
Skills Assistance To Families And Cadres In The Management Of Hypertension In The Elderly In Ladang Baro Village, Meukek District, South Aceh Regency

Syam Irwan¹⁾, Cut Rahmi²⁾, Rasima³⁾

^{1,2,3)}Prodi D-III Keperawatan Aceh Selatan Poltekkes Kemenkes Aceh

*Corresponding Author

Email: syamirwan.s.kep@gmail.com

Abstract

Hypertension is an abnormal increase in systolic pressure of 140 mmHg or more and diastolic pressure of 120 mmHg. In Indonesia, hypertension ranks 2nd out of the 10 most common diseases in hospital outpatients. Hypertension cannot be cured but can be controlled. Regular blood pressure checks are key in the management of the disease. Seeing this data, it is important to provide the right information through simple technical assistance to families, cadres, and the elderly to prevent and manage hypertension. The community service activity carried out is skill assistance to families and cadres in managing hypertension in the elderly in Ladang Baro Village, Meukek District, South Aceh Regency. The problems faced by partners include the lack of knowledge and skills of families and cadres in managing hypertension in the elderly. The purpose of this community service activity is to increase the knowledge and skills of the elderly, families, and cadres in managing hypertension. The problem solution offered in this community service is to provide education about hypertension and provide training to health cadres and selected communities on how to use digital tensimeters for blood pressure checks so that they can carry out appropriate management related to the disease they experience. The output of community service activities is expected to be articles submitted in accredited national journals or National Journals with ISSN and leaflets or booklets.

Keywords: Management Of Hypertension, Assistance To Families

INTRODUCTION

The aging process is a lifelong process, not only starting from a certain time but starting from the beginning of life. Growing old is a natural process that means a person has gone through three stages of life, namely childhood, adult, and old (Sholihach et al, 2022).

Population aging is related to the demographic transition and epidemiology of the elderly. Population aging has taken place rapidly, especially in developing countries in the first decade of the millennium. The sudden emergence of large numbers of older people has particular implications for nursing and healthcare (Sunaryo et al, 2016).

The large number of elderly people in Indonesia in the future has both positive and negative impacts. It has a positive impact if the elderly population is healthy, active and productive. On the other hand, the large number of elderly people becomes a burden, if the elderly have health problems that result in increased health care costs, decreased income, increased disability, lack of social support, and an environment that is not friendly to the elderly population (Ministry of Health RI, 2017).

The elderly is someone who is 60 years old and above according to WHO. The elderly have the risk or possibility to experience various diseases, especially degenerative diseases when compared to young age. Degenerative diseases are chronic chronic diseases that affect

the quality of life and productivity of a person. One of the degenerative diseases in the elderly that often occurs without symptoms is hypertension (Kholifah, 2016).

Hypertension is an abnormal increase in systolic pressure of 140 mmHg or more and diastolic pressure of 120 mmHg. Hypertension can be defined as persistent blood pressure, where the systolic pressure is above 140 mmHg and the diastolic is above 90 mmHg. In the elderly population, hypertension is defined as a systolic pressure of 160 mmHg and a diastolic pressure of 90 mmHg (Ibrahim, 2011).

According to World Health Organization (WHO) Data 2019 shows about 1.13 billion people in the world suffer from hypertension, which means every 1 in 3 people in the world suffer from hypertension, the highest global prevalence of hypertension is currently 22% of the total world population.. It is estimated that by 2025 there will be 1.5 billion people affected by hypertension, and each year an estimated 9.4 million people die from hypertension and complications (Ministry of Health, 2019).

The prevalence of hypertension in Indonesia based on measurement results in the population aged ≥ 18 years is 34.1%, the highest in South Kalimantan (44.1%), while the lowest in Papua (22.2%). The estimated number of hypertension cases in Indonesia is 63,309,620 people. In Indonesia, hypertension ranks 2nd out of the 10 most common diseases in hospital outpatients. Hypertension occurs in the age group 35-44 years (31.6%), age 45-54 years (45.3%), and age 55-64 years (55.2%). From the prevalence of 34.1%, it is known that 8.8% were diagnosed with hypertension and 13.3% of people diagnosed with hypertension did not take medicine, and 32.3% did not take medicine regularly (Risksedas, 2018).

