Journal of Applied Nursing and Health | Vol. 8, No. 1 (2026) p-ISSN: 2657-1609 | e-ISSN: 2809-3208

Original Article

Effectiveness of the Manori Sapuka Community-Based Adherence Program on Blood Pressure Control Among Hypertensive Patients

Faisal[1], Ambo Anto[1], Muhammad Indra Ibrahim[2]

[1] Nursing Science, Universitas Famika, Makassar, South Sulawesi, Indonesia
[2] Liukang Tangaya Community Health Center, South Sulawesi, Indonesia

ARTICLE INFO

Article History
Submit : December 23, 2025
Accepted : March 26, 2026
Published : March 30, 2026

Correspondence
Faisal; Nursing Science, Universitas Famika, Makassar, South Sulawesi, Indonesia

Email:
Faisalrizal315@gmail.com

Citation:
Faisal, F., Anto, A. ., & Ibrahim, M. I. . (2026). Effectiveness of the Manori Sapuka Community-Based Adherence Program on Blood Pressure Control Among Hypertensive Patients. Journal of Applied Nursing and Health, 8(1), 593–603. https://doi.org/10.55018/janh.v8i1.527

ABSTRACT

Background: Hypertension is a chronic disease often referred to as a "silent killer" because it frequently presents without symptoms until serious complications occur. Adherence to blood pressure control is essential for successful management and prevention of complications. However, adherence among hypertensive patients remains low in many primary healthcare settings. To address this issue, the "Ikan Manori Sapuka" program was implemented as a community-based intervention to improve patient adherence to blood pressure control. This study aims to determine the effectiveness of the Ikan Manori Sapuka program in improving adherence among hypertensive patients.
Methods: This study used a pre-experimental one-group design that followed the TREND reporting guideline. The sample consisted of 84 respondents obtained through a total sampling technique. Inclusion criteria included patients aged 40–85 years who consented to participate, while exclusion criteria were a history of stroke or refusal to participate. Data analysis was performed using the McNemar test to see significant differences before and after the intervention.
Results: Adherence to blood pressure control increased from 33.3% before the intervention to 82.1% after the intervention. This improvement was statistically significant ($p < 0.001$), with a risk difference of 48.8%, indicating a substantial magnitude of improvement following the intervention.
Conclusion: The findings demonstrate that a structured, community-based intervention significantly improves adherence to blood pressure control among hypertensive patients in remote island settings. This evidence supports the use of low-cost, locally adaptable community engagement strategies to strengthen hypertension management in primary healthcare services.

Keywords: Hypertension; Medication Adherence; Blood Pressure Monitoring; Community Health Intervention; Primary Health Care

Implications for Practice:

- This research can be integrated into public health programs to increase awareness and blood pressure control. Thus, it can help reduce the burden of hypertension and improve the quality of life of the community.
- Health education can be provided by healthcare professionals through the Ikan Manori Sapuka innovation program to

Implications for Practice:

hypertensive patients about the importance of blood pressure control and healthy lifestyle changes. Thus, patients can understand and practice healthy behaviors to control blood pressure.

- Hypertensive patients should undergo regular check-ups according to their control card to monitor blood pressure and prevent

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License.

Implications for Practice:

complications. Thus, early intervention can be done if there are any abnormal changes in blood pressure

Introduction

Hypertension is also called a silent killer because it does not cause symptoms and can even kill without warning. In general, hypertensive patients are not aware that they have hypertension until they have their blood pressure measured. Although there are still some hypertensive disorders that cause symptoms such as headaches and dizziness, these symptoms are most often found when the patient's blood pressure is very high, exceeding 140/90 mmHg (Sakulsupsiri et al., 2021). Hypertension is a major risk factor for kidney disease, stroke, preterm birth, heart failure, and cardiovascular disease (Ojangba et al., 2023a).

