



Description of self care management in hypertension patients

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Article Info

Article history:

Received Mar 25, 2023

Revised Apr 01, 2023

Accepted Apr 19, 2023

Keywords:

Hypertension;
Patient education;
Patient empowerment;
Self-care;
Self-management.

ABSTRACT

Hypertension or high blood pressure is often referred to as the silent killer because the patient does not know that he or she has hypertension. Hypertension is also known as heterogeneous group disease because it can affect anyone and various age, social, and economic groups. Hypertension is also the third biggest risk factor that causes premature death because it can trigger congestive heart failure and cerebrovascular disease. Self care management is an activity carried out by patients with the intention of improving one's well-being, because of their awareness of the time frame for maintaining life, continuing personal development and living a healthy functional life. The purpose of this study was to identify self care management in hypertensive patients at Santa Elisabeth Hospital Medan. This type of research is a descriptive research design with a cross sectional approach. Sampling in this study used a total sampling technique, the number of samples was 136 people. The results showed that self-care management in hypertensive patients was based on self-integrity with a sufficient category of 90 people (72.7%), self-care management in hypertensive patients based on self-regulation with a sufficient category of 66 people (48.5%), self-care management in hypertension patients based on interaction with other health workers with sufficient category as many as 77 people (56.6%), self care management in patients with hypertension based on monitoring other health workers sufficient category as many as 74 people (54.4%), self care management in hypertension patients based on compliance with the recommended rules category enough for 66 people (48.5%). It is hoped that health workers will improve the provision of health education for hypertensive patients, provide information to improve the quality of life of hypertensive patients by doing good self care management.

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1. INTRODUCTION

Hypertension or high blood pressure is often referred to as the silent killer because sufferers do not know that they have hypertension. Hypertension is also known as heterogeneous group disease because it can affect anyone from various age, social and economic groups. Hypertension is also the third biggest risk factor that causes premature death because it can trigger congestive heart failure and cerebrovascular disease (Surahmat & Damayanti, 2017).

Hypertension is a condition of abnormally high blood pressure, namely systolic pressure above 140 mmHg and diastolic blood pressure above 90 mmHg which is measured at least on three different

occasions. This disease is a group of non-communicable diseases and is included in the group of chronic diseases that cannot be cured but can be controlled. Causal factors that influence the occurrence of hypertension include age, gender, ethnicity, genetic factors and environmental factors which include obesity, stress, smoking, alcohol consumption, salt consumption, and so on (Suparti & Handayani, 2019).

Until now, hypertension is still a health problem that is big enough to be overcome. WHO (World Health Organization) states that hypertension affects 22% of the world's population, and reaches 36% of the incidence in Southeast Asia. Hypertension is also a cause of death with a rate of 23.7% of the total 1.7 million deaths in Indonesia in 2016 (Hariawan & Tatisina, 2020).

Increased blood pressure is caused by many things, including lifestyle. The increased risk of hypertension is influenced by unhealthy lifestyles, such as lack of exercise, smoking, consuming alcohol and coffee, consuming fatty and salty foods, and experiencing stress. The World Health Organization notes that there are around 1.3 billion people who suffer from hypertension. Other data states that 9.4 million people died from hypertension. Hypertension is a more serious problem in low-middle income countries than in high-income countries because of its greater prevalence. The World Health Organization states that the prevalence of hypertension in the African region is 27% compared to the Americas, which is 18% (Saludung & Malinti, 2021).

Hypertension is increasingly increasing. The American Heart Association (AHA) states that one in three people or about 65 million people in America have high blood pressure. As many as 28% or 59 million people with hypertension are at risk of causing the death of 8 million people each year. This prevalence was followed by Singapore, which reached 27.3%, and Malaysia, which reached 22.2%. The incidence of hypertension in Indonesia from survey results in Asia, shows that hypertension sufferers reach 31.7% of the total adult population (Pratiwi et al., 2021) (Sudikno et al., 2023) (Indriawati & Syaifudin, 2020) (Hasanah, 2019). Hypertension continues to increase and can be seen from the incidence of hypertension in various provinces in Indonesia, namely 35.8% in the Special Region of Yogyakarta, 30.9% in Bangka Belitung, 30.8% in Kalimantan (Sitanggang et al., 2022) (Puspitosari & Wardaningsih, 2021) (Hulu et al., 2021). South, 29.4% in West Java. The prevalence of hypertension in the Special Region of Yogyakarta is higher than the national rate (Setyopranoto et al., 2019) (Widiati & Anjani, 2020) (Islamy et al., n.d.) (Hariati & Abdurrachim, 2022) (Ariyani & Alfian, 2017).

