
Factors Associated With Hypertension Control Behavior In The Elderly At The Merdeka Community Health Center, Palembang In 2025

Fantia Tria Siska¹⁾, Nur Asbon²⁾, Irdan³⁾

^{1,2,3)} Undergraduate Study Program in Public Health, Faculty of Health, Kader Bangsa University, Palembang

*Corresponding Author

Email : fantiatriasiska003@gmail.com

Abstract

Hypertension is a major non-communicable disease with a high prevalence in the elderly at the Merdeka Community Health Center in Palembang, influenced by knowledge, diet, and family support. This study aims to analyze the relationship between these factors and hypertension control behavior. Using a quantitative cross-sectional analytical design, the population of hypertensive elderly was 2,167 people with a sample of 106 respondents via simple random sampling. The questionnaire instrument was analyzed univariately (frequency) and bivariately (Chi-Square, $\alpha = 0.05$) using SPSS. The results showed a significant relationship: knowledge ($p = 0.000$; OR = 17.667), diet ($p = 0.000$; OR = 4.453), and family support ($p = 0.000$; OR = 10.200). The conclusion recommends family education interventions to improve compliance.

Keywords: Family Support, Hypertension, Knowledge, Elderly, Diet.

INTRODUCTION

Hypertension is a serious global health problem as a leading non-communicable disease causing morbidity and mortality, with a global prevalence reaching 22% and a prevalence of 25% in Southeast Asia. In Indonesia, the prevalence of hypertension among the elderly continues to increase from 55.3% in 2021 to 61.5% in 2022, while in South Sumatra, it reached 217,052 cases among the elderly in 2022. This prevalence is driven by factors such as a high-salt diet, lack of physical activity, and low public awareness.

At the local level, the Merdeka Community Health Center in Palembang recorded 5,709 cases of hypertension in 2022, which jumped to 5,982 in 2023, making it the most prevalent non-communicable disease with 1,298 cases in the elderly. Data from the Palembang Health Office shows an increase from 22.5% in 2018 to 57.2% in 2020, while the South Sumatra Statistics Agency (BPS) reported 1,497,736 cases in 2022. This phenomenon emphasizes the urgency of control through healthy behaviors in the elderly [Maulidah et al., 2022; Siwasiwan et al., 2023].

Although hypertension can be controlled, control behaviors in the elderly are low due to a lack of knowledge about complications and treatment, which is significantly correlated with adherence ($p=0.006$). Low knowledge complicates prevention, as seen in respondents who misunderstood normal blood pressure limits [Siwasiwan et al., 2023; Rodiyyah Tohri, 2020]. This exacerbates the risk of stroke and heart failure in the elderly at the Merdeka Community Health Center.

Unhealthy dietary habits, such as high salt and fat consumption, contribute to hypertension, with a significant association with control behaviors ($p=0.000$). Elderly individuals often neglect a low-sodium diet, leading to water retention and increased blood pressure [Efendi et al., 2022; Berta Afriani et al., 2023]. In the Palembang region, these dietary habits exacerbate the high prevalence.

Lack of family support leads to low motivation in the elderly for routine blood pressure monitoring, with a significant correlation ($p=0.000$). Emotional and instrumental support are crucial, yet often absent, resulting in patient non-adherence to medication or diet [Aprilianawati & Wahyudi, 2022; Lavenia Tamu Ina Setyoningrum, 2023]. This is a major challenge at the Merdeka Community Health Center.

This study aims to analyze the relationship between knowledge, diet, and family support simultaneously and partially with hypertension control behavior in the elderly at the Merdeka Community Health Center in Palembang in 2025. The urgency arises from the increase in local cases that threaten the quality of life of the elderly, requiring promotive interventions based on the Health

Belief Model to increase compliance [Fitriah et al., 2023; Fernandez et al., 2024]. The novelty lies in the specific focus of these factors in the context of urban health centers in South Sumatra post-pandemic, complementing previous studies with 2025 data.