According to data from the Indonesian Ministry of Health (2023), the incidence of hypertension in Indonesia is expected to reach 36% based on data from the Indonesian Basic Health Research. The prevalence of hypertension is 34.1%. It is stated that 50% - 70% of hypertensive patients are non-adherent to anti-hypertensive treatment that has been prescribed. Despite the availability of antihypertensive treatment, non-adherence to regular blood pressure control and long-term therapy continues to undermine treatment outcomes, contributing to preventable complications and increased healthcare burden (Silvianah & Indrawati, 2024). These challenges are amplified in geographically isolated island communities, where limited healthcare access, transportation barriers, and reduced continuity of care further constrain effective hypertension management.

From a theoretical perspective, adherence behavior can be explained using the Health Belief Model (HBM) and Self-Regulation Theory. The HBM posits that individuals' engagement in health behaviors is influenced by perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and cues to action. In the context of hypertension, patients may fail to adhere to regular blood pressure monitoring due to low perceived severity of asymptomatic disease and limited cues to action. Similarly, Self-Regulation Theory emphasizes the role of monitoring, feedback, and goal-setting in sustaining long-term health behaviors, suggesting that structured monitoring systems and regular feedback can enhance adherence.

The MANORI Sapuka intervention was explicitly designed to influence adherence behavior through established health behavior theories. Drawing on the Health Belief Model, the intervention strengthens cues to action through fixed weekly blood pressure monitoring schedules and reminder-based control cards, while reinforcing perceived benefits by providing regular feedback on blood pressure status. In addition, guided by Self-Regulation Theory, MANORI Sapuka promotes adherence by facilitating continuous self-monitoring, goal reinforcement, and accountability via routine check-ups and targeted home visits. Through these mechanisms, the intervention is expected to enhance patients' adherence to regular blood pressure control behaviors in a remote island primary healthcare setting.

Previous studies conducted in high-income countries (HICs) have demonstrated that technology-assisted monitoring, multidisciplinary care teams, and telemedicine-based interventions effectively improve adherence to blood pressure control (Minuz et al., 2023). However, these approaches rely heavily on digital infrastructure, stable healthcare access, and financial resources that are

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License

often unavailable in LMIC and remote island settings. As a result, the transferability of evidence from HIC contexts to geographically isolated communities remains limited. The recommendations for preventing hypertension include the amendment of dietary deviations from guidelines and physical inactivity (Theodoridis et al., 2023). Adherence to blood pressure control is a major factor in the success of treatment therapy (Khairunnisa & Fayuning Tjomiadi, 2025).

Therefore, measuring adherence to blood pressure control is very important as a benchmark for treatment success (Silvianah & Indrawati, 2024). In controlling blood pressure, efforts can be made to regularly measure blood pressure and take anti-hypertensive medication (Eltrikanawati & Gultom, 2024).

However, in reality, there are people who are negligent in following the rules and instructions for taking medication regularly. There are several factors that cause hypertensive patients to be non-adherent to taking medication regularly, such as education and knowledge (Fitriana & Bai, 2022; Qian et al., 2025).

Other factors that cause patients to be non-adherent include treatment that requires a lifetime, leading to boredom, the absence of symptoms felt by hypertensive patients making them think they are cured, and inaccessible healthcare services (Laila et al., 2025).

Non-adherent patients are at risk of developing complications. As healthcare professionals, the initial step to address this issue is to increase hypertensive patients' adherence to regularly controlling their blood pressure (Solehudin Solehudin et al., 2025). The World Health Organization suggested that "increasing the effectiveness of adherence interventions might have a far greater impact on the health of the population than any improvement in specific medical treatments (Rosendo-Silva et al., 2023).

Although community-based interventions have been widely studied, prior research has largely focused on urban or mainland populations, with limited attention to remote island communities characterized by healthcare workforce shortages, logistical constraints, and strong sociocultural ties. Evidence remains insufficient regarding how structured, low-cost, community-based adherence interventions function in remote island primary healthcare settings, representing a clear research gap.

In South Sulawesi, particularly in Sapuka Island, hypertension is the most frequently reported chronic condition at Liukang Tangaya Primary Health Center. Despite this high burden, adherence to regular blood pressure control remains low, underscoring the need for context-specific interventions that align with local healthcare capacity and community behavior patterns.