The number of hypertension sufferers in 2018 in Aceh based on the results of measurements in the population aged ≥ 18 years was 25,884 people, or 26.45%. Hypertension occurs in men (23.36%) and women 29.42%) (Risksedas, 2018). Based on data from the South Aceh District Health Office in 2022, the number of elderly people with hypertension was 8,167 cases. And is the first of the 10 largest diseases in the elderly age group in the South Aceh District (South Aceh Health Office, 2022). The initial survey conducted by the researcher obtained the results of data collection on the number of hypertension sufferers from January-December 2022 as many as 161 people from 532 visits. For Ladang Baro Village, the number of elderly people with hypertension was 26 people out of a total of 48 elderly people (Meukek Health Center, 2022).

Hypertension occurs due to decreased tissue elasticity and thickening of the arterial walls which causes increased cardiac output. Arteries experience obstacles to the flow of blood, due to stiffness and cannot expand optimally. Blood pumped strongly by the heart forces the arteries to pump it. The arteries are unable to flow and the arterial blood vessels narrow which causes increased blood pressure or hypertension. If this condition is left for a long time (persistent) and does not receive immediate treatment, it can cause damage to organs such as the risk of coronary heart disease, heart failure, stroke, and kidney disease (Ministry of Health of the Republic of Indonesia, 2019).

Hypertension cannot be cured but can be controlled. Regular blood pressure checks are key in the management of the disease. The community must understand their condition and be able to control their health condition through blood pressure checks with simple techniques and tools. The use of a digital tensimeter is one solution to facilitate screening and early detection

of the disease by the community and for the community (Subandrate and Santoso, 2017).

Seeing the data above, it is important to provide the right information through simple technical assistance to families, cadres, and the elderly for the prevention and management of hypertension in order to reduce morbidity, complications, and mortality due to hypertension. This community service activity will provide education related to hypertension. Given that the complications of hypertension are numerous and dangerous, this community service activity is considered important so that further complications from hypertension can be prevented.

This activity was carried out in Ladang Baro Village, Meukek District, South Aceh Regency. The main livelihood of the villagers is as laborers/farmers. Some residents work as civil servants, traders, and craftsmen. As villagers, many people are still reluctant to check their health with health workers unless they are already suffering from a serious illness. With this activity, it is hoped that it can increase public awareness, especially among the elderly and families in Ladang Baro Village, about the dangers of hypertension and awareness to increase management activities for hypertension. In addition, it is also hoped that health cadres in the village will be trained in detecting hypertension based on symptoms and blood pressure checks.

From the description above, the authors are interested in conducting community health services with the title "Skills assistance to families and cadres in managing hypertension in the elderly in Ladang Baro Village, Meukek District, South Aceh Regency".

Results and Discussion

Based on the problems faced by partners, the solutions offered by the proposer through this non-communicable disease reduction program include:

1. Conduct education about hypertension:
 - a. Definition
 - b. Causes
 - c. Signs and Symptoms
 - d. Complications
 - e. Management (Prevention and treatment)
2. Evaluate pre and post-educational activities on the elderly, families, and cadres
3. Provide training to selected health cadres and communities on how to use digital tensimeters for blood pressure checks.
4. Application of the results of training in simple blood measurement techniques by cadres to the community directly

RESEARCH METHODS

Program Implementation

The method used in this community service activity consists of three stages, namely:

1. Preparation Stage
 - a. Strategy Meeting
This was done by involving Keucik (Village Head), Village Midwives, and Cadres to discuss the number of hypertension cases in the elderly in Gampong Ladang Baro and design strategies and planning for community service programs to be implemented.

