

The Relationship between Motivation and Family Support and Adherence to Taking Hypertension Medication in the Elderly

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Abstract

Introduction: Hypertension is a condition in which the increase in systolic blood is above the normal limit of more than 140 mmHg and diastolic blood pressure is more than 90 mmHg.

Objective: To determine the relationship between motivation and family support and adherence to taking hypertension medication in the elderly in Kampung Sekolaq Darat. **Method:** The design of this study is descriptive correlation with a cross-sectional approach. which will be held in February-May 2022. The population in this study is elderly people with hypertension in Sekolaq Darat village. The determination of the sample used Total Sampling, so a total of 35 respondents were obtained. The statistical test used is Chi-Square, if the t calculation (p -value) < 0.05 is obtained, then the H_a hypothesis is accepted and H_o is rejected. **Result and Discussion:** Motivation of the elderly in the moderate category (45.7%), then family support in the supportive category (65.7%) and adherence to taking hypertension medication in the elderly in the compliant category (54.3%). The relationship between motivation and adherence to taking hypertension medication in the elderly was obtained p Value = 0.00 and the relationship between family support and adherence to taking hypertension medication was obtained p Value = 0.00). **Conclusion:** There is a relationship between motivation and family support and adherence to taking hypertension medication in the elderly in Kampung Sekolaq Darat.

Keywords: Hypertension; Motivation; Family Support;

Introduction

Hypertension is a medical condition characterized by an elevation in systolic blood pressure exceeding 140 mmHg and diastolic blood pressure surpassing 90 mmHg (Pinto et al., 2022). Often labeled as "the silent killer," hypertension frequently presents without noticeable symptoms and is a leading contributor to heart disease, kidney failure, and stroke in Indonesia.

According to the World Health Organization (WHO) in 2015, approximately 1.13 billion people worldwide suffer from hypertension, meaning that one in three individuals globally is diagnosed with high blood pressure (Herna & Hidayani, 2022). The prevalence of hypertension continues to rise annually, with projections indicating that by 2025, around 1.5 billion people could be affected. Additionally, it is estimated that hypertension and its related complications cause 9.4 million deaths each year. In Indonesia, the estimated number of hypertension cases reaches 63,309,620, with the death toll attributed to hypertension standing at 427,218.

According to the 2018 Rikesdes report, the prevalence of hypertension in East Kalimantan reached 11.34% of the total patients studied. In West Kutai Regency, the number of non-communicable diseases (NCDs) in 2021 included 5,121 cases of hypertension and 2,136 cases of diabetes mellitus (DM) (West Kutai Regency Office, 2021).

Elderly individuals are defined as those over 60 years old who are no longer able to support themselves financially to meet their daily needs (Safari, Yulianingsih, & Waryantini, 2022). One of the critical factors influencing uncontrolled hypertension is the motivation and support provided by family members, particularly in maintaining adherence to hypertension medication (Ningrum, 2019). Motivation is described as a combination of internal and external forces that drive an individual to initiate and maintain behavior aligned with specific goals, direction, intensity, and duration (McClelland, 2020). Family support plays a crucial role in this process, manifesting as an accepting attitude and supportive actions from family members. This support can take various forms, including informational support, evaluative feedback, practical assistance, and emotional encouragement, all of which contribute to the elderly's overall well-being and treatment compliance.

The elderly's motivation to recover from illness is often fueled by a strong desire to maintain good health, live a long life, and continue enjoying time with their families. This aspiration allows them to cherish old age surrounded by their children and grandchildren. Such powerful motivation encourages the elderly to adhere consistently to their prescribed medication regimen. Family support plays a vital role in this context, characterized by an attitude of acceptance and supportive actions from family members. This support can manifest as informational assistance, evaluative feedback, practical help, and emotional encouragement (Perdana & Salmiyati, 2017).

