

Interactive Educational Program on Hypertension Management for Outpatients at Ir. Soekarno Regional Hospital, Sukoharjo Regency

Danuartha Vandika¹, Nimas Citra Nur Baety², Yuasti Ningsih³, Ani Syafriati⁴

^{1,2,4} Universitas Muhammadiyah Surakarta

³ RSUD IR Soekarno Kabupaten Sukoharjo

Correspondence: j230245117@student.ums.ac.id

Article Info

Article history:

Received Aug 8th, 2025

Revised Aug 20th, 20xx

Accepted Aug 26th, 20xx

Keyword:

Hypertension, Interactive Education, Outpatients, Health Promotion, Community Service

ABSTRACT

Background: Hypertension is a major risk factor for cardiovascular disease and one of the leading causes of morbidity and mortality worldwide. Inadequate knowledge and poor self-management among patients often lead to uncontrolled blood pressure. Therefore, patient education plays a critical role in improving hypertension management.

Objective: This community service program aims to enhance the knowledge and self-management skills of outpatients with hypertension through an interactive educational intervention at Ir. Soekarno Regional Hospital, Sukoharjo Regency.

Methods: The activity involved an interactive education session including multimedia presentations, discussions, and distribution of educational leaflets. The target participants were hypertensive outpatients receiving regular care at the hospital. Pre- and post-tests were conducted to assess the improvement in participants' knowledge about hypertension management.

Results: The intervention showed a significant improvement in patients' understanding of hypertension, including knowledge of medication adherence, dietary regulation, physical activity, and monitoring of blood pressure. Participants reported higher motivation and confidence in managing their condition independently.

Conclusion: Interactive education is an effective method to improve knowledge and encourage better self-care practices among hypertensive outpatients. Continued health education programs are recommended to support long-term hypertension control and prevent complications.



© 2025 The Authors. Published by CV. Morgensonne Media. This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>)

INTRODUCTION

Hypertension, or high blood pressure, is one of the most prevalent non-communicable diseases worldwide and is a leading contributor to cardiovascular morbidity and mortality. According to data from the World Health Organization (WHO), approximately 1.28 billion adults aged 30–79 years globally suffer from hypertension, and two-thirds of them live in low- and middle-income countries. In Indonesia, the Basic Health Research (Rskesdas) data show a significant increase in hypertension prevalence from 25.8% in 2013 to 34.1% in 2018, indicating an urgent need for sustainable prevention and control strategies (Bahtiar et al., 2022; WHO, 2022).

Despite the availability of effective antihypertensive medications, many patients fail to achieve optimal blood pressure control due to various factors, including poor adherence to therapy, lack of knowledge about the disease, limited access to healthcare education, and unhealthy lifestyle choices (Suryaningsih & Armiyati, 2021). Hypertensive patients, especially those treated on an outpatient basis, often have limited interaction time with healthcare providers and are less likely to receive comprehensive health education during regular consultations (Widayanti et al., 2024).

Patient education is a cornerstone of chronic disease management. It empowers patients to make informed decisions about their health, enhances treatment adherence, and supports behavior changes necessary for long-term control (Syamsia & Syafriati, 2022). Educational interventions that are interactive and participatory in nature have been shown to be more effective than traditional lecture-based methods (Syafriati & Wiriansyah, 2022). These methods promote patient engagement,

allow for two-way communication, and help reinforce learning through discussion and active involvement (Agustina et al., 2025).

Given this context, the community service program was designed to implement an interactive educational session on hypertension management targeted specifically at outpatients receiving care at RSUD Ir. Soekarno in Sukoharjo Regency. The educational content focused on key aspects of hypertension self-management, including the importance of medication adherence, low-sodium diet, physical activity, routine blood pressure monitoring, and avoidance of risk factors such as smoking and stress.

