East African Scholars Journal of Medical Sciences
Abbreviated Key Title: East African Scholars J Med Sci
ISSN: 2617-4421 (Print) & ISSN: 2617-7188 (Online)
Published By East African Scholars Publisher, Kenya

OPEN ACCESS

Volume-9 | Issue-2 | Feb-2026 | DOI: https://doi.org/10.36349/easms.2026.v09i02.003

Original Research Article

The Effect of Compliance Following Chronic Disease Management Program (Prolanis) on the Blood Pressure Condition of Hypertension Patients at the Sikumana Health Center

Yunita Astari Karambe[1*], Magdarita Riwu[2], Kartini Lidia[3], S. M. J. Koamesah[4]

[1]Medical Education Program, Faculty of Medicine and Veterinary Medicine, Universitas Nusa Cendana, Indonesia
[2]Department of Pharmacy, Faculty of Medicine and Veterinary Medicine, Universitas Nusa Cendana, Indonesia
[3]Department of Pharmacology and Therapy, Faculty of Medicine and Veterinary Medicine, Universitas Nusa Cendana, Indonesia
[4]Department of Public Health and Community Medicine, Faculty of Medicine and Veterinary Medicine, Universitas Nusa Cendana, Indonesia

Article History
Received: 29.12.2025
Accepted: 06.02.2026
Published: 12.02.2026

Journal homepage:
https://www.easpublisher.com

Quick Response Code

Abstract: ***Introduction*:** Hypertension is a non-communicable disease with a rising global prevalence. In Indonesia, particularly NTT which ranks fourth with 76,130 cases, hypertension remains a significant health problem. The Chronic Disease Management Program (Prolanis) by The Social Security Organizing Agency (BPJS) aims to manage and control chronic diseases, including hypertension. ***Aims*:** To know the effect of compliance following Chronic Disease Management Program (Prolanis) on the blood pressure condition of hypertensive patients at the Sikumana Health Center. ***Method*:** Observational analytics with cross sectional (cut latitude) research design. This research's primary data were taken from interviews and filling out The Five-Item Medication Adherence Report Scale (MARS-5) questionnaire, while secondary data were collected from respondents' medical records. The number of respondents who met the research's criteria was 15 respondents. ***Results*:** The majority of respondents were aged 59–65 years (13 participants; 87%) and female (13 participants; 87%). Adherence to the Prolanis program was observed in 10 participants (67%), while 5 participants (33%) were non-adherent. Stable blood pressure was identified in 10 participants (67%), whereas 5 participants (33%) exhibited unstable blood pressure. Statistical analysis demonstrated a statistically significant and strong association between variables ($p < 0.05$; $r = 0.707$). ***Conclusion*:** There is a significant influence of compliance following Prolanis on the blood pressure condition of hypertensive patients in the Sikumana Health Center.

Keywords: Hypertension, Noncommunicable Diseases (PTM), Chronic Disease Management Program (Prolanis), Blood Pressure, Medication adherence, Primary health care (Puskesmas).

INTRODUCTION

Hypertension is one of the non-communicable diseases (NCDs) characterized by increased blood pressure in the arterial vessels that carry blood as nutrients from the heart to all body tissues. (Inriani *et al*., 2021) Hypertension is a major cause of stroke (such as cerebral infarction, intracerebral hemorrhage, and subarachnoid hemorrhage), heart disease (including coronary artery disease, cardiac hypertrophy, and heart failure), kidney disease (such as nephrosclerosis), and macrovascular diseases. (Umemura *et al*., 2019) In its early stages, hypertension is often asymptomatic, resulting in many individuals remaining undiagnosed. Uncontrolled blood pressure constitutes a major public health problem in both developed and developing countries. (Fetiya *et al*., 2022)

Globally, more than 41 million people die each year due to non-communicable diseases, accounting for 71% of all global deaths, including approximately 15 million deaths occurring among individuals aged 30–70 years, many of which are premature. (Vijna *et al*., 2022) Worldwide, one in four men and one in five women suffer from hypertension. (Vijna *et al.*, 2022) Approximately one billion people are affected by hypertension, and this number is projected to increase to 1.5 billion by 2025. (Demamu *et al*., 2021) The overall estimated prevalence of hypertension in urban populations of Southeast Asia is 33.82%. The 2018

***Corresponding Author:** Yunita Astari Karambe
Medical Education Program, Faculty of Medicine and Veterinary Medicine, Universitas Nusa Cendana, Indonesia

Indonesian Basic Health Research (Riskesdas) reported an increase in hypertension prevalence from 25.8% in 2013 to 34.1% in 2018. In East Nusa Tenggara Province (NTT), Riskesdas reported a hypertension prevalence of 7.2%, corresponding to 76,130 cases, placing hypertension as the fourth most prevalent disease in the province. (Suratri, 2020) One of the efforts undertaken to manage hypertension is the Chronic Disease Management Program (Prolanis).