In essence, family support represents a form of interpersonal relationship that encompasses attitudes, behaviors, and acceptance that make family members feel valued and cared for. Individuals who experience a supportive social environment generally

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exhibit better overall well-being compared to those who lack this support. This is because family support acts as a buffer, helping to reduce the negative impacts on mental health. (Cahyanti, 2020)

The results of a study conducted by Sandra Puspita Ningrum (2019) at the Seyegan Sleman Health Center in Yogyakarta showed that $p = 0.000$ ($p < 0.005$) showed that H_0 was accepted. From 59 respondents, it can be concluded that there is a meaningful relationship between family support and adherence to taking hypertension medication at the Seyegan Sleman Health Center Yogyakarta (Ningrum, 2019)

The solution to the problem from the results of the study on the relationship between family support and medication adherence of hypertensive patients at the Seyegan Sleman Health Center in Yogyakarta is so that respondents can increase awareness of hypertension medication adherence, and the importance of family support in increasing respondents' adherence to medication. Based on a study conducted by researchers with an interview technique of 59 respondents with a family support questionnaire, the researcher got the answer that the functioning of the family to pay attention, respect and love to their family members.

Meanwhile, based on previous research by Sari Hanum (2019), the motivation of hypertension patients in the Peukan Bada Health Center Working Area is seen statistically as high as 36 respondents (64.3%). This means that based on the results of the statistical test, it is known that $p=0.002 < 0.05$ so that it can be concluded that there is a relationship between motivation and the level of adherence to taking antihypertensive drugs, this can be caused by the need of the respondent to recover from his illness. The high motivation of hypertension patients means that there is a desire from within the respondents to undergo treatment regularly.

Based on data from the Sekolaq Darat Public Health Centre Itself in 2020 the total number of hypertension sufferers was 243 cases and in 2021 the total number of NCD diseases increased, including the total number of hypertension patients recorded at 451 cases and DM recorded at 261 cases, therefore hypertension cases were higher compared to DM cases. And the Land Sekolaq Health Center is in the 3rd position with the highest total hypertension out of 19 sub-districts in West Kutai Regency (Kubar Health Office, 2021).

Method

The design of the study is a descriptive correlation with a cross-sectional approach, aiming to describe and examine the relationship between family motivation and support and adherence to hypertension medication in the elderly in Sekolaq Darat village. The research was carried out from February to May 2022. The sampling technique in this study is total sampling, that is, the sampling technique is that all members of the population are used as samples/research respondents (Sugiyono, 2014). Thus, the sample size in this study is 35 elderly patients.

The Relationship between Motivation and Family Support and Adherence to Taking Hypertension Medication in the Elderly**Results and Discussion****Result**

Table 1
Characteristics of Respondents

No.	Characteristic	Total	
		<i>f</i>	%
1	Age		
	60-69 years old	26	74.3
	>70 years	9	25.7
	Total	35	100
2	Gender		
	Man	6	17.1
	Woman	29	82.9
	Total	35	100
3	Last Education		
	College	1	2.8
	SHS	1	2.8
	JHS	8	22.9
	ES	10	28.6
	No School	15	42.9
	Total	35	100
4	Work		
	Farmer	16	45.7
	Not working/retiring	19	54.3
	Total	35	100
5	Hypertension Medication Consumption		
	Yes	30	85.7
	Not	5	14.3
	Total	35	100

Source: Primary data (2022)

The results of the study on the characteristics of the respondents showed that the age category was mostly in the age range between 60-69 years old as many as 26 people (74.3%), the gender was mostly female which was 29 people (82.9%). Meanwhile, in the last education category, almost half of the respondents were not in school, a total of 15 people (42.9%), then most of the elderly were no longer working or retired, namely 19 people (54.3%) and those who took hypertension medication mostly said "yes" 30 people (85.7%).

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Table 2
Motivation of the Elderly

Motivation of the elderly	Total	
	<i>f</i>	%
Strong	5	14.3
Keep	16	45.7
Weak	14	40.0
Total	35	100

The results of the research on the motivation of the elderly in Kampung Sekolaq Darat, almost half of the respondents in the medium category, namely 16 people (45.7%).

Table 3
Family Support

Family support	Total	
	<i>f</i>	%
Support	23	65.7
Not Supported	12	34.3
Total	35	100

The results of the research on family support in Kampung Sekolaq Darat, most of them were in the support category, namely 23 people (65.7%).

Table 4
Compliance with Taking Hypertension Medication in the Elderly

Medication Compliance	Total	
	<i>f</i>	%
Obedient	19	54.3
Non-Compliance	16	45.7
Total	35	100

The results of the study on adherence to taking hypertension medication in the elderly in Kampung Sekolaq Darat, most of them were in the compliance category, namely 19 people (54.3%).

