

# Empowerment and training in making herbal tea to utilize herbal plants and prevent degenerative diseases

Herman Herman, Andi Tenri Kawareng, Arman Rusman

Department/Faculty of Pharmacy, Mulawarman University  
Jl. Kuaro, Gn. Kelua, Samarinda, 75119, Indonesia

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## ABSTRACT

Teluk Pemedas is one of the sub-districts in the Samboja sub-district, Kutai Kartanegara, East Kalimantan Province. Previous health examination data showed that the presentation of hypertension in the Teluk Pemedas community was 28% and hypercholesterolemia was 20%. The use of herbal plants as an alternative treatment has been widely used. Plants that have antihypertensive and antihypercholesterolemic activity are rosella flowers, pandan leaves, and cinnamon. Research results show that this plant can lower blood pressure for hypertension sufferers. The aim of carrying out this activity is to increase public knowledge about degenerative diseases and the use of local herbal plants to add economic value. This activity was carried out in two stages, with an education method regarding degenerative diseases, then continued with a training method for making herbal tea preparations from a combination of rosella flowers (*Hibiscus sabdariffa*), pandan leaves (*Pandanus amaryllifolius*) and cinnamon (*Cinnamomum burmanii*). The partner of this activity is Dasawisma Teluk Pemedas sub-district, Samboja, Kutai Kartanegara East Kalimantan. This activity provides benefits to the community regarding efforts to prevent degenerative diseases and implement a healthy lifestyle and improve skills in processing herbal plants.

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## 1. INTRODUCTION

Community Empowerment is a process of developing, becoming independent, self-sufficient and strengthening the bargaining position of the lower levels of society against pressing forces in all fields and sectors of life. The concept of village community empowerment can also be understood from two points of view. Firstly, empowerment is interpreted in the context of placing the position of the community. The community is not the object of the recipient of benefits (beneficiaries) who depend on gifts from external parties such as the government, but is in a position as a subject or agent or participant who acts independently (Eko, 2002). Republic of Indonesia Minister of Home Affairs Regulation Number 7 of 2007 concerning Community Empowerment Cadres states that community empowerment is a strategy used in community development as an effort to realize capability and independence in the life of the nation and state.

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Teluk Pamedas village is a part of the Samboja sub-district, Kutai Kartanegara Regency which is one of the locations for community service program students from the pharmacy faculty at Mulawarman University. Health Examination is one of the work programs carried out during the community service program process. The results of the health examination showed that hypertension and hypercholesterolemia were the diseases most suffered by residents of Teluk Pamedas with a percentage of hypertension of 28% and hypercholesterolemia of 20%. One of the causes of this is the lack of knowledge regarding the causes and methods of treating hypertension. Hypertension is a disease of high blood pressure with a systolic blood pressure of more than 140 mmHg and a diastolic blood pressure of more than 90 mmHg. Factors that influence this disease are age, gender, obesity, history of smoking, stress, and sodium intake. The causes of hypertension are divided into two, namely primary hypertension with a percentage of 95% or which is mostly suffered by the public while the etiology is unknown, the second type of hypertension is secondary hypertension at 5% with the cause being due to other diseases such as kidney parenchyma (Tika, 2021). Currently, the use of herbal plants as an alternative treatment has been widely used. Practicality and ease of finding them in the surrounding environment are added values in choosing herbal plants as alternative treatments. However, some groups of people are less interested in herbal tea due to a lack of knowledge, especially about its properties, proper processing methods, the presence of aroma and bitter or bland (tasteless) taste that usually arises from herbal tea as well as packaging that is less practical and attractive (Triandini et al., 2022) and it is considered that food without aroma can reduce its acceptability (Akbar et al., 2019). So, the purpose of adding pandan leaves and cinnamon powder to making this tea is to provide aroma and adding honey to provide taste. The taste and aroma of each preparation has its characteristics and make it appetizing and even enjoyable for consumers (Nurhayati et al., 2021).

Some plants known for their antihypertensive and antihypercholesterolemic properties include rosella flowers. Research findings indicate that a dry infusion of rosella flowers can effectively lower blood pressure in individuals with hypertension. Additionally, approximately 32 out of 50 households in Dasawisma Teluk Pamedas cultivate rosella flowers as ornamental plants, which are planted alongside other rhizome medicinal plants such as ginger, turmeric, and galangal. However, the Dasawisma group still lacks the skills to process these medicinal plants into herbal preparations, and their understanding of degenerative diseases remains insufficient.