Prolanis is a program initiated by the Social Security Organizing Agency (BPJS) Health in 2014, aiming to treat and control patients with chronic diseases, including hypertension, in order to prevent complications and enable patients to achieve optimal quality of life. (Alkaff *et al*., 2020) One of the primary healthcare facilities implementing Prolanis is the Sikumana Health Center. Within the service area of Sikumana Health Center, 288 patients are registered as Prolanis participants, of whom 236 suffer from hypertension. Based on information obtained from officers responsible for the implementation of Prolanis, most participants are reported to routinely attend Prolanis activities. However, the effect of participation on patients' blood pressure has not yet been clearly determined. (Alkaff *et al*., 2020)

A study conducted by Alkaff *et al*., (2020) demonstrated that Prolanis was successful in controlling blood pressure within the normal range, although several limitations were noted. The study did not represent a broader population due to a relatively small sample size, and the secondary data were derived solely from Prolanis reports without incorporating patient medical records. (Alkaff *et al*., 2020)

The effectiveness of Prolanis in controlling blood pressure is further supported by a study conducted by Dewi e*t al*., (2019), which found that Prolanis activity components—consisting of medical consultations/education, reminders via Short Message Service (SMS) gateway, home visits, club activities, and health status monitoring—were effective in reducing blood pressure among hypertensive patients. (Dewi *et al*., 2019) In line with a study by Murti *et al*., (2019), a significant difference was observed whereby participants who adhered to Prolanis demonstrated more stable blood pressure control compared to those who did not participate in the program. (Murti *et al*., 2019)

In contrast, a study conducted by Pebriyani *et al*., (2022) found that adherence to Prolanis did not necessarily result in stable blood pressure. The study indicated that blood pressure instability among respondents was attributed to low awareness of adherence to Prolanis activities conducted by the health center, as well as several other unidentified factors. (Pebriyani *et al*., 2022) Although most previous studies suggest that adherence to Prolanis influences blood pressure control, the prevalence of hypertension continues to increase. Moreover, several studies still present limitations in terms of sample size and research instruments.

Based on the above considerations, the researchers are interested in examining whether adherence to the Chronic Disease Management Program (Prolanis) influences the blood pressure condition of patients with hypertension at the Sikumana Health Center.

METHODS

This study was conducted from 22 August 2023 to 21 October 2023 at Sikumana Health Center, Maulafa District, Kupang City, East Nusa Tenggara. The type of study used in this research was an observational analytic study with a cross-sectional design, conducted to determine the effect of adherence to the Chronic Disease Management Program (Prolanis) on the blood pressure condition of patients with hypertension at the Sikumana Health Center. This study received ethical approval from the Health Research Ethics Committee, Faculty of Medicine and Veterinary Medicine, University of Nusa Cendana, with approval number 53/UN15.16/KEPK/2023.

The study population consisted of all hypertensive patients newly registered in the Prolanis program from June to December 2022 at Sikumana Health Center, totaling 25 individuals. Sampling was conducted using purposive sampling, a non-random sampling technique in which samples are selected based on specific considerations aligned with the research objectives and predefined inclusion and exclusion criteria. The sample size was determined using the population size calculation for populations <1000, resulting in a minimum required sample of 12 participants. To anticipate potential dropouts during the study, the sample size was increased by 10%, resulting in a target sample of 14 participants.

Inclusion and Exclusion Criteria

The inclusion criteria were hypertensive patients diagnosed with blood pressure measurements of ≥140/90 mmHg, aged 45–65 years, registered between June and December 2022 and followed for six months after being enrolled as new Prolanis participants at Sikumana Health Center, regularly taking antihypertensive medication, having complete medical record data, and voluntarily agreeing to participate in the study by signing informed consent. The exclusion criteria included Prolanis participants with hypertension accompanied by comorbid diseases, those who could not be contacted, and those who did not complete the research process.

