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The Relationship of Family Support with Compliance Drinking Medicine for Hypertension Elderly in Puskesmas Seberang Padang

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Abstract

The prevalence of hypertension in Padang City in 2019 was 2931 cases and there was an increase in 2020 to 3010 cases. The incidence of hypertension at the Seberang Padang Health Center with hypertension cases was 433 people and 240 elderly people experienced hypertension (Dinkes, 2022). This study aims to determine the relationship between family support and adherence to taking medication in the elderly with hypertension at the Seberang Padang Health Center. The type of research is Analytical Survey with a Cross-Sectional Study design. This research was conducted at the Seberang Padang Health Center from March to September 2022. The population in this study was 240 elderly people who experienced hypertension at the Seberang Padang Health Center with a sample of 68 people. The sampling technique used is the accidental sampling technique. Computerized data processing (SPSS version 2016) using the chi-square test. The results of the study 79.4% of respondents had low medication adherence and 85.3% of respondents had negative family support. Hypertensive elderly who have low medication adherence are more common in hypertensive elderly who have negative family support, namely 73.5% compared to hypertensive elderly who have positive family support, namely 5.9%. Based on statistical tests, a p-value of 0.004 was obtained, so it can be concluded that there is a relationship between family support and adherence to taking medication in elderly hypertension at the Seberang Padang Health Center. Through the leadership of the Seberang Padang Health Center, it is hoped that the results of this study can be used as a reference in providing education to families in motivating elderly hypertensives to adhere to taking medication through health education.

Keywords: compliance, support, elderly, medicine, family

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Introduction

The elderly (elderly) is a group of people who experience a process of gradual change over a certain period of time and are at risk of experiencing various health problems (Priyanto, 2018). Elderly people are a group of people who are experiencing a process of gradual change over several decades (Notoadmojo, 2016). Based on the general definition, a person is said to be elderly if he is 60 years and over, both men and women. Meanwhile, the Indonesian Ministry of Health stated that a person is said to be elderly starting from age 55 and above (DepKes, 2018). As human age increases, a degenerative aging process occurs which will have an impact on changes in the human body, not only experiencing physical, cognitive, emotional, and social but sexual changes will also experience changes (Azizah, 2015). Increasing a person's age will be followed by an increase in the incidence of hypertension, this is due to natural changes in the heart, blood vessels, and hormone levels (Junaedi, et al, 2013). As a result, health problems that often occur in the elderly are hypertension or high blood pressure (Kowalski, 2014).

One of the changes that occur in the elderly is a change in the cardiovascular system which is the main disease that takes its toll because it will have an impact on other diseases such as hypertension, coronary heart disease, pulmonary heart disease, cardiomyopathy, stroke, kidney failure (Fatmah, 2020). Hypertension is a condition in which systolic and diastolic pressures increase beyond normal limits, namely systolic blood pressure > 140 mmHg and diastolic > 90 mmHg. Hypertension or high blood pressure is a high-risk disease that can lead to heart disease, stroke, and kidney failure (Zhao, 2013). Increasing age is a risk factor for hypertension. Factors related to the aging process are a risk for hypertension due to stiffness in the aorta, increased afterload (requires more power to pump blood from the ventricles), and increased vascular resistance (Sofia, 2014).

Hypertension is often referred to as silent *killer* (stealth killer), because often people with hypertension do not feel disturbances or symptoms when suffering from hypertension. Patients only realize hypertension when they experience complications in vital organs (Triyanto, 2014). Patients with hypertension do not cause symptoms, although incidentally, some symptoms occur related to high blood pressure. The symptoms experienced are headaches, bleeding from the nose, facial redness, dizziness, and fatigue, which are common in people with hypertension and in someone with normal blood pressure (Padila, 2013). The impact of uncontrolled blood pressure is to increase the risk of ischemic heart disease four times and the risk of cardiovascular damage two to three times (Yassine et al, 2016). Complications that often occur in people with hypertension are cardiovascular disease, atherosclerosis, heart failure, stroke, and kidney failure (Brunner & Suddarth, 2013). Untreated hypertension can have dangerous effects, namely heart failure, stroke, kidney damage, and vision damage (Fandinata, 2020).

