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Health Education In Improving The Self-Efficacy Management Of Hypertension Patients At Dr.Chalid Makassar Hospital

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ABSTRACT : Hypertension is a condition where blood pressure increases above normal, caused by various factors. The prevalence of hypertension in Indonesia among the population aged 18 years is 34.1%. Hypertensive patients must understand the importance of medication compliance so that effective communication between health care providers is needed.so that patients are able to self-efficacy MethodDescriptive research with cross sectional study subjects were hypertension patients with a sample of 43 people using a purposive sampling technique in accordance with inclusion criteria as secondary data and primary data in the form of a self-efficacy management questionnaire. Resultsafter health education was obtained, the Negative Ranks data showed that respondents' scores from pre-post 5 respondents experienced a decrease in self-efficacy management after health education, while the positive ranks data showed that 22 respondents' scores from pre-post experienced an increase in self-efficacy management after health education was carried out, and the data ties showed that 16 respondents got a fixed score from pre-post after health education, the Wilcoxon statistical test obtained a p value = $(0.001) < \alpha (0.05)$, then the alternative hypothesis (Ha) was accepted .Conclusion: There is an influence of health education on improving the self-efficacy management of hypertension sufferers at Dr. Chalid General Hospital Makassar. Suggestions for patients to be more active in seeking information in increasing self-efficacy in the treatment of hypertension.

Keywords: Health Education, Self-Efficacy, Hypertension

1. INTRODUCTION

Hypertension is a condition where blood pressure increases above normal. This disease is known as a silent killer because it does not cause symptoms and tends to be left uncontrolled which can cause sudden death. Apart from that, it is also a multifactoral disease caused by various individual factors such as age, gender, genetic factors.(D. Susanti et al., 2019), Women who experience hypertension during pregnancy are at risk of developing hypertension(Behrens et al., 2017) hypertension is a growing epidemic in the United States, according to the Centers for Disease Control and Prevention, more than 40% of adults aged 45-64 years and more than 70% of adults aged 65 years and over are diagnosed with hypertension, the physical damage from hypertension is cumulative, so that adherence to treatment becomes an important health behavior in preventing more serious diseases such as end-stage kidney disease, heart failure and stroke(Kang et al., 2020). The prevalence of hypertension in Indonesia based on measurements in the population aged 18 years is 34.1%, the highest is in South Kalimantan (44.1%), while the lowest is in Papua (22.2%). Lifestyle changes and antihypertensive medications are considered the most common guidelines for effective management of hypertension(Weber et al., 2014) with a more active lifestyle and wanting to try, everyone

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regardless of age can minimize or prevent and overcome the problems they experience(Milroy & Neil, 2000), such as health problems, both acute and chronic diseases, by instilling an obedient and obedient attitude such as taking and taking medication on time, actively doing physical activities or exercising, consulting health services, the ability to seek treatment information, following the recommended diet and other things that are considered to be ways or beliefs in overcoming health problems(Kara, 2017). Prevalence Data from the Makassar City Health Service in 2015, there were 11,596 cases of hypertension with gender details, namely 4,277 cases of men and 7,319 cases of women, specifically in Makassar City, it showed an increase of 69 cases or around 33.82% (2017), in 2018 with 72 cases or around 34.1% and in 2019 there were 78 cases or around 35.3% of all types of diseases treated (Muh Basri, Sitti Rahmatia, Baharuddin, 2022) hypertension occurs in the age group 31-44 years (31.6%), age 45-54 years (45.3%), age 55-64 years (55.2%) (M. Reinaldi Pratama, Sri Rahayu, 2019). As you get older, the risk of experiencing hypertension becomes greater. In old age, the majority of cases found are increased systolic blood pressure. This causes structural changes in large blood vessels so that the lumen becomes narrower and the blood vessel walls become stiffer(Kalehoff & Oparil, 2020).

Human behavior is a reflection of various factors, the best educational strategies can be designed to change and adapt current behavior by knowing the most important factors that influence oneself(Mahnaz Solhi et al., 2022). Higher self-efficacy is significantly and positively associated with greater medication adherence. Increasing patient self-efficacy through various interventions can improve the way hypertension patients are treated.(Kara, 2022). Hypertensive patients must understand the importance of medication adherence and therefore the need for effective communication between health care providersso that patients can be motivated to increase self-efficacy in treatment(Okuboyejo et al., 2018). Self-efficacy has a partial significant mediating effect on the relationship between drug literacy and medication adherence. Therefore, medication adherence in hypertensive patients can be improved and driven by increased self-efficacy.(Shen et al., 2020)

