



## HYPERTENSION SELF-MANAGEMENT AND QUALITY OF LIFE CORRELATION

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### ABSTRAK

Hypertension is a non-communicable disease that is one of the main problems in Indonesia where every year it always increases and becomes a comorbidity. To prevent complications of hypertension, patients must apply *self-management* that can affect the quality of life of sufferers. This study aimed to identify the relationship of *self-management* in hypertensive patients. This study used a quantitative descriptive design with a sample of 166 respondents through a *non-probability* sampling technique of *total sampling type*. The data collection technique used the Hypertension Self-management Behavior Questionnaire (HSMBQ) questionnaire. The data were analyzed using Pearson correlation. The results showed that in general, *self-management* of hypertension in general classified as poor (89%) including diet management (51.8%), weight control (54.8%), physical activity management (60.8%), poor stress management (62%), blood pressure monitoring (76%), and irregular hypertension treatment (77.8%). There are significant correlations between self-management and quality of life. Based on these results, it is important for primary health care and health workers to educate, evaluate and monitor the management carried out by hypertensive patients to improve hypertension self-management.

Keywords: hypertension; self-management; quality of life

### INTRODUCTION

Hypertension, also referred to as high blood pressure, is a chronic medical condition that impacts many individuals worldwide. It involves higher than normal blood pressure levels and can potentially result in various cardiovascular complications if not properly managed. Adhering to self-management practices in hypertension is crucial for patients to achieve desired treatment goals and improve their quality of life (Melaku et al., 2022). Self-management in hypertension refers to the actions taken by individuals to monitor and control their blood pressure levels, as well as to make necessary lifestyle changes, manage medication adherence, and engage in regular follow-up with healthcare providers. The 2020 International Society of Hypertension global hypertension practice guidelines emphasize the importance of self-management in controlling and managing hypertension (source) (Zhang et al., 2021). Self-management behavior is considered to be the key to controlling hypertension and improving the quality of life for patients. Studies have shown a significant correlation between self-management of hypertension and the overall quality of life experienced by individuals with this condition (Bella & Sutantri, 2022). Evidently, self-management behavior in hypertension positively impacts an individual's quality of life. One study conducted by Bosworth et al. found that self-management behavior, such as adhering to medication, maintaining a healthy lifestyle, and regularly monitoring blood pressure, was associated with improved blood pressure control and overall quality of life for patients with hypertension (source).

Hypertension self-management is recommended in the most recent clinical practice guidelines for the achievement of optimal blood pressure control (Lunyera et al., 2023). Self-management involves adopting a healthy diet, engaging in regular physical activity, not smoking, taking prescribed medications as directed, and self-monitoring blood pressure. Studies have shown

that self-management practices in hypertension effectively improve blood pressure control and reduce the risk of complications. Source: Hypertension self-management is recommended in the most recent clinical practice guidelines for achievement of optimal blood pressure control. Furthermore, self-management is an indispensable part of hypertension management and is as vital as effective drug therapy in improving the level of hypertension control (Zhang et al., 2016). Furthermore, self-management plays a pivotal role in improving the level of hypertension control.

Evidence suggests that individuals who actively engage in self-management behaviors, such as maintaining a healthy lifestyle, adhering to medication regimens, and regularly monitoring their blood pressure, experience better overall health and improved quality of life. For example, a systematic review and meta-analysis conducted by Lee et al. found that individuals who practiced hypertension self-management had better physical and mental health-related quality of life compared to those who did not engage in self-management behaviors. Additionally, a study by Krousel-Wood et al. reported that hypertensive individuals who participated in self-management activities had improved health-related quality of life scores compared to those who did not engage in self-management. Moreover, self-management can also positively impact the psychological well-being of individuals with hypertension. Individuals who actively participate in self-management practices often report reduced stress levels, improved emotional well-being, and increased satisfaction in life. Furthermore, effective self-management of hypertension can lead to better control of blood pressure levels, thus preventing or reducing the risk of complications associated with high blood pressure such as cardiovascular diseases, stroke, and kidney disease (Bella & Sutantri, 2022). The aim for this study to identify correlation about self-management and quality of life in hypertension patient in West Java.