The herbal preparation in question is herbal tea. The choice of herbal tea stems from the villagers of Teluk Pamedas' habit of consuming tea each morning before engaging in daily activities. Beyond its medicinal uses, this herbal tea has the potential to enhance the community's economic status by empowering the Dasawisma group to mass-produce and market it as a premium product of the Teluk Pamedas Dasawisma group. This initiative is crucial as Dasawisma Teluk Pamedas lacks a standout product for marketing purposes.

This community service program aims to increase the knowledge and skills of the Dasawisma of Teluk Pamedas subdistrict regarding hypertension and hypercholesterolemia through counseling and training in making herbal tea.

## 2. METHODS

Empowerment and training in making herbal tea from a combination of Rosella (*Hibiscus sabdariffa*), Pandan leaves (*Pandanus amaryllifolius*), and cinnamon (*Cinnamomum burmanii*) at Dasawisma Teluk Pamedas sub-district, Samboja, Kutai Kartanegara regency, was held in the Teluk Pamedas sub-district

office hall, which was attended by the Dasawisma Teluk Pamedas group 32 people, representatives from the sub-district office 2 people and 1 person from the community health center. Community service is carried out using the counseling method using a projector and loudspeakers, apart from training using direct practical methods, this activity uses a water heater kettle and a press, tea bags, digital scales and plastic boxes. carried out in several stages. Implementation of activities is carried out based on Table 1.

**Table 1.** Method of implementing activities

<b>Community Service Issues 1</b>	<b>Lack of knowledge about degenerative diseases (Hypertension and Hypercholesterolemia)</b>
Solution	Increased knowledge about degenerative diseases and diet management
Method	Counseling about degenerative diseases and presentation of material on how to regulate diet for hypertension sufferers as well as filling out pre and post counseling questionnaires
<b>Community Service Issues 2</b>	<b>The Dasawisma group does not yet have the skills to process herbal plants in the surrounding environment</b>
Solution	Skill improvement
Method	Tea-making demonstration and direct practice by the participants Rosella Flower Petals ( <i>Hibiscus sabdariffa</i> ), Pandan Leaves ( <i>Pandanus amaryllifolius</i> ) and Cinnamon ( <i>Cinnamomum burmanii</i> )

## Counseling

Counseling is carried out using educational methods in the form of providing several materials related to health problems experienced by partners. There were two educational materials presented, regarding degenerative diseases related to hypertension and hypercholesterolemia as well as education regarding the nutritional content and benefits of herbal tea. Both courses are carried out on the same day alternately and are delivered by presenters who are experts in their fields. This activity was carried out in the Teluk Pamedas sub-district office hall which was attended by sub-district officers and members of the Dasawisma group, some of whom suffered from hypertension and hypercholesterolemia. This education begins with filling out a questionnaire (pre-test) regarding hypertension and hypercholesterolemia as well as the nutritional content of herbal tea. The activities last for 1 hour each for each educational material consisting of delivering the material and discussions with participants. Participants were enthusiastic about discussing at this stage of the activity because of the history of hypertension and hypercholesterolemia that the counseling participants had. The final stage in this activity is filling out a questionnaire (post-test) and distributing *leaflets* containing information about herbal plants that are easily found in Teluk Pamedas sub-district as well as information about degenerative diseases.

It is hoped that this outreach activity will increase public knowledge about degenerative diseases such as hypertension and hypercholesterolemia as well as understanding the nutritional content of tea ingredients combined with rosella flowers (*Hibiscus sabdariffa*), fragrant pandan leaves (*Pandanus amaryllifolius*), and cinnamon (*Cinnamomum burmanii*), providing leaflets. The aim is for participants to be able to re-read health information so that they can indirectly change people's behavior based on the health messages conveyed during the training. Apart from that, through leaflets participants can convey educational material to other family members who are not present at the counseling activities.