However, evidence on structured, culturally adapted adherence interventions in remote island primary healthcare settings remains limited; therefore, this study aimed to evaluate aimed to evaluate the effectiveness of the MANORI Sapuka intervention, a structured community-based adherence strategy, in improving adherence to blood pressure control among hypertensive patients in a remote island primary healthcare setting.

Methods

Study Design

This study employed a pre-experimental one-group pretest–posttest design and was conducted in accordance with the TREND (Transparent Reporting of Evaluations with Nonrandomized Designs) reporting guideline. The design was selected to evaluate the effectiveness of the MANORI Sapuka intervention under real-

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License. https://janh.candle.or.id

world primary healthcare conditions in a remote island setting in Indonesia, where randomization and the inclusion of a control group were not feasible due to limited population size and ethical considerations related to service delivery.

Although pre-experimental designs have inherent limitations, including the absence of a comparison group and potential threats to internal validity, this approach was considered appropriate for preliminary effectiveness assessment in resource limited and geographically isolated contexts. This design allowed for the evaluation of within-subject changes in adherence to blood pressure control before and after the intervention while maintaining feasibility and ethical acceptability in a community health center setting.

Participants

The study was conducted at Liukang Tangaya Primary Health Center, South Sulawesi, Indonesia, and included 84 hypertensive patients recruited using a total sampling approach. Sample size justification was based on feasibility constraints, as the geographically isolated island setting and limited registered hypertensive population made formal power calculation and sample expansion impractical. All eligible patients were invited to participate, and no refusals, dropouts, or loss to follow-up occurred during the study period. Consequently, all 84 participants completed both pre-intervention and post-intervention assessments and were included in the final analysis. Inclusion criteria were hypertensive patients aged 40–85 years who provided informed consent, while exclusion criteria included a history of stroke and age outside the specified range.

Instruments

The research instruments consisted of structured observation sheets and blood pressure measurement devices. Adherence to blood pressure control was operationally defined as attendance at all scheduled weekly blood pressure monitoring sessions during the intervention period, as documented on individual patient control cards. Patients were categorized as adherent if they attended all scheduled sessions and non-adherent if they missed one or more sessions.

Content validity of the observation sheets was established through expert review by three public health and nursing experts, focusing on relevance, clarity, and completeness of adherence indicators. Minor revisions were made based on expert feedback prior to data collection.

Blood pressure was measured using a standard aneroid sphygmomanometer and stethoscope. All devices were calibrated and standardized according to the Indonesian Ministry of Health guidelines before data collection to ensure measurement accuracy and reliability.

Intervention

MANORI Sapuka is a multicomponent, community-based behavioral adherence intervention aimed at improving adherence to regular blood pressure control among hypertensive patients. The intervention was implemented over a 4-week period and consisted of four standardized components: (1) a brief structured education session (20–30 minutes) on hypertension and the importance of regular blood pressure control; (2) weekly scheduled blood pressure monitoring at the primary health center using individual control cards; (3) reminder-based follow-up through control cards functioning as cues to action and self-monitoring tools; and (4) targeted home visits for participants who missed

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License

scheduled sessions. The intervention was delivered by trained nurses and community health workers from the primary health center. Intervention fidelity was maintained through standardized operating procedures, weekly supervision, and review of control cards. Safety monitoring followed national blood pressure measurement guidelines, and no adverse events were reported during the intervention period.

Data Collection

Data collection followed a standardized workflow conducted over a 4-week intervention period. Baseline adherence data were collected during week 0 through scheduled blood pressure monitoring and recorded on structured observation sheets. The MANORI Sapuka intervention was then implemented for four consecutive weeks, during which adherence was monitored weekly using individual control cards and observation forms. Post-intervention data were collected at the end of week 4 using the same instruments to ensure measurement consistency.

