ISSN 2515-8260 Volume 08, Issue 03, 2021

RELATIONSHIP BETWEEN FAMILYSUPPORT AND COMPLIANCE IN IMPLEMENTING DIET PROGRAMS FOR ELDERLY PEOPLE WITH HYPERTENSION

Nina Sumarni^{1*}, Citra WindaniMambang Sari¹, Dadang Purnama¹

¹Faculty of Nursing, Universitas Padjadjaran, Bandung, Indonesia *Corresponding uthoremail: citra.windani@unpad.ac.id

ABSTRACT: Family support plays an essential role in understanding lifestyle changes associated with chronic illness, changes needed to help sick members. Family support for patients with hypertension can improve health, and intensive support can reduce pain and help carry out a more disciplined diet program to be maximized. Low adherence to treatment makes it difficult to control his blood pressure. The purpose of this study was to determine the relationship between family support and commitment in implementing a diet program for elderly Hypertension in Muarasanding Village, Garut Regency. The type of correlative descriptive study that describes the relationship of family support with hypertension diet compliance. This study's population is hypertension sufferers in the Muara Sanding village located in the SiliwangiGarut Health Center working area. The sample is a total sampling of 51 respondents. The instrument used was a questionnaire. The validity test uses the product-moment correlation technique; the reliability test in GarutJayaraga Village is 20 elderly. Data analysis uses chi-square. The results of this study received as much support as 57% with a level of adherence to carrying out a diet of 55%, and categories that lacked family support 43% and who did not carry out dietary compliance 45%. Results of analysis Sig = 0.42 (a <0.05) means that HO is rejected and accepts H1. There is a relationship between family support and adherence in implementing a diet in the elderly with hypertension. The analysis also found a significant correlation value, with an equivalent odds ratio of 3,889, meaning families who support have the possibility of 3,889 times to comply with the hypertension diet program. Conclusion: There is a relationship between family support with adherence to implementing the diet.

KEYWORDS: Family Support, Compliance, Hypertension, Diet

1. INTRODUCTION

The number of older people in Indonesia reached 24.49 million people, or 9.27% of the population in 2018, according to Susenas. The increasing number of elderly results from the success of development in the health sector in Indonesia.

ISSN 2515-8260 Volume 08. Issue 03. 2021

Simultaneously, in the field of various diseases, there is an epidemiological shift from communicable diseases to increasing non-communicable diseases. Non-infectious conditions include heart disease, ruptured blood vessels in the brain, kidney failure, and high blood pressure[1]. There are 25.8% of Indonesia's population is suffering from hypertension. According to [2], it is estimated that in 2025 there is around 29 percent of adults in the world who suffer from hypertension. Someone who isblessed with longevity has a tendency to have multipatological diseases.

West Java ranks fourth in Indonesia with the highest number of hypertension sufferers, with 790,382 cases in 2016[3]. In Garut Regency, hypertension sufferers rank third of the top ten diseases, the highest number of visits by hypertension sufferers in 2016, 64,480, of whom 36,801 included male patients and 27,679 female patients. Prevalence data above does not necessarily indicate the actual number because, in Indonesia, only 50% have been detected; hypertension also shows no apparent symptoms or is called a "silent killer" [4].

Someone with hypertension, blood pressure above the standard limit, is said to be hypertensive if systolic blood pressure is found ≥ 140 mmHg and diastolic blood pressure > 90 mmHg twice in the interval the interval between the first and second examination, which is about five minutes and the person is calm and sufficient break. Meanwhile, according [5] hypertension is an increase in blood pressure that continues continuously beyond the standard limit, whether there are symptoms or not, which is a threat to the patient's condition. Hypertension is influenced by multiple risk factors, both endogenous such as neurotransmitters, hormones, and genetics, as well as exogens such as cigarettes, nutrition, and stressors. Risk factors causing hypertension are age, obesity, smoking, high salt consumption, alcoholic drinks, overweight, lack of exercise, and fatty foods[4]. Two kinds of risk factors are risk factors that cannot be controlled such as age, heredity, gender, ethnicity and risk factors that can be controlled such as an unhealthy lifestyle which in this case includes lack of physical activity, unhealthy eating habits, stress, smoking, lack of rest and body mass index (BMI) (Suhadak in Mukiwanti, 2017). One of the causes of the emergence of hypertension is due to consuming unhealthy foods accompanied by a lack of physical activity (Khasanah, 2012). Fast food or fast food circulating in the community contains many substances that are not good for health, such as saturated fats, high salt levels, high sugar levels, and MSG; these elements play a role in increasing blood pressure.

