

The Effect of *Su Jok* Therapy on Reducing the Severity Scale of Physical Symptoms of Patients with Hypertension



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ABSTRACT

Introduction: Hypertension is a cardiovascular disease that causes certain signs and symptoms, causing discomfort and interfering with daily activities. One alternative therapy to reduce physical symptoms is using *Su Jok* Therapy. *Su Jok* Therapy is a complementary therapy originating from Korea. The method is by manipulating the hands or feet using different methods such as massaging, applying colour, putting seed or magnet and other methods. This research aimed to determine the effect of *Su Jok* Therapy on reducing the severity scale of physical symptoms of hypertensive patients.

Methods: The data was collected from one of the public health centers in Bantul, Yogyakarta. There were 15 patients with hypertension, 3 males (20%) and 13 females (80%), with the most physical complaints being knee pain (38,8%). *Su Jok* therapy was applied using massage and seed method, lasting about 5-7 minutes. The final data was then analyzed using the Wilcoxon Signed Rank Test.

Results: The result showed that the average severity scale of physical complaints before therapy was 3.20, with a standard deviation of 0.561. Meanwhile, the average complaints scale after therapy was 1.87, with a standard deviation of 0.640. The Wilcoxon Signed Rank Test analysis results show a p-value of 0.001 ($p < 0.05$).

Conclusion: It can be concluded that *Su Jok* Therapy can reduce the average level of severity scale of physical symptoms in a short time.

Keywords: Physical symptoms; hypertension; massage; seed method; *Su Jok* therapy.

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INTRODUCTION

Hypertension is one of the cardiovascular diseases that cause high mortality and morbidity. World Health Organization's data states that there are 1.28 billion people with hypertension in adults aged 30-79 years worldwide.¹ Some references say that deaths caused by hypertension reach 20-50%.^{2,3} Meanwhile, according to the results of the 2018 Basic Health Research, the prevalence of hypertension in the population aged ≥ 18 years reached 34.11%, while the prevalence of hypertension in the elderly in Indonesia for ages 55-64 years was 45.9%, aged 65-74 years was 57.6%, and age > 75 years was 63.8%. Still, based on the same source, the prevalence of hypertension in the Special Region of Yogyakarta (DIY) is 11.01%, higher than the national value of 8.8%.⁴ This prevalence makes DIY the province with the fourth-highest hypertension case

in Indonesia.⁵

Increased blood pressure can cause specific signs and symptoms, although not significant. Signs and symptoms of hypertension include mild to severe headaches, aching in the nape area, and discomfort throughout the head area down to the bottom of the chin to behind the ears.⁶ These symptoms are manifestations of blood flow disorders due to increased pressure in the blood vessels, especially in the head area.⁷ The appearance of symptoms felt by hypertension sufferers causes a feeling of discomfort and can interfere with daily activities. Therefore, health workers need to consider strategies to reduce the signs and symptoms felt by hypertensive patients. Apart from medical treatment, hypertension can be treated with non-pharmacological methods through complementary therapy. Complementary therapy is a non-mainstream approach used in

combination with conventional medicine.⁸

Complementary and alternative therapies (CAM) have been used for centuries worldwide and comprise various subsets of therapies such as dietary supplements, herbs, traditional Chinese medicine, acupuncture, mind-body, and therapeutic massage.⁹ One type of complementary therapy that is effectively used to treat various kinds of complaints due to compensation from chronic diseases is therapy *Su Jok*.

Su Jok therapy is a complementary therapy from Korea discovered by Professor Park Jae Woo in 1987. *Su Jok* therapy uses various methods to stimulate the hands and feet, such as massage, magnets, seeds, paint, needles, or other things on the skin.¹⁰ A study on patients with heart failure concluded that giving implementation of *Su Jok* with a duration of 30 minutes, which was stimulated every 10 minutes after surgery, effectively reduced

systolic pressure, diastolic pressure, pulse, respiration, and PONV.¹¹ Another study examined the effect of *Su Jok* Therapy on reducing headaches in hypertensive patients at the Harapan Kita Social Home for the Elderly in Palembang.¹² However, the scope of the research conducted was still limited to reducing pain in certain specific parts, such as the head. Further research is needed related to the effect of *Su Jok* Therapy to reduce the physical symptoms of hypertension more generally. Therefore, this research was conducted to know the effect of *Su Jok* Therapy on reducing the physical symptoms of hypertensive patients in one of the Public Health Center in the Bantul area, Yogyakarta.