Quality control measures included a one-day training session for nurses and enumerators on standardized blood pressure measurement, data recording procedures, and ethical conduct prior to data collection. Data collection was supervised weekly by the research team, and all observation sheets and control cards were reviewed for completeness and accuracy. Any inconsistencies were clarified immediately through verification with field staff.

Data Analysis

Data were analyzed using SPSS version 21. Descriptive analysis was performed to present respondent characteristics in frequencies and percentages. The McNemar test was used to analyze differences in adherence to blood pressure control before and after the intervention. Statistical significance was determined at a 95% confidence level ($p < 0.05$).

Ethical Considerations

This study received ethical approval from the Research Ethics Committee of Universitas Famika, Makassar, Indonesia, with ethical clearance letter number 002/KEP/UNF/VIII/2025. Research permission was formally issued by the Head of Liukang Tangaya Health Center, Pangkajene and Islands Regency, South Sulawesi, Indonesia.

All participants were informed about the objectives, procedures, potential benefits, and risks of the study. Written informed consent was obtained prior to data collection. The study adhered to ethical principles including voluntariness, anonymity, confidentiality, and justice.

Results

The demographic characteristics of the participants are presented in Table 1, showing that most respondents were female (72.6%), had elementary-level education (92.9%), and were aged 51–70 years. Changes in adherence to blood pressure control before and after the MANORI Sapuka intervention are summarized in Table 2. As shown in Table 2, adherence increased markedly from 33.3% before the intervention to 82.1% after the intervention. The McNemar test indicated a statistically significant improvement in adherence following the intervention ($p < 0.001$).

Table 1. Frequency Distribution of Respondents' Demographic Characteristics

Characteristics	Frequency (f) (n=84)	Percentage (%)
Education		
Not complete elementary school	5	6.0

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License. https://janh.candle.or.id

Characteristics	Frequency (f) (n=84)	Percentage (%)
Elementary school	78	92.9
Junior High School	1	1.2
Gender		
Male	23	27.4
Female	61	72.6
Age		
40-45 years	6	7.1
51-60 years	26	31.0
61-70 years	26	31.0
71-80 years	10	11.9
81-85 years	4	4.8

Based on **Table 2,** blood pressure control adherence before and after the implementation of Ikan Manori Sapuka innovation increased. The McNemar test results show a p-value of 0.000 ($p < 0.05$), thus concluding that the Ikan Manori Sapuka innovation program is effective in increasing blood pressure control adherence among hypertensive patients at Liukang Tangaya Health Center, Pangkajene and Islands District in 2025.

Table 2. Uji *Mc Nemar*

Before Innovation implementation	After Innovation Implementation		Total	P Value
	Adherent	Non-Adherent		
Adherent	28	0	28	
Non-Adherent	41	15	56	<0.001
Total	69	15	84	

Discussion

The significant improvement in adherence to blood pressure control observed in this study can be explained through behavioral and contextual mechanisms. The MANORI Sapuka intervention likely enhanced adherence by strengthening cues to action and perceived benefits, as described in the Health Belief Model, through fixed monitoring schedules, reminder-based control cards, and regular feedback. In line with Self-Regulation Theory, routine blood pressure checks and home visits supported continuous self-monitoring and accountability, which are key drivers of sustained adherence behavior.

The local context of Sapuka Island appears to have played an important role in amplifying the intervention's effectiveness. As a remote island community with limited healthcare access and strong social cohesion, regular face-to-face contact with healthcare providers and home visits reduced structural barriers to care and increased patient engagement. The integration of the intervention into existing primary healthcare routines and community trust networks likely facilitated high participation and adherence rates, highlighting the importance of context-sensitive, low-cost interventions in geographically isolated settings.

This study demonstrated a statistically significant improvement in adherence to blood pressure control after the implementation of the Ikan Manori Sapuka innovation ($p = 0.000$). Adherence increased before the intervention 33,3% to 82,1 after the intervention, indicating that structured community-based monitoring combined with regular reminders and home visits effectively improved patient compliance.