Preventing high blood pressure without drugs can be done with a healthy lifestyle that is recommended, including weight loss, reducing salt intake, exercise, reducing alcohol consumption, and stopping smoking [6]. Changes in treatment and lifestyle are recommended by health professionals [7]. To do a healthy life in people with hypertension needs to be supported by family. Family support plays a vital role in helping members in disease situations, understanding lifestyle changes related to chronic illness, making necessary changes, and helping members who are sick. Family members must participate in training programs to understand and identify patient needs, adhere to support plans, and provide support[8]. Family support in the treatment of hypertension, promoting acceptance of self-care practices such as adequate nutrition, medication adherence, and physical activity. As such, this is seen as a complementary tool for complying with treatment [9]. Long-term blood pressure monitoring requires interventions that

ISSN 2515-8260 Volume 08, Issue 03, 2021

include training and medication reminders, medical appointments, and follow-up to support medication adherence and persistence [10]. So that family support is needed to increase the motivation of hypertension sufferers in implementing a diet. Family support should be calculated to reduce the risk of adversity. Family support is divided into four forms, namely, types of emotional support. When caring for members who are sick, the way given is to give attention, reward, a sense of comfort, to provide servants with an attitude that is able to accept the condition of a sick family. The impact of family support on hypertension sufferers can improve health; intensive family support can reduce the pain level of the sufferer and also help perpetrators carry out a more disciplined and enthusiastic diet program so that the diet program can run optimally. According to research, the lack of family support in the care of hypertensive patients can cause a lack of stability in the entire treatment plan. Low adherence to treatment prevents patients from achieving the goals of the treatment plan and controlling blood pressure. In turn, uncontrolled blood pressure leads to frequent visits to medical centers, decreased quality of life for patients, and increased medical costs. Previous research results there is a significant relationship between family support and adherence to a low salt diet with a value (p <0.05)[11]. There is a relationship between family support, lifestyle and type of hypertension when following a diet for hypertension with family support (p = 0.002), lifestyle with value (p = 0.005) and type of hypertension with value (p = 0.009)[12]. Hypertension sufferers who go on a diet program and have the support of those around them the percentage of success is more significant than those who do not have the support of those around them. The treatment recommended by doctors to reduce blood pressure only if the patient is motivated, the family as a social network can increase the motivation of hypertensive sufferers through providing positive support about health such as various information, giving assistance when critical, and caring for overall health. Stimulation increases when the family as Social network conditions around patients with hypertension promote personal attitudes that have a positive effect on health [13]. Based on the above background, the researchers are interested in conducting research on whether there is a "relationship of family support with adherence in implementing a dietprogram in elderly people with hypertension in the estuary village of Muara Sanding GarutVillage.."

2. METHODS

2.1 Study Design

This research was conducted using a descriptive correlative research design.

2.2 Setting and participants

This research involved 51 people of the elderly who were recruited from the elderly in Siliwangi Health Center, Bandung, West Java.

2.3 Variables

The variables in this study were family support and diet compliance. Family support as an independent variable and compliance with diet as the dependent variable.

2.4 Population and sampling

ISSN 2515-8260 Volume 08, Issue 03, 2021

The population for this research was the elderly in Siliwangi Health Center. The sampling technique used total sampling.

2.5 Statistical analysis

The instrument used was a family support questionnaire and adherence to the diet. The collected data were coded and analyzed by descriptive statistical techniques and cross-tabulation. Correlation analysis used is chi-square.

2.6 Ethics approval

To concern human respondents' rights, this study received approval from the Ethics Committee of Universitas Padjadjaran, Indonesia (ID No.113/UN6.KEP/EC/2020). Also, permission from the GarutLocal Health Department, Indonesia, was granted.

3. RESULTS

Table 1. Frequency distribution of respondentsbased on Gender, Age, Educational Level, and Occupation

Subvariable	f	%
Gender		
Male	5	10
Woman	46	90
Age		
46-55	29	57
56-65	15	29
65 and above	7	14
Level of education		
Elementary school	22	43
Middle School	20	39
High School	18	9
Occupation		
Does not work	17	33
Employee	25	49
Trade	6	12
Retired	3	6

From table 1, The highest number of respondents is female, 90%, the age of most respondents is 56%, followed by the late 27%. In comparison, 43% are elementary school graduates, and 39% are junior high school graduates, 49% for employees/laborers, and it doesn't work for 33%.