Table 5
The Relationship between Motivation and Adherence to Taking Hypertension Medication

Motivation of the Elderly	Compliance with Taking Hypertension Medication				p-value
	Obedient		Non-Compliance		
	<i>f</i>	%	<i>f</i>	%	0.00
Strong	5	14.3	0	0.0	
Keep	14	40.0	2	5.7	
Weak	0	0.0	14	40.0	
Total	19	54.3	16	45.7	

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Results of research on motivation relationships, with the adherence to taking hypertension medication in the elderly, the results were obtained that most of them were motivation in the moderate category and adherence to medication in the adherence category as many as 14 people (40.0%). And the same total was obtained, namely motivation in the weak category and medication compliance in the non-compliance category as many as 14 people (40.0%). Based on the results of the analysis carried out using *Chi-Square* test, obtained a value $p\text{-value} = 0.00$ is less than the value of $\alpha = 0.05$ or ($0.00 < 0.05$), which means that there is a significant relationship between motivation and adherence to hypertension medication in the elderly

Table 6

The Relationship between Family Support and Adherence to Taking Hypertension Medication

Family Support	Compliance with Taking Hypertension Medication				p-value
	Obedient		Non-Compliance		
	<i>f</i>	%	<i>f</i>	%	0.00
Support	19	54.3	4	11.4	
Not Supported	0	0.0	12	34.3	
Total	19	54.3	16	45.7	

The results of the study on the relationship between family support and adherence to taking hypertension medication in the elderly, the results were obtained that most of them were family support in the category of supporting and adherence to taking hypertension medication in the elderly in the compliance category as many as 19 people (54.3%). Based on the results of the analysis conducted using *the Chi-square* test, the value of $p\text{-value} = 0.00$ was obtained less than the value of $\alpha = 0.05$ or ($0.00 < 0.05$), which means that there is a significant relationship between family support and adherence to taking hypertension medication in the elderly.

Discussion

Characteristics of Respondents

The results of the study on the characteristics of the respondents showed that the age category was mostly in the age range between 60-69 years as many as 26 people (74.3%). In line with the theory (Padila, 2013), that the age used as a benchmark for the elderly varies generally between 60-65 years. According to the World Health Organization (WHO), there are four stages, namely: (1) Middle age (*middle age*) age 45 - 59 years. (2) Elderly (*elderly*) age 60-74 years. (3) The elderly (*Old*) 75-90 years old and (4) Very old age (*very old*) > 90 years old (Putri, 2022). The assumption of elderly researchers is mostly in the age range of 60-69 years because at this age they have entered a phase where they need help from their surroundings to meet basic needs including support to undergo hypertension treatment.

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The gender was mostly female, namely 29 people (82.9%). While in the last education category, almost half of the respondents were not in school with a total of 15 people (42.9%), this result is in accordance with the theory that in general, men are more prone to hypertension than women. This is because men have many risk factors that affect the occurrence of hypertension such as smoking, being uncomfortable with work and eating uncontrollably. Usually women will experience hypertension after menopause (Tumundo, Wiyono, & Jayanti, 2021). The researcher's assumption is that both men and women have the same risk of developing hypertension. But what distinguishes is diet and hereditary factors.

Most of the elderly are no longer working or retired, namely 19 people (54.3%) and those who take hypertension medication mostly say "yes" 30 people (85.7%). The results of the study are in line with the theory that the elderly are no longer productive as government employees. The elderly have retired, stay at home and occupy themselves with the activities of the elderly that the elderly usually do or can be found in nursing homes. The elderly are the final stage of human development. So everyone hopes to live their old age in peace, peace, and enjoy retirement with their families with affection (Gustian & Palmizal, 2021). The assumption of elderly researchers is that they have entered a period of rest from all heavy work. The elderly have experienced a decrease in memory, effectiveness, aggressiveness and productivity, so it is not good to be placed in a job that consumes more energy and thinks harder.