METHOD

This research is a pre-experimental study using one group pre-test and post-test design designed to determine the effect of *Su Jok* Therapy on reducing the physical symptoms of clients with hypertension. This study, conducted in May 2023, involved fifteen elderly people with hypertension who participated in the Prolanis Program in the working area of a public health center in Bantul, Yogyakarta. The data collection process begins with conducting brief interviews to obtain data related to medical history, treatment, complaints, and the severity of complaints felt by the client.

The intervention then used the massage method and attached the seeds to the skin using tape. The target of correspondence therapy is the Basic Correspondence System. Correspondence therapy targets the physical areas of body correspondence mapped to the hands and feet. The map can be found in Professor Park Jae Woo's original book as the founder of *Su Jok* Therapy. Researchers conducted correspondence therapy using massage techniques using a unique probe tool (Figure 1). The massage process follows a particular direction based on the hand's body map and the target (Figures 5-9), lasting about 5 to 7 minutes. After the massage, tape the fenugreek seeds attached to the previously massaged points (Figure 2). The researcher asked about the client's response to the intervention and the scale of complaints felt after therapy.



Figure 1. Massage method using a probe with a target on basic correspondence.



Figure 2. Method of attaching seeds to the skin

Table 1. Clients characteristics (n=15)

Characteristic	Frequency	Percentage
Sex		
Male	3	20
Female	12	80
Age (Year)		
45-50	2	13,3
51-55	2	13,3
55-60	2	13,3
61-65	4	26,6
66-70	2	13,3
70-75	3	20
Profession		
Self-employed	2	13,3
Unemployed	13	86,6
Medication		
Amlodipine	14	93,3
Catopril and Amlodipine	1	6,6

Researchers used a Likert scale of 1 to 5 to measure the scale of complaints before and after the intervention. Scale 1 indicates no complaints, and 5 indicates the most severe complaint felt. After all the data was wholly obtained, researchers analyzed the data using the Wilcoxon Signed Rank Test.

RESULT

The study involved 15 clients with hypertension in the working area of a health center in Bantul, Yogyakarta. Most clients are female (80%) and aged between 61 and 65 (26.6%). The average client does not work (86.6%) and consumes amlodipine as routine treatment (93.3%). Table 1 shows clients' demographic characteristics, including gender, age, treatment, and occupation.

The level of client complaints was measured using a scale from 1 to 5 with criteria 1 = no complaints, 2 = mild complaints, 3 = moderate complaints, 4 = severe complaints, and 5 = very severe

complaints. The higher the score, the more severe the perceived complaints. Table 2 shows that the complaints felt by clients include knee pain, back pain, low back pain, headaches, neck pain, right-hand pain, and tingling in the fingers. The most common complaint clients feel is knee pain (38.8%). Meanwhile, the heaviest complaints were knee, neck, back, and right-hand pain with a scale of 4, each felt by 1 client.

Table 3 describes the therapy performed and the severity of symptoms before and after the *Su Jok* Therapy. After the *Su Jok* Therapy was carried out, most clients experienced a decrease in complaints, with the most significant decrease occurring in 2 clients with complaints of knee pain and back pain, where the complaint score dropped two levels.

