



## HEALTH WORKER SUPPORT TO IMPROVE SELF-MANAGEMENT OF HYPERTENSION PATIENTS: A CROSS-SECTIONAL STUDY

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### ABSTRACT

Background: Poor self-management, characterized by medication non-adherence and unhealthy lifestyles, significantly contributes to uncontrolled hypertension. Low self-efficacy in managing blood pressure remains a critical challenge in community health. Objective: This study evaluated the correlation between Health Worker Support and self-management practices among hypertensive patients. Methods: A quantitative cross-sectional study was conducted in December 2023 with 112 respondents selected via purposive sampling. Inclusion criteria included patients aged 19–65, diagnosed with uncomplicated hypertension, possessing a Glasgow Coma Scale (GCS) of 15 (E4V5M6), and being literate. Data were collected using healthcare support and self-management questionnaires, then analyzed using the Spearman Rank correlation test ( $\alpha < 0.05$ ). Results: Statistical analysis revealed a significant positive correlation between healthcare provider support and patient self-management ( $p = 0.003$ ). Conclusion: Professional Health worker support is pivotal in enhancing self-management among hypertensive individuals. To optimize patient quality of life and prevent complications, healthcare providers should intensify proactive monitoring and educational interventions to foster better self-care autonomy.

Keywords: Health Worker Support, Self-Management, Hypertension

### INTRODUCTION

Hypertension is a prevalent non-communicable disease (NCD) and a leading global cause of mortality (Pires et al., 2022). It is characterized as a chronic condition involving a sustained increase in blood pressure, specifically where systolic and diastolic measurements consistently exceed 140/90 mmHg over an extended period (Foroumandi et al., 2022; Ingenhoff et al., 2022; Mahyuvi, 2025). Hypertension remains a critical global health challenge, acting as a primary precursor to cardiovascular diseases and premature mortality (Mahyuvi, Oqui, et al., 2026). According to the WHO's Global Hypertension Report (2023), approximately one in three adults worldwide totaling an estimated 1.28 billion people are living with this condition. While previous projections anticipated a steady rise in prevalence, current data reveals a more alarming reality: nearly 46% of affected individuals remain unaware of their status, and only 21% have achieved effective blood pressure control. Without intensive intervention, the escalating burden of hypertension continues to pose a significant threat to global public health systems, particularly in low- and middle-income regions (Mahyuvi et al., 2025; Ostchega et al., 2020). Hypertension has resulted in the death of about eight million people each year, 1.5 million deaths in Southeast Asia, whose population suffers from hypertension (Ralapanawa, 2023). According to the Indonesian Ministry of Health (2023), the prevalence of hypertension demonstrates a progressive increase across productive and elderly age groups. The data indicates that the condition

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affects 6.3% of individuals aged 35–44 years, rising significantly to 11.9% in the 45–54 age bracket, and reaching a peak of 17.2% among those aged 55–64 years. (Widayanti et al., 2020). Indonesia has a high prevalence of hypertension (Mahyuvi, Prasetyo, et al., 2023).

Low self-management in the community is the cause of many uncontrolled hypertension. The ability to do Self-Management of people with hypertension is still relatively low, characterized by failure to control high blood pressure resulting from non-compliance with medication, unhealthy diet, and lifestyle (AlHadlaq et al., 2019; Mahyuvi, Pradana, et al., 2023). This contributes to uncontrolled hypertension, which diminishes patient quality of life and leads to a poor clinical prognosis (Konlan & Shin, 2023). A person with hypertension is advised to carry out self-management as one of the management of diseases experienced in everyday life. Self-management is the ability of individuals to manage daily life control and reduce the impact of the disease they suffer (Dineen-Griffin et al., 2019; Mahyuvi, Katmini, et al., 2023). Optimizing self-management is critical for patients with uncontrolled hypertension to achieve blood pressure regulation, mitigate complications, and improve clinical outcomes ( Ongkulna et al., 2022).

In patients with hypertension, it is indispensable to support health workers in helping hypertension patients in self-management under supervision in terms of lifestyle, adherence to regular treatment, eating healthy foods, and providing an impact on the comfort of sufferers. The support of health workers is an important thing that must be done because it is a form of assistance from health workers in terms of attention; informers provide other support that can be received by Hypertension patients so that their lives are better (Goudge et al., 2018). To be accepted by the community in providing support, health workers must use approaches, both personally to the environment and how to deliver it to be well received (Diver et al., 2021). This study analyzed the correlation between healthcare provider support and self-management among hypertensive patients.

## RESEARCH METHODOLOGY

This quantitative study utilized a cross-sectional design in Surabaya. From a population of 313,960 hypertensive individuals, 112 respondents were recruited via purposive sampling. Inclusion criteria comprised patients aged 19–65 with uncomplicated hypertension, a Glasgow Coma Scale (GCS) of 15 (E4V5M6), and literacy. Exclusion criteria included patients declining participation, those with comorbidities, impaired consciousness, or illiteracy.