ISSN 2515-8260 Volume 08, Issue 03, 2021

Table 2. Frequency distribution of blood pressure measurement results

Blood Pressure Category	f	%	
Stage 1 hypertension	16	31	
Stage 2 hypertension	35	69	

Based on the results of blood pressure measurements found that most respondents were in stage 2 hypertension as many as 69%, followed by stage 1 hypertension, 31%.

Table 3. Distribution of Respondents by Category of Compliance with hypertension diet

Diet Compliance	f	%
Obedient	28	55
Not obey	23	45

From Table 3. regarding adherence to a low salt diet, the highest results were found in non-compliance, namely 29 respondents, followed by a little salt compliance level of 22 respondents.

Table 4 Distribution of Respondents by category of family support

Subvariable Family support	f	%
Support	29	57
Does not support	22	43

Table 5 Relationship of family support with Diet adherence

Variable		Obedience					ρ value
	Ob	Obey		bey	Total		
	F	%	f	%	f	%	
Supporte d	20	69	9	31	29	57	0,42
Not supported	8	36	14	64	22	43	
Total	28	55	23	45	51	100	

ISSN 2515-8260 Volume 08. Issue 03. 2021

4. DISCUSSION

Based on Table 5, it is known that the family support for hypertension sufferers is categorized as having the most support from 29 respondents (57%) with the level of adherence to carrying out a diet of 28 respondents (55%). And the categories that lack family support are 22 (43%) respondents and who did not carry out dietary compliance 23 (45%) of respondents. The analysis results showed a relationship between family support and diet compliance in patients with hypertension. The Sig value = 0.42 (a < 0.05) means that HO was rejected and H1 was accepted. Families with adherence to carrying out diets in older people with Hypertension in Muara Sanding Village in Garut fostered by SiliwangiHealth Center Garut. The analysis results also found a significant correlation value, with an equivalent odds ratio of 3,889, meaningthat supportive families had 3,889 times the possibility to comply with the hypertension diet program. There is a relationship between family social support and hypertension patients in carrying out a diet, with a value of p = 0.001 at $\alpha =$ 0.05, as well as the results of research (2019) The resultsof the analysis of Chi-Square statistical test data obtained p-value = 0.000 which means there is a relationship of family support with adherence to diet compliance in patients with hypertension with a Contingency Coefficient value of 0.585, previous results in which the patient's family support results are high, the patient will be more obedient compared to family support low, with p-value p = 0.000 (p < 0.05)[14]. Meanwhile, according to the results of research by the family's level of support is higher than the level of help from friends and individuals other than family and friends. The results research that family support is very closely related to adherence in the treatment of hypertension[15].

According to previous research, the family is the closest and integral part of elderly hypertension, giving rise to her confidence in dealing with and managing her illness better[16]. Meanwhile, suggests that the family is the primary source of concepts healthy sick and healthy behavior[17]. According to previous research, the family plays an essential role in promoting and strengthening patient behavior. Support is highly expected by everyone in every phase of life, especially when someone is having difficulties with both financial problems and disease problems. Maintaining the health of family members is the responsibility of the family members themselves, so they can live and be productive. Through families, the source of assistance can be given both practical and concrete in terms of material, energy, including the attention and services of others. In addition to family responsibilities in the health sector, the ability to identify health cases, make decisions to resolve health cases, the capability to take care of sick family members, the ability to improve the environment to support health optimally, and the capacity to utilize health care facilities available in the background. Based on research conducted by states that effective management of hypertension is one of them by stopping smoking. maintaining a healthy diet, and healthy physical activity[13]. Behavior modification is beneficial to reduce or delay the adverse effects of hypertension. Support of family members is needed in health from health promotion, preventive, curative to rehabilitation. According to research, lack of social support will bequeath a resolution of a problem that is not very optimal in the

ISSN 2515-8260 Volume 08, Issue 03, 2021

family. Research conductedshows that family encouragement has a significant impact on monitoring blood pressure[18]. According to previous research, several aspects that influence patient compliance are undergoing a diet program, including interpretation of direction, level of interaction, family social relations, certainty, actions, and character of the patient. Changes in behavior are beneficial in reducing or delaying the adverse effects of high blood pressure. The family is a safe and peaceful place in supporting the healing of his illness. To maintain their health,older adults with hypertension have to go through a difficult time because they are required to routinely consume drugs for life and carry out a diet program. The support of family members is needed in the supervision of taking medication and adherence to implement a diet to overcome the disease so that complications do not occur due to non-compliance in both therapy and food. To stabilize blood pressure in addition to drugs also by managing diet in patients with hypertension, because of hypertension for life, dietary management is also carried out for being so that boredom arises in people with hypertension, family support is very influential on hypertension sufferers compliance in carrying out the diet. Through family support can encourage older people to improve compliance, family support can be in the form of, information support, emotional support, appreciation support and instrumental support.