2. METHOD

This research is a descriptive study using a cross sectional study approach with a total sample of 43 hypertensive patients, sampling was carried out using a purposive sampling technique in accordance with the inclusion criteria as secondary data and primary data in the form of a self-efficacy management questionnaire, length of suffering, comorbidities and pressure monitoring, next bloodprocessed and analyzed using SPSS and presented in table form

3. RESEARCH RESULT

Based on research conducted at RSUP Dr. Chalid Makassar in August 2023, the population in this study were hypertension sufferers with a sample size of 43 people. Next, univariate and bivariate analyzes were carried out. Univariate analysis to describe the distribution of general characteristics of variables including age, gender, education level, length of suffering and comorbidities. Meanwhile, bivariate analysis was carried out to see the influence between variables in proving the hypothesis, the basis for decision making with a significance level of 95% (α =0.05). The data obtained was then processed and analyzed using SPSS and presented in table form as follows:

Univariar Analysis

Table 1. Frequency Distribution Based on Age of Respondents at Dr. Chalid General Hospital Makassar

Age	Frequency (n)	Percentage (%)
40-50 Years	10	23.3
51-60 Years	17	39.5
> 61 Years	16	37.2
Total	43	100.0

Source: Primary Data, 2023

Based on Table 5.1, it shows that of the 43 respondents, the age frequency distribution showed that 10 respondents (23.3%) had an age range of 40-50 years, 17 respondents (39.5%) had an age range of 51-60 years, and 16 respondents (37.2%) had an age range of over 61 years old.

Table 2. Frequency Distribution Based on Respondent Gender at Dr. Chalid General Hospital Makassar

Gender	Frequency (n)	Percentage (%)
Man	16	37.2
Woman	27	62.8
Total	43	100.0

Source: Primary Data, 2023

Based on Table 5.2, it shows that of the 43 respondents in the gender frequency distribution, 16 respondents (37.2%) were male and 27 respondents (62.8%) were female.

Table 3. Frequency Distribution Based on Respondents' Educational Level at Dr.

Chalid General Hospital Makassar

Level of education	Frequency (n)	Percentage (%)
elementary school	8	18.6
junior high school	6	14.0
high school	19	44.2
College	10	23.3
Total	43	100.0

Source: Primary Data, 2023

Based on Table 5.3, it shows that of the 43 respondents, the frequency distribution of education level was found to be 8 respondents (18.6%) with elementary school education, 6 respondents (14.0%) with junior high school education, 19 respondents (44.2%) with high school education and 10 respondents (23.3%) with tertiary education.

Table 4. Frequency Distribution Based on Respondents' Length of Suffering at Dr.

Chalid General Hospital Makassar

Long Suffering	Frequency (n)	Percentage (%)
1-6 Months	14	32.6
7-12 Months	10	23.3
13-18 Months	5	11.6
19-24 Months	6	14.0
>24 Months	10	27.8
Total	43	100.0

Source: Primary Data, 2023

Based on Table 5.4, it shows that of the 36 respondents, the frequency distribution of long suffering was obtained, 14 respondents (32.6%) had a long suffering range of 1-6 months, 10 respondents (23.3%) had a long suffering range of 7-12 months, 5 respondents (11.6%) had The range of duration of suffering was 13-18 months, 6 respondents (14.0%) had a range of duration of suffering of 19-24 months and 10 respondents (27.8%) had a range of duration of suffering above 24 months.

Table 5. Frequency Distribution Based on Concomitant Diseases Respondents at RSUP Dr. Chalid Makassar

Concomitant Diseases	Frequency (n)	Percentage (%)
There is	18	41.9
There isn't any	25	58.1
Total	43	100.0

Source: Primary Data, 2023

Based on Table 5.5 Frequency distribution based on comorbidities of respondents, it was found that 18 respondents (41.9%) had comorbidities and 25 respondents (58.1%) did not have comorbidities.

Table 6. Frequency Distribution Based on Pre-Test Health Education on Improving Respondents' Self-Efficacy Management at Dr. Chalid General Hospital Makassar

Pre Test Health Education on Improving Self-	Frequency (n)	Percentage (%)
Efficacy Management		
Not enough	29	67.4
Tall	14	32.6
Total	43	100.0

Source: Primary Data, 2023

Based on Table 5.6 Frequency distribution based on the health education pre-test on increasing respondents' self-efficacy management, it was found that 29 respondents (67.4%) had less improvement in self-efficacy management and 14 respondents (32.9%) had high levels of self-efficacy management.

Table 7. Frequency Distribution Based on Health Education Post Test on Improving Self-Efficacy Management of Respondents at RSUP Dr. Chalid Makassar

Post Test Health Education on Improving	Frequency (n)	Percentage (%)	
Self-Efficacy Management			
Not enough	12	27.9	
Tall	31	72.1	
Total	43	100.0	

Source: Primary Data, 2023

Based on Table 5.7 Frequency distribution based on the health education post test on increasing respondents' self-efficacy management, it was found that 12 respondents (27.9%) had less improvement in self-efficacy management and 31 respondents (72.1%) had high levels of self-efficacy management.

Bivariate Analysis

To analyze the effect of health education on improving the self-efficacy management of hypertension sufferers at Dr. Chalid Makassar. The results of the Wilcoxon normality test with a significance level of α =0.05 are as follows:

Table 8. The Influence of Health Education on Improving the Self-Efficacy

Management of Hypertension Sufferers at Dr. Chalid General Hospital Makassar

Ranks						
			Mean	Sum of	Z	P-Value
		n	Rank	Ranks		
Post test	Negative	5a	14.00	70.00		
Improved	Ranks	Ja	14.00	70.00		

self-efficacy	Positive Ranks	22b	14.00	308.00	-	0.001
management -		220	14.00	308.00	3.272b	
Pre test	Ties	16c				
Improved						
self-efficacy	Total	43				
management						

Source: Primary Data, 2023

- a) Post test Improved self-efficacy management < Pre test Improved self-efficacy management
- b) Post test Improved self-efficacy management > Pre test Improved self-efficacy management
- c) Post test Increased self-efficacy management = Pre test Increased self-efficacy management
- d) Wilcoxon Signed Ranks Test
- e) Based on negative ranks

Based on Table 5.8, it can be seen that after the health education was carried out, the Negative Ranks data on respondents' scores from pre-post, 5 respondents experienced a decrease in self-efficacy management after health education, while the positive ranks data shows that 22 respondents experienced scores from pre-post. an increase in self-efficacy management after health education was carried out, and data ties showed that 16 respondents got a constant score from pre-post after health education was carried out.

4. DISCUSSION

Based on the results of the research conducted, the alternative hypothesis (Ha) is accepted. This means that it can be seen that there is an influence of health education on increasing the self-efficacy management of hypertension sufferers at Dr. Chalid General Hospital, Makassar. Respondents with low self-efficacy have weak self-confidence due to less positive life experiences, especially in adjusting their lifestyle to control blood pressure regularly. not maintaining a healthy diet and lifestyle properly, as well as having difficulty controlling emotions when angry or stressed(S. Susanti et al., 2022)Modern lifestyle is the main factor that makes it difficult for respondents to prevent complications(Amila et al., 2021). In addition, lack of time for exercise causes the accumulation of fat in the body which inhibits blood flow, characteristics of hypertension (HT) that are not well controlled, overweight or obesity, and more than half suffer from hyperlipidemia and diabetes mellitus as comorbidities. These patients also have low levels of knowledge, literacy and self-management. Factors significantly associated with HBP control included smoking history(Visanuyothin et al., 2018). As a result, respondents lose motivation to control blood pressure, which leads to poor

management of hypertension and increases the risk of serious complications such as coronary heart disease, stroke, and kidney failure, which can be fatal for people with hypertension. Therefore, attention and support from family and those closest to you are very important to help organize a healthy lifestyle. Health education about patient compliance in taking medication is influenced by various factors, including patient education, treatment follow-up, age, side effects, complexity of the regimen. Medication, low literacy levels, and social support also play a role in patient compliance. In general, patients from a better economic background and who have easier access to health services tend to be more compliant with treatment(Ni et al., 2019). Hypertensive patients tend to ignore self-management because they find it difficult even though the most common symptoms accompanying hypertension include headaches and fatigue as clinical symptoms that arise after experiencing hypertension for years in the form of headaches when awake, sometimes accompanied by nausea and vomiting, due to increased intracranial blood pressure.(NS Sriwahyuni, 2023), so that increasing knowledge through health education provided such as mHealth interventions is very helpful in providing patients with access to educational information anytime and anywhere, thereby increasing awareness and managing their own condition, thereby achieving good blood pressure control towards a healthy lifestyle, including adherence to medication, diet low salt, and physical activity achieved optimal blood pressure control at 6 months of continuous monitoring, and feedback(Liu et al., 2023). Research shows that the success of self-management in hypertension sufferers is greatly influenced by perceived control, namely a person's belief in his ability to control internal conditions and daily habits to achieve desired health goals. In addition, increasing self-care management for hypertension, especially in Southeast Asia, may require a multi-focused approach includes targeting personal preferences as well as external factors such as cultural relevance, environment, and resources(Irwan et al., 2022). Where hypertension is a type of chronic non-communicable disease that greatly affects the health status of Indonesian people(Israfil, 2019)Self-efficacy has an important role in the healing process for hypertensive patients. The higher a person's self-confidence in managing hypertension, the better their ability to undergo treatment and prevent complications. The relationship between self-efficacy and self-management is mutually reinforcing; when selfmanagement goes well, self-efficacy also increases, and vice versa. Failure to self-management can have serious consequences, such as hypertension complications that can lead to stroke. In stroke patients, good self-management is very necessary for recovery. In line with the Self-Efficacy Theory proposed by Bandura, a person's belief in their ability to organize and carry out the necessary actions will influence every aspect of their life, including the management of

hypertension. When hypertension sufferers have strong self-efficacy, they are better able to live a healthy lifestyle, control their emotions, and maintain a medication routine, so that hypertension complications can be prevented. High blood pressure that is left without proper treatment for a long time can result in serious complications such as coronary heart disease, (MA Sriwahyuni., 2020) said that patients with coronary heart disease really need good self-management to prevent recurrence. Steps such as changing diet, quitting smoking, avoiding excessive physical activity, and controlling emotions and anxiety are key to effective self-management so hypertensive sufferers who do not manage their condition well are at high risk of developing diabetes mellitus (DM), which is increasingly emphasized. the importance of proper self-management and hypertension sufferers with high self-efficacy are better able to carry out various actions to prevent complications, such as controlling blood pressure regularly, adopting a healthy diet, and doing physical activity consistently can help lower blood pressure, improve fitness, and improves the body's metabolism, which in turn helps control blood pressure. High levels of physical activity, such as exercise, can alter the circulatory and respiratory systems simultaneously through a response known as hemostasis(Noyumala, Sri Darmawan, Sriwahyuni, 2021)So strong self-efficacy not only improves the quality of life of hypertension sufferers but also plays a vital role in preventing serious complications(Reanita et al., 2022)improving cognitive abilities that are important for gaining health knowledge and making informed health-related decisions about the impact of various behaviors has become a major factor(Lawrence, 2017)

5. CONCLUSIONS

The results of the Wilcoxon statistical test obtained a value of $p=(0.001) < \alpha(0.05)$, so the alternative hypothesis (Ha) was accepted. This means that it can be seen that there is an influence of health education on increasing the self-efficacy management of hypertension sufferers at Dr. Chalid General Hospital, Makassar. Suggestions for patients to be more active in seeking information in increasing self-efficacy in the treatment of hypertension

BIBLIOGRAPHY

- Amila, A., Sembiring, E., & Aryani, N. (2021). Early detection and prevention of degenerative diseases in Mutiara Home Care area communities. *Journal of Community Service Creativity (Pkm)*, 4(1), 102–112. https://doi.org/10.33024/jkpm.v4i1.3441
- Behrens, I., Basit, S., Melbye, M., Lykke, J. A., Wohlfahrt, J., Bundgaard, H., Thilaganathan, B., & Boyd, H. A. (2017). Risk of post-pregnancy hypertension in women with a history of hypertensive disorders of pregnancy: Nationwide cohort study. *BMJ (Online)*, *358*. https://doi.org/10.1136/bmj.j3078
- Irwan, A. M., Potempa, K., Abikusno, N., & Syahrul, S. (2022). Self-care management for hypertension in Southeast Asia: A scoping review. *Journal of Multidisciplinary Healthcare*, 15(August), 2015–2032. https://doi.org/10.2147/JMDH.S367638
- Israfil, M. A. M. (2019). The role of community nurses in the prevention of complications on hypertension patients in integrated health centers. *Journal of Health Information*, 17(2), 108–118. https://doi.org/10.31965/infokes.Vol17.Iss2.320
- Kalehoff, J. P., & Oparil, S. (2020). The story of the silent killer. *Current Hypertension Reports*, 22(9). https://doi.org/10.1007/s11906-020-01077-7
- Kang, A., Dulin, A., & Risica, P. M. (2020). Relationship between adherence to diet and physical activity guidelines and self-efficacy among Black women with high blood pressure. https://doi.org/10.1177/1359105320967105
- Kara, S. (2017). Construction and validation of adherence to treatment scale among patients with essential high blood pressure. *Teacher Journal of Behavioral and Social Sciences*, 5(1), 639–644.
- Kara, S. (2022). General self-efficacy and hypertension treatment adherence in Algerian private clinical settings. *Journal of Public Health in Africa*, 13(3), 1–10. https://doi.org/10.4081/jphia.2022.2121
- Lawrence, E. M. (2017). Why do college graduates become more healthy than those who are less educated? *Journal of Health and Social Behavior*, 58(3), 291–306. https://doi.org/10.1177/0022146517715671
- Liu, F., Song, T., Yu, P., Deng, N., Guan, Y., Yang, Y., & Ma, Y. (2023). Efficacy of an mHealth app to support patients' self-management of hypertension: Randomized controlled trial. *Journal of Medical Internet Research*, 25(1). https://doi.org/10.2196/43809
- Milroy, P., & O'Neil, G. (2000). Factors affecting compliance to chiropractic prescribed home exercise: A review of the literature. *Journal of the Canadian Chiropractic Association*, 44(3), 141–148.
- Muh Basri, S., Rahmatia, S., & Baharuddin, N. A. O. A. (2022). Progressive muscle relaxation reduces blood pressure in hypertensive patients. *Sandi Husada Health Scientific Journal*, 11, 455–464.
- Ni, Z., Dardas, L., Wu, B., & Shaw, R. (2019). Cardioprotective medication adherence among

