

# Community Empowerment in The Prevention and Management of Hypertension

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## Abstract

**Background:** Lack of public knowledge and awareness of healthy lifestyle habits to prevent hypertension. **Purpose:** Community empowerment in helping and increasing community awareness and ability to treat hypertension. **Methods:** FGD to form a hypertension care group. Education and Training of cadres and groups caring for hypertension, early detection, prevention, and management of hypertension. Developing a routine health check program, getting rid of cigarettes, exercising regularly, maintaining a balanced diet, getting enough rest, managing stress (CERDIK) as modified by the service team, and providing assistance to cadres or groups caring for hypertension in utilizing health facilities. **Result:** Restructuring of health cadres/hypertension care groups, cadre assistance has been implemented to conduct health checks, increased knowledge about prevention and management of hypertension, the knowledge score during the pre-test was 60, and after counseling the score increased to 85. **Conclusion:** Restructuring and providing assistance and counseling to cadres to increase knowledge and motivation to actively help residents live a healthy lifestyle to prevent and overcome hypertension.

**Keywords:** Community Empowerment, Management of Hypertension, Prevention. Prevention

## Introduction

Hypertension is one of the most common non-communicable diseases (NCDs) in

Indonesia, with its prevalence continuing to increase. Hypertension can cause various serious complications, such as stroke, heart attack, and kidney failure, as well as increasing health burdens and costs. Preventing and controlling hypertension requires integrated and sustainable efforts, including community empowerment (1). Data from the World Health Organization (WHO) shows that Indonesia has a higher death rate due to hypertension compared to the Southeast Asian average. Public health in Indonesia is also disrupted by limited health infrastructure, a lack of trained medical personnel, and a lack of access to effective medicines. If not handled properly, the costs of treating hypertension can increase the burden on people's welfare and can affect productivity and quality of life. Hypertension can affect people's quality of life. Hypertension can cause limited physical activity, a lack of self-awareness, and a lack of participation in social activities. In the Ngasinan Village, There are still people who do not realize the importance of health, and still do not care about their own health apart from that, people also have unhealthy living habits, such as consuming foods high in salt and fat and a lack of physical activity, which increases the risk of hypertension (2) (3). Many people pay less attention to the diet of family members who suffer from hypertension, for example, they already know that their family/parents suffer from hypertension, but for daily meals it is still the same as healthy family members, for example in serving vegetables and side dishes are still salty, so that these hypertension sufferers find it difficult to lower their blood pressure. Bulu Community Health Center has carried out many activities to reduce the incidence of hypertension, such as elderly posyandu activities, which are regularly held once a month, with blood pressure checks on the elderly. Providing medication if the elderly have complaints, education, and sports activities in the form of elderly exercise (4). However, the incidence of hypertension in the Bulu Health Center area is still high, namely 11,134 people, with 5,515 male sufferers and 5,619 female sufferers, and 580,262 people aged over 15 years, 52.7% of whom have hypertension (1). In Bulu District, there is 1 community health center that serves patients with inpatient care from 12 village midwives and 3 community health centers, with the highest BOR at Bulu Community Health Center being 30.30% with an average treatment of 2.10 days (5).

## Priority Issues

It is important to improve hypertension management in primary health care and the community, especially in low- and middle-income countries (LMICs) (6). Non-pharmacological interventions: Lifestyle modifications including weight control, eating a balanced diet, limiting salt, exercising regularly, and consuming alcohol in moderation are important for the management and prevention of hypertension. Patient empowerment: The key to effective hypertension management is giving patients the tools they need to take control of their condition and adhere to their treatment regimen. (7) Community empowerment: Effective health promotion and disease prevention depend on developing community ownership, leadership, and capacity (8) Methods of health management: Hypertension can be reduced by putting into practice community-based interventions that emphasize advocacy, empowerment of the person and the community, and reorienting health care.