The findings support previous studies reporting that regular monitoring, patient engagement, and community-based interventions significantly enhance hypertension control adherence (Dhrik et al., 2023; Gondo, 2021). However, hypertension can affect anyone at any age, most commonly affecting those aged 35 and above (Azhimah et al., 2023; Kusuma Negara et al., 2019), and age at that stage increases the likelihood of developing hypertension (Amponsem-Boateng et al., 2021; Çapar & Yilmaz, 2025). This is also confirmed by the Indonesian Ministry of Health in 2024 (Khairunnisa & Fayuning

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License

Tjomiadi, 2025), stating that age is one of the unmodifiable risk factors.

In addition, education is a determining factor in medication adherence and treatment control, which is crucial for patients to recover from their illness (Kardas et al., 2024a; Menditto et al., 2021; Van Schandevyl et al., 2022). Education can influence a person's behavior, expand their active responsibility, and act and behave in ways that promote healthy behavior (Labiba Khuzaima & Sunardi, 2021).

Innovations and interventions implemented for blood pressure control adherence include multidisciplinary approaches, technology utilization, and community empowerment. Intensive and sustainable health education aims to enhance patients' understanding of hypertension, the importance of regular blood pressure monitoring, and medication adherence, helping patients grasp that therapy is long-term (Menditto et al., 2021). However, hypertension continues to rise, necessitating further innovations or interventions to control blood pressure and prevent additional complications.

One of the innovations implemented to monitor blood pressure control adherence among hypertensive patients at the Health Center is Ikan Manori Sapuka. This innovation is a strategy to improve blood pressure control adherence among hypertensive patients on Sapuka Island, scheduling regular checks every Friday. Ikan Manori Sapuka also conducts home visits to monitor blood pressure, enhancing access to care without compromising quality. Medication adherence among hypertensive patients in Indonesia who have experienced hypertension for 1-5 years tend to be more compliant with medication consumption, whereas patients who have experienced hypertension for 6-10 years tend to have poorer medication adherence due to factors such as duration of illness, work, fatigue from taking medication, lack of family support, and having moderate to poor adherence (Rahmalia Yacob et al., 2023).

This study shows that implementing the Ikan Manori Sapuka innovation effectively increases blood pressure control adherence among hypertensive patients, as respondents attended weekly check-ups every Friday. (Kardas et al., 2024b) found that routine treatment adherence affects blood pressure. Prihatin, K., Fatmawati, B. R., & (Prihatin et al., 2022) also noted that family support influences blood pressure control adherence, with high adherence impacting controlled blood pressure. Most respondents adhered to blood pressure control, likely due to their awareness of regular monitoring. Controlled blood pressure in hypertensive patients is influenced by individual efforts to prevent complications. The significant improvement aligns with evidence that routine adherence to blood pressure monitoring directly contributes to better hypertension management and reduced risk of complications (Ojangba et al., 2023b). Weekly evaluations and home visits addressed barriers related to access and forgetfulness, which are commonly reported causes of non-adherence among hypertensive patients. Overall, these findings indicate that the Manori Sapuka fish innovation is an effective and practical intervention for improving blood pressure control adherence in primary healthcare settings, particularly in remote island communities.

Implications and limitations

The implications of this study suggest that healthcare facilities such as community health centers, clinics, and hospitals should implement a structured and sustainable Ikan Manori health innovation program for hypertensive patients. However, this study has limitations, including the absence of a control group and a relatively short study

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License. https://janh.candle.or.id

period of only 1 month and 2 weeks. Future researchers are recommended to use a control group, increase the sample size, and conduct studies over a longer period. This study employed a pre-experimental one group pretest posttest design to assess the preliminary effectiveness of a community-based adherence intervention in a remote island primary healthcare setting

Relevance to Practice

For nurses and community health workers, this intervention provides practical implementation steps, including establishing fixed monitoring schedules, using simple control cards, and conducting targeted home visits for non-adherent patients. These steps can be integrated into routine primary healthcare services without additional financial burden.

