Research Article

ACUPRESSURE THERAPY FOR HYPERTENSION IN HAMBUKU BARU VILLAGE

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Abstract

Background: Common problems experienced by patients with hypertension can lead to decreased cardiac output, pain, anxiety, and various complications. Therefore, a new patient-centered strategy is needed to support individuals in managing their condition. Central blood pressure has gained attention in the management of hypertension. Acupressure stimulation can activate mast cells to release histamine, a vasodilation mediator, thereby increasing blood circulation, promoting body relaxation, and ultimately lowering blood pressure. This activity aimed to enable the community to perform acupressure therapy independently at home. **Method:** The intervention included health education through lectures and demonstrations of acupressure therapy techniques. **Results:** After the intervention, there was a reduction in both systolic and diastolic blood pressure ranging from 10 to 25 mmHg. **Discussion:** This activity demonstrated that acupressure therapy may be effective in reducing blood pressure.

Keywords: Acupressure Therapy, Blood Pressure, Hypertension

Background

Common problems experienced by patients with hypertension may lead to decreased cardiac output, pain, anxiety, and can result in numerous disease complications (Oparil et al., 2016). Therefore, optimal management is essential to prevent such complications in hypertensive patients. Despite advances in the prevention and treatment of hypertension, a high percentage of individuals still experience elevated or uncontrolled blood pressure. A new patient-centered strategy is needed to support individuals in managing their condition effectively (Solano López, 2018). Central blood pressure has recently gained significant attention in the management of hypertension (Cheng et al., 2020).

Acupressure is commonly practiced to promote physical revitalization (Aminuddin et al., 2020). According to Adam (2014), acupressure stimulation can activate mast cells to release histamine, a vasodilation mediator, leading to improved blood circulation, bodily relaxation, and ultimately, a reduction in blood pressure (Sari et al., 2019). Acupressure stimulates superficial skin nerves, transmitting signals to the hypothalamus in the brain. This activates the descending nervous system to release endogenous opioids such as endorphins. The parasympathetic nervous system, which functions to regulate activities when the body is at rest, allows hypertensive individuals to perceive touch as a relaxation stimulus, resulting in decreased blood pressure (Aminuddin et al., 2020).

This activity aims to motivate families to independently perform acupressure therapy for hypertensive family members after receiving education and demonstrations. Families are expected to understand and explain the definition, benefits, procedures, therapeutic goals, and to correctly perform the therapy movements.

Method

The methods used in this activity were lectures and demonstrations. The lecture method involved the direct verbal delivery of information by the educator to the participants, typically in a one-way communication format. Meanwhile, the demonstration method consisted of showing specific skills or procedures directly to participants, allowing them to observe, understand, and imitate the practice.

Results and Discussion

The therapy was administered to 16 participants. Each participant underwent blood pressure measurement before and after the acupressure intervention.

Table 1. Blood Pressure Measurements Before and After Acupressure Therapy

Sample No.	Blood Pressure (mmHg)	
	Before	After
1	150/90	130/80
2	170/100	150/90
3	160/90	140/80
4	140/80	130/80
5	150/80	130/70
6	145/80	120/70
7	160/80	150/80
8	155/70	140/80
9	160/100	150/80
10	180/110	170/90
11	165/100	150/90
12	170/80	160/70
13	150/80	130/80
14	140/90	120/80
15	160/90	150/80
16	180/120	160/90

Blood pressure measurements before therapy ranged from 140/80 mmHg to 180/120 mmHg. After the acupressure intervention, the results showed a reduction, with post-therapy blood pressure ranging from 120/70 mmHg to 170/90 mmHg.

Discussion

Observations of 16 individuals with hypertension who received acupressure massage therapy on May 29, 2025, demonstrated a reduction in both systolic and diastolic blood pressure following the intervention. All participants experienced a decrease in systolic blood pressure, with reductions ranging from 10 to 25 mmHg.

These findings are consistent with a literature review by Manullang et al. (2024), which reported that acupressure techniques effectively lowered blood pressure in patients with hypertension. After four weeks of bi-weekly acupressure therapy, the study showed a significant reduction in blood pressure among most participants. Acupressure treatment has been proven effective in reducing blood pressure by alleviating stress, improving blood circulation through vasodilation, and decreasing cardiac function, thereby reducing heart rate.

Similarly, a study by Kamelia et al. (2021) revealed changes in blood pressure following acupressure therapy. Eight out of ten reviewed articles (80%) indicated a shift from stage 2 (moderate) to stage 1 (mild) hypertension, while two articles reported no changes in blood pressure. The average reduction in systolic blood pressure ranged from 4 to 41 mmHg, and in diastolic pressure from 4 to 16 mmHg. The most commonly targeted acupressure points in these studies were Lr 3 (Taichong), Sp 6 (Sanyinjiao), Ki 3 (Taixi), and Li 4 (Hegu). The most frequently used therapy duration ranged from ten to thirty minutes, typically conducted three times per week.

A systematic review by Suryawan et al. (2022) further confirmed that acupressure at points such as the back and Taichong significantly impacted blood pressure in hypertensive patients. Moreover, patients reported feelings of comfort and calmness following the therapy.

Most participants also showed reductions in diastolic blood pressure, with an average decrease of approximately 8–10 mmHg. The most significant reductions were observed in sample number 8 (from 145/80 mmHg to 120/70 mmHg), sample number 14 (from 140/90 mmHg to 120/80 mmHg), and sample number 16 (from 180/120 mmHg to 160/90 mmHg). Acupressure therapy administered at specific pressure points has been shown to induce relaxation and assist in lowering blood pressure in individuals with hypertension.

This therapy may serve as a non-pharmacological alternative or complementary approach in managing hypertension, particularly for patients with mild to moderate high blood pressure. Thus, acupressure massage therapy has demonstrated positive effects in reducing blood pressure and can be considered a valuable component of promotive and preventive strategies in hypertension management.

Conclusion

Acupressure therapy applied to specific pressure points has been shown to promote relaxation and assist in lowering blood pressure in individuals with hypertension. This therapy may be utilized as a non-pharmacological alternative or complementary treatment in the management of hypertension, especially in patients with mild to moderate

elevations in blood pressure. Therefore, acupressure massage therapy has proven effective in reducing blood pressure and can be considered part of promotive and preventive efforts in hypertension care.

The results of this activity indicate that acupressure therapy techniques successfully reduced blood pressure among hypertensive individuals. Following the intervention, most participants experienced a decline in their blood pressure levels. Acupressure therapy has been proven effective in reducing blood pressure by minimizing stress, enhancing blood flow through vasodilation, and lowering cardiac workload, which results in decreased heart rate.

Observations of the 16 hypertensive individuals who received acupressure massage therapy on May 29, 2025, showed a decrease in both systolic and diastolic blood pressure after the intervention. All respondents experienced reductions in systolic blood pressure, with decreases ranging from 10 to 25 mmHg.

The outcomes confirm that acupressure therapy has a measurable impact on blood pressure in hypertensive patients, with many reporting that the therapy induced feelings of comfort and tranquility.

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