The average symptom complaints scale before therapy was 3.20, with a standard deviation of 0.561. Meanwhile, the average symptom complaints scale after therapy was 1.87, with a standard

Table 2. Client's complaints

Complaints	Scale (1-5: no complaints – very severe complaints)	Number of clients (person)	Percentage
Knee pain	4	1	
Knee pain	3	6	38,8
Headache	3	2	
Headache	2	1	16,6
Neck Pain	4	1	
Neck Pain	3	1	11,1
Back Pain	4	1	
Back Pain	3	1	11,1
Low Back Pain	3	1	5,5
Tingling in the fingers	3	2	11,1
Right's Hand Pain	4	1	5,5

Table 3. Physical complaints, scale, therapy, and result

Respondent	Physical Complaints	Scale		Therapy Protocol
		Before	After	
1	Knee pain	3	2	Therapy on the primary system in the knee correspondent with a massage using a probe and then attaching seeds (Figure 3)
2	Knee pain	3	2	Therapy on the primary system in the knee correspondent with a massage using a probe then attaching seeds (Figure 3)
3	Headache	3	2	Therapy on the primary system in the correspondent of the head with a massage using a probe and then affixing the seeds (Figure 4)
	Low Back Pain	3	2	Therapy on the primary system in the correspondent of the right waist with massage using a probe and then affixing seeds (Figure 9)
4	Knee Pain	3	2	Therapy on the primary system in the knee correspondent with a massage using a probe and then attaching seeds (Figure 3)
5	Knee pain	3	1	Therapy on the primary system in the knee correspondent with a massage using a probe and then attaching seeds (Figure 3)
6	Knee Pain	4	2	Therapy on the primary system in the knee correspondent with a massage using a probe and then attaching seeds (Figure 3)
7	Knee Pain	3	2	Therapy on the primary system in the knee correspondent with a massage using a probe and then attaching seeds (Figure 3)
8	Knee Pain	3	2	Therapy on the primary system in the knee correspondent with a massage using a probe and then attaching seeds (Figure 3)
9	Neck Pain	3	2	Therapy on the primary system in the neck correspondent with a massage using a probe and then affixing seeds (Figure 7)
	Back Pain	4	2	Therapy on the primary system in the back correspondent with a massage using a probe and then affixing seeds (Figure 5)
10	Back Pain	3	1	Therapy on the primary system in the back correspondent with a massage using a probe and then affixing seeds (Figure 5)
11	Neck Pain	4	3	Therapy on the primary system in the neck correspondent with a massage using a probe and then affixing seeds (Figure 7)

Respondent	Physical Complaints	Scale		Therapy Protocol
		Before	After	
12	Tingling in Fingers	3	2	Therapy in the primary system corresponds to the fingers with massage using a probe and then affixing the seeds (Figure 6)
13	Headache	2	1	Therapy on the primary system in the correspondent of the head with a massage using a probe and then affixing the seeds (Figure 4)
14	Tingling In Fingers	3	1	Therapy on the primary system corresponds to the fingers with massage using a probe and then affixing the seeds (Figure 6)
15	Right's Hand Pain	4	2	Therapy on the primary system in the right-hand correspondent with a massage using a probe and then affixing seeds (Figure 8)

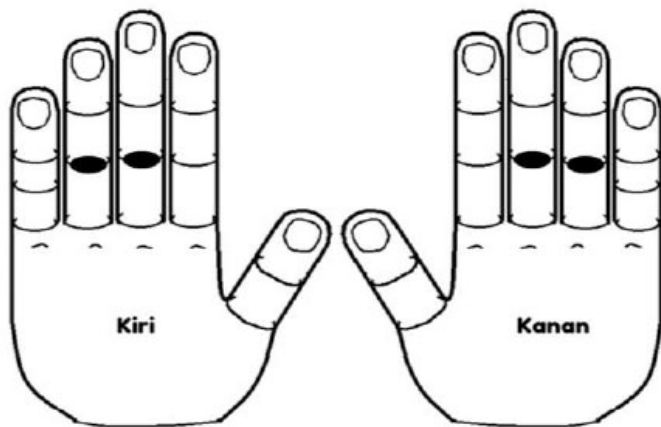


Figure 3. Knee correspondence points.

