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## **Family Support With Self-Care Management For Hypertension Patients**

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Abstract. Hypertension is a disorder characterized by elevated blood pressure originating from abnormalities in blood vessels, leading to impaired delivery of oxygen and nutrients to essential body tissues. Family involvement in assisting relatives afflicted with hypertension constitutes a supportive mechanism to facilitate effective self-care management of the condition. This study aimed to investigate the correlation between familial support and self-care management in hypertensive patients at Tuminting Health Center. Cross-sectional methods. The study sample comprised 49 individuals selected by purposive sampling. A questionnaire was employed as the study instrument. The gathered data was analyzed with the SPSS 16.0 software employing the Chi Square statistical test at a significance level (a) of <0.05. The results indicated that the predominant age group was 56-65 years, including 27 respondents, which represents 55.1%. The majority of respondents were female, totaling 39 individuals, accounting for 79.6%. The most common educational attainment was high school, with 22 respondents, corresponding to 44.9%. The statistical test yielded a P value of 0.0001, which is less than the alpha value (a) of  $\leq$ 0.05. This study concludes that a correlation exists between family support and self-care management in hypertension patients at Tuminting Health Center. The findings of this study are anticipated to serve as a resource for individuals with hypertension, emphasizing the importance of self-care management to prevent problems and facilitate recovery.

Keywords: Family Support, Hypertension, Self Care Management

## 1. INTRODUCTION

Hypertension has become a major health issue in both developed and developing countries. Hypertension is a non-communicable disease and the leading cause of death worldwide. Hypertension is a condition where blood pressure increases due to disturbances in blood vessels, resulting in disrupted supply of oxygen and nutrients to the body's tissues that need them.(Fernalia et al., 2021). The number of people suffering from hypertension worldwide doubled between 1990-2019, increasing from 650 million to 1.3 billion, according to the World Health Organization (WHO, 2023). The prevalence of hypertension is increasing the fastest in developing countries (80%), where its treatment is still difficult to control. About 8 million people die each year due to hypertension, with 1.5 million deaths in Southeast Asia.

According to the Basic Health Research (Riskesdas), the prevalence of hypertension in Indonesia is 34.1%, which is an increase compared to the prevalence of hypertension in the 2013 Riskesdas, which was 25.8% (Ministry of Health of the Republic of Indonesia, 2021). Indonesia's prevalence of hypertension based on measurements is 34.1% (≥18 years), with the highest in South Kalimantan Region (44.1%) and the lowest in Papua (22.2%) (Riskesdas, 2018). The estimated number of hypertension cases in Indonesia is 63,309,620 people, while the death toll in Indonesia due to hypertension is 427,218 deaths. In North Sulawesi, reports

from the Manado City Health Office in 2018 recorded 27,668 cases, and in 2019, there were 1,870 cases of hypertension. Tuminting Community Health Center is the second highest health center in terms of the number of hypertension patients, with 368 cases (Manado City Health Office, 2019).

Changing one's lifestyle is one way to prevent the occurrence of hypertension complications. Lifestyle changes in hypertensive patients by maintaining a healthy diet, reducing salt intake, managing stress and weight, and quitting smoking (Buelt et al., 2021). Someone with hypertension is advised to implement self-care management as one of the disease management practices in daily life. In addition to those things, adherence to medication must also be observed so that blood pressure can be controlled within normal limits. In this case, family support is very important for the self-management of hypertensive patients in controlling their blood pressure. The consistent application of self-management is the most important thing in the effort to improve the quality of life for someone with hypertension. This is because hypertension is a chronic disease that has long-term effects on various aspects of life, both physically, psychologically, and socially (Utami et al., 2021). Based on the initial survey conducted, the number of hypertension cases in 2023 was 5,455 individuals with age categories: 20-44 years old, 395 individuals; 45-54 years old, 1,171 individuals; 55-59 years old, 1,030 individuals; 60-69 years old, 1,030 individuals; and 70 years and older, 835 individuals. Based on the initial survey at Tuminting Health Center, the number of hypertension patients in the last month was 282 individuals.

## 2. LITERATURE REVIEW

Consistent family support can enhance the quality of life for individuals with hypertension by promoting a healthy lifestyle. Family support encompasses the attitudes, actions, and acceptance directed towards family members, manifested through information sharing, assessment, practical assistance, and emotional support. This allows family members to feel acknowledged and safeguarded against the adverse effects of stress. Support from family is crucial for patients in the management of their illness. Family serves as an essential support system for individuals (Wahid, 2020).

