

ISSN 2597- 6052DOI: <https://doi.org/10.56338/mppki.v7i8.5696>**MPPKI****Media Publikasi Promosi Kesehatan Indonesia**
*The Indonesian Journal of Health Promotion***Research Articles****Open Access****The Impact of Video-Based Drug Information on Medication Adherence among Hypertensive Patients : A Study at Dr. Sindhu Trisno Level-III Hospital Palu****Ririen Hardani¹, M. Fakhru Hardani^{2*}, M.Rinaldhi Tandah³, Indah Ismiranti Awaliyah⁴**¹Program Studi Farmasi Jurusan Farmasi FMIPA Universitas Tadulako | ririenhardani@gmail.com²Program Studi Farmasi Jurusan Farmasi FMIPA Universitas Tadulako | fakhrulhardani@gmail.com³Program Studi Farmasi Jurusan Farmasi FMIPA Universitas Tadulako | prof.aldhi@gmail.com⁴Program Studi Farmasi Jurusan Farmasi FMIPA Universitas Tadulako | indahismirantty@gmail.com* Corresponding Author: fakhrulhardani@gmail.com**ABSTRACT****Introduction:** Adherence of hypertensive patients in taking drugs is one of the determinants of the success of a treatment so that compliance can be influenced by the patient's knowledge and attitude in treating the disease.**Objective:** The purpose of this study was to determine the effect of providing education through video media on the level of knowledge, attitude, and adherence to taking medication for hypertensive patients at Dr. Sindhu Trisno Hospital Palu.**Method:** The method used in this study was quasi-experimental with pre-test and post-test approaches using questionnaires on outpatient hypertensive patients at Dr. Sindhu Trisno Hospital.**Result:** There are differences in knowledge, attitudes, and compliance of hypertensive patients before and after being given drug information with video media with a significance value of $0.000 < 0.05$. The partial relationship for significance value attitude is $0.359 > 0.05$, knowledge significance value is $0.906 > 0.05$, and duration of treatment significance value is $0.882 > 0.05$. Knowledge and attitude simultaneously significance value $0.441 > 0.05$ **Conclusion:** It can be concluded that there is an influence of providing drug information with video media on the knowledge, attitudes, and compliance of hypertensive patients.**Keywords:** Hypertension; Video; Adherence; Knowledge; Attitude

INTRODUCTION

Hypertension is often considered a disease that emerges without any symptomatic complaints. According to the Indonesian Health Profile report of 2022, most cases of high blood pressure in the community are undiagnosed. This is indicated by the results of blood pressure measurements in individuals aged over 18 years. It was found that the prevalence of hypertension in Indonesia is 34.1%, with only 7.2% of the population aware of their condition and only 8.8% of cases diagnosed.

Patient compliance in taking medication is one of the determinants of successful treatment of a disease, influenced by the knowledge and attitude of the patient towards their illness. Good compliance with treatment gradually affects blood pressure and prevents complications. The level of compliance is influenced by various factors, such as demographic factors including age and education level, patient knowledge and awareness about hypertension, the medical service's capability in treating hypertension, the patient-health worker relationship, the prevailing health system, and the combination of medications received by the patient (3).

Providing information using video as a medium for health education communication, especially for hypertension patients, has been well-received. Delivering drug information through video media significantly impacts patient compliance in treating hypertension. Videos that incorporate audiovisual elements with non-monotonous animations and explanations are highly suitable for patients, providing information for those who find it difficult to understand printed information such as leaflets, brochures, and other media (3).

Several research results indicate a relationship between knowledge about hypertension and blood pressure control. Respondents with good knowledge and attitudes about hypertension generally have controlled blood pressure, whereas those with low knowledge about hypertension usually have uncontrolled blood pressure, requiring longer treatment periods (6).

Observations at Dr. Sindhu Trisno Hospital, a healthcare facility prioritized for soldiers/civil servants, retirees, veterans, widows/widowers, and their families, show that hypertension is the second most frequent disease handled at this hospital. This presents a problem that needs attention, as one of the risks of increased hypertension patients is non-compliance in taking medication. Without proper handling, this can lead to many disease complications and even death. The causes include patients' non-compliance due to lack of knowledge and attitude about hypertension. Therefore, using video media is expected to improve patient compliance, knowledge, and attitude in taking medication and managing hypertension. Hence, video media was chosen as a cognitive support medium in this research.