Self care management can be defined as an activity carried out by patients with the intention of improving health or preventing disease (Tulu et al., 2021) (Godfrey et al., 2011) (Pun et al., 2009). The purpose of self-care behavior is to improve a person's welfare, due to their awareness of the time frame for sustaining life, continuing personal development and healthy functional life (Kitson et al., 2022) (Riegel et al., 2021) (Ziguras, 2004).

In the context of hypertension self-management or care, the American Heart Association (AHA) recommends behavior modification related to self-care consisting of a low-salt diet, a healthy diet, physical activity, reducing smoking and alcohol, reducing stress, and exposure to cold air (Bokhour et al., 2012) (Powers et al., 2009) (Balduino et al., 2016) (Riegel et al., 2009) (Adinkrah et al., 2020).

Self-care management or self-care management in people with hypertension is an action to change the behavior, thoughts and feelings of people with hypertension, with the aim of helping sufferers to change their behavior and unhealthy lifestyle habits, develop the skills of sufferers in self-care in order to improve their health status independently. To minimize the occurrence of complications of hypertension (Salami, 2021).

African American women face a higher lifetime risk of blood pressure than white women. For example, African-American women are twice as likely to have high blood pressure as those who are white. This study shows that African-American women tend not to do self-care such as diet and exercise behavior. To date, it has been found that stressful interpersonal communication problems, sleep disturbances, chronic pain, blood pressure knowledge deficits, and complex dietary information all interfere with blood pressure self-care in older African-American women (Wright et al., 2022).

Hypertension can be controlled in several ways, namely adherence to treatment, lifestyle changes and healthy active behavior (Aulia et al., 2018). Akhter stated in his research that self-care management of hypertensive clients can be carried out by implementing 5 components of self-care management for diabetic clients that are adapted to self-care for hypertensive clients, namely self-integration, self-regulation, interaction with other health care, blood pressure monitoring, and adherence to the recommended rules. This is because it is chronic which requires controlling the blood (Akter et al., 1998).

However, until now there has not been much research on hypertensive patients in terms of a nursing perspective, especially with the self care management approach at Santa Elisabeth Hospital Medan. care management namely self-integration, self-regulation, interaction with other health workers, blood pressure monitoring and adherence to recommended rules so that the authors are interested in conducting research on self-care management in hypertensive patients at Santa Elisabeth Hospital Medan in 2022

2. RESEARCH METHOD

The research design is a research strategy in identifying problems before planning the final data collection. The research design is also used to identify the structure of the research to be carried out (Simamora & Ginting, 2022). The type of research design used in this research is a descriptive research design with a cross-sectional approach which aims to identify features of Self Care Management in hypertension at Santa Elisabeth Hospital Medan in 2022.

The population is subjects (eghumans; clients) who meet predetermined criteria (Simamora & Ginting, 2022). The population in this study were patients suffering from hypertension, inpatient and outpatient at Santa Elisabeth Hospital Medan in 2021 totaling 136 people.

The instrument used in this study was a questionnaire and used the Guttman scale. In measuring this study using a questionnaire as an instrument to obtain information and data from respondents. There are 2 parts of the questionnaire that will be used in research made by researchers based on a literature review, namely: the initial part of the questionnaire is demographic data consisting of: initial name, age, gender, occupation, ethnicity, education and the last part is the Self Care Management questionnaire Adopted from Akther (2010) regarding self-management of hypertensive patients with a total of 40 question items with duration of hypertension, there are 4 answer choices, namely never = 1, rarely = 2, sometimes = 3, always = 4 and get a good score = 121-160, enough = 81-120, = less

3. RESULTS AND DISCUSSIONS

Table 1. Distribution of Percentage Frequency Based on Demographic Data of Respondents with Hypertension Patients at Santa Elisabeth Hospital Medan in 2022