- b. Site survey
The survey was conducted a week before the activity to organize the layout of the equipment and the shape of the activity.
 - c. Preparation of Facilities and Infrastructure
 - d. Preparation of venue, tools, and media for education and skills training.
2. Implementation stage
- The implementation stage is the main stage of the community service program. The targets of activities at the implementation stage are the elderly, families, and cadres in the village of Ladang Baro. Activities will be divided into 3 sessions with the distribution of activity implementation as follows:
- a. Extension
The core activity of this community service is counseling or material exposure regarding the basic concepts of hypertension. Counseling or material exposure is delivered by the speaker implementing community service activities using lectures, question and answer, and demonstration methods.
 - b. Cadre Training
This activity is carried out by providing education and training skills to cadres and families on how to check blood pressure in the community using a digital tensimeter.
 - c. Pre-Test and Post-Test
 1. Pre-test is an activity to test the target's level of knowledge about the material to be delivered, including knowledge about hypertension. This activity was carried out before the presentation by the speaker. Test the level of knowledge using a questionnaire containing 15 questions with multiple choices related to the material provided to the community.
 2. Post-test is an activity to test the level of knowledge of the target regarding the material that has been delivered. This activity aims to determine the increase in community knowledge from before listening to exposure to counseling with knowledge after listening to exposure to counseling that has been delivered by the speaker.
 - d. Leaflets were distributed by students to all targets. The leaflet contains important information about hypertension and how to measure blood pressure.
3. Evaluation Stage
- After the implementation of community service, the team evaluated post-test activities to measure the extent of the increase in community knowledge related to hypertension.

Forms of Partner Participation

- Partner participation in the implementation of this community service activity includes:
1. Community Leaders of Ladang Baro Village, Meukek District participated in providing permits, facilities, and infrastructure for counseling activities, and facilitating the implementation of this service activity.
 2. Ladang Baro village health facilities participated in facilitating the smooth running of this service activity
 3. Partners provide a place and human resources who are ready to provide education, namely people with the age of elderly (45-65 years) as many as 28 people, 20 elderly families, and

2 cadres to be given training on how to measure blood pressure using a digital tensimeter and are willing to do monitoring and evaluation.

4. Provide assistance and assessment of the achievements of the program that has been implemented between the proposing team and partners. Evaluation of program implementation and program sustainability after community service activities are completed.

Team Expertise and Duties

The performance of the Community Service Unit of the Poltekkes Kemenkes Aceh as a unit that oversees all activities of lecturers and students in the implementation of community service includes:

1. The Community Service Unit informs each proposal submission information following applicable guidelines.
2. The Community Service Unit selects the proposals.
3. The Community Service Unit coordinates the implementation of community service in an institutionalized manner, both administratively and financially.
4. The Community Service Unit monitors and evaluates the implementation of community service in the field.
5. The Community Service Unit facilitates every community service activity under the available facilities.

The human resources involved in this activity are lecturers who have the expertise to solve partner problems and students who help with technical aspects. The following is presented in Table 3.1 about the participation of each lecturer in the form of duties and obligations.

Table 1 Student and Lecturer Participation in the Form of Duties and Obligations

No.	Name	Status	Tasks
1.	Ns.Syam Irwan, M.Kep	Head	Organize community service activities, from accommodating information, problems, and alternative solutions, to monitoring and reporting activities, and communication with other parties.
2.	Ns.Cut Rahmi, M.Kep	Member 1	Designing counseling methods and skills training to improve knowledge and skills in hypertension management
3.	Dra.Rasima, M.Pd	Member 2	the local community for the smooth running of activities
4.	Riska Arfida	Student	Preparation of demonstration of knowledge and skills on how to measure blood pressure by cadres and families
5.	Ican Karli Agusrianda	Student	Checking the blood pressure of

			participants and facilitating the community to ask questions.
6.	Raudhatul Badriyah	Student	Distributing activity questionnaires and facilitating the community to ask questions

Location and Time

1. Place of Activity

This community service activity was carried out in Ladang Baro Village, Meukek District, South Aceh Regency.