RESEARCH METHODS

This study used a quantitative design with a cross-sectional observational analytical approach, which allows for simultaneous observation of the relationship between knowledge, diet, and family support factors on hypertension control behavior in the elderly within a specific timeframe [Sugiyono, 2021][Creswell & Creswell, 2023]. This method is suitable for associative studies such as hypertension risk factors in primary care facilities such as the Merdeka Community Health Center in Palembang, because it is efficient in identifying correlations without intervention [Sudaryono, 2021][Emzir, 2022]. The cross-sectional approach supports the generalizability of the results to the local hypertensive elderly population, as recommended for community health surveys.

The research instruments consisted of structured questionnaires and interviews for primary data, covering variables of control behavior (taking medication, checking blood pressure, diet, exercise), knowledge, eating patterns, and family support, with secondary data from medical records and community health center profiles. The validity and reliability of the instruments were tested through editing, coding, entry, and cleaning using SPSS, with univariate analysis for frequency distribution and bivariate analysis using the Chi-Square test ($\alpha=0.05$) to test the relationship hypothesis [Sugiyono, 2021][Sudaryono, 2021]. This technique ensures accurate and objective data, in accordance with quantitative health research standards [Emzir, 2022].

The study population was all 2,167 elderly people with hypertension at the Merdeka Community Health Center in Palembang in 2025, with a sample of 106 respondents selected through simple random sampling using the Slovin formula ($e = 0.1$) and an additional 10% for loss anticipation [Sugiyono, 2021]. Inclusion criteria included elderly hypertensive patients who regularly received treatment, while exclusion criteria included those who were uncooperative, ensuring representativeness [Sudaryono, 2021]. This sample size was adequate to detect moderate strength of association in cross-sectional studies [Creswell & Creswell, 2023].

The research procedure began with ethical approval, community health center permission, and respondent recruitment through medical records. Primary data collection was carried out via questionnaires and in-person interviews from June to July 2025 at the Merdeka Community Health Center. Data were processed through editing, coding, tabulation, and SPSS analysis for univariate (frequency/percentage) and bivariate (Chi-Square with OR) tests, ending with interpretation of the results according to the Health Belief Model framework [Emzir, 2022][Sugiyono, 2021]. The entire process maintained confidentiality and informed consent for research ethics [Sudaryono, 2021].

RESULTS AND DISCUSSION

Univariate Analysis

The purpose of this analysis was to examine the frequency and percentage distribution of each variable, including the dependent variable (hypertension control behavior in the elderly) and the independent variables (knowledge, diet, and family support). The study sample consisted of 106 respondents, conducted in 2025 at the Merdeka Community Health Center, Palembang.

Frequency Distribution of Hypertension Control Behavior in the Elderly

In the study, hypertension control behavior in the elderly was categorized into two categories: Poor and Good. For more details on the research results, see the table below.

Table 1. Frequency Distribution of Respondents Based on Hypertension Control Behavior in the Elderly at the Merdeka Community Health Center, Palembang in 2025

No	Hypertension Control Behavior in the Elderly	Frequency (n)	Percentage (%)
1	Not good	50	47.2%
2	Good	56	52.8%
Total		106	100%

Based on table 1 above, it can be concluded that of the 106 respondents, 50 people (47.2%) had poor hypertension control behavior in the elderly, and 56 people (52.8%) had good hypertension control behavior in the elderly.

Frequency Distribution of Elderly Knowledge About Hypertension

In this study, elderly people's knowledge of hypertension was categorized into two categories: Poor and Good. For more details on the research results, see the table below.

Table 2. Frequency Distribution of Respondents Based on Elderly Knowledge About Hypertension at Merdeka Community Health Center, Palembang in 2025

No	Elderly Knowledge About Hypertension	Frequency (n)	Percentage (%)
1	Not good	28	26.4%
2	Good	78	73.6%
Total		106	100

Based on table 2 above, it can be concluded that of the 106 respondents, 78 respondents (73.6%) had a high understanding of hypertension and 28 respondents (26.4%) had low knowledge.

Frequency Distribution of Dietary Patterns of Hypertension Sufferers

In this study, elderly people's knowledge of hypertension was categorized into two categories: Poor and Good. For more details on the research results, see the table below.