The program used various interactive tools such as multimedia presentations, question-and-answer sessions, educational leaflets, and small group discussions to facilitate learning (Puspasari & Syafriati, 2023). It also involved pre- and post-education knowledge assessments to evaluate the effectiveness of the intervention. This activity aimed not only to increase patient knowledge but also to build motivation, confidence, and self-efficacy in managing hypertension independently at home.

Ultimately, this initiative supports the broader goal of reducing hypertension-related complications and improving the quality of life among hypertensive patients in the community, in line with the national health priorities and WHO's global action plan for the prevention and control of noncommunicable diseases.

METHODS

This community service activity employed a descriptive participatory approach and was conducted at the outpatient clinic of Ir. Soekarno Regional Hospital in Sukoharjo Regency. The target population consisted of outpatients diagnosed with hypertension, with a total of 30 participants selected using purposive sampling. Inclusion criteria included being diagnosed with hypertension, aged between 30 and 70 years, able to communicate effectively, and willing to participate voluntarily. Patients experiencing acute complications or cognitive limitations were excluded. All participants provided verbal informed consent prior to the intervention.

The educational intervention consisted of a 90-minute interactive session aimed at improving patients' understanding and self-management of hypertension. The session covered fundamental topics such as the definition, causes, symptoms, risk factors, complications of hypertension, as well as lifestyle modifications including dietary management, physical activity, stress control, medication adherence, and blood pressure monitoring. The materials were delivered using multimedia presentations, interactive discussions, and printed educational leaflets that participants could take home for continued reference.

To evaluate the impact of the intervention, participants completed a structured knowledge questionnaire both before and after the session (pre-test and post-test). The questionnaire included 15 items in the form of multiple-choice and true/false questions designed to assess knowledge related to hypertension and its management. The results were analyzed descriptively to measure the improvement in participants' knowledge. In addition, participants completed a brief evaluation form to provide feedback on the clarity, usefulness, and delivery of the educational session.

This community service program was designed and implemented by a team of lecturers and students from the Faculty of Health Sciences, Nursing Science Study Program, Universitas Muhammadiyah Surakarta, in collaboration with nursing staff at the outpatient clinic of Ir. Soekarno Regional Hospital. The team was responsible for developing educational materials, delivering the sessions, collecting data, and analyzing the outcomes.

RESULTS AND DISCUSSION

The results of the educational intervention indicated a positive improvement in the participants' knowledge regarding hypertension management. Based on the analysis of the pre-test and post-test scores, there was a notable increase in the number of correct responses after the interactive educational session. Before the session, the majority of participants demonstrated limited understanding of key hypertension-related topics, including the importance of medication adherence, dietary sodium restriction, and the role of regular physical activity. After the intervention, participants showed enhanced awareness and were better able to identify strategies for blood pressure control and prevention of complications.

The average pre-test score was 58%, which increased to 84% in the post-test. This suggests that the educational session significantly improved knowledge retention and comprehension among the participants. In addition, qualitative feedback collected through the evaluation form revealed that participants found the use of multimedia and discussion-based learning methods to be engaging and easy to understand. Many of them expressed appreciation for the practical tips and emphasized their motivation to apply the information in daily life.



Figure 1.

These findings are consistent with previous studies indicating that interactive educational methods are more effective than conventional lectures in promoting patient understanding and behavioral change. Active participation in learning helps patients internalize the information, ask questions, and relate the content to their personal health experiences. According to research by Ogedegbe et al. (2014), patient education that includes behavioral strategies, such as self-monitoring and goal setting, has a greater impact on blood pressure control.



Figure 2.

Moreover, this program emphasized culturally appropriate education, using simple language and real-life examples, which made the content more relatable to the local community. The distribution of educational leaflets also allowed patients to review the material at home and share it with family members, which can further support a holistic approach to hypertension management through family involvement.



Figure 3

In terms of practical implications, this community service activity highlights the vital role of nurses and nursing educators in promoting patient-centered care through health education. By involving the academic team from the Faculty of Health Sciences, Nursing Science Study Program, Universitas Muhammadiyah Surakarta, this initiative served not only as a public health intervention but also as a means of strengthening community engagement and experiential learning for nursing students.