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The results of the research on the motivation of the elderly in Kampung Sekolaq Darat, the most in the medium category, namely 16 people (45.7%). It shows that the desire of the elderly to stay healthy is on a fairly good result, because the majority of motivation is in the medium category. The encouragement that the elderly get can come from their own desire to recover, because the elderly want to psychologically return to their bodies when they used to be active at work. The encouragement that the elderly get can also come from outside, namely because they are given advice by other people, family, relatives and experts in the health sector. In line with the results of the study on the relationship between motivation and adherence to taking hypertension medication in the elderly, the results were obtained that most of them were motivation in the moderate category and adherence to medication in the adherence category as many as 14 people (40.0%). And the same total was obtained, namely motivation in the weak category and medication compliance in the non-compliance category as many as 14 people (40.0%).

The assumption of motivation researchers in the moderate category and adherence to taking medication in the adherence category because motivation is closely related to the actions taken by a person, it can be said that motivation can be a promoter or driver of a person to act and decide something, including the decision taken by the elderly to comply with hypertension treatment procedures by regularly taking medication.

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Based on the results of the analysis conducted using the *Chi-Square* test, the value of $p\text{-value} = 0.00$ was obtained less than the value of $\alpha = 0.05$ or $(0.00 < 0.05)$, which means that there is a significant relationship between motivation and adherence to taking hypertension medication in the elderly. This result is in line with Hanum's research, (2019) showing that there is a relationship between motivation and the level of adherence to taking antihypertensive drugs, this can be caused by the need of the respondent to recover from his illness. The high motivation of hypertension patients means that there is a desire from within the respondents to undergo treatment regularly.

The researcher's assumption is that the higher the motivation of an elderly person to recover, the higher their compliance with taking medication recommended by doctors or health workers. In this study, the elderly in Sekolaq Darat village were more motivated from themselves rather than from the motivation of their family, a strong desire to be more productive even with the state of the disease they suffered.

The Relationship between Family Support and Adherence to Taking Hypertension Medication in the Elderly

The results of the research on family support in Kampung Sekolaq Darat, the most in the support category, namely 23 people (65.7%). Seeing the togetherness of the elderly with their families, it is appropriate that the majority of families support the elderly in various aspects of their lives. The support provided by the family is in the form of emotional support by giving more attention, appreciation support by being a good listener to the elderly and chatting and agreeing to what the elderly say as a form of appreciation or appreciation.

Other support is in the form of instrumental support by providing the necessary facilities and infrastructure for the elderly to live their daily lives and finally information support, the family always provides information about the health of the elderly and always invites the elderly to routinely check their health at the elderly posyandu, so that they know their health conditions (Herlinah, Wiarsih, & Rekawati, 2013). Supported by the fact that the elderly in Kampung Sekolaq Darat also live with their families, there is no elderly person who lives alone without other family members by his side.

Such conditions are very possible for maximum health control by the family. In line with this study, the results were obtained that the most was family support in the category of supporting and adherence to taking hypertension medication in the elderly in the compliance category as many as 19 people (54.3%). Supported by Ningrum (2018) research, it was shown that there was a statistically significant relationship between family support and adherence to medication for hypertension patients at the Seyegan Sleman Health Center, Yogyakarta.

The assumption of most researchers is that most of the community provides support to the elderly to be obedient in consuming hypertension medicine, because the community in Kampung Sekolaq Darat adheres to the norms of politeness, customs and traditions that view that parents must be respected and loved, so the family is so attentive and provides support to the elderly. In this study, the results were obtained that children of the elderly

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with hypertension who were more dominant in providing support for the elderly, both in terms of providing emotional support, appreciation, instrumental, information, ranging from reminding to take medicine, escorting treatment or health control, providing encouragement.

Based on the results of the analysis conducted using *the Chi-Square* test, the value of $p\text{-value} = 0.00$ was obtained to be smaller than the value of $\alpha = 0.05$ or ($0.00 < 0.05$), which means that there is a significant relationship between family support and adherence to taking hypertension medication in the elderly. These results are in line with Ningrum's research, (2018) that there is a relationship between family support and adherence to taking hypertension medications. It is also in line with Zang's research, (2019) that there is a significant relationship between family support and hypertensive patients' compliance to take medication. Elderly people who are undergoing hypertension treatment will feel that their supportive family will always be ready to provide full help and assistance if they need it at any time.

Conclusion

Based on the results of the analysis using the Chi-Square test, it was concluded that there was a significant relationship between family support and adherence to hypertension medication in the elderly, because the $p\text{-value}$ (0.00) was smaller than the significance level of α (0.05).

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