The research was approved by the Surabaya City Health Office, and all respondents provided informed consent prior to their participation in December 2023. Data collection procedures involved initial coordination with health workers across three community health center work areas in Surabaya to identify eligible patients. Researchers then met with the participants to introduce themselves and explain the study's objectives and procedures. Respondents were instructed on how to complete the questionnaires, which covered demographic data, health worker support, and self-management. The survey process took approximately 10–15 minutes per respondent. The research instruments included: Health Worker Support Questionnaire: Adapted from (Pratiwi, 2022), with a validity significance of  $< 0.05$  for all items and a Cronbach's Alpha of 0.859. Hypertension Self-Management Questionnaire: Adapted from (Akhter, 2010), demonstrating a validity significance of  $< 0.05$  and a reliability coefficient above 0.8.

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Data analysis was performed using the Spearman Rank Correlation Test. This test was selected due to its suitability for the study's criteria and its efficiency in measuring the strength and significance of the relationship between variables. A p-value of < 0.05 was used to determine statistical significance. Ethical integrity was maintained by adhering to principles of informed consent, anonymity, confidentiality, beneficence, non-maleficence, veracity, and justice. The protocol was declared ethically feasible by the Health Research Ethics Committee= USI(Nomor:543/EC/KEPK/1/11/2023).

**RESULT AND DISCUSSION**

**RESULT**

The research findings are summarized in the table below:

Table 1. Frequency gender, age, education, occupation, income, and race

Characteristic Data	Frequency (N)	Percentage (%)
<b>Gender</b>		
Man	44	39,3
Woman	68	60,7
<b>Total</b>	<b>112</b>	<b>100</b>
<b>Age</b>		
	22	19,6
	55	49,1
56-65 Years	35	31,3
<b>Total</b>	<b>112</b>	<b>100</b>
<b>Education</b>		
Elementary and Junior High School	40	35,7
Senior High School	60	53,6
College	12	10,7
<b>Total</b>	<b>112</b>	<b>100</b>
<b>Work</b>		
Army / Police	2	1,8
State Officers of the Civil / State-Owned Efforts Agency	12	10,7
Farmer	8	7,1
Private Employees	33	29,5
Does not work	57	50,9
<b>Total</b>	<b>112</b>	<b>100</b>
<b>Income</b>		
>/= District Minimum Wage	35	31,3
District Minimum Wage <	77	68,8
<b>Total</b>	<b>112</b>	<b>100</b>
<b>Ras</b>		
Majority	89	79,5
Minorities	23	20,5
<b>Total</b>	<b>112</b>	<b>100</b>

Based on table 1. Most respondents (60.7%) were female. Almost half (49.1%) of respondents were 46-55 years old. The education level of respondents is partly (53.6%) in high school. Most respondents (68.8%) earned < the District Minimum Wage. Almost all respondents (79.5%) are the majority of the Javanese race.

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Table 2. Frequency Distribution based on Health Worker Support

Health Workforce Support	Frequency (n)	Percentage (%)
Good	65	58,0
Enough	30	26,8
Less	17	15,2
<b>Total</b>	<b>112</b>	<b>100</b>

Based on Table 2, of the 112 respondents, most (58.0%) stated that the support of health workers was good.

Table 3. Frequency Distribution based on self-management

Management	Frequency (N)	Percentage (%)
Good	78	69,7
Enough	20	17,9
Less	14	12,5
<b>Total</b>	<b>112</b>	<b>100</b>

Table 3. showed that of the 112 respondents, most (69.7%) stated the level of Self-Management was good.

Table 4. Cross-tabulation of the relationship between Health Worker Support and Self-Management of people with hypertension

Health Worker Support	Self Management						Sum	
	Good		Enough		Less			
	F	%	F	%	F	%	F	%
Good	53	47,4	7	6,3	5	4,5	65	58,0
Enough	15	13,4	9	8,1	6	5,3	30	26,8
Less	10	8,9	4	3,6	3	2,7	17	15,2
<b>Total</b>	<b>78</b>	<b>69,7</b>	<b>20</b>	<b>17,9</b>	<b>14</b>	<b>12,5</b>	<b>112</b>	<b>100</b>

The results of the correlation analysis using the Spearman Rank have a significance value of 0.003, which means there is a positive relationship.

Table 4 shows that out of 112 respondents, almost half (47.4%) stated they had good health worker support and self-management. The results of the correlation analysis using the Spearman Rank have a significance value of 0.003, which means there is a positive relationship.