5. CONCLUSION

There is a relationship between family support and adherence to implementing a diet. The better the family support, the more obedient the elderly carry out a menu. Clients need a monitoring and evaluation program for hypertension diet compliance by involving patients, health workers, and families.

ACKNOWLEDGEMENT

We would like to thank the participants for willingly being involved in the study.

CONFLICT OF INTEREST

The authors have declared no conflict of interest.

References

- 1. Ministry of Health, Basic Health Research. 2018.
- 2. WHO, Hypertension. 2020.
- 3. Office, G.H., Health Profile of Garut Regency 2017. 2017.
- 4. Cardiology, A.C.o., A.C.o. Cardiology, and A.H. Association, 2017

 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults a report of the American College of Cardiology/American Heart Association Task Force on Clinical practice guidelines. Hypertension, 2018. 71(6): p. E13-E115.
- 5. Situmorang, P.R., Faktor–faktor yang berhubungan dengan kejadian hipertensi pada penderita rawat inap di Rumah Sakit Umum Sari Mutiara Medan tahun 2014. Jurnal ilmiah keperawatan imelda, 2015. **1**(1): p. 71-74.

ISSN 2515-8260 Volume 08, Issue 03, 2021

- 6. Sudarsono, E.K.R., et al., *Peningkatan pengetahuan tentang hipertensi guna perbaikan tekanan darah pada anak muda di Dusun Japanan, Margodadi, Sayegan, Sleman, Yogyakarta*. Jurnal Pengabdian Kepada Masyarakat, 2017. **3**(1): p. 26-38.
- 7. Leiva, A., et al., Efficacy of a brief multifactorial adherence-based intervention on reducing the blood pressure of patients with poor adherence: protocol for a randomized clinical trial. BMC cardiovascular disorders, 2010. **10**(1): p. 1-8.
- 8. Brunner, L.S., *Brunner & Suddarth's textbook of medical-surgical nursing*. Vol. 1. 2010: Lippincott Williams & Wilkins.
- 9. Barreto, M.d.S. and S.S. Marcon, *Patient perspectives on family participation in the treatment of hypertension*. Texto & Contexto-Enfermagem, 2014. **23**(1): p. 38-46.
- 10. Bobrow, K., et al., Efficacy of a text messaging (SMS) based intervention for adults with hypertension: protocol for the StAR (SMS Text-message Adherence suppoRt trial) randomised controlled trial. BMC public health, 2014. **14**(1): p. 1-9.
- 11. Imran, A., *Hubungan Dukungan Keluarga dengan Kepatuhan Pengendalian Hipertensi pada Lansia di Puskesmas Pandak 1 Bantul Yogyakarta*. 2017, STIKES Jenderal Achmad Yani Yogyakarta.
- 12. Elmiani, E., N. Sewang, and S. Darmawan, *Faktor yang berhubungan dengan kepatuhan dalam menjalankan diet pada penderita hipertensi di wilayah kerja puskesmas larompong kabupaten luwu*. Jurnal Ilmiah Kesehatan Diagnosis, 2014. **4**(2): p. 214-221.
- 13. Chobanian, A.V., et al., *The seventh report of the joint national committee on prevention, detection, evaluation, and treatment of high blood pressure: the JNC 7 report.* Jama, 2003. **289**(19): p. 2560-2571.
- 14. Olowookere, A.J., et al., *Perceived family support and factors influencing medication adherence among hypertensive patients attending a Nigerian tertiary hospital.* Annals of Tropical Medicine and Public Health, 2015. **8**(6): p. 241.
- 15. Osamor, P.E., *Social support and management of hypertension in south-west Nigeria*. Cardiovascular journal of Africa, 2015. **26**(1): p. 29.
- 16. Ratnasari, D., et al., Relationship Of Sleep Quality With The Event Of Hypertension In Elderly In Tresna Werdha Social Protection In West Java Province. Journal of Health (JoH), 2019. **6**(1): p. 72-75.
- 17. Friedman, M.M., V.R. Bowden, and E. Jones, *Family nursing: Research, theory & practice*. Vol. 16. 2003: Prentice Hall Upper Saddle River, NJ.
- 18. Hu, H., G. Li, and T. Arao, *The association of family social support, depression, anxiety and self-efficacy with specific hypertension self-care behaviours in Chinese local community.* Journal of human hypertension, 2015. **29**(3): p. 198-203.