

## **The Relationship between Self-Efficacy to Compliance with Antihypertension Drug UPT. Cempaka Health Center, Banjarmasin City**

Farah Nur Aulia<sup>1</sup>, Darini Kurniawati<sup>1</sup>, Angga Irawan<sup>1</sup>

<sup>1</sup>*Sari Mulia University, Banjarmasin, Indonesia*

*farahna1903@gmail.com*

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### **Abstract**

Hypertension is a chronic disease that is a health problem throughout the world. According to the World Health Organization (WHO), nearly 1.8 billion people each year die from hypertension in the Asian region. Hypertensive patients need self-care to improve their health status. One component that affects self-care of hypertensive patients is self-efficacy. Patients who have high self-efficacy have 11 times the opportunity to show good medication adherence compared to patients who have low self-efficacy. This study is to determine the relationship between self-efficacy and adherence to taking antihypertensive drugs at UPT. Cempaka Health Center, Banjarmasin City. Research with cross-sectional. The sample is people who seek treatment at UPT. Cempaka Public Health Center Banjarmasin City and diagnosed with level 2 hypertension patients amounted to 43 people. data collection technique is purposive sampling. Using a questionnaire as a measuring tool. Data were analyzed by Spearman rho test. Self-efficacy of people suffering from level 2 hypertension in the UPT area. Cempaka Public Health Center Banjarmasin City is included in the category of self-efficacy of 69.8%, compliance is 60.5% and there is a significant relationship between self-efficacy and drinking compliance with a significant value of p value = 0.001, the correlation coefficient is 0.503 which is included in the medium category and the direction of the correlation is positive. (+) which means unidirectional. There is a significant relationship between self-efficacy and adherence to taking antihypertensive drugs at UPT. Cempaka Health Center, Banjarmasin City.

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### **INTRODUCTION**

Hypertension is a chronic disease which is a health problem throughout the world. According to the World Health Organization (WHO) states that nearly 1.8 billion people die from hypertension every year in the Southeast Asian region, which means that approximately 1 in 3 adults in Southeast Asia have high blood pressure [1]. Based on the 2018 Basic Health Research Data (Riskesdas), it states that the prevalence of hypertension in Indonesia is 185,857 cases, South Kalimantan Province ranks first at 10.81%, with a total of 15,793 cases of sufferers. Meanwhile, the number of hypertension sufferers in the city of Banjarmasin is 2,747 cases [2].

Hypertension is also known as the "silent killer" because people with hypertension often show no symptoms [1]. If hypertension is not treated or does not comply with taking medication, it can cause dangerous complications that can be fatal. According to research that non-compliance is something that can make therapy potentially fail, this can lead to complications and body organs can become damaged, this can be a major cause of coronary heart disease, stroke, congestive heart failure, and end-stage kidney disease, and others [3]. Hypertensive patients need self-care to improve health status. One of the components that influence the self-care of hypertensive patients is self-efficacy.

The concept of self-efficacy is also known as part of social cognitive theory. This theory is concerned with an individual's belief in the ability to perform assigned tasks. The higher your self-efficacy, the more confident you are in your ability to succeed. In difficult situations, people with low self-efficacy can easily reduce or stop their efforts. Self-efficacy, on the other hand, is working hard to master the challenges they face [4]. Self-efficacy factors include age, gender, marital status, education level, knowledge, socio-economic, long-suffering, emotional, family support and motivation [5].

Patients who have high self-efficacy have 11 times the opportunity to show good medication adherence compared to patients who have low self-efficacy [1]. Low self-care (self-efficacy) in these

patients can exacerbate hypertension with the emergence of disease complications. In addition, a low level of care will affect the effectiveness of treatment which will have an impact on quality of life such as adherence in taking antihypertensive drugs to prevent recurrence of hypertension [6].

The success of treatment in hypertensive patients is influenced by several factors, one of which is adherence in taking the drug, so that hypertensive patients can control their blood pressure within normal limits [7]. Compliance is very important in healthy living behavior. Compliance with taking medication is taking medicines prescribed by a doctor at the right time and in the right dosage. Treatment will only be effective if the patient complies with the rules for using the drug [8].