## **Training**

The second activity stage is mentoring which is carried out after the counseling activities. The Pamedas Bay Dasawisma group was given training in making herbal tea combining rosella flower petals (*Hibiscus sabdariffa*), fragrant pandan leaves (*Pandanus amaryllifolius*), and cinnamon (*Cinnamomum burmanii*). The method applied was a demonstration of making tea and was directly practiced by the participants who were divided into several groups who were equipped with tools and materials for making, including dried simplicia of fragrant pandan leaves, dried simplicia of rosella tea flower petals and cinnamon powder as well as mineral water and honey.

Before the training on making tea, a presentation was first given on how to dry the simplicia used. The three simplicia used had different characteristics because some used flower petals, leaves and stem bark so the process for making the simplicia was different. The first stage for rosella flower petals is to collect the flower petals and do a wet sorting and wash them thoroughly under running water, then dry them which can be done using direct sunlight or using tools in the form of an oven or food dehydrator. After drying, dry sorting is carried out with the aim of separating the rosella flower petals that are completely dry from the petals that are not yet dry and ready to be used as an ingredient for making tea. Meanwhile, for drying pandan leaves, the steps are to collect fresh pandan leaves, wet sort them and wash them thoroughly in running water, then chop them into small pieces and continue with the same drying method used for drying rosella flowers. The next stage is grinding the dried pandan leaf simplicia into pandan leaf simplicia powder.

Cinnamon is a cooking spice that is easily available on the market, but in this training participants are taught to make cinnamon powder independently to reduce unwanted impurities. The steps for making cinnamon powder are collecting the cinnamon bark and washing it under running water. Next, it is dried using an oven or food dehydrator and coarsely chopped. After that, it is smoothed using a grinder, followed by using a blender, then filtered. This method is done repeatedly until all the bark becomes powder.

The equipment prepared is an electric kettle for cooking hot water used to brew tea, a digital scale for weighing simplicia according to a predetermined formulation. For weighing, the participants were first given an example of using a digital weighing tool considering that this tool is very sensitive to small objects and requires precision in its use. After the participants are proficient in using the tools, the next step is to introduce other tools, namely tea bags and press tools. To use the press, participants were informed about the temperature and length of time used to get good press results. Glasses and spoons were also prepared for each group so that after packaging the tea, it could be immediately brewed and drunk.

After introducing each tool and ingredient, the participants then weighed each dry simplicia and mixed it in a special container, stirred it well and put it in a tea bag. After that, participants were asked to carry out the press-process. This process is repeated until all the prepared simplicia are packed in tea bags. This process is carried out by all Dasawisma participants who take part in the training.

During the packaging process, questions and answers are carried out regarding what should and should not be done in making herbal tea. The next stage is brewing, in this process participants are given information about the temperature of hot water that can be used and the time used to brew the tea to get the desired properties, namely as antihypertensive.

## **Evaluation Design**

Evaluation is the process of designing sketches, obtaining and providing use of information in order to provide opinions on alternative decision options (Herlinda et al., 2018). Evaluation carried out

on activities takes the form of filling out evaluation questionnaires from participants regarding the implementation of activities and also evaluations carried out on participants regarding the series of activities carried out. This evaluation method is included in process evaluation, namely an assessment of the implementation of a plan that has been determined to assist implementers in carrying out activities and will then be able to help other user groups to determine program performance and estimate the results (Andriani & Afidah, 2020).

Evaluation of the extension activities, namely the two materials provided by looking at the difference in knowledge before and after the education was provided. Then the training is to see changes in participants' skills before and after the practice of making combined herbal tea. The method used is evaluation through the usership provided as well as direct observation and in-depth interviews with participants regarding the skills they have before and after the training.

The purpose of this activity is as input for improving activities at the next stage and as material for improving health information. Evaluation methods can be carried out in various ways including direct observation, filling out questionnaires, filling out Google forms, in-depth interviews or interviews using applications such as zoom meetings (Marlina et al., 2021).

### **3. RESULTS AND DISCUSSION**

This community service activity begins with a situation analysis in the form of coordination with the local government and students who have carried out community empowerment team at this location. Coordination is carried out to determine priorities for problems to be resolved. The results of the analysis show that there is a high rate of degenerative diseases in Teluk Pemedas Sub-District, more specifically, high levels of hypertension and hypercholesterolemia. Apart from that, in the village there are many plants that can be used as herbal ingredients. So that degenerative disease education was created and education was provided regarding the nutritional content of each herb used and dietary management for hypertension sufferers.