Research Procedure

The study commenced by identifying respondents who met the inclusion and exclusion criteria using secondary data from Prolanis participants.

Secondary data collection was performed by reviewing the medical records of each participant from the time of initial Prolanis registration, followed by monitoring blood pressure for six months after enrollment. Participants were then screened according to the predetermined inclusion and exclusion criteria.

Primary data were collected through interviews consisting of 16 questions related to Prolanis and by administering The Five-Item Medication Adherence Report Scale (MARS-5) questionnaire, developed by Horne and Weinman. The MARS-5 questionnaire is available in the Indonesian language and has been validated with a Cronbach's alpha value of 0.80315. This questionnaire consists of five items assessing non-adherent behaviors (forgetting, altering dosage, stopping medication, skipping doses, and taking less medication than prescribed). Medication adherence was determined based on the frequency of responses to each item, with scores <23 categorized as non-adherent and scores ≥23 categorized as adherent.

Data Analysis

After completing the interviews and questionnaire administration, the collected data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 25. Data analysis was performed for each research variable and presented in tabular form accompanied by descriptive explanations. The analysis consisted of univariate and bivariate analyses. Univariate analysis was conducted to describe the characteristics of each variable in the study, including both the independent variable (adherence to the Prolanis program) and the dependent variable (blood pressure condition), using frequency and percentage distributions. Bivariate analysis was performed to assess the effect of the independent variable on the dependent variable, specifically the influence of adherence to the Prolanis program on blood pressure condition among hypertensive patients. The contingency coefficient test was applied for bivariate analysis, with a significance level set at $p < 0.05$.

RESULTS

Respondent Characteristics

The respondents in this study were Prolanis participants selected based on the predetermined inclusion and exclusion criteria. A total of 15 participants met the inclusion criteria and were included as study respondents, consisting of 10 participants who were adherent to the Prolanis program and 5 participants who were non-adherent. The characteristics of the respondents in this study included age, sex, adherence to the Prolanis program, and blood pressure condition.

Table 1 : Characteristics of Respondent

Variable	Frequency	Percentage (%)
Age (Years Old)		
45-51	0	0%
52-58	2	13%
59-65	13	87%
Gender		
Male	2	13%
Female	13	87%
Prolanis Adherence		
Adherent	10	67%
Non-Adherent	5	33%
Blood Pressure		
Stable	10	67%
Unstable	5	33%
Medication Adherence		
Adherent	15	100%
Non-Adherent	0	0%

Based on Table 1, the largest proportion of respondents was in the 59–65 years age group, comprising 13 participants (87%), followed by the 52–58 years age group with 2 participants (13%), while no respondents were found in the 45–51 years age group (0%). Regarding sex distribution, the majority of respondents were female, totaling 13 participants (87%), whereas male respondents accounted for 2 participants (13%).

In terms of adherence to the Prolanis program, 10 respondents were classified as adherent and 5 respondents as non-adherent. All respondents who were adherent to Prolanis (10 participants) exhibited stable blood pressure, whereas all non-adherent respondents (5 participants) demonstrated unstable blood pressure. Regarding medication adherence, all respondents (15 participants; 100%) were categorized as adherent to medication, and no respondents were identified as non-adherent (0%).

Univariate Analysis

Univariate analysis was conducted to describe the characteristics of respondents related to adherence to the Prolanis program and blood pressure condition.

Table 2 : Frequency Distribution of Adherence to the Prolanis Program at Sikumana Health Center

Variable	Frequency	Percentage (%)
Prolanis Adherence		
Adherent	10	67%
Non-Adherent	5	33%
Total	**15**	**100%**

Based on Table 2, 10 respondents (67%) were classified as adherent to the Prolanis program, while 5 respondents (33%) were categorized as non-adherent.

Table 3 : Frequency Distribution of Blood Pressure Condition at Sikumana Health Center

Variable	Frequency	Percentage (%)
Blood Pressure		
Stable	10	67%
Unstable	5	33%
Total	**15**	**100%**

Based on Table 3, the frequency distribution of blood pressure condition at Sikumana Health Center showed that 10 respondents (67%) had stable blood pressure, while 5 respondents (33%) exhibited unstable blood pressure.

