The Relationship of Knowledge and Role of Nurse in Management with Hypertension Patients

¹Deni Kurniati, ^{1*}Tri Adi Nugroho, ¹Rizki Yeni Wulandari, ¹Moh.Heri Kurniawan ¹Program Studi S1 Keperawatan, Fakultas Kesehatan, Universitas Aisyah Pringsewu

*Korespondensi: adinugrohopsw@gmail.com

Abstract: Hypertension is a disease that is increasing every year. Dieting for the risk of hypertension sufferers is still not implemented because many hypertension sufferers still have poor dietary behavior. This research aims to analyze the influence of education level and family support on diet in people at risk of hypertension using the self-care theory approach. The design of this research is Observational Analytical with a Cross Sectional approach. The sample taken using the Purposive Sampling technique with criteria for inclusion and exclusion at the Rajal Clinic was 80 respondents. This study collected data on education level and family support using a questionnaire sheet. The statistical test used is the multiple linear regression analysis test results showed that family support had the most influence on diet in people at risk of hypertension, with a value of (0.001) with a coefficient of -.420. Based on this, family support can influence the diet of people at risk of hypertension, so there is a need for family support for people at risk of hypertension to reduce the risk of hypertension in people at risk of hypertension.

Kata Kunci: Hypertension, Knowledge, Role of nurse

BACKGROUND

Hypertension is a non-communicable disease that can cause death. According to the World Health Organization (WHO), hypertension is categorized as a silent disease because sufferers do not know they have hypertension before checking their blood pressure (1). hypertension is categorized as a silent disease because sufferers do not know they have hypertension before checking their blood pressure. Based on WHO data quoted by Yonata (2016), the number of hypertension cases worldwide has reached 972 million, with details of 333 million in developed countries and 639 million cases in developing countries, including Indonesia. The number of hypertension cases is expected to increase to 29.2% in 2025. Hypertension was the most common non-communicable disease in Indonesia in 2018, with a total of 185,857 cases in residents aged ≥18 years (2).

This case increased by 25.8% from 2013, According to the Lampung Province Health Profile (2019), Hypertension in Lampung Province reached 15.10% of the population aged \geq 15 years, with health service outcomes of 49.1%. Meanwhile, in 2018, in Pesisir Barat Regency, hypertension in residents aged >18 years reached 582 cases (12.2%), with details of 84,616 cases in men and 80,803 cases in women (2).

Based on preliminary test results, the number of hypertension cases at the Ngambur Community Health Center, Pesisir Barat Regency, in October 2023 was 315 cases, increasing by 49 in the last three months. Based on the analysis, this was caused by inadequate treatment of patients by nurses, as evidenced by 7 out of 10 patients needing better knowledge of hypertension management. Meanwhile, 9 out of 15 nurses were required to provide optimal education to patients and their families. Patient knowledge about hypertension also influences patient compliance with treatment. Hypertension sufferers who know well about hypertension will adhere to treatment (3).



Research by Erick Johans Manoppo, Gresty M. Masi, and Wico Silolonga (2018) shows a relationship between nurses' role and compliance with hypertension management to improve the health status of hypertensive patients (4), If nurses do not carry out their duties well, the negative impact can increase hypertension and death.

The proposed research, titled 'The Impact of Patient Knowledge and Nurse Roles on Hypertension Management: A Study at the Ngambur Community Health Center UPTD, Pesisir Barat Regency in 2023', aims to explore the crucial role of patient knowledge and nurse interventions in the effective management of hypertension.

METHODS

The type of research used is quantitative correlation research. The study was conducted using an analytical survey with a cross-sectional approach to determine the relationship between knowledge and the role of nurses in treating hypertension patients at the UPTD Ngambur Health Center, Pesisir Barat Regency, in 2023. The population of this study was Hypertension patients in the working area of the UPTD Ngambur Health Center, Pesisir Barat Regency, totaling 315 cases per month. October 2023. Then, the sample was determined using a non-probability sampling technique and a sample of 76 respondents was obtained.