#### **Implementation Stages**

##### **Counseling**

The outreach activity was carried out in the Teluk Pamedas Sub-District office hall which was attended by the partners of this community service activity the Teluk Pamedas Dasawisma Group, totalling 32 people on Monday, August 8 2023. The aim at this stage is to increase knowledge about herbal tea combining rosella flower, pandan leaves and cinnamon including how to make it, benefits, and nutritional content of the tea. Apart from that, it can also increase knowledge about degenerative diseases.

Technically, this activity is given a questionnaire before and after providing educational material. This questionnaire functions to assess knowledge before and after education. The results of the distribution of participant characteristics can be seen in the Table 2.

Table 2 shows the distribution of characteristics of participants who took part in education about degenerative diseases and the nutritional content of herbal tea. Meanwhile, the results of the pretest and post-knowledge regarding the counseling provided can be seen in Figure 2.

The indicators for achieving the output targets for this activity are the pre-test and post-test scores. The comparison of these two values becomes the standard for the success of the activity.

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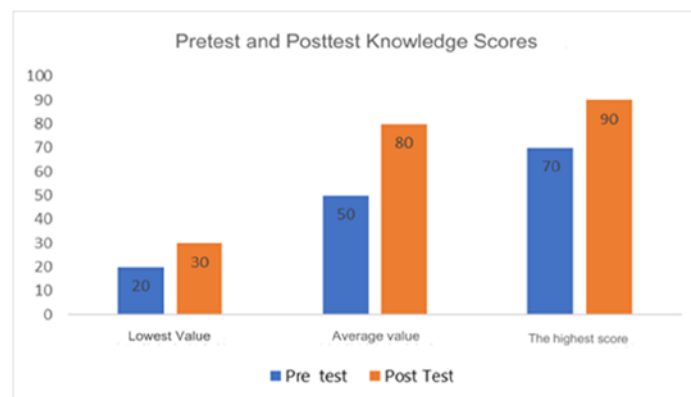
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**Figure 1.** Counseling on degenerative diseases and nutritional diet for hypertension sufferers

**Table 2.** Distribution of characteristics of participants about degenerative diseases and hypertension diet

Aspect	Amount	Percentage
<b>Gender</b>		
Man	6	19%
Woman	26	81%
<b>Age (Years)</b>		
30-35	18	56%
35-40	12	38%
>40	2	9%
<b>Work</b>		
Housewife	23	52%
Farmer/Gardener	2	5%
Office workers	5	11%
Fisherman	4	9%
<b>Last education</b>		
Not attending school	1	3%
Senior High School	16	50%
DIII	2	6%
S1	3	9%
S2	1	3%
<b>Total</b>	<b>32</b>	<b>100%</b>



**Figure 2.** Knowledge level scores before and after counseling

## Material selection

Material selection as part of the preparation stage for implementing community service. This stage aims to enable people to know the good ingredients that can be used in making tea. The selection of materials was carried out in 2 locations, the first location was Teluk Pamedas Village for collecting pandan leaves and rosella flowers, the second location was Samarinda City for selecting cinnamon because it was not found at the location. Community service was carried out in July 2023. Furthermore, after collecting the raw materials, several samples of the plants were taken to the pharmacy faculty laboratory at Mulawarman University for processing. Techniques for selecting raw materials need to be applied, for example, leaf picking which is done using the tea leaf picking formula. This is done to maintain the quality of the tea leaves produced (Amanto et al., 2020). This is carried out as a provision to increase the knowledge and training abilities of participants regarding the basic ingredients of a product especially natural ingredients that can be used as herbal medicines. The tea referred to in this dedication is not tea (*Camelia sinensis*). Plant organs that can be processed into herbal tea also vary from leaves, roots, stems, flowers, and fruit that come from plants but from several herbal plants (Triandini et al., 2022).