Hypertension suffered by the elderly can cause problems, the biggest problem is adherence to taking medication because the elderly have experienced various declines, and elderly compliance affects the success of treatment. Treatment of hypertension sufferers is important because hypertension is an incurable disease that must always be controlled or controlled so that complications do not occur which can lead to death. Anti-hypertensive drugs have been shown to be able to control blood pressure in people with hypertension and play an important role in reducing the risk of developing cardiovascular complications (Palmer and William 2017). According to Susanto (2015), Individuals need other people to provide support to provide comfort. Individuals with high levels of family support have strong feelings that the individual is valued and loved. Individuals with high family support feel that other people care about and need these individuals, so this can direct individuals to a healthy lifestyle, in this case, adherence to attending the elderly Posyandu.

Rosana and Lidya (2015), revealed that family involvement in care is important for

controlling blood pressure, and a lack of family support can lead to less stability of the entire treatment plan. Because the elderly need help and support from
the closest people to help treat blood pressure (Rubin and Peyrot, 2015). The family is responsible for providing care to the elderly. Families can provide motivation to the elderly in dealing with health problems due to factors of ignorance, unwillingness, and inability so that the elderly have the confidence to be able to change their behavior and daily lifestyle (Kaakinen, et al, 2016).

Positive support that can be done by the family is to provide motivation for the elderly to always take antihypertensive drugs, reminding the elderly to maintain a regular lifestyle and to control blood pressure at the nearest service center. However, the support provided by the family for the elderly is in the form of negative support, such as families who are busy with their own affairs, the family does not pay attention to the elderly, the family rarely accompanies the elderly and the family does not understand the diseases suffered by the elderly, so that it can worsen the condition of the elderly (Kaakinen, et al, 2016). Nurses as health workers have a role as a caregiver, an educator, or educators. The role of the nurse is to provide correct information about hypertension and recommend a salt diet, provide information about prevention and motivate families to provide support so that they can increase the knowledge of hypertension sufferers to carry out a healthy lifestyle and prevent complications (Anita, 2019).

Research conducted by Sumarni, et al (2020) regarding "Family Support with Medication Compliance in the Elderly with Hypertension in Muara Sanding" obtained the results of a correlation analysis to obtain a sig value = 0.084 ($p \leq 0.05$) meaning that there is a relationship between family support and adherence to taking medication in elderly people with hypertension in Muara Sanding sub-district Pustu. Another study was also conducted by Widyaningrum, et al (2019) regarding the "Relationship of Family Support and Compliance with Taking Medication in the Elderly with Hypertension" The results of the Spearman Rho statistical test showed that a value of $0.000 \leq 0.05$ means that there is a relationship between family support and adherence to taking medication in the elderly hypertension sufferers in the Gayamsari Community Health Center, Semarang City. The difference between this study and the research conducted is the various problems found in family support such as emotional support, esteem support, instrumental support, and information support.

World Health Organization (WHO) in 2021 stated that around 47% of persons with hypertension in the world. Most people with hypertension are in the age range > 40 years. The number of people with hypertension continues to increase every year, which was found in 2019 as much as 32% of the incidence of hypertension and increase again in 2020 as much as 36%, it is estimated that by 2025 there will be 1.5 billion people affected by hypertension (WHO, 2022). The incidence of hypertension in the elderly in Indonesia is 34.1% with the age group 45-54 years 45.3%, the age group 55-64 years 55.2%, the group 65-74 years 63.2%, and the age group >75 year 69.5% and West Sumatra data of 22.2% (Riskesdas, 2018). The prevalence of hypertension in Padang City in 2019 was 2931 cases and there was an increase in 2020 to 3010 cases. The incidence of hypertension at the Seberang Padang Health Center with hypertension cases was 433 people and 240 elderly people experienced hypertension (Dinkes, 2022).