METHODS

This type of research is a quasi-experimental design where the sampling is not done randomly, using a pre-test and post-test approach. The sampling is conducted through quota sampling using a questionnaire instrument, which covers knowledge, attitudes, and medication compliance of hypertension patients before and after being provided with the video.

RESULT

Table 1. Respondent Characteristics

Characteristics	Sample Size (n=100)	Percentage (%)
Gender		
Male	41	41
Female	59	59
Ages		
26-35	4	4
36-45	25	25
46-55	28	28
56-65	36	36
66-75	7	7
Highest Education level		
No Formal Education	0	0
SD	0	0
SMP	16	16
SMA	51	51

Sarjana	33	33
Jobs		
Pelajar/mahasiswa	0	0
Buruh	15	15
Wiraswasta	25	25
IRT	37	37
Pegawai/PNS	23	23
Antihypertensive drugs		
Amlodipin	38	38
Candesartan	6	6
Amlodipin dan candesartan	45	45
Amlodipin dan bisoprolol	11	11

The respondent group most affected by hypertension in this study is women, with a total of 59 patients (59%). The age group most affected by hypertension in this study is between 56-65 years old, with 36 patients (36%). The highest level of education among hypertension patients in this study is high school (SMA), with 51 patients (51%). The most common occupation among hypertension patients in this study is housewives (IRT), with 37 patients (37%). The most commonly prescribed medications for hypertension patients in this study are amlodipine and candesartan, with 45 patients (45%).

Table 2. Result Wilcoxon Knowledge test

		N	Mean Rank	Sig.
Pre test dan Post test	Negative Ranks	0	0,00	
	Positive Ranks	100	50,50	0,000
	Total	100		

Table 3. Result Wilcoxon Attitude test

		N	Mean Rank	Sig.
Pre test dan Post test	Negative Ranks	0	0,00	
	Positive Ranks	99	50,00	0,000
	Total	100		

Table 4. Result Wilcoxon Compliance test

		N	Mean Rank	Sig.
Pre test dan Post test	Negative Ranks	5	13,00	
	Positive Ranks	72	40,81	0,000
	Total	100		

The results of the Wilcoxon test for knowledge, attitudes, and medication compliance of hypertension patients before and after being provided with education through video media show a significance value of $0.000 < 0.050$. This indicates that providing medication information through video media has a significant effect on the medication compliance of hypertension patients.

Table 5. Result T- test partially

	Std. Error	Beta	T	Sig.
Attitude	0,101	0,182	0,923	0,359
Knowledge	0,102	0,023	0,118	0,906
Treatment Duration	0,090	0,015	0,149	0,882

The results for attitudes show a significance value of $0.359 > 0.05$, indicating that the independent variable of attitude does not have a significant effect on the compliance variable. Based on the t-value and t-table comparison, if the t-value $>$ t-table, then the attitude variable affects compliance. Therefore, it can be concluded that H_0 is accepted and H_a is rejected, meaning that attitude does not significantly influence patient compliance. For knowledge, the significance value obtained is $0.906 > 0.05$. Thus, it can be concluded that H_0 is accepted and H_a is rejected, meaning that knowledge does not significantly influence patient compliance. Regarding the duration of treatment, the significance value is $0.882 > 0.05$.

Table 6. Result F-Test simultaneous

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4,631	3	1,544	0,907	0,441
Residual	163,369	96	1,702		
Total	168,000	99			

The significance value obtained is $0.441 > 0.05$, so H_0 is accepted and H_a is rejected. Based on the F-value calculation, the result is $3.219 > 3.09$ Ftabel. Therefore, if the F-value is greater than the Ftabel, it indicates that there is no significant effect between the knowledge and attitude variables on the compliance variable.

DISCUSSION

The respondent group most affected by hypertension in this study is women, with a total of 59 patients (59%). The occurrence of hypertension in men and women is actually the same, but premenopausal women are protected from cardiovascular disease. Women who have not yet reached menopause are protected by estrogen; a hormone responsible for increasing HDL (high-density lipoprotein) levels. Hypertension in women has a higher prevalence than in men because it is associated with the menopause process. Postmenopausal women can be affected by the decrease in estrogen levels (6).