**Figure 3.** Plants as raw materials for making herbal tea: (1) Pandan leaves (*Pandanus amaryllifolius*); (2) Cinnamon (*Cinnamomum burmanii*); (3) Roselle flower (*Hibiscus sabdariffa*)

## Material processing

Material processing consists of 2 activities, making tea powder and making combination herbal tea products. The manufacture of tea powder was carried out in June 2023 after the material selection stage was carried out at the Mulawarman University pharmaceutical laboratory because at the community service location, several tools were not available. Making tea goes through several stages, consist of wet sorting, chopping, drying, and powdering. Herbal samples of rosella flowers and pandan leaves that have gone through the wet sorting process using clean, running water are then air-dried at room temperature and then dried using an oven at 35p c for 5 hours then powdered using a blender. Cinnamon that has passed the wet sorting stage is air-dried and crushed using a grinder and blender. The second activity for making tea products was carried out in August 2023 at the community service location, Teluk Pamedas, Samboja sub-district. This activity involved training participants using electric kettles, digital scales, press tools, and tea bags. At this stage, various methods are used so that when making it, it can produce good and desired results. The raw materials that are processed into herbal tea generally have medical properties so the use of herbal tea is a form of traditional medicine that has been proven effective to date (Etheridge & Derbyshire, 2020).

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**Figure 4.** Processing of herbal tea powder and making herbal tea

### Reviews

The series of activities that have been carried out include counseling regarding degenerative diseases and hypertension diet which was held in the hall of the Teluk Pamedas sub-district office. The second activity is training in making herbal tea which begins with selecting ingredients, this stage is carried out in 2 different locations, namely in the home environment of the Dasawisma who are participants in this training and Samarinda city, the next stage is processing of ingredients which is carried out in the Pharmacy laboratory at Mulawarman University and the final stage is tea making which is carried out in the Pamedas Bay sub-district office hall. After all these activities have been carried out, a post-test questionnaire is given, and this questionnaire is also given before the counseling (post-test) to see the level of understanding of the counseling participants. Apart from that, direct interviews and practical observations were carried out by the training participants. The results of the interviews showed that the training participants gained new knowledge through the training held and this was supported by the results of practical observations which were following the procedures previously presented, so that one of the objectives of this community service was achieved. namely improving the skills of Teluk Dasawisma in making herbal tea.

### Activity materials

The activity material in community service includes socialization through providing materials and distributing brochures regarding the material presented. The material and brochures are prepared based on literature studies from books and scientific articles related to the material presented. Apart from that, in this activity, the community was taught to make herbal preparations made from rosella flowers, fragrant pandan leaves, and cinnamon. The herbal tea recipe created is the result of research that has been published by the service team. The stages of service activities are in Table 3.



**Table 3.** Schedule of training activity meetings

Stages of Devotion	Activity	Objective
Presentation of material about degenerative diseases	<ul style="list-style-type: none"> <li>- Introduction to members of the service team</li> <li>- Carrying out a pretest before presenting material about degenerative diseases</li> <li>- Presentation of material about degenerative diseases</li> <li>- Posttest Implementation</li> </ul>	<ul style="list-style-type: none"> <li>- To inform participants about the profile of the activity implementing team</li> <li>- To find out the participants' initial knowledge regarding the material that will be explained</li> <li>- Provides an overview of knowledge about degenerative diseases</li> <li>- To determine the success of material presentation in increasing public knowledge.</li> </ul>
Presentation of material regarding the nutritional diet of hypertension sufferers	<ul style="list-style-type: none"> <li>- Carrying out a pretest before presenting material about the nutritional diet of hypertension sufferers</li> <li>- Presentation of material regarding the nutritional diet of hypertension sufferers</li> <li>- Posttest Implementation</li> </ul>	<ul style="list-style-type: none"> <li>- To find out the participants' initial knowledge regarding the material that will be explained</li> <li>- Provides an overview of knowledge about the nutritional diet of hypertension sufferers</li> <li>- To determine the success of material presentation in increasing public knowledge.</li> </ul>
Training on making herbal tea from a combination of rosella flowers, fragrant pandan leaves and cinnamon	<ul style="list-style-type: none"> <li>- Introduction to Composition</li> <li>- Introduction to how to process materials</li> <li>- Demonstration of how to make tea</li> <li>- Tea taste testing</li> <li>- Packaging and labeling of tea packaging</li> </ul>	<ul style="list-style-type: none"> <li>- To find out the composition and uses of each ingredient that makes up tea</li> <li>- Ensure that processing methods are good and correct to create quality tea products</li> <li>- To know how to make tea and be able to practice how to make tea</li> <li>- To give the impression of an attractive appearance from the tea packaging</li> </ul>

### Closing

The final stage, which was the 3rd meeting, namely the closing session of the event, was combined with testing the taste of tea packaging and labeling of tea packaging which was carried out in the office hall of Teluk Pamedas sub-district, Samboja. Kutai Kartanegara.