In an initial survey conducted by the authors on May 9 2022 at the Seberang Padang Health Center by interviewing 7 elderly people, 5 elderly people who suffered from hypertension said they received antihypertensive drugs from the Seberang Padang Health Center, namely Amlodipine 10 mg once a day, but the elderly rarely take medication, sometimes forget to take medication, lazy to take medicine because they are bored, family members rarely take them to the Puskesmas for control, families are busy with their own affairs, health workers rarely provide information about hypertension treatment. Meanwhile, 2 other elderly people who suffered from hypertension said they received antihypertensive drugs from the Seberang Padang Health Center, namely Amlodipine 5 mg once a day, but the elderly took medication regularly and always came to the Health Center for control once a month. After interviewing 3 nurses at that time, data was

obtained that the patient's lack of willingness to treat hypertension by taking medication and that the incidence of hypertension in the elderly always increased. Based on the background above, researchers have conducted research with the title "The Relationship between Family Support and Compliance with Taking Medication in Elderly Hypertension at the Seberang Padang Health Center ".

Methodology

This type of research used is Quantitative *Analytical Descriptive which* is *Survey* or research that tries to explore how and why health phenomena occur. This research designed *Cross-Sectional Study* namely by collecting data at once at one time, meaning that each research subject was only observed once, and measurements were made of the character status or subject variables at the time of examination (Notoatmodjo, 2018).

This research was conducted at the Seberang Padang Health Center from March to September 2022. The population for this study was elderly people who had hypertension in the last six months (January to June 2022) at the Seberang Padang Health Center as many as 240 people with a sample of 68 people. The sampling technique used in this study is to use the technique *purposive sampling*, namely a sampling technique by taking all members of the population as respondents or samples (Santjaka, 2011).

Results

Situation Analysis

The Seberang Padang Health Center is one of the health centers in the city of Padang. The Seberang Health Center is led by the head of the Health Center and several other staff. The Seberang Health Center has one room for general poly, elderly poly, maternal and child health poly, laboratory, pharmacy, and other facilities. The Seberang Health Center also has a child Posyandu and elderly Posyandu program as well as an immunization program.

Characteristics of Respondents

Table 1. Characteristics of Respondents Based on Gender in Elderly Hypertension at the Seberang Padang Health Center

Gender	*f*	%
Male	29	42.6
Female	39	57.4
Total	68	100

Based on table 1 above, shows that more than half (57.4%) of respondents are female elderly with hypertension at the Seberang Padang Health Center.

Table 2. Characteristics of Respondents Based on Education in Elderly Hypertension at the Seberang Padang Health Center

Education	*f*	%
No School	2	2.9
Elementary School	10	14.7

Junior High School	21	30.9
Senior High School	30	44.1
Higher Education	5	7.4
Total	68	100

Based on Table 2 above, shows that less than half (44.1%) of the respondents have high school education for elderly hypertension at the Seberang Padang Health Center.

Table 3. Characteristics of Respondents Based on Occupation in Elderly Hypertension at the Seberang Padang Health Center

Pekerjaan	*f*	%
Not Working	6	8.8
Private	21	30.9
Entrepreneur	26	38.2
And Others	15	22.1
Total	68	100

Based on table 3 above, shows that less than half (38.2%) of the respondents work as entrepreneurs for the elderly with hypertension at the Seberang Padang Health Center.

Univariate analysis

Medication Compliance in Elderly Hypertension

Table 4. Frequency Distribution of Medication Compliance in Elderly Hypertension at the Seberang Padang Health Center

Medication Compliance	*f*	%
Height	5	7.4
Moderate	9	13.2
Low	54	79.4
Total	68	100

Based on table 4 above, it shows that the majority (79.4%) of respondents have low medication adherence in elderly hypertension at the Seberang Padang Health Center

Family Support for Elderly Hypertension

Table 5. Frequency Distribution of Family Support for Elderly Hypertension at the Seberang Padang Health Center

Family support	*f*	%
Positif	10	14.7
Negatif	58	85.3
Total	68	100

Based on table 5 above, shows that the majority (85.3%) of respondents have negative family support for elderly hypertensives at the Seberang Padang Health Center.