Family support constitutes a crucial component of social support, significantly facilitating an individual's adaptation to life events. The family plays a crucial role by providing physical support, including assistance with medication schedules and dietary maintenance, as well as emotional support that enhances the patient's motivation to adopt a healthy lifestyle.

Active family involvement in the care process enhances patient motivation for treatment adherence, promotes a healthy lifestyle, and improves stress management. Alnidi, S. (2021).

Friedman identified that families obtain support through multiple modalities, such as informational support, appraisal support, instrumental support, and emotional support. The most effective preventive methods that strengthen family support and promote the health of family members are identified (Sudirman, 2022). Robust family support is a significant determinant in enhancing treatment outcomes and the overall quality of life for patients. This aligns with the research by Nurfitasari, S., Handayani, L. T., & Asih, S. W. (2023), which emphasizes the critical roles of both formal and informal family structures in the management of hypertension care for affected family members.

#### 3. METHODS

This study employs a quantitative research method with a descriptive-analytical approach to ascertain the correlation between independent and dependent variables. This research employed a cross-sectional study design. The study population comprises hypertension patients at Tuminting Community Health Center throughout the past month, encompassing persons from early adulthood to old, totaling 282 participants. The employed sampling technique is Purposive Sampling, since the selection of samples is predicated on predetermined specified criteria utilizing the Slovin formula. The sample requirements for this study are hypertension patients residing within the jurisdiction of the Tuminting health center, living with family, consenting to participate as respondents, and possessing a chronic condition record. The sample size for this study included 49 participants with hypertension.

The research instruments employed in this study are the Family Support Questionnaire and the Self-Care Management Questionnaire. This study was performed at the Tuminting Health Center in August 2024. Data analysis was performed univariately and bivariately utilizing the Chi-Square statistical test. This study adheres to research ethics, as investigations involving human beings must comply with ethical norms. This research encompasses ethical considerations such as informed consent, which involves providing a consent form to participants, anonymity to preserve the confidentiality of respondents by omitting their names from data sheets and questionnaires, and confidentiality, ensuring that all collected information is securely maintained by the researcher.

#### 4. RESULTS

Table 1.Frequency Distribution by Age, Gender, and Education Level in Hypertensive
Patients at Tuminting Health Center

Characteristic	Frequency (f)	Presentation (%)
Age		
Early Elderly (46-55 Years)	15	30,6
Late Elderly (56-65 Years)	27	55,1
Elderly (≥65 Years)	7	14,3
Gender		
Male	10	20,4
Female	39	79,6
Educational Level		
Elementary School Junior	12	24,5
High School	12	24,5
Senior High School	22	44,9
Bachelor's Degree	3	6,1
Total	49	100

Table 1 illustrates the frequency distribution categorized by age, gender, and education level among 49 respondents. The majority of respondents belong to the late elderly demographic (56-65 years), comprising 27 individuals, which accounts for 55.1%. Females constitute the predominant gender, with 39 respondents representing 79.6%. Furthermore, the most common educational attainment is high school, with 22 respondents, corresponding to 44.9%.

Table 2.Frequency Distribution of Family Support in Self-Care Management Among
Hypertensive Patients at Tuminting Health Center

Analysis of a Single Variable	Frequency (f)	Presentation (%)				
Family Support						
Favorable	43	87,8				
Suboptimal	6	12,2				
Self Care Management						
Favorable	44	89,8				
Suboptimal	5	10,2				
Total	49	100				

Table 2. illustrates the frequency distribution of the univariate analysis of family support among hypertension patients at the Tuminting health facility. Out of 49 respondents, the majority, comprising 43 individuals (87.8%), reported having good family support. The self-care management study indicated that the majority of respondents demonstrated effective self-care management, with 44 respondents (89.8%).

Table 3. Frequency Distribution Based on Family Support with Self Care Management in Hypertension Sufferers at Tuminting Community Health Center

	Self Care Management			Total				
Family Support	Favorable		Suboptimal		Total		OR	P
	f	%	f	%	f	%		
Favorable	42	85,7	1	2,1	43	87,8		
Suboptimal	2	4,1	4	8,1	6	12,2	84,000	0,0001
Total	44	89,8	5	10,2	49	100		

Table 3 indicates that among the 49 respondents, the majority exhibited strong family support, with 43 respondents (87.8%) demonstrating effective self-care management, while 1 respondent (2.1%) displayed inadequate self-care management. Upon performing the Chi-Square test on a 2x2 table, it was determined that two cells exhibited an anticipated count value of  $\leq$  5. Consequently, the data were analyzed using Fisher's exact test, yielding a p-value of 0.0001, which is less than the alpha ( $\alpha$ ) threshold of  $\leq$ 0.05. Consequently, it is asserted that a correlation exists between family support and self-care management in hypertensive patients at the Tuminting health center, indicated by an Odds Ratio (OR) of 84.000. This signifies that respondents with robust family support possess an 84-fold greater likelihood of exhibiting effective self-care management in comparison to those with inadequate family support.