The age group most affected by hypertension in this study is between 56-65 years old, with 36 patients (36%). This is due to the increased likelihood of high blood pressure as a person ages. Hypertension results from the interaction of various factors within the human body. Numerous studies have found a relationship between various risk factors and the development of hypertension. The loss of tissue elasticity, arteriosclerosis, and vessel dilation contribute to the increase in high blood pressure in older adults. Several studies conducted in Indonesia show that residents over the age of 20 have risk factors for hypertension (4).

The highest level of education among hypertension patients in this study is high school (SMA), with 51 patients (51%). This is because respondents with lower education levels are more likely to suffer from hypertension compared to those with higher education levels. Education level influences patients' knowledge and compliance in taking hypertension medication. A study found that people with lower education levels have a 2.9 times higher risk of developing high blood pressure compared to those with higher education levels. This may be because patients with limited communication skills and the lack of effective communication skills among healthcare workers can hinder patient understanding (3).

The most common occupation among hypertension patients in this study is housewives (IRT), with 37 patients (37%). This is due to the very monotonous activities at home, which can cause stress and increase blood pressure. Stress can result from numerous household chores, family issues, economic problems, and family demands, as well as a lack of outdoor activities, which can add to mental burdens. Women who do not work or are housewives have an increased risk of developing high blood pressure compared to working women (2).

The most commonly prescribed medications for hypertension patients in this study are amlodipine and candesartan, with 45 patients (45%). This is because the combination of amlodipine and candesartan provides a synergistic effect by focusing on two pathways to lower blood pressure. The combination of amlodipine and candesartan is effective because it lowers blood pressure along with various other components. Medications with different mechanisms of action can control blood pressure and minimize toxicity (7).

Knowledge about hypertension can be defined as the result of a patient's understanding of all aspects of the disease, including its definition, causes, symptoms, consequences, prevention, risk factors, and physical activities/exercises. Knowledge about hypertension plays a crucial role in determining overall behavior since knowledge forms the basis for an individual's behavior. In this study, the results show a change in knowledge before and after providing medication information through video media. Good knowledge can be influenced by various factors, including personal (or others') experiences and information sources received from the provided video or other

sources. This aligns with previous research, which explains that respondents' knowledge levels can be influenced by the information they receive. The better the information provided, the better the respondents' understanding of hypertension prevention (8).

Respondents' attitudes in this study concern the prevention and behavior towards hypertension. Attitudes can be influenced by several factors, including personal (or others') experiences, mass media, educational institutions, and emotional factors. Attitudes can be divided into two domains: positive and negative attitudes. Positive attitudes lead to positive behavior, whereas negative attitudes lead to negative behavior, including preventive behaviors towards hypertension. Knowledge plays a role in shaping respondents' attitudes, so the better a person's knowledge, the more it will influence their behavior. This is because the educational video provided increases the patients' knowledge, thus influencing their attitudes. This aligns with previous research, which explains that a person's attitude is a reaction to their surrounding environment. Positive attitudes can be influenced by positive knowledge, and vice versa. Hence, in undergoing treatment, family support is essential to build positive attitudes among patients.

The level of medication compliance is influenced by many factors, including demographic factors such as age and education level, patients' understanding and awareness of hypertension, healthcare providers' competence in treating hypertension, and the patient-healthcare provider relationship. The most significant factors in society are low socioeconomic status, acceptance and understanding of the disease, and awareness of the importance of treatment. Therefore, in this study, medication information was provided using video media that explains the correct use of medication, the dangers of hypertension, non-pharmacological prevention methods, and how to maintain medication compliance. This video can enhance patients' compliance with their hypertension medication. This aligns with previous research, which explains that paired t-test results also show a p-value of 0.00 (<0.05), indicating a significant effect on improving hypertension patients' medication compliance through video intervention (6).

A person's knowledge is acquired through education and experience, which can be obtained from various sources such as books, people (friends, relatives, officials), and various media that shape certain beliefs, leading individuals to act according to those beliefs. Knowledge is also the result of the process of perceiving objects (seeing and hearing). Several factors influence knowledge, including experience, education, and beliefs. Knowledge has six levels: knowledge, understanding, application, analysis, synthesis, and evaluation.

CONCLUSION

It can be concluded from this study that providing medication information through video media affects the knowledge, attitudes, and compliance of hypertension patients. Additionally, there is no partial or simultaneous relationship between knowledge, attitude, and duration of treatment with patient compliance in hypertension management.

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