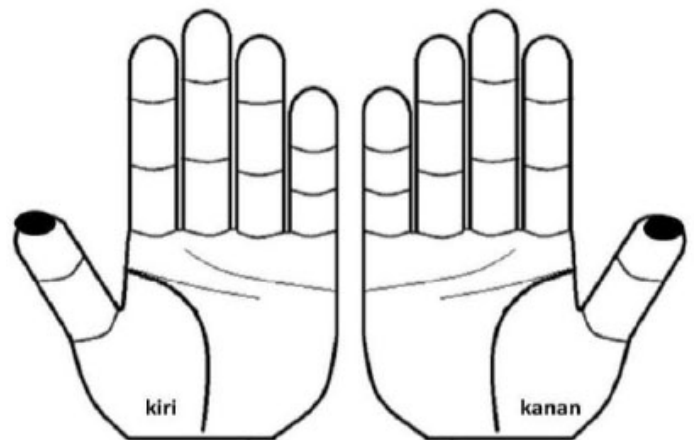


Figure 4. Head correspondence points.

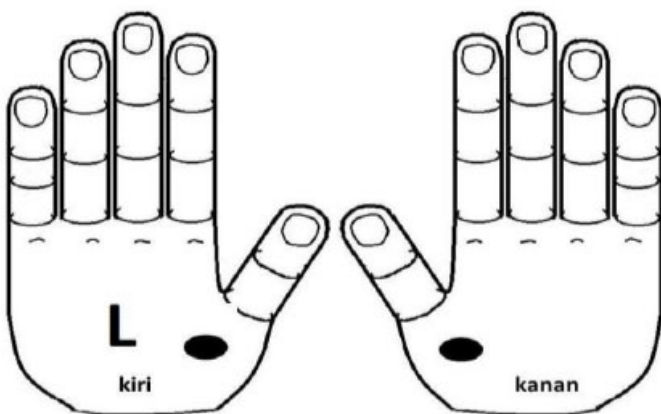


Figure 5. Back correspondence points.

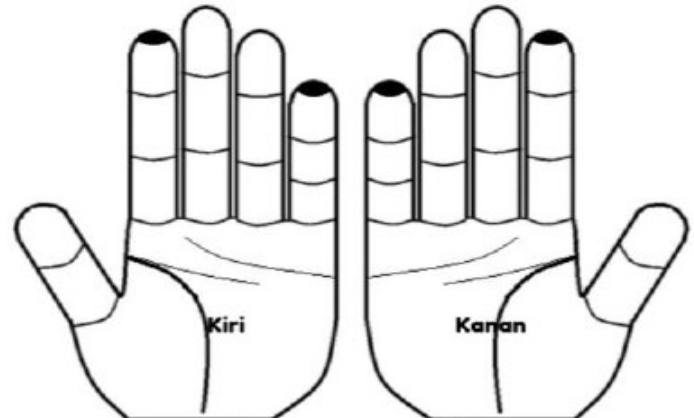


Figure 6. Fingers correspondence points.

deviation of 0.640. The Wilcoxon Signed Rank Test analysis showed a p-value of 0.001 ($p < 0.05$). This result shows that *Su Jok* Therapy can have a significant effect on complaints of symptoms due to hypertension. The results of the Wilcoxon Test analysis can be seen in Table 4.

DISCUSSION

Based on this study, physical complaints are felt by all clients with different types. Clients experience headaches, nape pain, knee pain, back pain, hand pain, and tingling in the fingers. The symptoms experienced by clients have variant levels, ranging from a scale of 2 (mild) to 4 (severe). The average client feels moderate

symptoms on a scale of 3. This condition is understandable, considering that the client can still carry out activities well even though they feel uncomfortable due to the symptoms they are experiencing. This is in line with research that states that the physical symptoms of hypertension can make the client feel uncomfortable and can interfere with daily activities.¹³

Clients experiencing physical

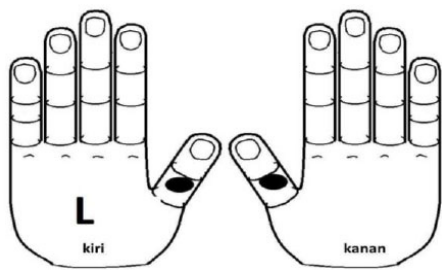


Figure 7. Neck correspondence point.