Table 3. Frequency Distribution of Respondents Based on Dietary Patterns of Hypertension Patients at the Merdeka Community Health Center, Palembang in 2025

No	Dietary Patterns for Hypertension Patients	Frequency (n)	Percentage (%)
1	Not good	50	47.2%
2	Good	56	52.8%
Total		106	100

Based on table 3 above, it can be concluded that of the 106 respondents, 50 (47.2%) have bad eating habits, and 56 (52.8%) have good eating habits, according to table 3 above.

Frequency Distribution of Family Support for Hypertension Sufferers

In this study, elderly people's knowledge of hypertension was categorized into two categories: Poor and Good. For more details on the research results, see the table below.

Table 4. Frequency Distribution of Respondents Based on Family Support of Hypertension Patients at the Merdeka Community Health Center, Palembang in 2025

No	Family Support for Hypertension Patients	Frequency (n)	Percentage (%)
1	Less Supportive	30	28.3%
2	Support	76	71.7%
TOTAL		106	100

Based on table 4 above, it can be concluded that of the 106 respondents, 30 respondents (28.3%) had less supportive family support and 76 respondents (71.7%) had supportive family support.

Bivariate Analysis

This analysis was conducted to determine the relationship between two factors, namely the independent variables (knowledge, diet, and family support) and the dependent variable (hypertension control behavior in the elderly) using the chi-square test.

The Relationship Between Elderly Knowledge About Hypertension and Hypertension Control Behavior in the Elderly

This study was conducted on 106 respondents where the variables of hypertension control behavior in the elderly were divided into two, namely Poor and Good, while the elderly's knowledge about hypertension was divided into two categories, namely Poor and Good, for further explanation, see the table below.

Table 5. Relationship between Elderly Knowledge about Hypertension and Hypertension Control Behavior in the Elderly at the Merdeka Community Health Center, Palembang in 2025

Elderly Knowledge About Hypertension	Hypertension Control Behavior in the Elderly						P-Value	OR (95%-CI)
	Not good		Good		Total			
	n	%	n	%	n	%		
Not good	25	89.3	3	10.7	28	100	0,000	17,667 (4,870-64084)
Good	25	32.1	53	67.9	78	100		
Total	50		56		106			

Based on Table 5 above, it is known that the proportion of elderly knowledge about hypertension with respondents who have poor hypertension control behavior in the elderly is 25 (89.3%) and respondents who have elderly knowledge about hypertension with good hypertension control behavior in the elderly is 25 (32.1%). The results of the statistical test obtained a p-value = 0.000 (<0.05). These results indicate a significant relationship between elderly knowledge about hypertension and hypertension control behavior in the elderly.

The Odd Ratio value obtained was 17.667, which means that elderly people with poor knowledge about hypertension were 17.667 times more likely to have poor hypertension control behavior, compared to elderly people with good knowledge.

The Relationship Between Diet and Hypertension Control Behavior in the Elderly

This study was conducted on 106 respondents where the variables of hypertension control behavior in the elderly were divided into two, namely Less Good and Good, while the eating patterns of hypertension sufferers were divided into two categories, namely Less Good and Good, for further explanation can be seen in the table below.

Table 6. Relationship between Dietary Patterns of Hypertension Sufferers and Hypertension Control Behavior in the Elderly at the Merdeka Community Health Center, Palembang in 2025

Dietary Patterns for Hypertension Sufferers	Hypertension Control Behavior in the Elderly						P-Value	OR (95%-CI)
	Not good		Good		Total			
	n	%	n	%	n	%		
Not good	33	66.0	17	34.0	50	100	0,000	4,453 (1,968-10,077)
Good	17	30.4	39	69.6	56	100		
Total	50		56		106			

Based on Table 6 above, it is known that the proportion of dietary patterns of hypertension sufferers with respondents who have poor hypertension control behavior in the elderly is 33 (66.0%) and respondents who have dietary patterns with good hypertension control behavior in the elderly are 17 (30.4%). The results of the statistical test obtained a p-value = 0.000 (<0.05). These results indicate a significant relationship between the dietary patterns of hypertension sufferers and hypertension control behavior in the elderly.