Table 4 : Frequency Tabulation of Prolanis Adherence in Relation to Blood Pressure Condition

Variable	Blood Pressure			
	Stable	Percentage (%)	Unstable	Percentage (%)
Prolanis Adherence				
Adherent	10	100%	0	0
Non-Adherent	0	0	5	100%
Total	**10**		**5**	

Based on Table 4, all respondents who were adherent to the Prolanis program (10 respondents; 67%) exhibited stable blood pressure, whereas all respondents who were non-adherent to Prolanis (5 respondents; 33%) had unstable blood pressure.

Bivariate Analysis

Bivariate analysis was conducted to determine the effect of adherence to the Prolanis program on the blood pressure condition of patients with hypertension at Sikumana Health Center. The results of the bivariate analysis are presented below.

Table 5 : Bivariate Analysis of Prolanis Adherence and Blood Pressure Condition among Hypertensive Patients at Sikumana Health Center

		Blood Pressure		P Value	R Value
		Stable	Unstable		
Prolanis Adherence	Adherent	10	0	0,000*	0,707
	Non-Adherent	0	5		

*Contingency Coefficient Test, significant if p value < 0,05

The table above shows that the statistical test yielded a p-value of 0.000 ($p < 0.05$), indicating a statistically significant effect of adherence to the Prolanis program on the blood pressure condition of hypertensive patients at Sikumana Health Center. Furthermore, the strength of the association was classified as a strong relationship.

DISCUSSION

Prolanis is a BPJS Health program that not only serves as a medium for counseling but also functions as an educational intervention aimed at increasing motivation and awareness among patients with hypertension to consistently adhere to treatment. (Utomo, 2019) In addition to medical management, Prolanis provides comprehensive information on healthy lifestyles, regular blood pressure monitoring, and psychosocial support. Therefore, respondents' adherence to Prolanis plays a central role in the management of hypertension, particularly among the elderly population. (Ghufron Mukti, 2021)

Demographic analysis showed that the largest proportion of respondents participating in Prolanis were aged 59–65 years, totaling 13 individuals (87%), followed by those aged 52–58 years with 2 individuals, while no respondents were found in the 45–51 years age group (0%). This finding indicates that the incidence of hypertension tends to increase with advancing age. The high risk of hypertension among older adults is associated with arterial wall thickening, resulting in

narrowed lumens and increased vascular stiffness, which subsequently elevates blood pressure. (Dewi *et al*., 2019) A study by Murti *et al.,* (2019) on the prevalence of hypertension and its determinants in Indonesia identified age as a major risk factor for hypertension, with increasing age corresponding to a higher risk of developing hypertension. (Murti *et al*., 2019)

Sex is another factor influencing blood pressure. (Murti *et al*., 2019) The results of this study showed that female respondents predominated, with 13 individuals (87%), compared to 2 male respondents (13%). This finding is consistent with a study conducted at Siak Hulu III Health Center (2018), which reported a higher number of female hypertensive patients (24 individuals; 80%) compared to males. (Dewi *et al.,* 2019) Similarly, a study by Raraswati *et al*., (2019) found that the prevalence of hypertension was higher among women than men, with 177 female respondents compared to 98 male respondents. (Raraswati *et al*., 2018) Women experience an increased risk of hypertension after menopause, typically after the age of 45 years. Prior to menopause, estrogen helps increase high-density lipoprotein (HDL) levels; however, post-menopause, decreased estrogen levels lead to reduced HDL cholesterol, which contributes to atherosclerosis and subsequently hypertension. Sex is also associated with participation in health services, as women generally demonstrate greater concern for their health and are more likely to utilize healthcare services, including participation in Prolanis. (Dewi *et al*., 2019)

The results of this study showed that 10 out of 15 respondents (67%) adhered to Prolanis and all of them exhibited stable blood pressure, whereas the 5 respondents (33%) who were non-adherent to Prolanis experienced unstable blood pressure. These findings indicate a strong influence of Prolanis adherence on blood pressure control. This result is supported by a study conducted by Frieska Dyanneza (2017) at Griya Husada 2 Primary Clinic, Tasikmadu, Karanganyar, which demonstrated that Prolanis was effective in controlling blood pressure among patients with hypertension. (Dyanneza *et al*., 2017)

Adherence to Prolanis is influenced by multiple complex factors. Interviews conducted in this study revealed that one factor affecting adherence was the distance from respondents' homes to the Prolanis activity location, which sometimes led respondents to postpone attendance. One respondent (YA) stated: *"Sometimes I arrive late, and I have even missed Prolanis because the distance is far and I have to take care of my grandchildren and nephews who are fussy in the morning."* Additionally, elderly individuals often experience mobility limitations and multiple comorbid complaints, which further complicate their ability to travel long distances to participate in Prolanis activities. (Ilham *et al*., 2023)