The data used is primary data collected based on the results of the questionnaire. In the knowledge variable, a questionnaire with Yes/No statements was used, then the results were added up into three categories, namely, good (76-100%), sufficient (56-75%), and poor (<56%). Meanwhile, for the variable role of the nurse using a Likert scale questionnaire to measure the variable's size on a scale of 1-4, grouping is done by making a total score and then determining the mean value (83.73). If the score is ≤83.73, it is categorized as bad, and if it is >83.73, it is classified as good. Variables were analyzed and measured using univariate and bivariate analysis. Univariate analysis aims to obtain a frequency distribution on the independent variable (knowledge) and the dependent variable (nurse role). Meanwhile, bivariate analysis was carried out using the gamma test to determine whether there is a relationship, correlation, and difference between the independent and dependent variables. The bivariate analysis carried out in the study aims to examine the relationship between the level of knowledge and the role of nurses in treating hypertensive patients at the Ngambur Community Health Center UPTD in 2023.

RESULT AND DISCUSSION

Patient Knowledge of Hypertension

The study's results showed that 31 respondents (40.8%) of hypertensive patients at the Ngambur Health Center UPTD, Pesisir Barat Regency in 2023 had insufficient knowledge of hypertension. Complete data can be seen in Table 1. Hypertension sufferers should increase their knowledge regarding hypertension so that they can treat recurrence early or try to prevent it to reduce the occurrence of complications.

Tabel 1. Frequency Distribution of Patient Knowledge of Hypertension Level knowledge for hypertension Frekuensi (n) Presentase (%) Good 16 21,0 Enought 29 38,2 Less 31 40,8 76 Total 100,0





Lack of knowledge can be caused by a lack of ability to grasp information, low education, lack of awareness, and an environment that is less supportive of both health workers and health promotion media related to hypertension. Learning is not only focused on increasing knowledge but also on increasing family awareness and concern for hypertension-related matters. To achieve this, sharing was held regarding problems, increasing family awareness and concern for hypertension-related issues.

The Role of Nurses in Hypertension Patients

The role of nurses in treating hypertensive patients at the Ngambur Community Health Center UPTD, Pesisir Barat Regency, in 2023 is mainly in the good category, with 39 respondents (51.3%). Meanwhile, 37 respondents (48.7%) included the role of nurses in the wrong category. Complete data can be seen in Table 2.

Researchers underscore the vital role of nurses in improving health outcomes, particularly in the case of hypertensive patients. The study emphasizes that the quality of health education provided by nurses directly impacts a patient's motivation to manage their condition. The more effectively nurses educate patients about their health, the greater the patient's drive to overcome the disease (5).

Research discussing nurses' experiences in carrying out their roles and functions reveals that nurses' experiences in carrying out their roles and functions in Community Health Centers start with caring responsibly and being able to coordinate services in the form of programs and activities with other related parties (6, 7).

Table 2. Frequency Distribution of Nurses' Roles in Hypertension Patients						
Role of Nurse	Frekuensi (n)	Persentase (%)				
Good	39	51,3				
No. Good	37	48,7				
No. Good	37	40,7				
Total	76	100,0				

The Relationship between Patient Knowledge and the Nurse's Role in Handling Hypertension Patients

The study results showed no relationship between knowledge and the role of nurses in treating hypertension at the Ngambur Community Health Center UPTD in 2023. The results of the study were obtained from 76 respondents there were 39 (51.3%) patients perceived the role of nurses as good for patients' knowledge of hypertension 31 (40.8%)) had less knowledge. Based on the gamma test, the p-value was obtained (0.803>0.05), so there was no relationship between knowledge and the role of nurses in treating hypertension at the Ngambur Community Health Center UPTD.