2. Activity Time

Activities have been carried out on June 3, 2024 (Attachment to the activity schedule)

RESULTS AND DISCUSSION

Result

Community service was carried out in Ladang Baro Village, Meukek District, South Aceh Regency where the target activities were the elderly and families (companions) who experienced hypertension and elderly cadres in Ladang Baro Village. Activities were carried out by 50 community members. The event was attended by the village head and other community leaders for the smooth running of this community service activity. The description of activities will be reported as follows:

1. Preparation

Preparation for the implementation of this community service activity involves lecturers, students, and community service targets, namely the elderly, families who experience hypertension, and elderly cadres in Ladang Baro Village, Meukek District. In preparation, the targets have received socialization that they will receive counseling and training on how to measure blood pressure using a digital tensimeter to manage hypertension, so they have prepared themselves to attend the specified activities. The community service team also prepares all supporting equipment starting from obtaining permits to carry out activities, activity venues, tools and materials needed, counseling media and skills training, consumption, and evaluation tools for activities (pre and post-test sheets).

2. Implementation

The implementation of community service activities was carried out on Monday, June 3, 2024, at the TPA hut in Ladang Baro village, Meukek sub-district, South Aceh Regency. The activity began with an opening ceremony by members of the community service team followed by measuring the blood pressure of all participants as well as filling out the Pre-test questionnaire to find out the extent of participants' knowledge about hypertension. Pre-test results are shown in the table below:

Table.2. Knowledge of families with hypertension before counseling and training in the management of hypertension in the elderly in Ladang Baro Village, Meukek District, South Aceh Regency.

No.	Category	Total	%
1.	Good Simply	3	6
2.	Less	9	18
3.		38	76
Total		50	100

Source: Primary Data 2024

Based on the table above, it can be seen that most families are in the category of lack of knowledge about hypertension management, namely 76%.

Furthermore, the activity continued with the provision of health counseling by the service team and assisted by students according to their respective duties. Counseling is given by lecture and discussion methods using power point media, LCD and leaflets. then continued with skill training to measure blood pressure by cadres and families (representative) using a digital tensimeter. During the provision of counseling and skills assistance, the participants seemed enthusiastic in participating in the activities.

3. Evaluation

After counseling and skills training are continued with post-test activities, the post-test results can be seen below:

Table.3. Knowledge of families with hypertension after counseling and training in the management of hypertension in the elderly in Ladang Baro Village, Meukek District, South Aceh Regency.

No.	Category	Total	%
1.	Good	31	62
2.	Simply Less	19	38
3.		0	0
Total		50	100

Source: Primary data 2024

Based on the table above, it can be seen that most families are in the category of good knowledge about hypertension management, which is 62%.

Before the event was closed, blood pressure measuring devices (4 Digital Tensimeters and 2 manual tensimeters) were handed over to the Village Head and Cadres, and a group photo with the participants.

Activity Outputs

The target output to be achieved in this activity is to increase the skills of cadres and families at partner locations and also to increase the knowledge of the elderly, families and cadres related to hypertension in order to protect themselves against complications of

hypertension. The details of the outputs to be achieved in this PKM program can be described in the table below:

Table 4. Outputs of Community Service Activities

No.	Outputs	Funding Source
Required Outputs		
1.	Scientific articles published in national journals are Not accredited or international with ISSN and Eissbn	DIPA POLTEKKES ACEH
2.	Leaflet/booklet	
Additional Outputs		
1.	Intellectual property, patent, copyright, trademark, trade secret, industrial product design, product protection.	DIPA POLTEKKES ACEH



Figure. 1 Measuring the blood pressure of students



Figure. 2 Health Counseling About Hypertension

CONCLUSION

Community service activities have run according to the design that has been prepared. The community is very enthusiastic about the counseling related to Hypertension Disease. Because it is one of the leading targets in increasing community knowledge through counseling and health education. Family and cadre assistance is very important for the management of hypertension in Ladang Baro Village, Meukek District, South Aceh Regency so that it is very useful and can apply these skills to the community. This activity is needed as an effort to support the government in efforts to prevent non-communicable diseases, especially hypertension.

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