## **LITERATURE REVIEW**

Hypertension comes from the Latin words hyper and tension. Hyper which means excessive and tension which means pressure. Hypertension, also known as high blood pressure, is a medical condition when a person experiences chronic (long-term) elevated blood pressure which can result in a high mortality rate. A person is said to suffer from high blood pressure or hypertension, that is, if the systolic blood pressure is  $> 140$  mmHg and diastolic  $> 90$  mmHg [9]. Hypertension is a risk factor for damage to important organs such as the brain, heart, kidneys, retina, large blood vessels (aorta) and peripheral blood vessels [10].

Hypertension is a diastolic blood pressure value of less than 90mmHg and a systolic blood pressure value of 140mmHg or more. Hypertensive crisis (BP  $> 180/120$  mm Hg) can be categorized as a hypertensive emergency (extreme increase in blood pressure with acute or progressive organ damage) or hypertensive urgency (high blood pressure increase without acute or progressive organ damage)[11].

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According to Bandura's theory, on cognitive social theory, low self-efficacy will cause an increase in anxiety and behavior such as one's obedience, for example. Individuals will avoid things that can make things worse, this is not caused by threats but because they feel they do not have the ability to manage risky aspects[12].

According to the theory of adherence is individual behavior (for example: taking medication, adhering to a diet, or making lifestyle changes) according to therapy and health recommendations. The level of compliance can start from following every aspect of the recommendation to complying with the plan.

Another opinion defines patient compliance as "the extent to which the patient's behavior is in accordance with the provisions given by health professionals". Patients may not comply with the goals or may simply forget or misunderstand the instructions given [13].

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## **MATERIALS AND METHODS**

### **Materials**

The object of this study was stage 2 hypertension patients at UPT. Cempaka Health Center, Banjarmasin City. The location of this research is at UPT. Cempaka Health Center, Banjarmasin City. Data analysis was divided into 2, namely univariate Self Efficacy and bivariate Medication Compliance. Then in data analysis using SPSS version 24.

## Methods

The research method used in this study is the Analytical Observational method with a Cross Sectional design. This research was conducted in the working area of UPT. Cempaka Health Center, Banjarmasin City. The population used in this research is people who seek treatment at UPT. Cempaka Health Center, Banjarmasin City and has been diagnosed as a level 2 hypertension patient. The sample used in this study was 43 respondents with a period of 1 month, namely May 2022, this sampling was in accordance with the inclusion and exclusion criteria determined by the researcher.

The data collection instruments used in this study were the MASES-R questionnaire which consisted of 13 questions for self-efficacy variables and the MMAS-8 questionnaire which consisted of 8 questions for adherence to taking antihypertensive medication.

Data processing obtained from the results of this study were processed using a statistical test in the form of SPSS version 24 to determine the significance value, the correlation coefficient and the direction of the correlation.

## RESULTS AND DISCUSSION

The results of the demographic characteristics data are as follows:

Table 1. Demographic Characteristics Data

Respondent	Demographic Data	Amount (n)	Percentage (%)
Age			
	37-57 Years	18	41.9
	58-77 Years	25	58.1
Gender			
	Man	18	41.9
	Woman	25	58.1
Merried Status			
	Marry	34	70.1
	Widow widower	9	20.9
Last Education			
	SD	6	14
	SMP	9	20.9
	SMA/SMK	17	39.5
	D3/S1	11	25.6
Job			
	IRT	19	44.2
	Private	17	39.5
	Civil Servant	7	16.3
Long Suffered			
	≤10 Years	35	81.4
	≥10 Years	8	18.6

Source: Primary Data (2022)

## Univariate analysis

The results of the respondent's self-efficacy frequency data on the use of antihypertensive drugs are as follows:

Table 2.Data of Respondents Frequency of Self Efficacy

Characteristics		Amount (F)	Percentage (%)
Self-efficacy	Tall	30	69.8
	Low	13	30.2
Total		43	100

Source: Primary Data (2022)

The results of the respondent's medication adherence frequency data on the use of antihypertensive drugs are as follows:

Table 3.Compliance Frequency Respondent Data

Variable		Amount (F)	Percentage (%)
Obedience	Obey	26	60.5
	Not obey	17	39.5
Total		43	100

Source: Primary Data (2022)

## Bivariate Analysis

The results of the data on the relationship between self-efficacy and medication adherence are as follows:

Table 4.Bivariate Analysis Data

Variable	Obedience				Total	
	obey		Not obey			
	f	%	f	%	F	
Self-efficacy	Tall	23	88.5	7	41.2	30
	Low	3	11.5	10	58.8	13
Total		26	60.5	17	39.5	43

*P*: 0.001

Source: Primary Data (2022)

Based on research that has been done at UPT. The Cempaka Community Health Center, Banjarmasin City, obtained the results from univariate analysis, namely the respondent's self-efficacy was high and the respondent's compliance with taking medication was included. This research is in line with research which shows that most of the respondents have high self-efficacy, namely 77.6% and most of the respondents have adherence, namely 78.8% [1].

Someone who has high self-efficacy prefers to imagine success, similarly to taking medicine, people who have high self-efficacy will be obedient in taking medicine because they think that by routinely taking medicine the disease they are suffering from will not relapsed[12]. Conversely, someone who has low self-efficacy will imagine more failures and things that can hinder the achievement of success, as well as taking medicine, people who have low self-efficacy will be disobedient in taking medicine because they think the things that make them unsure and lead to treatment failure [12].

This research shows that some of the respondents found at UPT. The Cempaka Health Center in Banjarmasin City has a good perception of the disease and the treatment being undertaken, they believe that by undergoing treatment according to the recommendations given by doctors and health workers there is a risk of recurrence and disease severity. This is illustrated by the answers of several respondents in the questionnaire where respondents who adhere to taking medication always take medication regularly, take

medication according to the dosage, do not stop treatment without doctor's instructions, know the schedule for taking medication, and immediately take medication according to the specified schedule.

Based on the results of bivariate analysis shows that there is a significant value obtained with a  $p$  value = 0.001, it can be concluded that there is a correlation or relationship between self efficacy and adherence to taking antihypertensive medication at UPT. Cempaka Health Center, Banjarmasin City because the significance value obtained was  $<0.05$ , which means  $H_0$  was rejected and  $H_a$  was accepted, then the correlation coefficient or the degree of closeness of the relationship between each variable found in this study was 0.503 which indicates that the correlation strength obtained was included in the medium category because it was included in interval 0.4 to  $<0.6$  and the direction of the correlation obtained in this study is positive (+) which means unidirectional, because the greater the value of a variable, the greater the other variables. The direction of the relationship between self-efficacy and adherence to taking medication in this study is positive (+), meaning that the higher the self-efficacy of hypertensive patients, the more obedient the patients are in taking antihypertensive drugs [14].

The results of this study are in line with a research where there is a relationship between self-efficacy and the level of adherence to taking medication in people with hypertension at the Dinoyo Health Center in Malang City with a  $p$  value of 0.000 [3]. Someone who has high self-efficacy will have behavior in taking hypertension drugs that is higher than those who have low self-efficacy. The majority of adherence to taking medication in patients with hypertension at the Dinoyo Health Center in Malang City showed high adherence and also moderate adherence. However, according to a research namely the relationship between self-efficacy and the level of adherence to treatment in patients with hypertension at the Bareng Health Center in Malang City, there is no significant relationship because the  $p$  value is 0.155, where this result is  $> 0.05$ , so it can be concluded that  $H_0$  cannot be rejected, that is, there is no relationship between self-efficacy and adherence treatment of elderly hypertension at the Public Health Center together in Malang City [15].

Individuals who have high self-efficacy will consider themselves capable of doing something that they want to achieve as well as being obedient in taking drugs, by having faith one will be motivated and increase individual hopes for recovery and finally individuals will be encouraged to comply in taking antihypertensive drugs [3].

## CONCLUSION

Based on the research that has been done, it can be concluded that the self-efficacy of people who suffer from level 2 hypertension in the UPT area. The Cempaka Health Center in Banjarmasin City is included in the high self-efficacy category of 69.8%, adherence is 60.5% and there is a significant relationship between self-efficacy and adherence to taking antihypertensive medication at the UPT. Cempaka Health Center in Banjarmasin City with a significant value of  $p$  value = 0.001, a correlation coefficient of 0.503 which is included in the moderate category and the direction of the correlation is positive (+) which means the same direction.