No	Characteristics	Frequency(f)	Percentage (%)
	Age		
	26-35	7	5.1
	36-45	23	16.9
	45-55	34	25
	56-65	46	33.8
	≥65	26	19.1
	Total	136	100
2	Education		
	SD	16	11.8
	SMP	12	8.8
	SMA	61	44.9
	Perguruan Tinggi	44	32.4
	Tidak Sekolah	3	2.2
	Total	136	100
3	Gender		
	Male	71	52.2

No	Characteristics	Frequency(f)	Percentage (%)
	Female	65	47.8
	Total	136	100
4	Work		
	Farmer	34	25.0
	Private employed	16	11.8
	IRT	28	20.6
	Self-employed	32	23.5
	Civil servants	24	17.6
	etc	2	1.5
	Total	136	100

Based on table 1. above, the data shows that many respondents are in the late elderly age (56-65 years) as many as 46 people (33.8%) Most respondents with high school education are 61 people (44.9%). Most of the respondents were male as many as 71 people (52.2%). Most of the respondents are farmers as many as 34 people (25%)

Tabel 2. Frequency Distribution and Percentage of Self Care Management in Hypertension Sufferers at Santa Elisabeth Hospital Medan in 2022

No	Self Care Management	Frequency (f)	Percentage (%)
1	Good (121-160)	31	22.7
2	Enough (81-120)	81	59.5
3	Less (40-80)	24	17.6
	Total	136	100

Based on the results of a study conducted by researchers at Santa Elisabeth Hospital Medan with 136 respondents with hypertension who carried out good self-care management, namely 31 people (22.7%), the sufficient category was 81 people (59.5), and the less category was 24 people (17.6)

4. CONCLUSION

Based on the results of the study with a sample of 136 respondents regarding self care management in patients at Santa Elisabeth Hospital Medan, it can be stuffed self care management for hypertension sufferers at Santa Elisabeth Hospital Medan in 2022 in the sufficient category as many as 81 people (59.5%), in the good category as many as 31 people (22.7%), and in the less category 24 people (17.6%). There are several potential avenues for future research on the description of self-care management in hypertension patients. Examining the effectiveness of various self-care interventions: There are many different self-care strategies that can be employed to manage hypertension, such as regular exercise, dietary changes, stress reduction techniques, and medication adherence. Future research could investigate which interventions are most effective for different populations and how they can be tailored to individual patients. Identifying barriers to self-care: Despite the benefits of self-care in managing hypertension, many patients struggle to adhere to recommended practices. Future research could explore the reasons why patients may not engage in self-care and identify strategies for overcoming these barriers. Assessing the role of technology in self-care: Advances in digital health technologies have the potential to revolutionize self-care management in hypertension patients. Future research could investigate the efficacy of various technology-based interventions, such as mobile apps or wearable devices, in improving hypertension outcomes. Examining the impact of cultural factors: Cultural beliefs and practices can play a significant role in how patients approach self-care management. Future research could explore how cultural factors influence self-care behaviors and develop strategies for tailoring interventions to different cultural groups. Investigating the role of healthcare providers: Healthcare providers play a critical role in supporting patients' self-care efforts. Future research could explore how providers can best support patients in managing hypertension through self-care and identify strategies for improving provider-patient communication and collaboration.