Conclusion

The implementation of the Manori Sapuka fish innovation effectively increases adherence to blood pressure control among hypertensive patients, thus it can be integrated into healthcare services so that hypertensive patients regularly monitor their blood pressure to ensure stable blood pressure levels. For future research, it is necessary to test its effectiveness on diverse populations with a stronger design and long-term evaluation to produce more solid evidence supporting government hypertension control programs.

Funding

This study was supported by Universitas Famika, Makassar, Indonesia, under an internal research grant. Grant/Research Approval Number: 0488/C/DT.06.01/2025

CrediT Authorship Contributions Statement

Faisal: Conceptualization, Methodology, Supervision, Writing - Original Draft

Ambo Anto: Software, Data Curation, Validation, Writing - Review and Editing

Muhammad Indra Ibrahim: Investigation, Resources, Data Curation, and Administration

Conflicts of Interest

There is no conflict of interest.

Acknowledgments

The authors would like to thank the Head of Liukang Tangaya Primary Health Center, the nursing staff, community health workers, and all participants who contributed to this study.

References

Amponsem-Boateng, C., Oppong, T. B., Zhang, W., Abdulai, T., Boakye-Yiadom, J., Wang, L., & Duodu Kyere, E. K. (2021). Language and Communication Impact of Hypertension: A Qualitative Study. *International Journal of Hypertension*, *2021*. https://doi.org/10.1155/2021/9931873

Azhimah, H., Syafhan, N. F., & Manurung, N. (2023). Efektifitas Video Edukasi dan Kartu Pengingat Minum Obat Terhadap Kepatuhan Pengobatan dan Kontrol Tekanan Darah pada Pasien Hipertensi. *Jurnal Sains Farmasi & Klinis*, *9*(3), 291. https://doi.org/10.25077/jsfk.9.3.291-301.2022

Çapar, A. G., & Yilmaz, M. (2025). Which is more effective in hypertension?: Salt-free diet vs DASH diet. *Medicine (United States)*, *104*(10), e41636.

 ©The Authors 2026. This is Open-Access article under the **CC BY-SA** License

https://doi.org/10.1097/MD.0000000000041636

Dhrik, M., Prasetya, A. A. N. P. R., & Ratnasari, P. M. D. (2023). Analisis Hubungan Pengetahuan terkait Hipertensi dengan Kepatuhan Minum Obat dan Kontrol Tekanan Darah pada Pasien Hipertensi. *Jurnal Ilmiah Medicamento*, *9*(1), 70–77. https://doi.org/10.36733/medicamento.v9i1.5470

Eltrikanawati, T., & Gultom, Y. M. (2024). Edukasi Hipertensi dan Pelatihan Pengukuran Tekanan Darah pada Penderita Hipertensi dalam Upaya Peningkatan Perilaku Kontrol Tekanan Darah di Rumah. *Jurnal Pengabdian Masyarakat Bangsa*, *2*(2), 336–341. https://doi.org/10.59837/jpmba.v2i2.818

Fitriana, M., & Bai, C.-H. (2022). Hearing Problems in Indonesia: Attention to Hypertensive Adults. *International Journal of Environmental Research and Public Health*, *19*(15). https://doi.org/10.3390/ijerph19159222

Gondo, H. K. (2021). Moringa oleifera decrease blood sugar level and blood pressure in pregnant diabetic rats. *Journal of Advanced Pharmacy Education and Research*, *11*(2), 88–91. https://doi.org/10.51847/FDGccLKxoF

Kardas, P., Bennett, B., Borah, B., Burnier, M., Daly, C., Hiligsmann, M., Menditto, E., Peterson, A. M., Slejko, J. F., Tóth, K., Unni, E., & Ágh, T. (2024a). Medication non-adherence: reflecting on two decades since WHO adherence report and setting goals for the next twenty years. *Frontiers in Pharmacology*, *15*. https://doi.org/10.3389/fphar.2024.1444012