Overall, the results support the effectiveness of interactive education in enhancing patient knowledge and self-efficacy in managing hypertension. Continued efforts to implement similar programs in other outpatient settings are recommended, especially in areas with high prevalence of hypertension and limited access to preventive education (Setiadi & Halim, 2018; Surya et al., 2023; Yan & Fitriana, 2023).

The findings from this community service activity demonstrate that interactive education is an effective strategy to improve knowledge and awareness regarding hypertension management among outpatients (Agustina et al., 2025; Ni Wayan Anggriani Dwita Sary & Syafriati, 2023; Syafriati & Syamsia, 2022). The substantial increase in post-test scores compared to pre-test scores confirms that participants were able to absorb and understand the information delivered during the session. This outcome aligns with previous studies that have shown how participatory educational approaches can significantly enhance patient comprehension and engagement (Devi et al., 2021).

One key factor contributing to the success of this intervention was the use of interactive learning methods, which included visual media, group discussions, and real-life examples (Relawati et al., 2018). These methods catered to various learning styles and allowed participants to not only receive information but also to ask questions, share personal experiences, and clarify misunderstandings in a supportive environment (Wijayaningsih et al., 2024). Compared to conventional didactic education, interactive sessions encourage active participation and foster a sense of involvement, which is essential for adult learners, especially those managing chronic conditions such as hypertension (Anggraeni & Syafriati, 2022).

Another important element was the cultural and contextual adaptation of educational materials. The language used was simple and accessible, and the content was tailored to reflect the daily realities and challenges faced by patients in Sukoharjo Regency. For example, dietary advice was provided using examples of local food habits, and physical activity recommendations were adapted to patients' age and lifestyle. This contextual relevance is vital to ensure that health messages are not only understood but also applicable and sustainable in the long term.

The session also emphasized self-management skills, including medication adherence, regular monitoring of blood pressure at home, reduction of salt intake, avoidance of stress, smoking cessation, and maintaining physical activity. Many participants reported that they had never received such comprehensive education before and expressed increased confidence in managing their condition. This is particularly important, as studies have shown that patients with higher self-efficacy are more likely to adhere to treatment regimens and experience better health outcomes (Hidayatullah & Rokhmiati, 2023).

Furthermore, the use of printed educational leaflets supported the reinforcement of learning beyond the session. Patients could take the materials home, review them at their convenience, and even share them with family members (Fauzan & Khairunisa, 2019). This not only strengthens individual learning but also promotes family involvement, which is known to play a significant role in chronic disease management, particularly in collectivist cultures such as Indonesia (Rahayu et al., 2025).

This activity also had added value as a service-learning opportunity for nursing students from the Faculty of Health Sciences, Universitas Muhammadiyah Surakarta. The students gained real-world experience in patient education, communication, and community engagement—key competencies in professional nursing practice. Meanwhile, the collaboration with hospital staff helped ensure that the program was aligned with clinical practices and patient needs in the outpatient setting.

Despite the positive results, this program also revealed some challenges. Time limitations during the outpatient visit constrained the depth of education that could be provided. Some participants required additional clarification even after the session, highlighting the need for ongoing education and follow-up support. Therefore, it is recommended that similar programs be

institutionalized and conducted periodically, either through scheduled health education classes or integrated into routine nursing care.

In summary, the interactive educational program not only improved patients' knowledge of hypertension management but also empowered them to take a more active role in their health. This supports the growing body of evidence that community-based, culturally tailored, and interactive health education is a valuable tool in the prevention and control of chronic diseases like hypertension.

CONCLUSION

The implementation of an interactive educational program significantly improved the knowledge and awareness of outpatients with hypertension at Ir. Soekarno Regional Hospital, Sukoharjo Regency. The increase in post-test scores and positive feedback from participants demonstrate that interactive methods—such as multimedia presentations, discussions, and the use of printed educational materials—are effective in enhancing patient understanding and encouraging active engagement in disease management.