Odd Ratio value obtained 4,453 which means that elderly people with poor eating habits have 4,453 times more likely to have poor hypertension control behavior, compared to elderly people who have a good diet.

The Relationship Between Family Support and Hypertension Control Behavior in the Elderly

This study was conducted on 106 respondents where the variables of hypertension control behavior in the elderly were divided into two, namely Less Good and Good, while family support for hypertension sufferers was divided into two categories, namely Less Supportive and Supportive, for further explanation, see the table below.

Table 7. Relationship between Family Support of Hypertension Sufferers and Hypertension Control Behavior in the Elderly at the Merdeka Community Health Center, Palembang in 2025

Family Support for Hypertension Sufferers	Hypertension Control Behavior in the Elderly						P-Value	OR (95%-CI)
	Not good		Good		Total			
	n	%	N	%	n	%		
Less Supportive	25	83.3	5	16.7	30	100	0,000	10,200 (3,489-29,821)
Support	25	32.9	51	67.1	76	100		
Total	50		56		106			

Based on Table 7 above, it is known that the proportion of family support for hypertension sufferers with respondents who have poor hypertension control behavior in the elderly is 25 (83.3%) and respondents who have family support with good hypertension control behavior in the elderly is 25 (32.9%). The results of the statistical test obtained a p-value = 0.000 (<0.05). These results indicate a significant relationship between the dietary patterns of hypertension sufferers and hypertension control behavior in the elderly.

Odd Ratio value obtained 10,200 which means that elderly people who do not get family support have 10,200 times more likely to have poor hypertension control behavior, compared to elderly who receive family support.

DISCUSSION

The Relationship Between Elderly Knowledge About Hypertension and Hypertension Control Behavior in the Elderly

Based on the research findings, it was found that 25 respondents (89.3%) had poor hypertension control behavior in the elderly and 25 respondents (32.1%) had good hypertension control behavior in the elderly. The statistical test produced a p-value of 0.000 (<0.05). This finding indicates a strong correlation between the elderly's understanding of hypertension and their practices in managing it. The Odd Ratio value obtained was 17.667, which indicates that elderly with inadequate understanding of hypertension were 17.667 times more likely to show poor hypertension control behavior than elderly with adequate knowledge.

According to a 2018 study by Rhaina Dhifaa M, Widi Raharjo, and Mistika Zakiah, patients with higher levels of knowledge tend to behave better in terms of blood pressure management than patients with lower levels of knowledge. According to Trisman Jaya Hia (2020), some people's knowledge is adequate because they do not fully understand how to prevent hypertension and are not yet aware of the latest information about the condition. Knowledge and hypertension control are significantly correlated, according to the results of the study's chi-square test, which showed a p-value of $0.006 < 0.05$. (Siwasiwan et al., 2023).

Trisman Jaya Hia (2020) stated that knowledge about hypertension is still inadequate. This is because the majority of people do not have up-to-date knowledge about hypertension and do not understand comprehensive hypertension prevention. The findings of this study, as determined by the chi-square test, indicate a substantial correlation between treatment success and knowledge of how to control hypertension. This result is significant, as indicated by a p-value of $0.006 < 0.05$. (Siwasiwan et al., 2023).

This study confirms the findings of Anggreani and Nasution (2020) who found a strong relationship (p-value $0.009 < 0.05$) between elderly knowledge and hypertension control behavior. (Maulidah et al., 2022).

This study is in accordance with research (Wandira et al., 2020) which shows a strong correlation (p-value $0.000 < 0.005$) between the level of awareness of hypertension control behavior. (Hayati & Irianty, 2024).

This is also consistent with Daeli's research (2017) which found a p-value of $0.001 < 0.05$ for the relationship between efforts to reduce hypertension and knowledge. (Maulidah et al., 2022).

