# Monitoring Hypertension Group Regularly and Intensively with Officers and Cadres (Fit Heart Group) as an Effort to Increase the Knowledge of Elderly Cadres about Controlled Hypertension

Pemantauan Kelompok Hipertensi Secara Rutin dan Intensif Bersama Petugas dan Kader (Kelompok Jantung Sehat) sebagai Upaya Meningkatkan Pengetahuan Kader Lansia tentang Hipertensi Terkendali

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#### Abstract:

Controlled hypertension is a health problem that is closely related to mortality. The prevalence of this disease increases significantly every year throughout the world. Failure in self-awareness results in decreased self-control and decreased self-efficacy, resulting in patients not having regular control and not regularly taking hypertension medication. This study aims to increase the knowledge of female cadres about controlled hypertension. Using pre-test and post-test results of elderly cadres in blood pressure measurement training for hypertensive patients with the T-Test. Inclusion criteria of elderly cadres who have a blood pressure measurement training certificate at the UPTD Tegalampel Public Health Center. The 20 elderly cadres who took part in blood pressure measurement training with using T-Test to see the effect of training for elderly cadres toward blood pressure measurement level of knowledge. Based on the results of the T-Test, there was no significant improvement after health education regarding the prevention and treatment of hypertension (p=0.115). Given to the level of knowledge of elderly cadres regarding blood pressure measurement training. This is caused by increased self-awareness, self-control, and self-efficacy. Efforts to increase the level of knowledge of elderly cadres about controlled hypertension can increase self-awareness by forming a healthy heart group (the hypertension group is supervised regularly and intensively by officers and cadres) by forming a WA group, training elderly cadres with blood pressure measurement training and therapy counseling traditional (guava leaves, garlic, cat's whiskers leaves, ginger, bay leaves, noni, soursop leaves, soak feet in warm water)to increase awareness of controlled hypertension patients in improving healthy lifestyles, namely regular health checks, taking medication regularly.

Keywords: self-awareness; self-control; self-efficacy; controlled hypertension; elderly cadres

#### Abstrak:

Hipertensi yang tidak terkontrol merupakan masalah kesehatan yang berkaitan erat dengan kematian. Prevalensi penyakit ini meningkat secara signifikan setiap tahunnya di seluruh dunia. Kegagalan dalam kesadaran diri mengakibatkan kontrol diri menurun dan efikasi diri menurun, sehingga pasien tidak melakukan kontrol secara teratur dan tidak rutin minum obat hipertensi. Penelitian ini bertujuan untuk meningkatkan pengetahuan kader wanita tentang hipertensi terkontrol. Menggunakan hasil pre-test dan post-test kader lansia dalam pelatihan pengukuran tekanan darah pada pasien hipertensi dengan T-Test. Kriteria inklusi kader lansia hipertensi yang terdaftar di UPTD Puskesmas Tegalampel. Sebanyak 20 kader lansia yang mengikuti pelatihan pengukuran tekanan darah, T-Test untuk melihat pengaruh pelatihan kader lansia terhadap tingkat pengetahuan pengukuran tekanan darah. Berdasarkan hasil uji T-Test, tidak terdapat peningkatan yang signifikan setelah dilakukan pendidikan kesehatan mengenai pencegahan dan pengobatan hipertensi (p=0,115). Upaya meningkatkan tingkat pengetahuan kader lansia tentang hipertensi terkontrol dapat meningkatkan kesadaran diri dengan membentuk kelompok jantung sehat (kelompok hipertensi yang diawasi secara rutin dan intensif oleh petugas dan kader) dengan membentuk grup WA, melatih kader lansia dengan pelatihan pengukuran tekanan darah dan penyuluhan terapi tradisional (daun jambu biji, bawang putih, daun kumis kucing, jahe, daun salam, mengkudu, daun sirsak, rendam kaki dengan air hangat) untuk meningkatkan kesadaran pasien hipertensi terkontrol dalam meningkatkan pola hidup sehat yaitu cek kesehatan secara rutin, minum obat secara teratur.