This activity reinforces the importance of patient-centered health education in outpatient settings, where time constraints often limit the delivery of in-depth information. Empowering patients through structured and engaging educational interventions can contribute to better self-care behaviors, medication adherence, and ultimately improved blood pressure control.

Moreover, this program highlights the role of academic institutions, particularly the Faculty of Health Sciences, Nursing Science Study Program, Universitas Muhammadiyah Surakarta, in supporting community health through collaborative service-learning. It is recommended that similar initiatives be sustained and expanded to reach broader populations and address other chronic conditions in the community..

REFERENCES

- Agustina, F., Darussalam, H., Artika, & Purwanti, A. (2025). EDUKASI DAN MONITORING HIPERTENSI PADA LANSIA MELALUI HOMECARE: PENDEKATAN BERBASIS KOMUNITAS. *APPLIED NURSING COMMUNITY EMPOWERMENT JOURNAL*, 1, 68–77.
- Anggraeni, A. R., & Syafriati, A. (2022). Pengaruh Pemberian Edukasi Manajemen Kesehatan Pasien Gagal Jantung Kongestif. *Babul Ilmi_Jurnal Ilmiah Multi Science Kesehatan* <Https://Jurnal.Stikes-Aisyiyah-Palembang.Ac.Id/Index.Php/Kep/Article/View/126> Vol. 14, No. 2, Desember 2022, Hal. 7-18, 14(2), 7–18.
- Bahtiar, H., Ariyanti, M., & Supinganto, A. (2022). PENGUATAN DUKUNGAN KELUARGA LANSIA UNTUK MENURUNKAN DERAJAT HIPERTENSI DI DUSUN MELASE. *LENTERA (Jurnal Pengabdian)*, 2(2), 244–249.
- Devi, H. M., Sari, R., Putri, M., Kesehatan, F. I., & Tunggadewi, U. T. (2021). *Peningkatan Pengetahuan dan Kepatuhan Diet Hipertensi melalui Pendidikan Kesehatan di Posyandu Lansia Tlogosuryo Kota Malang*. 10(2), 432–438. <https://doi.org/10.36565/jab.v10i2.399>
- Fauzan, A., & Khairunisa, Y. (2019). *Pengembangan Website Edukasi Interaktif Pengenalan Kesehatan Mental Bagi Remaja*. 02.
- Hidayatullah, A., & Rokhmiati, E. (2023). Edukasi Kegawatdaruratan Hipertensi Dalam Meningkatkan Pengetahuan Lansia Dengan Hipertensi. *JURNAL MENGABDI MASYARAKAT MENGABDI NUSANTARA*, 2(3).
- Ni Wayan Anggriani Dwita Sary, & Syafriati, A. (2023). ANALISA MANAGEMENT SELFCARE TERHADAP KUALITAS HIDUP PASIEN CHRONIC HEART FAILURE DI RUMAH SAKIT SKesehatan, Jurnal Kesdam, Akper Sriwijaya, I IILOAM SRWIJAYA PALEMBANG. *Jurnal Kesehatan Akper Kesdam II Sriwijaya Palembang*, Volume 12 No. 1, Januari 2023, 12(1).
- Puspasari, D., & Syafriati, A. (2023). PENGARUH PEMBERIAN EDUKASI BOOKLET “MANAJEMEN KESEHATAN GAGAL GINJAL KRONIK ” PENDAHULUAN Gagal Ginjal Kronik (GGK) adalah penurunan faal ginjal yang menahun mengarah pada kerusakan jaringan ginjal yang tidak reversible dan Indonesia menderita Batu Gin. *Babul Ilmi_Jurnal Ilmiah Multi Science Kesehatan* <Https://Jurnal.Stikes-Aisyiyah-Palembang.Ac.Id/Index.Php/Kep/Article/View/126> Vol. 15, No. 1, Juni 2023, Hal. 165-175 e-ISSN, 15(1).