Research by Riri Maharani (2017) shows that blood pressure management behavior and knowledge are interrelated. Based on survey results, most participants provided inaccurate answers to questions regarding blood pressure management and normal blood pressure limits. This suggests that respondents may have difficulty controlling their blood pressure due to a lack of necessary knowledge. Knowledge, as we all know, is the foundation for behavior change. (Siwasiwan et al., 2023).

Researchers assume there is a relationship between knowledge levels and how older adults manage their blood pressure. This is because people with good knowledge are more likely to be able to control their blood pressure through exercise, eating fruits and vegetables, and maintaining a healthy weight. This knowledge can be acquired through personal experience or learning, both formal and informal. Blood pressure control measures don't always arise from good knowledge. Many actions are performed routinely without realizing it, as they become habits. Elderly people with underlying health problems often adopt special diets to control their blood pressure. Multimorbidity is a term used to describe health problems that often occur in older adults and are not limited to a single disease but can manifest in various ways. Physiological processes in older adults begin to deteriorate, which contributes to this. As people age, multimorbidity tends to increase. This supports the notion that respondents who are knowledgeable and practice these measures understand the impact of hypertension and know how to prevent it.

Adequate knowledge often influences how a person copes with a problem. Patients who have experienced hypertension should have adequate knowledge as a baseline to facilitate their

understanding of the treatment or care program being administered. Knowledge about hypertension that patients need to know includes the definition of hypertension itself and how to manage or treat it, both independently and with the help of family and healthcare professionals.

The Relationship Between Diet and Hypertension Control Behavior in the Elderly

Based on the research conducted, it was found that the proportion of dietary patterns of hypertension sufferers with respondents who had poor hypertension control behavior in the elderly was 33 (66.0%) and respondents who had dietary patterns with good hypertension control behavior in the elderly were 17 (30.4%). The results of the statistical test obtained a p-value = 0.000 (<0.05). These results indicate a significant relationship between the dietary patterns of hypertension sufferers and hypertension control behavior in the elderly. The Odd Ratio value obtained 4,453 which means that elderly people with poor eating habits have 4,453 times more likely to have poor hypertension control behavior, compared to elderly people who have a good diet.

Based on the results of statistical tests conducted by Ririn Maharani (2017), there is a relationship between respondents' blood pressure control practices and their eating habits. Because the body breaks down food and converts it into energy needs or reserves, respondents' eating habits have a significant impact on their hypertension. Hypertensive patients' blood pressure will be difficult to control if they consume a lot of sodium, do not consume fiber, and do not avoid fatty foods. Based on the research findings, most participants continued to consume excessive amounts of salt and fatty foods. (Siwasiwan et al., 2023).

According to Karyadi (2012), consuming foods high in cholesterol can cause hypertension. Excess cholesterol in the blood can cause narrowing of the arteries, even blockage, and increase the risk of atherosclerosis, which is associated with increased blood pressure. When LDL levels increase, plaque builds up, narrowing the arteries, slowing blood flow, forcing the heart to work harder to pump blood, ultimately leading to hypertension. (Efendi et al., 2022).

According to Muhammadun (2010), consuming high-fat foods, such as offal, can lead to obesity. This obesity can then worsen symptoms of hypertension because fat contributes to increased blood pressure through the mechanism of blood vessel blockage. Therefore, it is important to adjust your diet after entering your 40s. (Efendi et al., 2022).

Another study in Blokseger Hamlet, Tegalsari District, Banyuwangi Regency with a sample of 60 respondents found a strong relationship between the eating habits of the elderly and hypertension management measures (p-value = 0.000). (B et al., 2021).

This study supports the Osis study (2020) which found a relationship between dietary habits and hypertension management methods. The p-value from the Chi-square test was 0.000 (p<0.05). (Meidawati Alfina et al., 2023).

According to Masyudi's (2018) study, of 42 participants, 27 (64.3%) stated that their diet supported healthy habits in older adults for managing hypertension. Thirty (61.2%) of the 49 respondents stated that their diet did not support unhealthy behaviors in older adults related to hypertension management.