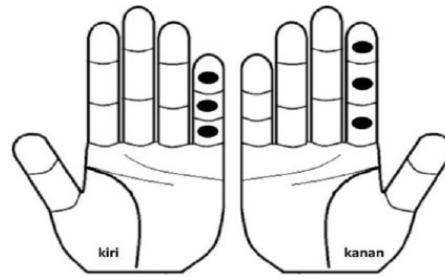


Figure 8. Right's hand correspondence point.

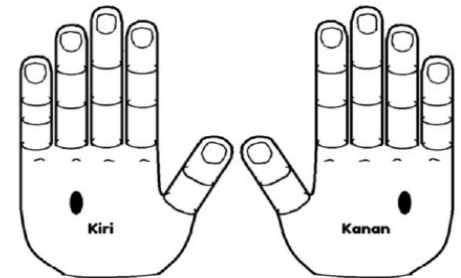


Figure 9. Right's low back correspondence point.

Table 4. Effect of *Su Jok* therapy on symptoms of hypertension

	Mean ± SD	p-value
Complaint Scale before therapy	3,20 ± 0,561	0,001
Complaint Scale after therapy	1,87 ± 0,640	

Significant ($p > 0.05$)

complaints are given *Su Jok* Therapy for 5 to 7 minutes. As a result, the average client complaint decreased significantly with a p-value of 0.001 (<0.05). This proves that *Su Jok* Therapy can reduce the severity of physical symptoms due to hypertension. In line with these findings, a case study conducted by Nurjannah & Hariyadi on 46 respondents concluded that *Su Jok* Therapy using correspondence and energy can significantly reduce pain.¹⁴

The *Su Jok* therapy given in this study was therapy with massage and seed-sticking methods. This is a simple therapy because it only targets the organs or body parts in the hands or feet. Not only simple, this therapy is effective in dealing with pain problems quickly.¹⁰ This is in line with a study using a massage method on pain points and applying red color to the heart correspondence points, which are proven to reduce pain in all respondents with an average time of only 6.9 minutes¹⁴. Meanwhile, a previous case study used acupuncture techniques to reduce dysmenorrhea pain, which required 20 minutes for 3 consecutive days.¹⁵

According to Park, correspondence therapy in *Su Jok* is related to body anatomy, so if there are problems with anatomy, stimulation in this area will activate autoregulation and return the body to a healthy state. Besides, we also used seeds with latent energy that could promote health by placing them on diseased parts of the body. Treatment occurs when the bioenergy waves from the seeds are transmitted to the active pain points, and

the seeds absorb negative energy through the pain points. Correspondence therapy works on anatomical areas, whereas energy therapy reduces pain by working on energy pathways (meridians) where the painful areas are affected by energy lines. The mechanism is almost the same as acupuncture, except that acupuncture is applied all over the body. However, *Su Jok* can be done on the fingers or toes, representing several energy pathways.¹⁴

Based on the explanation that has been presented, it can be concluded that *Su Jok* Therapy is a complementary therapy that is cheap, easy, fast, and effective. This therapy is proven to reduce physical symptoms that arise due to chronic diseases such as hypertension. Some of the clients in this study even said that this therapy is a miracle therapy because it can reduce symptoms quickly. Therefore, this therapy needs to be introduced to the health profession more broadly so that it can be used as a pharmacological companion therapy for clients with chronic diseases, especially hypertension.

Due to limitations, this study has deficiencies in terms of focus of therapy and implementation time. This research only focuses on addressing the physical symptoms felt by clients. In addition, the implementation of the research was only carried out in one session at a time. Therefore, further research is expected to be carried out by considering additional sessions for some time to get a more significant effect.

CONCLUSION

Various kinds of complementary therapies are used to reduce symptoms caused by hypertension, one of which is through *Su Jok* Therapy. *Su Jok* therapy can be used as a solution to help reduce physical symptoms in patients with hypertension. *Su Jok* therapy has its advantages; besides being cheap, it is also easy to do and learn. In addition, this therapy can also provide a fast and practical effect in reducing symptoms such as pain. However, the following research still needs to be carried out with more stringent methods and include not only the physical but also the psychological of the client.

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CONFLICT OF INTERESTS

The authors have no conflicts of interest to declare.

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