Kata Kunci: kesadaran diri; pengendalian diri; efikasi diri; hipertensi terkontrol; kader lansia

Submitted: 31-03-2024	Revised: 30-04-2024	Accepted: 02-05-2024
DOI: https://doi.org/10.53713/jcemty.v2i1.193	This we	ork is licensed under CC BY-SA License.

# INTRODUCTION

Uncontrolled hypertension, defined as persistently elevated systolic blood pressure (SBP) >140 mmHg and/or diastolic blood pressure (DBP) of at least 90 mmHg, is the most significant risk factor that can cause morbidity and mortality worldwide. By 2023, approximately 33% of the 8 billion global population lives with hypertension (International Society of Hypertension, 2024). In Indonesia, in 2018, the number of hypertension patients was 58,621 people (54.40%) (Indonesian Ministry of Health, 2019). Meanwhile, in East Java in 2018, the number of hypertension patients was 71,000 people (8.01%)(East Java Provincial Health Service, 2019). Especially in Bondowoso Regency, the number of hypertension patients reached 1,431 (8.89%) (East Java Provincial Health Service, 2019). In particular, the incidence of early detection of hypertension at the Tegalampel Community Health Center in 2023 is number 6689 people (26.3%) of the total population of Tegalampel District (Tegalampel Community Health Center, Bondowoso District Health Service, 2023).

The high incidence of hypertension with controlled blood pressure is caused by decreased self-awareness (Kreibich et al., 2020), decreased self-control (self-control) (Arini Ayu et al., 2023), and decreased self-efficacy (self-efficacy) (Tan et al., 2021). As a result, patients with hypertension who do not regularly take antihypertensive drugs experience high blood pressure, which can cause complications and death (Bakhsh et al., 2017).

Based on previous research in Saudi Arabia, self-awareness about hypertension was (72.6%) (Bakhsh et al., 2017). Based on data on controlled hypertension patients at the Tegalampel Community Health Center in 2023, the achievements of the Individual Health Effort (UKP) show that there are 6689 hypertension patients with high but controlled blood pressure. The number of patients with stable blood pressure was 752 people (11.24%) according to the program 17%, while the target of achieving 63% has not been achieved (Tegalampel Community Health Center, Bondowoso District Health Service, 2023), and this achievement has not met the target. This is because the behavior of the residents of the Tegalampel sub-district towards awareness of healthy living is still low.

Self-awareness is a person's ability to recognize, understand, and evaluate oneself objectively. It includes understanding an individual's thoughts, feelings, motivations, strengths, weaknesses, and behaviors. Self-awareness also involves awareness of how individuals influence others around them and how the environment influences them (Bakhsh et al., 2017).

Self-control is a person's ability to control their impulses, emotions, and behavior to achieve larger, long-term goals. It involves the ability to refrain from undesirable or harmful actions, even in the face of temptation or challenging situations. Self-control also involves the ability to regulate negative feelings, manage stress, and make good decisions in difficult situations (Arini Ayu et al., 2023).

Self-efficacy is an individual's belief in his or her ability to succeed in achieving certain goals or in overcoming certain challenges. It is a belief based on an individual's assessment of his or her ability to manage a particular situation and produce a desired outcome (Tan et al., 2021).

Based on behavioral theory by Lawrence Green, Factors that influence the formation of behavior include1) predisposing factors (age, gender, occupation, economic status, employment, marital status), 2) factor enabling factors (Distance to health facilities, health insurance, medicines, transportation 3) Reinforcing factors (Family support, support from health workers, support from community leaders (Green, 2021).

Hypertension cadres are individuals who are trained and empowered to provide education, monitoring, and support services to the community in efforts to prevent, early detect, and manage hypertension. They are usually part of a public health program that aims to increase awareness and understanding of hypertension, teach healthy lifestyles, help monitor blood pressure, and provide psychosocial support to hypertension sufferers and their families (Sadewa, 2023).