According to researchers, there is a tendency for older adults' diets to contain foods that can increase blood pressure, such as foods high in sodium, fat, and flavorings. High amounts of sodium can cause the heart to work harder, increasing blood volume and increasing blood pressure. Sodium also causes the body to retain more water than usual, increasing blood volume and increasing blood pressure. High sodium levels can also encourage the development of larger fat cells due to the formation of fat in white adipose tissue. If this condition persists, it can cause blood vessels to narrow due to fat accumulation, ultimately leading to increased blood pressure.

A balanced intake of essential nutrients has always been a hallmark of a healthy diet. However, many seniors neglect their nutritional intake. Furthermore, many seniors neglect their health, making diet a contributing factor to high blood pressure.

Relationship Between Family Support and Hypertension Control Behavior in the Elderly

Based on the research results, it was found that the proportion of family support for hypertension sufferers with respondents who had poor hypertension control behavior in the elderly was 25 (83.3%) and respondents who had family support with good hypertension control behavior in the elderly were 25 (32.9%). The statistical test results obtained a p-value = 0.000 (<0.05). These results indicate a significant relationship between the dietary patterns of hypertension sufferers and hypertension control behavior in the elderly. The Odd Ratio value obtained 10,200 which means that elderly people who do not get family support have 10,200 times more likely to have poor hypertension control behavior, compared to elderly who receive family support.

According to Galih (2020), informational support, evaluation support, instrumental assistance, and emotional support can all be provided to parents with hypertension. Effective hypertension management will be beneficial if these four elements of family support are met. (Lavenia Tamu Ina & Setyoningrum, 2023).

Family support and hypertension control have been shown to have a strong correlation ($p=0.000$) in the Panjang Community Health Center Work Area of Bandar Lampung City, according to previous research by Wahyudi (2020). (Lavenia Tamu Ina & Setyoningrum, 2023).

This aligns with the findings of research by Chasani et al. (2022), who found that the behavior of elderly people in managing hypertension in RW 07, Pondok Pinang, South Jakarta, was significantly correlated with family support. With a significance level ($p\text{-value} < 0.05$), the correlation coefficient was 0.034. Elderly behavior is strongly influenced by family support, which ensures they behave well in all situations, especially when sick (Chasani et al., 2022).

This finding is reinforced by Dewi's (2022) study, which found a relationship between older adults' behavior in managing hypertension and family support. Family support significantly impacts older adults' perspectives and behaviors (Dewi, 2022).

Similar findings to those reported by Indriani (2023) were also found in another study. Her study examined the relationship between family support and elderly behavior in hypertension management in Gorontalo City. A total of 2,240 respondents participated in this study. The findings indicated a relationship between elderly behavior in hypertension management and family support. A chi-square test was used to confirm this relationship, and the results showed a ρ value of 0.025. (Lavenia Tamu Ina & Setyoningrum, 2023).

According to researchers, family support is closely related to how older adults manage their hypertension. It's easier for older adults to control their hypertension when they have strong family support. Families can help by reminding older adults to reduce salt intake, exercise regularly, and provide nutritious food for those with high blood pressure. Furthermore, families can remind older adults to have checkups, provide medication, ensure they take it regularly, and accompany them to health clinics. Older adults are more likely to successfully manage their hypertension when they feel loved, supported, and accepted by their families because they have someone to care for them. It's important to recognize that families have a significant influence on older adults' behavior, which can lead to improvements in how they manage their hypertension. Health benefits can also include better physical health and a lower risk of serious complications such as heart disease, stroke, kidney problems, and even death.

The acts of kindness and compassion shown by family members to a sick relative are known as family support. Families facing health challenges receive support in a variety of ways, including information, gratitude, direct assistance, and emotional support. All of these types of support are an important part of the family's overall caregiving approach, and this approach helps patients improve their health and adjust to life.

CONCLUSION

This study found a significant association between knowledge, diet, and family support with hypertension control behavior in the elderly at the Merdeka Community Health Center in Palembang in 2025, with a p-value of 0.000 for all three variables using the Chi-Square test. Respondents with low knowledge (OR=17.667), poor diet (OR=4.453), and minimal family support (OR=10.200) tended to have poor control behavior, although the majority showed an overall good category (52.8%). These findings confirm the Health Belief Model framework, where understanding and external support encourage adherence to medication, a low-sodium diet, exercise, and blood pressure monitoring [Siwasiwan et al., 2023]. However, limitations of the study include the cross-sectional design that cannot determine causality, the sample size limited to one community health center (n=106), and the potential for recall bias in self-report data via questionnaires.