Bivariate analysis

Relationship between family support and medication adherence in elderly with hypertension

Table 6. The Relationship between Family Support and Medication Compliance in Hypertension at the Seberang Padang Health Center

Medication Adherence	Family support				Amount		*p-value*
	Positive		Negatives				
	f	%	*f*	%	*f*	%	0.004
Height	2	2.9	3	4.4	5	7.4	
Moderate	4	5.9	5	7.4	9	13.2	
Low	4	5.9	50	73.5	54	79.4	
Total	10	14.7	58	85.3	68	100	

Based on table 6, shows that hypertensive elderly who have low adherence to taking medication occur more frequently in hypertensive elderly who have negative family support, namely 73.5% compared to hypertensive elderly who have positive family support, namely 5.9%. Based on statistical tests, a p-value of 0.004 was obtained, so it can be concluded that there is a relationship between family support and adherence to taking medication in elderly hypertension at the Seberang Padang Health Center.

Discussion

1. Univariate analysis

a. Medication Compliance in the Elderly

The results showed that most (79.4%) respondents had low medication adherence in the elderly with hypertension at Seberang Padang Health.

This is in line with the research conducted by Massa and Manafe (2021) concerning "Compliance with Taking Hypertension Medication in the Elderly" the results for the adherent category were 56.3% and the non-adherent category was 43.7%.

Elderly compliance in taking antihypertensive medication is one of the determining factors in controlling blood pressure. Compliance with treatment is defined as the behavior of a patient in obeying the rules, advice recommended by health workers while undergoing treatment. Suggestions to follow the rules in taking hypertension drugs regularly are useful for controlling blood pressure so that it requires adherence in taking these hypertension drugs. The duration of treatment creates boredom, boredom with the treatment being undertaken, so that the longer the treatment for hypertension becomes the cause of non-adherence in undergoing treatment (Afina, 2018).

Causes of disobedience in the elderly in taking hypertension medication are due to busyness at work, decreased memory when giving the drug and the correct dosage of the drug, side effects of treatment such as drowsiness, dizziness, nausea while taking hypertension medication, stopping treatment when conditions improve are the causes of less adherence to hypertension treatment. The use of hypertension medication consumption in the long term causes stress, lack of support and care during hypertension treatment.

According to the assumption of the researchers, namely in this study, hypertension occurs mostly in women. This is due to hormonal problems. In elderly women, the majority of whom

have experienced menopause, there is more of the hormone progesterone than the hormone estrogen. It is the hormone progesterone that triggers an increase in blood pressure. And the most education is high school. This shows that educational programs are effective in increasing knowledge, improving self-management, and controlling habits lifestyle that is detrimental to patients with hypertension. Education is also very influential about hypertension towards increasing knowledge of managing hypertension.

b. Family Support for Elderly Hypertension

The results showed that most (85.3%) respondents had negative family support for elderly hypertensives at the Seberang Padang Health Center.

This is in line with research conducted by Abdullah, et al (2020) regarding "Family Support for Elderly People with Hypertension" which found that more than half (59.4%) of the elderly had negative family support and less than half (40.6%) of the elderly had family support. positive.

Elderly who have hypertension need and want guidance or support from their family, but this will not be expressed because of their independent desire. Negative reactions that appear are irritability towards the family, withdrawing and not wanting to have contact with other people (Wong, 2018).

The positive assessment given by the family is a form of appreciation that can increase the enthusiasm and optimism of the respondents. In addition, family appreciation for the patient's efforts to achieve recovery also increases the patient's self-esteem and social role in the family (Matteo, 2016).