## REFERENCES

- [1] Kawulusan, K. B., Katuuk, M. E., & Bataha, Y. B, Hubungan Self-Efficacy Dengan Kepatuhan Minum Obat Hipertensi Di Puskesmas Ranotana Weru Kota Manado, *Jurnal Keperawatan*, 7(1), (2019), 1–9.
- [2] Riskesdas. Laporan Provinsi Kalimantan Selatan RISKESDAS 2018, In *Badan Penelitian dan Pengembangan Kesehatan (LPB)*, (2018).
- [3] Kendu, Y. M., Qodir, A., & Apriyanto, F, Hubungan Self-Efficacy Dengan Tingkat Kepatuhan Minum Obat, *Media Husada Journal of Nursing Science*, 2, (2021), 13–21.
- [4] Lianto, L, Self-Efficacy: A Brief Literature Review, *Jurnal Manajemen Motivasi*, 15(2), 55. <https://doi.org/10.29406/jmm.v15i2.1409>, (2019).

- [5] Irawan, A., & Hartitie, T, *Penerapan Self Efficacy dan Perilaku Pengobatan Pada Klien Tuberculosis (TB)*, (2018).
- [6] Anggreani, F., Untari, E. K., & Yuswar, M. A, *Gambaran Keyakinan Diri (Self-Efficacy) Pada Pasien Lansia Yang Menggunakan Antihipertensi Di Kota Pontianak Tahun 2020. Jurnal Untan*, (2020).
- [7] Almira, N., Arifin, S., & Rosida, L, *Faktor-Faktor Yang Berhubungan Dengan Perilaku Kepatuhan Minum Obat Anti Diabetespada Penderita Diabetes Melitus Tipe 2Di Puskesmas Teluk Dalam Banjarmasin. Homeostasis*, 2(1), (2019), 1–12.
- [8] Saragih, F. L., & Sirait, H, *Hubungan Pengetahuan Dan Sikap Dengan Kepatuhan Minum Obat Anti Tuberkulosis Pada Pasien Tb Paru Di Puskesmas Teladan Medan Tahun 2019, Jurnal Riset Hesti Medan Akper Kesdam I/BB Medan*, 5(1), 9–15, <https://doi.org/10.34008/jurhesti.v5i1.131>, (2020).
- [9] Anggreni, D., Mail, E., & Adiesty, F, *Hipertensi Dalam Kehamilan. In E. D. Kartiningrum (Ed.), BidanKita, STIKes Majapahit Mojokerto*, (2018).
- [10] PDHI, *Konsensus Penatalaksanaan Hipertensi 2019, Indonesian Society Hipertensi Indonesia*, (2019), 1–118.
- [11] Wells, B. G., DiPiro, J. T., Schwinghammer, T. L., & DiPiro, C. V, *Pharmacotherapy Handbook, Tenth Edition. In McGraw-Hill Companies*, (2017).
- [12] Rustika, I. M, *Efikasi Diri : Tinjauan Teori Albert Bandura*, 20(1), (2012), 18–25.
- [13] Kurniati, D. Y, *Pengaruh Health Education Terhadap Peningkatan Kepatuhan Menjalankan Pengobatan Medis pada Pasien dengan Simptom Kanker Payudara Di Rumah Sakit Islam PKU Muhammadiyah Maluku Utara, Journal of Psychological Research*, 4, (2018), 46–55.
- [14] Desy Rachmawati, Sustin Farlinda, Sugeng, G. A, *Hubungan Kepuasan Kerja dengan Kinerja Petugas Rekam Medis. Jurnal Rekam Medik Dan Informasi Kesehatan*, 2(2), 194–202. <https://publikasi.polije.ac.id/index.php/j-remi/article/view/1984>, (2021).
- [15] Ariesti, E. S. E. D. T. K. K. M., & Pradikatama, Y, *Hubungan Self Efficacy Dengan Tingkat Kepatuhan Kota Malang, Jurnal Keperawatan Malang*, 3, (2018), 39–44.