REFERENCES

- Adinkrah, E., Bazargan, M., Wisseh, C., & Assari, S. (2020). Adherence to hypertension medications and lifestyle recommendations among underserved African American middle-aged and older adults. *International Journal of Environmental Research and Public Health*, *17*(18), 6538.
- Akter, N., Rahman, A., & Chowdhury, M. (1998). *Environmental Investigation And Evaluation Of Sericulture Programme And Ayesha Abed Foundation Nasima Akter Amina Rahman Mushtaque Chowdhury* (Issue March). https://bigd.bracu.ac.bd/wp-content/uploads/2021/12/Environmental_Investigation_And_Evaluati.pdf
- Ariyani, H., & Alfian, R. (2017). Building care of hypertensive patients in reducing sodium intake in Banjarmasin. In *Unity in Diversity and the Standardisation of Clinical Pharmacy Services* (pp. 33–40). CRC Press.
- Aulia, R. U., Ananto, D., & Christiany, I. (2018). Pengaruh Pengendalian Diri Berbasis Teori Self Care Terhadap Perubahan Tekanan Darah Pada Klien Hipertensi. *Jurnal Keperawatan*, *11*(2), 119–125. <http://journal.poltekkesdepkes-sby.ac.id/index.php/KEP/article/view/1468/833>
- Balduino, A. de F. A., Mantovani, M. de F., Lacerda, M. R., Marin, M. J. S., & Wal, M. L. (2016). Experience of hypertensive patients with self-management of health care. *Journal of Advanced Nursing*, *72*(11), 2684–2694.
- Bokhour, B. G., Cohn, E. S., Cortés, D. E., Solomon, J. L., Fix, G. M., Elwy, A. R., Mueller, N., Katz, L. A., Haidet, P., & Green, A. R. (2012). The role of patients' explanatory models and daily-lived experience in hypertension self-management. *Journal of General Internal Medicine*, *27*, 1626–1634.
- Godfrey, C. M., Harrison, M. B., Lysaght, R., Lamb, M., Graham, I. D., & Oakley, P. (2011). Care of self-care by other-care of other: The meaning of self-care from research, practice, policy and industry perspectives. *International Journal of Evidence-Based Healthcare*, *9*(1), 3–24.
- Hariati, N. W., & Abdurrachim, R. (2022). Adequacy of Potassium Intake for Blood Pressure Control in the Daily Diet of Hypertensive Elderly by Consumption Combination of Vegetable and Fruit Juices. *International Conference on Nutrition*, *2*(1), 86–92.
- Hariawan, H., & Tatisina, C. M. (2020). Pelaksanaan Pemberdayaan Keluarga Dan Senam Hipertensi Sebagai Upaya Manajemen Diri Penderita Hipertensi. *Jurnal Pengabdian Masyarakat Sasambo*, *1*(2), 75–79.
- Hasanah, N. (2019). The Relationship between Dietary Compliance of Hypertension Patients and Increased Blood Pressure in Hypertension Patients in the Internal Medicine Poly Room of Dr Rm Djoelham Binjai Hospital in 2019. *Science Midwifery*, *8*(1, October), 96–102.
- Hulu, T., Budi, N. P., & Sari, R. P. (2021). Relationship of Family Support with Quality of Life of Hemodialized Patients using Study Literature Review Method. *Journal of Vocational Nursing*, *2*, 132–141.
- Indriawati, R., & Syaifudin, S. (2020). Relationship between Demographic Factors and Body Mass Index with the Prevention of Hypertension in Adolescents. *Journal of Health Promotion and Behavior*, *5*(2), 72–78.
- Islamy, A., Livana, P. H., & Farasari, P. (n.d.). Relationship compliance with dietary approach to stop hypertension pattern with blood pressure in hypertension patients at Puskesmas Tulungagung, Tulungagung Regency. *Journal of Health Sciences*, *6*(S3), 10625–10632.
- Kitson, A., Feo, R., Lawless, M., Arciuli, J., Clark, R., Golley, R., Lange, B., Ratcliffe, J., & Robinson, S. (2022). Towards a unifying caring life-course theory for better self-care and caring solutions: A discussion paper. *Journal of Advanced Nursing*, *78*(1), e6–e20.
- Powers, B. J., Olsen, M. K., Oddone, E. Z., & Bosworth, H. B. (2009). The effect of a hypertension self-management intervention on diabetes and cholesterol control. *The American Journal of Medicine*, *122*(7), 639–646.
- Pratiwi, I., Rosa, E., Syazwani, N., & Kartikasari, A. (2021). Appropriate Use of Antihypertensive Medicines in Hypertension Patients of BPJS Participants. *Indonesian Journal of Nursing and Health Sciences*, *2*(2), 71–78.
- Pun, S. P. Y., Coates, V., & Benzie, I. F. F. (2009). Barriers to the self-care of type 2 diabetes from both patients' and providers' perspectives: literature review. *Journal of Nursing and Healthcare of Chronic Illness*, *1*(1), 4–19.
- Puspitosari, W. A., & Wardaningsih, S. (2021). Mental Emotional Disorders in the Community. *4th International Conference on Sustainable Innovation 2020–Health Science and Nursing (ICoSIHSN 2020)*, 564–570.
- Riegel, B., Dunbar, S. B., Fitzsimons, D., Freedland, K. E., Lee, C. S., Middleton, S., Stromberg, A., Vellone, E., Webber, D. E., & Jaarsma, T. (2021). Self-care research: where are we now? Where are we going? *International Journal of Nursing Studies*, *116*, 103402.
- Riegel, B., Moser, D. K., Anker, S. D., Appel, L. J., Dunbar, S. B., Grady, K. L., Gurvitz, M. Z., Havranek, E. P., Lee, C. S., & Lindenfeld, J. (2009). State of the science: promoting self-care in persons with heart failure: a scientific statement from the American Heart Association. *Circulation*, *120*(12), 1141–1163.