## DISCUSSION

### Health Worker Support for Hypertension Sufferers

Data in Table 2 indicate that a majority of respondents (58.0%) perceived healthcare provider support as high. This aligns with (Pasha et al., 2021), who reported that robust healthcare support significantly fosters positive behavioral changes, particularly regarding self-management adherence in hypertensive patients

The behavior of friendly health workers, providing education related to how people with hypertension do good self-care and healthy lifestyle, giving explanations related to the treatment given, and emphasizing how important it is to take medication regularly is a form of support from health workers that can affect the behavior of hypertension sufferers (Narasimhan et al., 2023; Salemonsens et al., 2020; Tan et al., 2021). The findings in this study correlate with the research of Mata et al., (2021), who stated that the factors that influence the support of health workers in a health service are communication, namely providing services in a friendly manner and language that is easy to understand. Li et al.,

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(2020) said that the support of health workers and education related to patient diseases, which aims to help patients they can improve self-management and avoid complications, can be a motivation in itself, especially for people with hypertension to pay more attention and manage health independently so that they can improve their self-care behavior from the explanation above that the support of health workers is significant to be done in people with hypertension.

### **Self-Management in Hypertension Sufferers**

Table 3 demonstrates that a majority of respondents (69.7%) exhibited high levels of self-management. In this study, self-management encompasses self-integration, self-regulation, interaction with healthcare providers, blood pressure monitoring, and therapeutic adherence. These results align with Khoong et al. (2021), who reported proficient self-management across all domains. Broadly, self-management reflects an individual's capacity to engage in self-care to maintain and enhance health. This includes symptom monitoring, treatment adherence, psychological regulation, and lifestyle modifications tailored to chronic disease management (Omoronya et al., 2021).

Self-management of people with hypertension is the ability of a person with hypertension to maintain effective behavior through other healthy diets, exercise, use of drugs as recommended, self-monitoring, and emotional coping (Foroumandi et al., 2022; Mahyuvi et al., 2024). In individuals, internal and external factors become essential in improving self-management in Hypertension patients (Kurt & Gurdogan, 2022). Health workers support significantly correlates with improved self-management among hypertensive patients (Igarashi, 2019). Good self-management in people with hypertension in self-integration there is compliance that has been adhered to, among others, not smoking, efforts to maintain ideal body weight, compliance with the recommendations for taking blood pressure medication regularly, interaction with health workers with routine checks as recommended by doctors and health workers. Self-regulation is related to checking the signs and symptoms of high blood pressure and regular blood pressure monitoring at the nearest health integrated health service (Shahaj et al., 2019).

Self-management is essential for symptom reduction and complication prevention in hypertension. It facilitates disease processing, effective coping strategies, and the regulation of hypertension-related conditions.

### **The Relationship of Health Worker Support to Self-Management of Hypertension Sufferers**

Based on the analysis presented in Table 4, nearly half of the 112 respondents (47.4%) reported that both the support from health workers and their self-management practices were categorized as good. The Spearman Rank correlation analysis yielded a significance value of 0.003, indicating a statistically significant positive relationship between these two variables. This finding suggests that enhanced support from healthcare providers is directly associated with superior self-management among individuals with hypertension (Hussien et al., 2021; Islam et al., 2023). Effective self-management is critical for ensuring that the health behaviors of hypertensive patients are adequately controlled to prevent disease progression (Li et al., 2020).

Good self-management is achieved through the implementation of a healthy lifestyle, routine health screenings, and the utilization of professional medical services (Bonvanie et al., 2020; Salemonsens et al., 2020). Consequently, consistent support from healthcare workers regarding appropriate self-management strategies is essential. Strengthening these practices has been shown to improve the overall autonomy of patients in managing their condition (Putri et al., 2021). By establishing robust self-management, patients can



achieve a better quality of life, allowing them to maintain their health and perform daily activities with the same functional capacity as healthy individuals.

Theoretically, healthcare provider support plays a fundamental role in enhancing patient self-efficacy, which is necessary for the consistent implementation of self-management protocols. This support serves as an external reinforcement that facilitates behavioral modification through accurate information, clinical monitoring, and emotional motivation. When healthcare professionals deliver structured education regarding the DASH diet, physical activity, and medication adherence, patients tend to develop higher health literacy. This empowerment allows patients to make informed health decisions and bolsters their confidence in independently controlling their blood pressure, which constitutes the core of effective self-management (Mahyuv, Fanani, et al., 2026).

Beyond the educational dimension, a collaborative relationship between providers and patients establishes a vital control system to mitigate treatment fatigue. Instrumental support such as training in the use of home digital blood pressure monitors—combined with appraisal support through periodic feedback, assists patients in recognizing their clinical progress. Such supportive interactions reduce the psychological and social barriers frequently encountered by chronic patients. As a result, individuals with hypertension no longer perceive their treatment as a burden, but rather as an integral part of a healthy lifestyle. Ultimately, healthcare provider support acts as a bridge that transforms theoretical knowledge into sustainable practical actions to prevent cardiovascular complications.

## CONCLUSION AND RECOMMENDATIONS

Support from health workers significantly enhances the self-management of patients with hypertension. By consistently monitoring patient conditions and providing tailored education, health workers empower individuals to adhere to treatment protocols. This proactive engagement is crucial for preventing severe complications, ultimately ensuring that patients maintain an optimal quality of life through effective and sustained self-care practices.

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