## 5. DISCUSSION

This study is entitled "The Correlation Between Familial Support and Self-Care Management in Hypertensive Patients at Tuminting Health Center, Manado." The findings of this investigation indicate a p-value of 0.0001, which is less than the alpha (α) threshold of ≤0.05. Consequently, it may be inferred that a correlation exists between familial support and self-care management among hypertension patients at the Tuminting community health center. This study aligns with the research by Simamora T (2022), which identified a correlation between family support and self-care management among hypertension patients at Santa Elisabeth Hospital. This study's results align with the research by Wicaksono R. et al. (2024), which reported a p-value of 0.001, signifying a correlation between family support and self-care management in hypertension patients.

This is corroborated by Dorothea Orem's health and self-management theory (2020), which underscores the significance of self-care in chronic disease management. This idea aligns with Bowen's health and family theory (2019), which views the family as an interactive and mutually influential system. In this context, familial support acts as a determinant that aids in the management of chronic health disorders, including hypertension. The findings indicate

the existence of respondents with strong familial support yet inadequate self-care management, as well as those with little familial support but effective self-care management. This aligns with Simamora T.'s (2020) research, which indicates that effective family support coupled with inadequate self-care management is affected by various factors, including insufficient familial motivation, lack of family involvement with the patient, and inadequate information provided to the family that aids the patient's treatment. According to the self-control hypothesis of Mischel and Shoda (2019), even in the absence of family support, an individual's ability to regulate behavior, make decisions, and effectively implement self-management strategies can enhance their self-care management.

Research by Joo et al. (2019) corroborates that individuals possessing substantial knowledge and motivation can sustain effective self-management despite insufficient familial support. The outcomes of this study are also affected by various factors, including age.

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support, an individual's ability to regulate behavior, make decisions, and effectively implement self-management strategies can enhance their self-care management.

Research by Joo et al. (2019) corroborates that individuals possessing substantial knowledge and motivation can sustain effective self-management despite insufficient familial support. The outcomes of this study are also affected by various factors, including age. The age frequency distribution indicates that the majority of respondents belong to the late elderly category (56-65 years), including 27 individuals (55.1%). Research by McLaughlin et al. (2019) indicates that age affects family support, with older adults typically receiving greater familial assistance, although encountering challenges in effective self-management adaptation. The frequency distribution of gender indicates that the majority of respondents were female, comprising 39 individuals (79.6%). During this age, hormonal fluctuations associated with menopause may result in heightened insulin resistance and metabolic problems that contribute to hypertension, with weight gain and adverse fat distribution, all of which are linked to elevated hypertension.

The frequency distribution of education levels indicates that the predominant group of respondents possesses a high school education, amounting to 22 individuals (44.9%). Research by Rusminingsih E. (2021) indicates that education is intricately connected to knowledge and is not a causative element of hypertension; nonetheless, it can impact an individual's lifestyle. The study posits that self-care in hypertension patients with robust family support is attributable to emotional, esteem, informational, and instrumental assistance. Robust familial assistance will augment the capacity of hypertension individuals to handle their disease proficiently. This include physical assistance (e.g., medication reminders), emotional support (e.g., motivation to adhere to the treatment plan), and lifestyle modifications (e.g., adopting a healthy diet together).

## 6. CONCLUSION

Robust familial support can significantly enhance treatment outcomes and the overall quality of life for patients. The active participation of family members in aiding the care of hypertension patients is a crucial kind of assistance to guarantee effective hypertension control. With ongoing treatment, hypertensive patients can maintain stable blood pressure within normal ranges. This research aims to provide a reference for future studies investigating additional factors that affect the association between family support and self-care management.

## **LIMITATION**

This study possesses multiple limitations that may influence the results and the generalizability of the findings, including: Method of Data Collection This study employs a subjective questionnaire method, which may introduce bias in respondents' answers, either from social desirability bias or misinterpretation of questions. Research Methodology This study employs a cross-sectional design, hence it cannot elucidate the causal relationship between familial support and self-care management in individuals with hypertension. Diversity in Respondent Attributes The research sample exclusively comprises hypertension patients from a specific region, hence the findings of this study cannot be extrapolated to a wider population with varying social and cultural attributes. Unexamined Variables This study did not evaluate other characteristics influencing self-care management in hypertension patients, including education level, economic status, and medication adherence.

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