Individual Health Efforts (UKP) are a series of actions aimed at improving individual health on a personal basis. The UKP program aims to provide holistic and integrated health services to each individual based on their needs and health conditions (Amaliah, 2017).

Based on this problem, it is necessary to innovate, so that the residents of the Tegalampel sub-district can improve healthy living behavior by carrying out regular treatment, including by forming a WA group (Laar et al., 2019), training of elderly cadres on measuring blood pressure in the hope of preventing hypertension, counseling on healthy living methods, and various types of traditional medicine including guava leaves (Babatola & Oboh, 2021), garlic (Matsutomo, 2019), cat's whisker leaves (Muhidin et al., 2024), ginger (Megh R. Goyal, Ph.D., PE Ademola Olabode Ayeleso, nd), Bay leaf (Amer & Rizk, 2022), noni (Inada et al., 2017), soursop leaf (Alatas et al., 2020), soak your feet in warm water (Pramono et al., 2021), division of calculations (control card) (Fandinata & Ernawati, 2020), and achieving controlled hypertension according to targets (Tocci et al., 2020).

## **IMPLEMENTATION METHOD**

This research is a review of public awareness regarding hypertension by assessing the results of pre-test and post-test training for elderly cadres regarding measuring hypertension blood pressure. With a sample size of 20 people, who are representatives from 8 villages in the Tegalampel sub-district, Bondowoso Regency. The activities carried out include 1) the Establishment of a WhatsApp group 2) Cadre training (pre-test, hypertension material, how to diet for hypertension, types of hypertensions, the impact of hypertension, traditional and pharmacological therapy, questions and answers, post-test, the practice of measuring blood pressure, door prize for 2 outstanding participants) using the T-Test.

			Method	
No	Author (Year)	Study objectives	(Design, Subjects, Variables, Instruments, and Analysis)	Key Findings
1.	Bakhsh et.al (2017) Awareness and Knowledge on Hypertension and its Self- Care Practices Among Hypertensive Patients in Saudi Arabia.	To assess knowledge, awareness, and self-care practices of hypertension among hypertensive patients	D: Cross-study sectional S: 211 respondents V: Consciousness, knowledge, attitude I: Awareness questionnaire, knowledge, attitude A: Correlation analysis was also carried out to evaluate the relationship between awareness, knowledge, and self-care practices related to hypertension	Level of awareness about hypertension was high in the majority of cases (72.6%) and the level of knowledge was average in 54.7% of patients. While self-care practice levels were below average for 74.4% of participants. Awareness, Knowledge, and practice of self-management were found to be significantly poorer among older age groups (above 50 years), men, and less educated patients.
2.	Selly et al. (2020) The Effects of Self-Reminder Card to the Successful Treatment of Blood Pressure of Hypertension Patients in Community Health Centers in Surabaya	To determine the effect of giving self-reminding cards regarding the success of blood pressure treatment in hypertensive patients at community health centers (puskesmas) in Surabaya	D: Quasi-Experimental two groups (control and self- reminder card group) pre- post prospective S: 115 respondents V: Control card, Blood Pressure Treatment for Hypertensive Patients I: Control card A: Wilcoxon test (p-value 0.009) and the Mann- Whitney test of both groups (p-value 0.009)	The results of the study showed that the success of the patient's systolic blood pressure before and after the intervention group was the Wilcoxon test (p-value 0.009) and the Mann- Whitney test for both groups (p- value 0.009) so there was an effect of self-reminding cards on successful treatment in reducing the patient's systolic blood pressure. hypertension. In pre and post- intervention groups diastolic blood pressure, Wilcoxon test (p-value 0.016), and Mann-Whitney test.
3.	Sadewa, et. all (2023) Enabling the Grass-Root: Health Cadres Empowerment Program in Efforts to Prevent and Manage Hypertension in the Tanjung Sub-Village Community	To find out what society lacks is observation, interviews, and surveys. Action planning was carried out by involving cadres, Sewon II primary health services, hamlet heads, and village youth organizations.	D: Observational study cross-sectional S: 202 respondents V: Grassroots: Programs, Health Cadres, Prevention and Management of Hypertension I: Questionnaire A: The Wilcoxon test	From the Wilcoxon test, the pre-test and post-test values obtained a Z value of -2.375 and a sig value of 0.018, which shows that there is an influence of hypertension presentation on cadre knowledge and understanding. Community acceptance of this program is going well and Tanjung Hamlet cadres are independently able to carry out health screening for non- communicable diseases, especially hypertension, in the monthly Posyandu program in the future.