Another factor influencing adherence identified through interviews was respondents' awareness and intrinsic motivation to maintain their health. Respondents who adhered to Prolanis reported strong motivation to stay healthy, and distance was not perceived as a significant barrier. Awareness of the positive outcomes of Prolanis, including better blood pressure control and prevention of complications, can enhance motivation to participate consistently. (Pebriyani *et al.,* 2022)

Social aspects also play an important role in respondents' participation. Support and understanding from family members and the surrounding social environment can increase motivation to adhere to Prolanis, whereas social isolation or lack of support can pose significant barriers. Economic factors must also be considered, as respondents with limited financial resources may experience difficulties accessing healthcare services or affording medications. These factors can substantially influence adherence to Prolanis participation. (Susanti, 2018)

In contrast, non-adherence to Prolanis may be caused by various factors. A study by Muhammad Akhsin Atto Illah (2021) identified several factors contributing to decreased adherence, including difficulty walking, chronic illness, rapid fatigue, and lifestyle-related factors. (Atto'illah *et al*., 2021) Interview findings in this study revealed that non-adherent respondents often experienced poor sleep quality, which became a barrier to attending morning Prolanis activities. One respondent (PB) stated: *"When I cannot sleep well, I wake up feeling lazy and tired, so I do not attend Prolanis."* Poor sleep quality can also contribute to unstable blood pressure. This finding aligns with a study by Arissandi Devi *et al*., (2019), which demonstrated a significant relationship between sleep pattern disturbances and hypertension among the elderly. Poor sleep quality and duration can activate the sympathetic nervous system, creating physical and psychological stressors. Sleep disturbances may also increase angiotensin hormone levels, which play a role in elevating blood pressure, thereby triggering hypertension. (Arissandi *et al*., 2019)

Another factor contributing to unstable blood pressure identified in this study was stress. One respondent (SS) stated: *"Because I work alone and have to think about washing, cooking in the morning, sweeping, and other chores, I often feel stressed."* Stress-induced increases in blood pressure are generally temporary; however, prolonged stress can lead to sustained hypertension. This occurs due to activation of the adrenergic system, resulting in catecholamine and adrenaline release, vasoconstriction, increased heart rate, and elevated blood pressure. (Hadia *et al*., 2022)

Active participation in Prolanis also fosters a supportive environment. Through Prolanis clubs,

respondents can interact with fellow members, share experiences, provide mutual support, and receive direct guidance from healthcare professionals. Most respondents reported experiencing emotional support from fellow Prolanis participants, which significantly influenced adherence. Social and emotional support can reduce stress and anxiety—known contributors to elevated blood pressure—and strengthen resilience in managing health challenges. (Atto'illah *et al*., 2021)

Understanding these factors suggests that efforts to improve Prolanis adherence require a holistic approach. Such efforts should involve not only healthcare providers and respondents but also family members and reinforcement of individual motivation. (Kartikawati, 2017) Awareness of factors influencing adherence provides valuable insight for designing more effective strategies to enhance participation and sustainability of the Prolanis program at an optimal level. (Ilham *et al*., 2023)

Adherence to Prolanis offers significant benefits in managing blood pressure. Through educational sessions and information provided by healthcare professionals, respondents gain a deeper understanding of healthy practices and hypertension management. This knowledge influences informed decision-making regarding personal health management, including dietary regulation, stress management, and medication adherence. (Kusnan, 2022)

Furthermore, consistent participation in Prolanis allows for regular blood pressure monitoring. Routine measurements enable early detection of fluctuations or increases in blood pressure, facilitating timely adjustments in treatment or lifestyle interventions and reducing the risk of complications. (Ilham *et al*., 2023)

This study found that five respondents who were non-adherent to Prolanis experienced unstable blood pressure. This was attributed to the belief that medication adherence alone was sufficient, resulting in low concern for other factors such as high-fat diets, physical inactivity, and alcohol consumption. One respondent (AP) stated: *"At parties, if someone offers a drink, I usually take one shot, sometimes up to two."* A study by Hamria *et al*., (2020) reported that 24 respondents exhibited unhealthy lifestyles due to a lack of awareness regarding the importance of healthy behaviors, including consumption of high-fat foods, physical inactivity, and alcohol use, which can lead to hypertension relapse, complications, and even death. (Hamria *et al.,* 2020)