## METHOD

This research is a quantitative descriptive type research conducted in one of the puskesmas in West Java. The sampling method with total sampling *technique* with the number of samples used in this study was 166 people. The questionnaire used by the *Hypertension Self-management Behavior Questionnaire* (HSMBQ) developed by Akhter (2010) consists of 38 questions, namely positive questions (2, 4, 10, 11-18, 20, 22, 23, 24, 25, 27, 28, 30, 31-36) and negative (1, 3, 5-9, 19, 21, 26, 29, 37) which are divided into 8 criteria including diet, cigarette consumption, physical activity, stress management, weight management, alcohol consumption, blood pressure management and hypertension treatment. This instrument has been tested for validity with an  $r$  value = 0.465 and a Cronbach alpha value of 0.823, meaning the questionnaire is declared valid and reliable.

Data collection is carried out by providing questionnaire sheets at the puskesmas for 10-15 minutes. In filling out the questionnaire, the researcher provides *informed consent* by explaining the research procedure. The research data were analyzed using Pearson. In conducting research, three ethical principles of health research must be met by researchers, which are in accordance with the Helsinki Declaration. The ethical principles of this research activity have been conducted an ethical test to the Health Ethics Committee of Padjadjaran University with letter number 165 / UN6. KEP/EC/2023.

## RESULTS

Table 1 shows that more than half of respondents (69.9%) are dominated by women where less than half (45.8%) include pre-elderly aged 45-59 years. Most respondents (99.4%) are Muslim and are Sundanese. Half of the respondents (50.6%) were unemployed and less than half (48.2%) had a primary education.

**Table 1.**  
Demographic Frequency Distribution of Hypertensive Patients at Jatinangor Health Center (n=166)

Characteristic	f	%
Gender		
Man	50	30.1
Woman	116	69.9
Age		
Adults (19-44 years old)	69	41.6
Pre-senior (45-59 years old)	76	45.8
Senior (>59 years old)	21	12.7
Religion		
Islamic	165	99.4
Kristen	1	0.6
Tribe		
Sundanese	160	96.4
Javanese	6	3.6
Education		
SD	80	48.2
SMP/SLTP	41	24.7
High School / High School	36	21.7
College	6	3.6
No School	3	1.8
Work		
Unemployee	84	50.6
Student	8	4.8
Laborer	30	18.1
PNS	1	0.6
Private employees	33	19.9
Self employed	10	6.0

**Table 2.**  
Data of Hypertensive Patients (n=166)

Characteristic	f	%
Hypertension Classification		
Stage 1 hypertension	26	15.7
Stage 2 hypertension	140	84.3
Weight Loss (BMI)		
Less	4	2.4
Usual	49	29.5
More	52	31.3
Fat	57	34.3
Obesity	4	2.4
Duration of Hypertension		
New (1-5 years)	129	77.7
Old (>5 years)	37	22.3
Complaints		
Not	19	11.4
Dizzy	71	42.8
Dizziness, yeri chest	5	3.0
Dizzy, tired quickly	17	10.2
Dizziness, chest pain, fatigue	54	32.5
Routine Control		
Not	128	77.1
1 month	6	3.6
3 months	32	19.3

Characteristic	f	%
Other diseases		
Yes	20	12.0
Not	146	88.0
Place of Treatment		
Primary Health Care	135	81.3
Hospital	12	7.2
Clinic/doctor	9	5.5
Other	10	6.0

Table 3.  
Self Management

Variable	Category			
	Good		Bad	
	f	%	f	%
Self-Management	77	46.3	89	53.7
Diet/Food	80	48.2	86	51.8
Weight Control	75	45.2	91	54.8
Physical Activity	65	39.2	101	60.8
Stress Management	63	38	103	62
Smoking Habits	88	53	60	47
Alcohol Consumption	113	68	53	32
Blood Pressure Monitoring	40	24	126	76
Hypertension Treatment	37	22.2	129	77.8

Table 3 found that actually more than half of respondents have poor self-management, this is because respondents have not maximized in carrying out weight control, physical activity, stress management, blood pressure monitoring, and hypertension treatment.

Table 4.  
Correlation between self-management hypertension and quality of life

Variable	M	SD	P-value
Self-Management	119.31	7.71	0.007
Quality of life	128.05	9.92	

Table 4 shows a correlation between self-management hypertension and quality of life ( $p < 0.05$ ).