## Method

Formation of hypertension groups. This activity can improve the health status of people from Ngasinan Village (9). The head of the community service team coordinates with health center officers/midwives and community representatives regarding hypertension problems in the Ngasinan Village area. Furthermore, at the second meeting, a coordination meeting was held between the service team and partners regarding the activity plan to be carried out to overcome the problem. Implementation stage: Implementation of services: formation of hypertension care community groups. The service team forms hypertension care community groups/restructuring of health cadres consisting of active and productive mothers who are willing to become health cadres for handling hypertension.

Education, training, and assistance to health cadres and the community in managing hypertension are expected to be able to change community behavior to pay more attention to health, such as exercising often and reducing excess salt consumption to prevent hypertension (10) (11). Participants in this community service were 6 health cadres, 6 representatives of PKK mothers, community leaders and hypertension sufferers, which in total numbered around 40 people. The training was given by the head of the community service team, Marni, and from the Instituto Superior Cristal

Timot Leste, namely Domingos Soares along with other teams from Universitas Duta Bangsa. Students helped implement the training as facilitators, recorders, and documenters.

Development of the CERDIK Program: The CERDIK program, modified by the community service with Can be an effective solution in empowering the community to prevent hypertension. This program includes activities such as routine health checks, elimination of cigarette smoke, regular physical activity, a healthy and balanced diet, adequate rest, and emphasizing management (11).

Activity Evaluation. After the activity is completed, an evaluation is carried out. activities with questionnaires and observations and demonstrations of providing counseling and blood pressure checks by cadres.

## Results



**Figure 1. Health Cadres / Hypertension Care Group**



**Figure 2. Provision of Material on Prevention and Management of Hypertension:  
CERDIK Program**



**Figure 3. Presentation by Dr. Domingos Soares, Timor Leste**



**Figure 4: Community Service Participans**





**Figure 5**

**Activity Evaluation: Community empowerment: Cadres can provide health education to hypertension sufferers and at the same time encourage them to actively carry out health checks at Posyandu.**

### **Discussion**

The first activity after the discussion reached an agreement was the restructuring of health cadres, active residents who are willing to do social tasks to improve health levels in a village (figure 1). There are 6 health cadres at Posyandu Angrek 4 Ngasinan Village. There are 7 Posyandu in 1 Village, so that 1 Village has more than 40 cadres to help health workers in Ngasinan Village. Health cadres who function as hypertension care groups are very good at helping health workers in the Bulu Health Center area, because the presence of health cadres, it helps health workers monitor hypertension sufferers directly more closely. The involvement of Health Cadres is an innovation that helps health workers to prevent and overcome hypertension in the community (12).

Health cadres who have been formed are given education and training on how to prevent and overcome hypertension (13) to improve their abilities and knowledge about preventing and overcoming hypertension according to figures 2 and 3 (14). Providing

education on prevention and management of hypertension (15) with the development of the CERDIK program increases public knowledge, especially among hypertension sufferers and health cadres (16). Community service activities carried out can provide knowledge and lower blood pressure in hypertension sufferers (17). Providing health education on hypertension can increase knowledge on the prevention and management of hypertension (18), and also motivate cadres in efforts to help control hypertension NCDs (19). Providing counseling and training needs to be done continuously (20).

Evaluation of this international community service activity can be seen from several aspects, the first is the increase in knowledge of health cadres and the community with hypertension which can be seen from the pre-test and post-test scores, namely an increase from an average score of 60 to an average score of 85. The community service activity process went very well, when the speaker provided counseling, all participants, both cadres and hypertension sufferers, listened and actively participated in asking questions and the speaker answered the participants' questions. Likewise, when participants were asked questions by the speaker, participants were able to answer the questions correctly. The cadres greatly appreciated the activities that had been followed. Another activity evaluation is that health cadres can provide counseling and motivation for the community to actively go to integrated health posts to check their health (20)

### **Conclusion**

The empowerment of the Ngasinan Village community has been running well, the health cadres who have been formed and restructured have been able to carry out their duties well, such as conducting health checks: checking blood pressure, conducting assessment interviews, providing health education on hypertension, healthy lifestyles by implementing the CERDIK program and providing motivation / inviting the community to carry out routine health checks at the integrated health post.

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### **Conflict of Interest**

There is no conflict of interest among the authors.

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