It is important to recognize that blood pressure control depends not only on medication adherence but also on comprehensive management, and Prolanis plays a crucial role in enhancing therapeutic effectiveness to achieve optimal blood pressure. (Utomo, 2019) Adherence to Prolanis should be viewed not merely as an obligation but as an investment in personal health. Factors such as genetic predisposition, physical activity, and dietary patterns also contribute to program success. (Man *et al.,* 2022) Therefore, efforts to increase participation, particularly among the elderly, must be supported by holistic approaches involving education, social support, and understanding of the long-term benefits of active engagement in Prolanis. Through such strategies, patients can manage blood pressure effectively, minimize complications, and improve quality of life. (Magder, 2018)

CONCLUSION

Based on the findings of this study, it can be concluded that adherence to the Prolanis program has a significant effect on the blood pressure condition of patients with hypertension at Sikumana Health Center, as indicated by the contingency coefficient test results showing a p-value of 0.000 ($p < 0.05$). This result highlights the important role of consistent participation in Prolanis in supporting effective blood pressure control and underscores the program's contribution to comprehensive hypertension management at the primary healthcare level.

REFERENCES

- Alkaff, F. F., Sukmajaya, W. P., Intan, R. E., & Salamah, S. (2020). Effectivity of Indonesia Chronic Disease Management Program (Prolanis) to control hypertension and its comorbidities at primary health care. *Journal of Public Health Research*, 8, 224–227.
- Arissandi, D., Setiawan, C. T., & Wiludjeng, R. (2019). *Hubungan gangguan pola tidur dengan hipertensi lansia di Desa Sei Kapitan Kabupaten Kotawaringin Barat* (Vol. 3, No. 2, pp. 82–88). Repositori STIKES Borneo Cendekia Medika. https://repository.stikesbcm.ac.id/id/eprint/23/
- Atto'illah, M. A., Anggraini, M. T., Lahdji, A., & Anggraheny, H. D. (2021). Keaktifan mengikuti Prolanis mempengaruhi kestabilan tekanan darah pada pasien hipertensi di Puskesmas Warungasem. *Jurnal Medika Arteriana*, 3(2), 75–86.
- Demamu, H., Abinet, A., Hilina, G., & Nega, Y. (2021). Undiagnosed hypertension and its associated factors among adult people living in Southern Ethiopia: Evidence from Gunchire Woreda of Gurage Zone. *Journal of Hypertension and Management*, 7(1), 1–8.
- Dewi, U., Andriane, Y., & Fitriyana, S. (2019). Pola tekanan darah pasien hipertensi setelah mengikuti Prolanis di Puskesmas Pasirkaliki. *Jurnal Keperawatan*, 5(2), 778–785.
- Dyanneza, F., Tamtomo, D. G., & Sugiarto. (2017). The effectiveness of chronic disease management program in blood pressure control among hypertensive patients. *Indonesian Journal of*