Kardas, P., Bennett, B., Borah, B., Burnier, M., Daly, C., Hiligsmann, M., Menditto, E., Peterson, A. M., Slejko, J. F., Tóth, K., Unni, E., & Ágh, T. (2024b). Medication non-adherence: reflecting on two decades since WHO adherence report and setting goals for the next twenty years. *Frontiers in Pharmacology*, *15*. https://doi.org/10.3389/fphar.2024.1444012

Khairunnisa, & Fayuning Tjomiadi, C. E. (2025). Gambaran Kepatuhan Kontrol Tekanan Darah dan Kepatuhan Minum Obat pada Pasien Hipertensi di UPT Puskesmas Sungai Malang. *INDOGENIUS*, *3*(3), 240–249. https://doi.org/10.56359/igj.v3i3.488

Kusuma Negara, I. G. N. M., Jiryantini, N. W. S., & Parwati, N. W. (2019). Hubungan Tingkat Pengetahuan Tentang Hipertensi Terhadap Kepatuhan Pasien Untuk Kontrol Tekanan Darah. *Jurnal Riset Kesehatan Nasional*, *3*(2), 73–77. https://doi.org/10.37294/jrkn.v3i2.176

Labiba Khuzaima, L., & Sunardi. (2021). Hubungan Tingkat Pendidikan Terhadap Kepatuhan Minum Obat Antihipertensi Di Puskesmas Sewon II Periode Januari 2021. *Jurnal Kefarmasian Akfarindo*, 15–21. https://doi.org/10.37089/jofar.vi0.103

Laila, A. Z., Asmarani, D., Sumardi, E. P. N., Ridwan, H., Nur'aeni, I., Boys, M. D. V., Pangistu, M. A., Hakim, M. N. L., Anshori, M. S., Rifdah, N. R. H., Sopiah, P., & Lestari, R. P. (2025). Tinjauan literatur: Ketidakpatuhan minum obat pada pasien hipertensi sebuah analisis dan rekomendasi. *Jurnal Ilmiah Keperawatan (Scientific Journal of Nursing)*, *11*(1), 71–79. https://doi.org/10.33023/jikep.v11i1.2390

Menditto, E., Cahir, C., Malo, S., Aguilar-Palacio, I., Almada, M., Costa, E.,

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License. https://janh.candle.or.id

Giardini, A., Peinado, M. G., Massot Mesquida, M. M., Mucherino, S., Orlando, V., Parra-Calderón, C. L., Salom, E. P., Kardas, P., & Vrijens, B. (2021). Persistence as a robust indicator of medication adherence-related quality and performance. *International Journal of Environmental Research and Public Health*, *18*(9). https://doi.org/10.3390/ijerph18094872

Minuz, P., Albini, F. L., Imbalzano, E., Izzo, R., Masi, S., Pengo, M. F., Pucci, G., Scalise, F., Salvetti, M., Tocci, G., Cicero, A., Iaccarino, G., Savoia, C., Sechi, L., Parati, G., Borghi, C., Volpe, M., Ferri, C., Grassi, G., & Muiesan, M. L. (2023). Telemedicine and Digital Medicine in the Clinical Management of Hypertension and Hypertension-Related Cardiovascular Diseases: A Position Paper of the Italian Society of Arterial Hypertension (SIIA). *High Blood Pressure and Cardiovascular Prevention*, *30*(5), 387–399. https://doi.org/10.1007/s40292-023-00595-0

Ojangba, T., Boamah, S., Miao, Y., Guo, X., Fen, Y., Agboyibor, C., Yuan, J., & Dong, W. (2023a). Comprehensive effects of lifestyle reform, adherence, and related factors on hypertension control: A review. *Journal of Clinical Hypertension (Greenwich, Conn.)*, *25*(6), 509–520. https://doi.org/10.1111/jch.14653

Ojangba, T., Boamah, S., Miao, Y., Guo, X., Fen, Y., Agboyibor, C., Yuan, J., & Dong, W. (2023b). Comprehensive effects of lifestyle reform, adherence, and related factors on hypertension control: A review. *Journal of Clinical Hypertension (Greenwich, Conn.)*, *25*(6), 509–520. https://doi.org/10.1111/jch.14653

Prihatin, K., Fatmawati, B. R., & Suprayitna, M. (2022). FAKTOR-FAKTOR YANG MEMPENGARUHI KEPATUHAN BEROBAT PENDERITA HIPERTENSI. *Jurnal Ilmiah STIKES Yarsi Mataram*, *10*(2), 7–16. https://doi.org/10.57267/jisym.v10i2.64

Qian, Y., Yuan, L., & Zhang, X. (2025). Comparative study on blood pressure and metabolic improvements in hypertensive patients using copper bianstone scraping. *Medicine (United States)*, *104*(2), e41133. https://doi.org/10.1097/MD.0000000000041133

Rahmalia Yacob, Rosmin Ilham, & Fadli Syamsuddin. (2023). Hubungan Kepatuhan Minum Obat Dengan Penurunan Tekanan Darah Pada Pasien Hipertensi Program Prolanis Diwilayah Kerja Puskesmas Tapa. *Termometer: Jurnal Ilmiah Ilmu Kesehatan Dan Kedokteran*, *1*(2), 58–67. https://doi.org/10.55606/termometer.v1i2.1297

Rosendo-Silva, B., Ortigosa-Ferreira, A. C., Prazeres, F., Caramelo, F., Santiago, L. M., & Rosendo, I. (2023). Systematic review of motivational interventions to improve adherence to medication in patients with hypertension and meta-analysis. *Hipertensión y Riesgo Vascular*, *40*(4), 174–196. https://doi.org/10.1016/j.hipert.2023.04.003

Sakulsupsiri, A., Chattranukulchai, P., Siwamogsatham, S., Boonchayaanant, P., Naeowong, W., Ariyachaipanich, A., Lertsuwunseri, V., Rungpradubvong, V., Satitthummanid, S., Puwanant, S., Srimahachota, S., Buddhari, W., Boonyaratavej, S., Sitthisook, S., Shantavasinkul, P., Buranakitjaroen, P., Sukonthasarn, A., & Sangwatanaroj, S. (2021). Home Blood Pressure Control and Drug Prescription Patterns among Thai Hypertensives: A

 ©The Authors 2026. This is Open-Access article under the **CC BY-SA** License

1-Year Analysis of Telehealth Assisted Instrument in Home Blood Pressure Monitoring Nationwide Pilot Project. *International Journal of Hypertension*, *2021*. https://doi.org/10.1155/2021/8844727

Silvianah, A., & Indrawati, I. (2024). HUBUNGAN KEPATUHAN MINUM OBAT HIPERTENSI DENGAN PERUBAHAN TEKANAN DARAH PADA LANSIA DI POSYANDU LANSIA. *Jurnal Keperawatan*, *17*(2), 52–61. https://doi.org/10.56586/jk.v17i2.361

Solehudin Solehudin, Emi Yuliza, Nur Eni Lestari, & Nurul Ainul Shifa. (2025). Penyuluhan Kesehatan Masyarakat dengan Penyakit Hipertensi di Kelurahan Paledang Kota Bogor. *Jurnal Pengabdian Bidang Kesehatan*, *3*(1), 01–12. https://doi.org/10.57214/jpbidkes.v3i1.150

Theodoridis, X., Chourdakis, M., Chrysoula, L., Chroni, V., Tirodimos, I., Dipla, K., Gkaliagkousi, E., & Triantafyllou, A. (2023). Adherence to the DASH Diet and Risk of Hypertension: A Systematic Review and Meta-Analysis. *Nutrients*, *15*(14), 3261. https://doi.org/10.3390/nu15143261

Van Schandevyl, G., Casimir, G., & Hanssens, L. (2022). A medication adherence–enhancing simulation intervention in pediatric cystic fibrosis. *Journal of Child Health Care*, *26*(2), 275–289. https://doi.org/10.1177/13674935211013924

©The Authors 2026. This is Open-Access article under the **CC BY-SA** License. https://janh.candle.or.id