- Salami, S. (2021). Perilaku Self Care Management Penderita Hipertensi: Studi Kualitatif. *Jurnal Keperawatan 'Aisyiyah*, 8(1), 87–99.
- Saludung, M. P., & Malinti, E. (2021). Gambaran Gaya Hidup Penderita Hipertensi Di Puskesmas Bua Tallulolo Toraja Utara Pada Masa Pandemi. *Klabat Journal of Nursing*, 3(1), 1–12.
- Setyopranoto, I., Bayuangga, H. F., Panggabean, A. S., Alifaningdyah, S., Lazuardi, L., Dewi, F. S. T., & Malueka, R. G. (2019). Prevalence of stroke and associated risk factors in sleman district of Yogyakarta Special Region, Indonesia. *Stroke Research and Treatment*, 2019.
- Simamora, T., & Ginting, F. B. (2022). Hubungan Dukungan Keluarga dengan Manajemen Perawatan Diri Pasien Hipertensi di Rumah Sakit Santa Elisabeth Medan Tahun 2022. *Elisabeth Health Jurnal*, 7(2), 184–191.
- Sitanggang, T., Dalimunthe, T., Purba, E. M., Sinaga, S. N., Sinuhaji, L. N., & Sari, E. P. (2022). Factors Associated with Compliance of Pregnant Women in Consuming Fe Tablets in the Working Area of the Pardamean Health Center, Pematang Siantar City in 2022. *Jurnal Eduhealth*, 13(02), 912–918.
- Sudikno, S., Mubasyiroh, R., Rachmalina, R., Arfines, P. P., & Puspita, T. (2023). Prevalence and associated factors for prehypertension and hypertension among Indonesian adolescents: a cross-sectional community survey. *BMJ Open*, 13(3), e065056.
- Suparti, S., & Handayani, D. Y. (2019). Screening hipertensi pada lansia di wilayah Puskesmas Banyumas. *Indonesian Journal for Health Sciences*, 2(2), 84–93.
- Surahmat, R., & Damayanti, N. R. (2017). Pengaruh terapi bekam dalam menurunkan tekanan darah pada pasien hipertensi di rumah bekam palembang. *Majalah Kedokteran Sriwijaya*, 49(1), 43–49.
- Tulu, S. N., Cook, P., Oman, K. S., Meek, P., & Kebede Gudina, E. (2021). Chronic disease self-care: a concept analysis. *Nursing Forum*, 56(3), 734–741.
- Widiati, N., & Anjani, A. D. (2020). Knowledge Of Pregnant Women About The Dangers Of Hypertension In The Work Area Puskesmas Tanjungbatu, Kundur District. *Zona Kedokteran: Program Studi Pendidikan Dokter Universitas Batam*, 10(2), 45–50.
- Wright, K. D., Jones, L. M., Adams, I. R., Moss, K. O., Harmon-Still, C., Nguyen, C. M., Rose, K. M., & Klatt, M. D. (2022). Co-created health education intervention among older African American women living with hypertension. *EXPLORE*, 18(2), 234–239. <https://doi.org/https://doi.org/10.1016/j.explore.2021.02.004>
- Ziguras, C. (2004). *Self-care: Embodiment, personal autonomy and the shaping of health consciousness*. Routledge.