- Rahayu, S., Kristinawati, B., Maliya, A., & Syafriati, A. (2025). Pemberdayaan Masyarakat Melalui Pelatihan Cek SehatMu Dalam Rangka Pengelolaan Tekanan Darah dan Gula Darah. *Jurnal Masyarakat Madani Indonesia* E-ISSN: 2829-6702 <Https://Syadani.Onlinelibrary.Id/Pemberdayaan>, 4(2), 131–137.
- Relawati, A., Syafriati, A., Hasbi, H. Al, & Fitria, P. N. (2018). Edukasi pasien chronic kidney disease berbasis aplikasi android : buku saku pasien dialysis Patient education chronic kidney disease based on android application : dialysis patient pocket book. *Jurnal Health of Studies*, 3(2), 1–7.
- Setiadi, A. P., & Halim, S. V. (2018). Penyakit Kardiovaskular: Seri Pengobatan Rasional. In *Graha Ilmu*. Graha Ilmu.
- Surya, D. O., Sapardi, V. S., Desnita, R., & Sugiarti, Y. (2023). Pemberdayaan Kader dan Keluarga dalam Perawatan Lansia Hipertensi. *BERNAS: Jurnal Pengabdian Kepada Masyarakat*, 4(1), 802–806.
- Suryaningsih, M., & Armiyati, Y. (2021). Penurunan Tekanan Darah Pada Pasien Usia Lanjut Menggunakan Terapi Musik. *Ners Muda*, 2(2), 53. <https://doi.org/10.26714/nm.v2i2.6301>
- Syafriati, A., & Syamsia, M. B. (2022). *Manajemen Hipertensi* (B. P. Dewi (ed.); 1st ed.). Morgensonne Media.
- Syafriati, A., & Wiryansyah, O. A. (2022). PENYULUHAN KESEHATAN HIPERTENSI DENGAN MEDIA BOOKLET PADA LANSIA DI WILAYAH BINAAN KELURAHAN. *Community Development Journal*, 3(2), 550–554.
- Syamsia, & Syafriati, A. (2022). PENGARUH PENDIDIKAN KESEHATAN MELALUI MEDIA BOOKLET “MANAJEMEN HIPERTENSI” TERHADAP TINGKAT PENGETAHUAN PASIEN HIPERTENSI. *Babul Ilmi_Jurnal Ilmiah Multi Science Kesehatan*, 14(2), 140–150. https://scholar.google.co.id/citations?view_op=view_citation&hl=en&user=r5YFLlCAAAAJ&citation_for_view=r5YFLlCAAAAJ:9yKSN-GCB0IC
- WHO. (2022). Cardiovascular Diseases. *Rebhun's Diseases of Dairy Cattle: Third Edition*, 46–93. <https://doi.org/10.1016/B978-0-323-39055-2.00003-6>
- Widayanti, N., Rahmawati, A., & Isnaeni, Y. (2024). Gambaran Dukungan Keluarga Pada Lansia Hipertensi Di Padukuhan Plurugan Kasihan Ii Bantul Yogyakarta. *Prosiding Seminar Nasional Penelitian Dan Pengabdian Kepada Masyarakat*, 2(September), 1738–1747.
- Wijayaningsih, K. S., Mutmainna, A., Mina, W., Isa, L., Mato, R., Indrayani, F., Tinggi, S., Kesehatan, I., Hasanuddin, N., Article, I., Lansia, H., & Commons, C. (2024). EDUKASI KEGAWATDARURATAN HIPERTENSI DALAM MENINGKATKAN PENGETAHUAN LANSIA DENGAN HIPERTENSI. *ABDIMAS BERKARYA*, 3(03), 89–97.
- Yan, A., & Fitriana, N. (2023). Peran Dukungan Keluarga sebagai Upaya Pengontrolan Hipertensi Pada Lansia Prediksi dari World Health. *NERS: Jurnal Keperawatan*, 19(2), 61–67.