

Complementary Therapy for Hypertension Control: Family Medicine Therapy and Tai Chi Gymnastics in the Community of Nengkelan Village, Bandung Regency

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Abstract

The purpose of community service is to provide new insights into a holistic approach to hypertension control and improve the quality of life of village communities through complementary therapy that combines Tai Chi gymnastics and family medicine therapy. This community service activity was implemented in Nengkelan Village, Bandung Regency. The activity lasted for 1 week. The stages of this activity consist of preparation, implementation, and evaluation. The results of a study in Nengkelan Village, Bandung Regency, showed that combining family medicine therapy with Tai Chi gymnastics can be an effective method to control hypertension. The use of complementary strategies that combine medical and non-medical therapies can have a positive impact on hypertension control in the community. Complementary therapy, which consists of family medicine therapy and Tai Chi gymnastics, is effective in controlling hypertension in the people of Nengkelan Village, Bandung Regency. The implementation of this therapy in the community can be one of the solutions to overcoming the problem of hypertension holistically and improving the quality of life of hypertension patients.

A. Introduction

Hypertension or high blood pressure disease is a major risk factor for atherosclerosis, heart failure, stroke, and kidney failure (Gosmanova et al., 2016). Hypertension increases the risk of premature mortality, and systolic and diastolic pressure increases, damaging blood vessels in the heart, kidneys, brain, and eyes (Azizah et al., 2022). World Health Organization (WHO) data in 2015 showed that 1.13 billion people worldwide suffer from hypertension, or 1 in 3 people worldwide are diagnosed with hypertension. The number of people with hypertension is expected to increase every year, and it is estimated that by 2025 there will be 1.5 billion people suffering from hypertension, with 9.4 million deaths due to hypertension complications each year (Kurniawati, 2020).

The World Health Organization (WHO) states that hypertension cases are increasing worldwide (Fadia et al., 2023). Hypertension is an increase in systolic blood pressure of more than 140 mmHg and diastolic blood pressure of more than 90 mmHg twice for five minutes in a state of calm or rest, indicated by systolic and diastolic blood pressure tests (Afriani et al., 2023). Persistent increases in blood pressure, or high blood pressure, can cause damage to the kidneys (kidney failure), heart (coronary heart disease), and brain (stroke) if not treated immediately (Al Rasyid et al., 2022).

Hypertension, a non-communicable disease, is difficult to detect because it has no specific signs or symptoms. Therefore, hypertension is also known as the "silent killer" (Cristanto et al., 2021). One type of non-communicable disease (NCD) that is still the leading cause of premature death worldwide is

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hypertension (Oktarina & Ayu, 2024). Until now, the government is still paying attention to public health problems, especially those caused by non-communicable diseases. Awareness of the importance of health is still uneven in every region, including the prevalence of hypertension in the community (Hamzah et al., 2022).

Hypertension has very different symptoms, may not be present at all or have mild headaches or other symptoms similar to the symptoms of other diseases (Currie et al., 2021). Headache or heaviness in the nape of the neck, dizziness (vertigo), heart palpitations, fatigue, blurred vision, ringing in the ears (tinnitus), and nosebleeds are symptoms (Maulana, 2022). According to the World Health Organization (WHO) and the International Society of Hypertension (ISH), seven out of ten people who suffer from hypertension in adulthood do not get adequate treatment. Not many people know about the importance of managing hypertension because of the many responsibilities that exist in middle adulthood. Most people with hypertension in middle adulthood do not realize that they have hypertension or get treatment (Puspitosari & Nurhidayah, 2022).

One of the most common diseases in Nengkelan Village, Bandung Regency, is hypertension. In this area, there are many cases of hypertension. Some of the causes include an unhealthy diet, lack of physical activity, and high levels of stress. Treatment of blood pressure with antihypertensive drugs is effective, but it is often not accompanied by the lifestyle changes necessary for long-term control.

The results of the assessment on 64 heads of families in Hamlet 1, Nengkelan Village, found that as many as 42% (27 families) of family members suffered from hypertension; 56% of the families do not regularly take hypertension medication and 47% of families do not routinely carry out physical activities such as leisurely walks and regular exercise. As a result of the Village Community Deliberation (MMD), the problems found in Nengkelan Village include an increase in cases of degenerative diseases; ineffective management of health and lifestyle behaviors tend to be at risk: lack of physical activity.

One approach that can be considered for hypertension control is complementary therapy, which is a combination of medical treatment and alternative approaches. Tai Chi gymnastics is one of the increasingly popular forms of complementary therapy. If done correctly, Tai Chi exercises, a traditional Chinese sport that involves slow movements, deep breathing, and meditation elements, can lower blood pressure in people with hypertension (Emilyani et al., 2023).