Table 3. The Relationship between Patient Knowledge and the Nurse's Role in Handling Hypertension Patients

Knowledge		Role of Nursing							
	Good No Good			Total					
	n	%	n	%	n	%			
Good	6	37,5	10	62,5	16	100,0	0,803		
Enought	18	62,1	11	37,9	29	100,0			
Less	16	48,4	16	51,6	31	100,0			



The role of nurses is vital to be carried out as well as possible to improve health status and maintain and improve patient recovery in general, especially the recovery of hypertensive patients. The better nurses provide health education to patients, the lower the number of hypertension sufferers. The patient's lack of knowledge is caused by the patient's awareness of the importance of poor recovery, an unsupportive environment and the patient's ability to understand and low education (8-12).

CONCLUSION

There is no relationship between knowledge and the role of nurses in treating hypertension at the Ngambur Community Health Center UPTD in 2023. Other factors that can influence the handling of hypertension include the patient's awareness and the patient's environmental factors. However, it is still necessary to maintain and increase nurses' knowledge, especially for patient care and education, so that hypertension management is better and hypertension cases decrease.

ACKNOWLEDGEMENTS

We thank the Ngambur Community Health Center, Pesisir Barat Regency, the patient's family, and everyone involved in this research.

REFERENCES

- 1. WHO. Hypertension 2022 [Available from: https://www.who.int/news-room/fact-sheets/detail/hypertension.
- RISKESDAS. Laporan Hasil Riset Kesehatan Dasar Tahun 2018 2018 [Available from: https://kesmas.kemkes.go.id/assets/upload/dir 519d41d8cd98f00/files/Hasil-riskesdas-2018 1274.pdf.
- 3. Boulestreau R, van den Born BH, Lip GYH, Gupta A. Malignant Hypertension: Current Perspectives and Challenges. J Am Heart Assoc. 2022;11(7):e023397.
- 4. Manoppo E, Masi G. Hubungan Peran Perawat Sebagai Edukator Dengan Kepatuhan Penatalaksanaan Hipertensi Di Puskesmas Tahuna Timur. Jurnal Keperawatan Unsrat. 2018;1(3).
- 5. Himmelfarb CR, Commodore-Mensah Y, Hill MN. Expanding the Role of Nurses to Improve Hypertension Care and Control Globally. Ann Glob Health. 2016;82(2):243-53.
- 6. Lou Y, Sun N, Zhang M, Qiu Y, Wang J, Chen J. Trends in exercise for hypertension: a bibliometric analysis. Front Cardiovasc Med. 2023;10:1260569.
- 7. Świątoniowska N, Sarzyńska K, Szymańska-Chabowska A, Jankowska-Polańska B. The role of education in type 2 diabetes treatment. Diabetes Res Clin Pract. 2019;151:237-46.
- 8. Carter BL, Bosworth HB, Green BB. The hypertension team: the role of the pharmacist, nurse, and teamwork in hypertension therapy. J Clin Hypertens (Greenwich). 2012;14(1):51-65.
- 9. Hannan JA, Commodore-Mensah Y, Tokieda N, Smith AP, Gawlik KS, Murakami L, et al. Improving hypertension control and cardiovascular health: An urgent call to action for nursing. Worldviews Evid Based Nurs. 2022;19(1):6-15.
- 10. Spies LA, Bader SG, Opollo JG, Gray J. Nurse-Led Interventions for Hypertension: A Scoping Review With Implications for Evidence-Based Practice. Worldviews Evid Based Nurs. 2018;15(4):247-56.
- 11. Zhu X, Wong FKY, Wu CLH. Development and evaluation of a nurse-led hypertension management model: A randomized controlled trial. Int J Nurs Stud. 2018;77:171-8.
- 12. Gyamfi J, Plange-Rhule J, Iwelunmor J, Lee D, Blackstone SR, Mitchell A, et al. Training nurses in task-shifting strategies for the management and control of hypertension in Ghana: a mixed-methods study. BMC Health Serv Res. 2017;17(1):104.