Medicine, 2(1), 52–62. https://doi.org/10.26911/theijmed.2017.2.1.41

- Fetiya, O., Tesfaye, T., & Abebaye, A. (2022). Association of blood pressure, anthropometric indices and blood group among hypertensive patients at health centers in Addis Ababa, Ethiopia. *Journal of Hypertension and Management*, 8(2), 1–9.
- Ghufron Mukti, A. (2021). *Optimalisasi dan pengelolaan penyakit kronis selama pandemi Covid-19*. BPJS Kesehatan. Diakses dari https://www.bpjs-kesehatan.go.id
- Hadia, M. P., Mariati, L. H., & Nggarang, B. N. (2022). Pengaruh senam Prolanis terhadap penurunan tekanan darah pada lansia produktif (45–59 tahun) di Dusun Kaweng wilayah kerja Puskesmas Bangka Kenda. *Jurnal Wawasan Kesehatan (JWK)*, 7.
- Hamria, H., Mien, M., & Saranani, M. (2020). Hubungan pola hidup penderita hipertensi dengan kejadian hipertensi di wilayah kerja Puskesmas Batalaiworu Kabupaten Muna. *Jurnal Keperawatan*, 4(01), 17–21. https://doi.org/10.46233/jk.v4i01.239
- Ilham, R., Sudirman, A. N., Maku, Y. D., et al. (2023). Faktor-faktor yang mempengaruhi pemanfaatan Prolanis di Puskesmas Botumoito Kecamatan Botumoito Kabupaten Boalemo Tahun 2022. *Jurnal Inovasi Riset Ilmu Kesehatan*, 1(2).
- Inriani, I., Narmawan, N., & Abadi, E. (2021). Pengaruh senam Prolanis terhadap penurunan tekanan darah pada penderita hipertensi di wilayah pesisir Puskesmas Soropia. *Health Information: Jurnal Penelitian*, 13(1), 1–10.
- Kartikawati, K. (2017). *Faktor-faktor yang mempengaruhi partisipasi peserta dalam mengikuti kegiatan aktivitas klub Program Pengelolaan Penyakit Kronis di Puskesmas di Denpasar Barat*. Universitas Udayana. Diakses dari https://erepo.unud.ac.id
- Kusnan, A. (2022). Pengaruh teh hijau dalam menurunkan tekanan darah: A systematic review. *Nursing Update: Jurnal Ilmiah Ilmu Keperawatan*, 13(1), 69–79.
- Magder, S. (2018). The meaning of blood pressure. *Critical Care*, 22(1), 1–10.
- Man, P. K., Cheung, K. L., Sangsiri, N., Shek, W. J., Wong, K. L., Chin, J. W., et al. (2022). Blood pressure measurement: From cuff-based to contactless monitoring. *Healthcare (Switzerland)*, 10(10), 1–42.
- Murti, F. S., Josef, H. K., & Istiono, W. (2019). Prolanis influence on decreasing blood pressure of hypertension patients in Puskesmas Pandak II Bantul 2017. *Review of Primary Care Practice and Education*, 2(2), 54.
- Pebriyani, U., Rafie, R., Agustina, R., & Zakariya, N. (2022). Gambaran kepatuhan pelaksanaan Program Pengelolaan Penyakit Kronis (Prolanis) BPJS Kesehatan pada pasien hipertensi di UPTD Puskesmas Kedaton Kota Bandar Lampung. *Jurnal Kesehatan Tambusai*, 3(1), 328–335.
- Pebriyani, U., Rakhmi, R., Agustina, R., & Zakariya, N. (2022). Gambaran kepatuhan pelaksanaan Program Pengelolaan Penyakit Kronis (Prolanis) BPJS Kesehatan pada pasien hipertensi di UPTD Puskesmas Kedaton Kota Bandar Lampung. *Jurnal Kesehatan Tambusai*, 3.
- Raraswati, A., Heryaman, H., & Soetedjo, N. N. M. (2018). Peran Program Prolanis dalam penurunan kadar gula darah puasa pada pasien diabetes melitus tipe 2 di Puskesmas Kecamatan Jatinangor. *Jurnal Sistem Kesehatan*, 4, 65–70.
- Suratri, M. A. L. (2020). Pengaruh hipertensi terhadap kejadian penyakit jaringan periodontal (periodontitis) pada masyarakat Indonesia (Data Riskesdas 2018). *Buletin Penelitian Kesehatan*, 48(4), 227–234.
- Susanti, I. (2018). *Kualitas pelayanan Program Pengelolaan Penyakit Kronis (Prolanis) pasien diabetes melitus di Klinik Prima Medika Sidoarjo*.
- Umemura, S., Arima, H., Arima, S., Asayama, K., Dohi, Y., Hirooka, Y., et al. (2019). The Japanese Society of Hypertension guidelines for the management of hypertension (JSH 2019). *Hypertension Research*, 42(9), 1235–1481. https://doi.org/10.1038/s41440-019-0284-9
- Utomo, R. N. (2019). Program Pengelolaan Penyakit Kronis di Puskesmas. *Higeia Journal of Public Health Research and Development*, 3(1), 63–73. https://doi.org/10.15294/higeia/v3i1/24708
- Vijna, Mishra, & Pati, C. (2022). Prevalence and predictors of hypertension: Evidence from a study of rural India. *Journal of Family Medicine and Primary Care*, 11(3), 1047–1054.

Cite This Article: Yunita Astari Karambe, Magdarita Riwu, Kartini Lidia, S. M. J. Koamesah (2026). The Effect of Compliance Following Chronic Disease Management Program (Prolanis) on the Blood Pressure Condition of Hypertension Patients at the Sikumana Health Center. *East African Scholars J Med Sci, 9*(2), 64-70.