- patients with coronary heart disease in China: A systematic review. *Heart Asia*, 11(2), 1–12. https://doi.org/10.1136/heartasia-2018-011173
- Noyumala, S., Darmawan, S., & Sriwahyuni, A. S. (2021). Blood pressure changes in Lans who do Prolanism in Tamalanrea. *Scientific Journal of Nursing*, 7(2), 181–186. http://jurnal.uimedan.ac.id/index.php/JURNALKEPERAWATAN
- Okuboyejo, S., Mbarika, V., & Omoregbe, N. (2018). The effect of self-efficacy and outcome expectations on medication adherence behavior. *Journal of Public Health in Africa*, 9(3), 826. https://doi.org/10.4081/jphia.2018.826
- Reanita, F., Nani, S., Makassar, H., Perintis, J., Viii, K., & Makassar, K. (2022). The effect of temporary increases in blood sugar levels on increased blood pressure in diabetes mellitus patients. *Sandi Husada Health Scientific Journal*, 2, 316–322.
- Shen, Z., Shi, S., Ding, S., Zhong, Z., & Warren, H. (2020). Mediating effect of self-efficacy on the relationship between medication literacy and medication adherence among patients with hypertension. *Frontiers in Pharmacology*, 11(December), 1–10. https://doi.org/10.3389/fphar.2020.569092
- Solhi, M., Rasouli, Z. A., & Naderi, N. (2022). Comparison of perceived self-efficacy, benefits, and barriers of hypertension control between male and female patients referred to Rajaie Cardiovascular Medical and Research Center in Tehran. *The Journal of Tehran University Heart Center*, 18(1), 52–61.
- Sriwahyuni, M. A. (2020). Self management of coronary heart patients: Literature review. *Nursing Media Journal: Makassar Health Polytechnic*, 11(02), 118–129.
- Sriwahyuni, N. S. (2023). Types of degenerative diseases (1st ed.). Eureka Media Literacy.
- Susanti, D., Lastriyanti, & Haryono, S. (2019). The relationship between knowledge and self-management in coronary heart disease sufferers. *Journal of Medical Knowledge*, 2(1), 65–69.
- Susanti, S., Bujawati, E., Aulia, R., Sadarang, I., & Ihwana, D. (2022). Relationship of self-efficacy with self-management of hypertension patients at Kassi-Kassi Health Center Makassar City in 2022. *Nursing and Health Studies*, 6(2), 48–58.
- Visanuyothin, S., Plianbangchang, S., & Somrongthong, R. (2018). Appearance and potential predictors of poorly controlled hypertension at the primary care level in an urban community. *Journal of Multidisciplinary Healthcare*, 11, 131–138. https://doi.org/10.2147/JMDH.S156518
- Weber, M. A., Schiffrin, E. L., White, W. B., Mann, S., Lindholm, L. H., Kenerson, J. G., Flack, J. M., Carter, B. L., Materson, B. J., & Ram, C. V. S. (2014). Clinical practice guidelines for the management of hypertension in the community: A statement by the American Society of Hypertension and the International Society of Hypertension. *Journal of Clinical Hypertension*, 16(1). https://doi.org/10.1111/jch.12237