Family support needed includes emotional support including expressions of empathy, care and concern for the people concerned for family members who are experiencing health problems, for example feedback and affirmation from family members. Informational support includes giving advice, instructions, suggestions or feedback. Families can provide informative support by providing suggestions on what to do to deal with the problem. Instrumental support is real and material in nature aims to ease the burden on the individuals who make it up and the family can fulfill it, so that the family is a source of practical help and modification of the environment. Appreciation support is in the form of providing information to someone that he is valued and accepted, where a person's self-esteem can be increased by communicating to him that he is valuable and accepted even though he is not free from mistakes (Githa, 2019).

According to the researcher's assumption, namely in this study, family support provided by the family for the elderly was lacking, based on the results of the questionnaire, the lowest result was obtained, namely the family always reminded me of behaviors that worsened my illness and the family continued to love and pay attention to my condition during illness. As well as the most jobs undertaken by the elderly are self-employed, where most of the elderly still work as traders.

2. Bivariate analysis

a. Relationship between family support and medication adherence in elderly with hypertension

The results showed that hypertensive elderly who had low medication adherence were more common hypertensive elderly who had negative family support, namely 73.5% compared to hypertensive elderly who had positive family support, namely 5.9%. Based on statistical tests, a p-value of 0.004 was obtained, so it can be concluded that there is a relationship between family support and adherence to taking medication in elderly hypertension at Seberang Padang Health. This is in line with research conducted by Sumarni, et al (2020) concerning "Family Support with Medication Compliance in Elderly Hypertension in Muara Sanding" The results of the correlation analysis obtained a sig value = 0.084 ($p \leq 0.05$) meaning that there is a relationship

between family support adherence to taking medication in the elderly with hypertension. Hypertension suffered by the elderly can cause problems, the biggest problem is adherence to taking medication, because the elderly have experienced various declines, and elderly compliance affects the success of treatment. Treatment of hypertension sufferers is important because hypertension is an incurable disease that must always be controlled or controlled so that complications do not occur which can lead to death. Antihypertensive drugs have been proven can control blood pressure in people with hypertension, and plays an important role in reducing the risk of developing cardiovascular complications (Palmer and William 2017).

According to Susanto (2015), Individuals need other people to provide support to provide comfort. Individuals with high levels of family support have strong feelings that the individual is valued and loved. Individuals with high family support feel that other people care about and need these individuals, so this can direct individuals to a healthy lifestyle, in this case, adherence to attending the elderly Posyandu. Hypertension sufferers who get support from their families will be more obedient to take medication regularly, maintain a healthy lifestyle, and control their blood pressure at the Puskesmas compared to hypertension sufferers who do not get family social support (Utami & Raudatussalamah, 2016). Family support received by an individual can avoid stress. Family support is a family way to show love, care, and appreciation for other family members. The recipient will feel loved, cared for, and feel that he is truly part of his social environment (Sarafino & W, 2017). According to the researchers' assumptions, namely in this study, family support is very important in the process of treating elderly hypertension. Because with a family, the elderly with hypertension will feel cared for and supervised so they pay more attention to everything that can trigger hypertension. The support that is lacking in the family is informative support and appreciation support. Efforts that can be made by the family in providing support to the elderly to comply with taking medication are motivating the elderly so that the elderly are always enthusiastic about undergoing treatment and obedient in taking medication. Family can motivate through education and sufficient attention for the elderly.

Conclusion

Based on the results of research conducted concerning the Relationship between Family Support and Compliance with Taking Medication in Elderly Hypertension at the Seberang Padang Health Center, the following conclusions can be drawn most (79.4%) of respondents have low adherence to taking medication for elderly hypertension at the Seberang Padang Health Center in 2022. Most (85.3%) of respondents have negative family support for elderly hypertensives at the Seberang Padang Health Center in 2022. There is a relationship between family support and adherence to taking medication in elderly hypertensives at the Seberang Padang Health Center in 2022 with p-value = 0.004

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