Family drug therapy can also help in controlling hypertension. This treatment includes the use of herbal herbs that have been traditionally used for a long time (Mphuthi & Husaini, 2022). Many families in Nengkelan Village know about herbal medicines that can be used to treat various diseases, such as hypertension. Government Regulation Number 103 of 2014 concerning Traditional Health Services stipulates that people can carry out health care independently and correctly by utilizing Family Medicinal Plants. One example of the use of family traditional medicine is to treat hypertension, which is an increasing problem (Indriani et al., 2022).

Based on the description above, this article will discuss the effectiveness of complementary therapies that combine Tai Chi gymnastics and family drug therapy in controlling hypertension in the community of Nengkelan Village, Bandung Regency. This research is expected to provide new insights into a holistic approach to hypertension control and improve the quality of life of the village community.

B. Methods

The implementation of this community service activity was carried out in Nengkelan Village, Bandung Regency. The methods used in this community service activity include providing health education and demonstrations of family medicinal plants and tai chi gymnastics. The activity lasted for 1 week. With the following stages: 1) Preparation for the implementation of community service activities starting from October 2023 starting from the preparation for the implementation of community service activities. 2) The implementation of activities will be carried out in the fourth week of November 2023. 3) The evaluation was carried out in the first week of December 2023 by carrying out tai chi exercises again in the community and measuring blood pressure in families. Evaluation of this community service activity whether there is an increase in the knowledge and ability of the people of Nengkelan Village for hypertension control through complementary therapies: family medicinal plants and tai chi gymnastics.

C. Results and Discussion

The implementation of community service activities runs according to schedule and receives good appreciation from the community, this can be seen from the enthusiastic reception of the community in tai

chi gymnastics activities and demonstrations. Most of the people who attended were housewives and health cadres. This can be because the majority of family heads are men who work as laborers. Participants who attended were able to answer questions given related to signs and symptoms of hypertension, hypertension treatment, and family medicinal plants. Participants were able to demonstrate tai chi exercises, even though they needed to repeat two – three times. The public was given educational materials through hard copy power points and links to Tai Chi gymnastics video recordings to be able to watch gymnastics video recordings.

One of the most common health problems in the community is hypertension or high blood pressure. To control hypertension, there are many alternative therapies that can be used in addition to medical treatment, such as family medicine therapy and Tai Chi gymnastics (McGee, 2021). The use of these drugs must be done with caution and in accordance with the existing instructions. To ensure that it is safe and effective, ongoing consultation with healthcare professionals is required.

Tai Chi, a type of physical exercise that originated in China, has been known to have many health benefits, one of which is hypertension control (Zhong et al., 2020). In Nengkelan Village, Bandung Regency, Tai Chi gymnastics is routinely carried out with the local community participating. This activity improves overall health in addition to controlling hypertension. The implementation of this community service activity is by Step 1) Education: The community is educated about the importance of controlling hypertension and complementary therapy. 2) Training: The people in the village are educated to perform Tai Chi gymnastics properly and regularly. 3) Approach: Healthcare workers help residents use family drug therapy to ensure safe and appropriate use.

Community service activities in Nengkelan Village for hypertension sufferers have found that complementary therapies, such as Tai Chi gymnastics, with gentle movements and regular breathing, improve blood circulation and reduce stress. The use of family medications also helps control blood pressure without significant side effects. The high adherence in the intervention group shows how important a holistic approach in the treatment of hypertension involves social and psychological aspects in addition to medical aspects. This is in line with research conducted by Salini & Sutantri (2023) which means that Tai Chi gymnastics is very beneficial for lowering blood pressure. In addition to the tai chi gymnastics movement which includes regular body-mind-breath movements, this movement can increase the release of nonadrenaline through the urine, reduce cortisol levels, and reduce sympathetic nerve activity. All of this has a positive impact on the heart, with a stable heart rate and blood pressure dropping towards normal (Andrini et al., 2023).

Based on research Kristinawati et al. (2023) finding new information about family medicinal plants commonly grown in gardens can help treat hypertension. Commonly used cooking ingredients, such as ginger, bay leaves, and pandanus, can also help treat hypertension. The results show that health education improves the knowledge of most health staff. Knowledge about hypertension and the use of natural ingredients from plants that are commonly grown by the community can be used as an alternative to hypertension treatment.

In Nengkelan Village, Bandung Regency, research shows that combining family medicine therapy with Tai Chi gymnastics can be an effective method to control hypertension. Families can be educated about the importance of maintaining their blood pressure, using medication properly, and living a healthy lifestyle. This can increase public awareness and compliance with hypertension control. Tai Chi, a light and easy-to-do exercise, also helps lower blood pressure and stress. The use of complementary strategies that combine medical and non-medical therapies can have a positive impact on hypertension control in the community. To improve the health and welfare of the community.



Figure 1. Documentation of Activities

D. Conclusion

Complementary therapy, which consists of family medicine therapy and Tai Chi gymnastics, is effective in controlling hypertension in the people of Nengkelan Village, Bandung Regency. The implementation of this therapy in the community can be one of the solutions in overcoming the problem of hypertension holistically and improving the quality of life of hypertension patients.

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