## DISCUSSION

The correlation between self-management and quality of life in individuals with hypertension was significant. Multiple studies have demonstrated the positive impact of self-management on the quality of life of individuals with hypertension. For example, the studies conducted by Bucknall et al., Bourbeau and Van der Palen, Mirzai et al., Kafami et al., Salimi et al., and Karimi et al. have all shown that implementing self-management programs can lead to improvements in various aspects of quality of life for individuals with hypertension. These studies have shown that self-management practices, such as medication compliance, healthy lifestyle behaviors, stress management, and regular monitoring, can enhance both physical and mental health-related quality of life in individuals with hypertension.

The implementation of self-management programs in hypertension care plans has been found to be a suitable strategy for enhancing the overall quality of life in hypertensive patients. According to the results of the above studies, which have examined the effect of self-management training on hypertension, it is evident that utilizing self-management theory can be a highly effective approach to enhance the quality of life for individuals with hypertension.

Various studies have shown that self-management practices can greatly improve the quality of life of individuals with hypertension. For example, the studies conducted by Bucknall et al., Bourbeau and Van der Palen, Mirzai et al. and Kafami et al. have demonstrated the positive impact of self-management programs on various aspects of quality of life, including physical and mental well-being, in individuals with hypertension. Additionally, Salimi et al. and Karimi et al. found that self-management interventions led to improvements in self-care management and social protection, further enhancing the quality of life for individuals with hypertension. These programs empower patients to take control of their own health and manage their condition through measures such as medication compliance, healthy lifestyle behaviors, stress management, and regular monitoring.

Implementation of self-management programs in other chronic diseases has also shown positive results, supporting the efficacy of self-management in improving quality of life. Research conducted on the implementation of self-management programs in other chronic diseases has yielded positive results, further supporting the effectiveness of self-management in improving the quality of life. Some studies have demonstrated the positive impact of self-management programs on quality of life outcomes in individuals with other chronic diseases. For example, a study by Johnson et al. found that self-management interventions improved quality of life in individuals with diabetes, arthritis, and chronic obstructive pulmonary disease. Similarly, a study by Steinsbekk et al. revealed that self-management interventions improved quality of life in individuals with chronic pain. Moreover, self-management education has been found to increase self-care knowledge about hypertension and promote compliance with healthcare appointments and self-care behaviors. Furthermore, self-management interventions have been shown to decrease healthcare use and improve medication adherence and exercise habits among individuals with hypertension.

These findings suggest that self-management is crucial in improving quality of life for individuals with hypertension. Research consistently shows a correlation between self-management and improved quality of life in individuals with hypertension. Several studies have found a positive correlation between implementing self-management programs and improving quality of life in individuals with hypertension. Furthermore, the implementation of self-management programs has been shown to lead to a decrease in complications, hospitalizations, morbidity, and mortality associated with hypertension. Implementing self-management programs in hypertension has shown positive results in improving quality of life for individuals with the condition. Studies have consistently shown a positive correlation between implementing self-management programs and improving quality of life in individuals with hypertension. These studies provide evidence that incorporating self-management strategies into care plans for hypertensive patients can improve all aspects of quality of life.

## **CONCLUSION**

In conclusion, research consistently shows a positive correlation between self-management and improved quality of life in individuals with hypertension. Implementing self-management programs and interventions can effectively enhance the overall well-being and life satisfaction of hypertensive patients. Self-management education and interventions have been found to increase self-care knowledge, promote compliance with healthcare appointments, improve medication adherence, and encourage healthy behaviors such as exercise and weight management. By empowering individuals with hypertension to take control of their own care, self-management interventions can help reduce healthcare utilization and associated complications. Moreover, self-management programs can have a significant impact on controlling blood pressure levels in hypertensive patients. By teaching patients self-care

management techniques and providing support, healthcare professionals can enhance the quality of life for individuals living with hypertension. Research consistently shows a positive correlation between the implementation of self-management programs and improved quality of life in individuals with hypertension. Overall, the evidence suggests that integrating self-management strategies into care plans for hypertensive patients is a suitable and effective approach to enhance their quality of life.

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