### Discussion

Community service program activities in the form of using local plants as alternative raw materials for treatment. In carrying out this service in the form of training and counseling, the aim is to increase knowledge about degenerative diseases and skills in making herbal tea in the Teluk Pamedas sub-district community. This is strongly supported by the local government and the surrounding community, as can be seen from the enthusiasm of the community when participating in the training.

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Based on Table 2, the distribution of the characteristics of participants in counseling about degenerative diseases and the nutritional content of herbal tea shows that the gender of the participants who took part in this training activity was mostly women at 81% while men were 19%. This was influenced by the invitation to the activity addressed to the Teluk Pamedas government Dasawisma, where The Dasawisma members are mostly women. The second characteristic is age, the highest age group of participants is the 30-35 age group at 56% and the lowest age group is over 40 years at 12% or 2 people. The largest age group present is of productive age. Age is the time when a person is counted from birth to birthday. The older a person is, the more mature they are, and the more trusted they are than those who are not mature enough, this is experience and maturity of the soul (Lasut et al., 2017).

The third characteristic is work, the types of work of the training participants consist of housewives at 52%, farmers or gardeners at 5%, office workers at 11%, and finally fishermen at 9% or 4 people. Teluk pamedas sub-district is a coastal area that also has oil palm plantations and rubber plantations, so the jobs of these training participants are varied. The last characteristic is the last education.

The most recent education was high school education and the lowest was no education and master's degree with a percentage of 3% or 1 person each. Education is a process of empowering an individual's potential and competence to become a quality and useful human being throughout his life. Education can elevate human life to a higher social class, education can be used to help residents raise their standard of living to a higher level through their efforts (Asmirawanti et al., 2016).

Age and level of education are factors that are directly related to performance, whereas productive age can increase the level of understanding and skills in making herbal tea (Lubis, 2017; Widakdo et al., 2021). A productive age is a person who can still understand the extension material well to achieve the extension target optimally and can improve skills in making herbal products using local plants.

Based on the graph shown in Figure 2, the pre-test and post-test of the counseling carried out shows that there was an increase in the average knowledge before and after the counseling. The lowest average score before counseling was 50 and after counseling it increased to a score of 80. At the counseling stage, 2 materials were given regarding degenerative diseases and material regarding the nutritional content of plants used as herbal tea.



**Figure 5.** Filling out the questionnaire by training participants

Based on the results of filling out questionnaires distributed to training participants, it was found that the average public knowledge of degenerative diseases and diet regarding nutrition increased after being given counseling. The graph in Figure 2 shows that the average knowledge of participants before the counseling was carried out was 50 and the highest score was 80. Providing counseling material to participants could increase. Many things can influence this increase in knowledge, including the method

used in counseling, namely the lecture method. According to [Guspita \(2017\)](#), lectures are one of the most effective methods for conveying messages to the public. In his research, participants who took part in HIV AIDS counseling experienced an increase in knowledge after following the counseling, this was because participants were more confident in answering the posttest questionnaire questions because they had gained new knowledge from resource persons who were experts in their fields. Apart from that, during the counseling session, participants can also ask questions that they do not understand so that a discussion process occurs. The lecture method is considered the best method because it can be accepted by all groups, from those with low education to those with high education. Exposure to information is one of the factors that influence knowledge and attitudes.

The next activity was training in making tea using local plant foods including cinnamon, rosella flower petals, pandan leaves, and honey. This training is accompanied by presenters who are experts in their fields. Participants seemed very enthusiastic about following the presentation of the material and continued with direct practice accompanied by assistants who were experts in their fields as well. This training is equipped with several tools and materials that are ready for use by participants.



**Figure 6.** Training on making tea from a combination of rosella flower petals, cinnamon, and pandan leaves

During the implementation of this training, the participants seemed very enthusiastic about making tea independently and there was a discussion process regarding the raw materials used to make tea. What the participants asked most about was what type of pandan leaves were used and also cinnamon, was it powder? