ratio	8.915	1	.003				
Fisher's Exact Test				.004		.004	
Linear-by Linear Association	8.981	1	.003				
N of Valid Cases	65						

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.17

b. Computed only for a 2x2 table

## DISCUSSION

From the results research in Diagram 1 found that 41 respondents (63.1%) received support family in following a Hypertension diet and 24 respondents (36.9%) did not get support family in running a Hypertension diet. Meanwhile, in Diagram 2, 51 respondents (78.5 %) were found to be compliant following a hypertension diet and 14 respondents (21.5%) did not obedient running a Hypertension diet.

From the results analysis statistics use *chi-square* obtained p- value  $0.003 \leq 0.005$  with an Odd Ratio (OR) value 6.607 which means There is influence support family to dietary compliance of elderly people who experience Hypertension. Elderly people who experience hypertension and get support family will more obedient running a hypertension diet by 6.6 times compared to elderly who do not get support family in running a hypertension diet.

Support family According to Friedman in Yulianto, Budi (2020), it is attitude, action reception family to member his family, in the form of support informational, support assessment, instrumental support and support emotional. So, support family is a form interpersonal relationship that include attitude, action and acceptance to member family, so that member family feel someone noticed. Support family in a number of research believed Can

become support or tool help for increase degrees health someone. This is because of with existence good support so will create A good environment too. Good environment will provides a sense of comfort that makes someone feel given cherish and be loved. So that capable to form atmosphere good emotions , and make the person happy always (Kayubi, Asyari and Ruswadi, 2021) (Rosyada, Faizin and Noviasari, 2023) .

Elderly people who experience hypertension is in great need support family in follow his hypertension diet like reduce salt consumption. There are four types of diets for maintain condition pressure blood, namely: low salt diet, low fat diet cholesterol, limited fat as well as tall fiber and low calories when excess weight. Compliance with the diet being undertaken is the desired goal achieved by the elderly in maintain pressure normal blood. One of management that can done family in guard health and provide care for the elderly with hypertension is with control pressure blood elderly regularly and provide support to elderly in undergoing a hypertension diet. If the elderly who experience hypertension get support from family so elderly will obedient in operate his diet , so that If controlled salt intake , intake calories and cholesterol controlled so pressure blood elderly will be normal (Arindari and Rina, 2022; Liawati, Purnairawan and Ihsan, 2024) .

Elderly people who experience hypertension in a way Keep going continuous and not get treatment as well as control in a way appropriate will cause heart Work with hard then result the occurrence damage to blood vessels blood heart, brain and eyes . There is damage heart will cause various symptoms like Sick headache , chest pain , and tingling in the feet and hands so that cause quality life elderly decreased , even can impact happen the rupture vessels blood brain or stroke. (Sumiyati, Ariani, Syikir M, 2022; Alsidiq and Ismaniar, 2023).

From the results study support the family that in the form of support informational, support assessment, instrumental support and support emotional is very much needed elderly with hypertension for comply diet. Hypertension diet that is not controlled can increase level cholesterol in vessels blood, thing This will make the diameter of the vessel blood become narrow. In difficult circumstances Where happen total blockage of vessels blood so will happen organ damage. HDL will bring cholesterol free from vessels blood to heart so that the diameter of the blood vessels will widening , while when high VLDL and LDL levels so will happen matter on the contrary it will aggravate constriction vessels blood and will cause the occurrence improvement pressure blood ( hypertension ) (Li *et al.* , 2013; Alsidiq and Ismaniar, 2023).

## CONCLUSION

Research result This There is influence support family to dietary compliance of elderly people who experience Hypertension. Elderly people who experience hypertension and get support family will more obedient running a hypertension diet by 6.6 times compared to elderly who do not get support family in running a hypertension diet.

## REFERENCE

- Alsidiq, M. and Ismaniar, I. (2023) 'The Relationship Between Family Support and Achievement Motivation of Residents Learning Package C at PKBM Farilla Ilmi', *SPEKTRUM: Journal of Out-of-School Education (PLS)* , 11(2), p. 157. Available at: <https://doi.org/10.24036/spektrumpls.v11i2.118796>.
- Arindari, DR and Rina, P. (2022) 'The Relationship between Family Support and Hypertension Diet Compliance in the Elderly at the Ariodillah Health Center', *Excellect Midwifery Journal* , 5(1), pp. 95–103.
- Irawati, I. (2020) 'The Relationship of Family Support to Low Salt Diet Compliance in Hypertension Patients at Ulaweng Health Center', *Scientific Journal of Health Diagnosis* , 15(1), pp. 36–40. Available at: <https://doi.org/10.35892/jikd.v15i1.331>.

- Kayubi, Asyari, H. and Ruswadi, I. (2021) 'The Relationship Between Family Support and Anxiety Levels of Preoperative Caesarean Section Patients at MA Sentot Patrol Hospital, Indramayu', *Sisthana Journal of Physiotherapy and Health Sciences* , 3(1), pp. 1–13.
- Li, G. *et al.* (2013) 'Development of the Chinese family support scale in a sample of Chinese patients with hypertension', *PLoS ONE* , 8(12). Available at: <https://doi.org/10.1371/journal.pone.0085682>.
- Liawati, N., Purnairawan, Y. and Ihsan, RN (2024) 'The Relationship Between Family Support and Diet Compliance in Hypertension Patients', *Jurnal Keperawatan* , 16(1), pp. 37–44. Available at: <https://doi.org/10.24269/hsj.v3i1.215>.
- Multaqiyah, L. and Desridius, D. (2023) 'The Relationship between Family Support and Low Salt Diet Compliance in Elderly Hypertensive Patients in Sukahurip Village', *MAHESA: Malahayati Health Student Journal* , 3(9), pp. 2849–2857. Available at: <https://doi.org/10.33024/mahesa.v3i9.11014>.
- Rosyada, YA, Faizin, C. and Noviasari, NA (2023) 'The Relationship between Family Support and Spiritual Needs with the Quality of Life of Elderly Patients', *Muhammadiyah Journal of Geriatric* , 4(1), p. 73. Available at: <https://doi.org/10.24853/mujg.4.1.73-80>.
- Saputri, LC and Sujarwo, S. (2017) 'The Relationship Between Family Support and Anxiety Before the Birth of the First Child in the Third Trimester', *Scientific Journal of PSYCHE* , 11(2), pp. 87–96.
- Sumiyati, Ariani, Syikir M, S. (2022) 'The Relationship of Family Support with the Quality of Life of The Elderly WHO Have Hypertension', *Life Birth* , 6(2), pp. 48–57.