# Table 1. Summary of Previous Research

## **RESULT AND DISCUSSION**

The results of the annual report of the Individual Health Effort (UKP) program for controlled hypertension patients in 2023 at the UPTD Tegalampel Community Health Center, Bondowoso Regency, were 17% and had not met the target due to a lack of public awareness of the importance

of healthy living by regularly checking at posyandu and community health centers as well as a lack of awareness about drinking. medication regularly, which is due to various factors including: 1) Predisposing factors (age, gender, economy, job) 2) Enabling factors (distance to health facilities, transportation, health insurance factors) 3) Strengthening factors (friend support, family support, support from health workers, support from community leaders). So, to achieve the target of 63%, it is necessary to make regular reporting and inspection efforts every 1 month by forming a fit heart group (the hypertension group is monitored regularly and intensively with officers and cadres), including: 1) forming a WhatsApp group consisting of Head of Tegalampel Community Health Center, Coordinator UKM, UKM Coordinator, Person in Charge of PTM, Village Health Officer, Elderly Cadre in Handling Hypertension who has received a Decree from the Village Head. 2) Training for elderly cadres on blood pressure checks includes pre-test, the material on controlled hypertension, causes of hypertension, impact of hypertension, healthy lifestyle, post-test, practice on how to measure blood pressure correctly, distribution of door prizes to 2 training cadres who excel.

Table 2. Analysis of Pre-test and Post-test Scores

Label	Ν	Min	Max	Standard Deviation
Pre-test	20	40	90	17.25
Post-test	20	60	90	11.65

T-Test to see the effect of training for elderly cadres regarding blood pressure measurement on their level of knowledge. The criteria for change is when the value is sig≤0.05, whereas if sig>0.05 then no difference in value is observed after the intervention. Based on test results pre-test and posttest values produced a significant 2-tailed equal variance assumed value of 0.115 and an equal variance not assumed value of 0.117, indicating that there was no significant improvement after health education regarding the prevention and treatment of hypertension. given to the level of knowledge of elderly cadres regarding blood pressure measurement training.



Figure 1. Digital Tensimeter

Figure 2. WhatsApp group

**JCEMTY** Journal of Community Empowerment for Multidisciplinary (JCEMTY)

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Figure 3. "KALKULASI" (Hypertension Control Card)



Figure 4. Cadre Training for Measuring Blood Pressure



Figure 5. Awarding Certificates to Cadres for Completing Follow the Blood Pressure Measurement Training

## CONCLUSION AND RECOMMENDATION

Efforts to increase knowledge of elderly cadres about controlled hypertension by increasing self-awareness with the formation of a healthy heart group (a hypertension group monitored regularly and intensively with officers and cadres) has been successfully formed through the formation of a WhatsApp group consisting of Head of Tegalampel Community Health Center, UKM Coordinator, UKM Coordinator, Person in Charge of PTM, Village Health Officer, Elderly cadres in handling hypertension who have received a decree from the Village Head. 2) Training for elderly cadres regarding blood pressure checks includes pre-test, controlled hypertension material, causes of hypertension, counseling on traditional therapy (guava leaves, garlic, cat's whisker leaves, ginger, bay leaves, noni, soursop leaves, soak feet in warm water).impact of hypertension, healthy lifestyle, post-test, practice on how to measure blood pressure correctly, distribution of door prizes to 2 training cadres who excel to increase awareness of controlled hypertension patients in improving healthy lifestyle, namely regular health checks, taking medication regularly.

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