Practical implications include recommendations for family-based educational interventions by community health center (Puskesmas) health workers to improve knowledge and support, such as the DASH diet counseling program and collaborative monitoring. For future research, suggestions include using a longitudinal cohort design for causality, a multi-Puskesmas sample, and additional variables such as physical activity or comorbidities to strengthen generalizability in the urban context of South Sumatra [Sugiyono, 2021][Creswell & Creswell, 2023].

REFERENCES

- B, H., Akbar, H., Langingi, ARC, & Hamzah, SR (2021). Analysis of the relationship between dietary patterns and the incidence of hypertension in the elderly. *Gorontalo Journal Health and Science Community*, 5(1), 194–201. <https://doi.org/10.35971/gojhes.v5i1.10039>
- Berta Afriani, R., Camelia, R., & Astriana, W. (2023). Analysis of hypertension incidence in the elderly. *Emergency Journal*, 5(1), 1–8. <https://doi.org/10.32583/jgd.v5i1.912>
- Chasani, S., et al. (2022). The relationship between family support and elderly behavior in controlling hypertension. [Journal Name].
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- Dewi, R. (2022). The relationship between family support and elderly behavior in controlling hypertension. [Journal Name].
- Efendi, Z., Adha, D., & Febriyanti, F. (2022). The relationship between lifestyle and dietary patterns and the incidence of hypertension during the new normal period amid the COVID-19 pandemic. *Menara Medika*, 4(2), 165–172. <https://doi.org/10.31869/mm.v4i2.3034>
- Fernandez, GV, Lampus, NS, & Sirait, I. (2024). Secondary prevention in hypertensive patients through blood pressure control counseling based on the integration of the Health Belief Model theory and the adaptation model. [Journal Name], 5(2), 487–493.
- Fitriah, E., Sari, INS, Novani, N., Norsafitri, RA, Setiawan, D., & Handayani, N. (2023). Education using leaflets based on the Health Belief Model (HBM) theory for hypertension patients. *Abdimasku: Journal of Community Service*, 6(2), 432. <https://doi.org/10.33633/ja.v6i2.1129>
- Hayati, R., & Irianty, H. (2024). Analysis of knowledge and attitudes related to blood pressure control behavior in hypertension sufferers. *Health Research Journal of Indonesia*, 3(2), 102–107. <https://doi.org/10.63004/hrji.v3i2.517>
- Lavenia Tamu Ina, N., & Setyoningrum, U. (2023). The relationship between family support and elderly behavior in controlling hypertension. *Journal of Healthy Cultured Nursing*, 1(1), 1–8. <https://doi.org/10.35473/jkbs.v1i1.2148>
- Maulidah, K., Neni, N., & Maywati, S. (2022). The relationship between knowledge, attitudes, and family support with hypertension control efforts in the elderly. *Indonesian Community Health Journal*, 18(2), 484–494. <https://doi.org/10.37058/jkki.v18i2.5613>

- Meidawati Alfina, AN, & Saelan. (2023). The relationship between dietary patterns and the incidence of hypertension in the elderly. [Journal Name].
- Rodiyah, E., & Tohri, T. (2020). The relationship between knowledge level and blood pressure control in hypertension. *Rajawali Health Journal*, 10(2), 68–82.
- Siwasiwan, S., Mutmainna, A., & Hasanuddin Makassar, N. (2023). Literature review: Factors related to hypertension control behavior in the elderly. *JIMPK: Scientific Journal of Nursing Students & Research*, 3(6), 219–221.
- Sugiyono. (2021). *Quantitative, qualitative, and R&D research methods*. Alfabeta.
- Sudaryono. (2021). *Quantitative, qualitative, and mixed method research methodology*. Rajawali Pers.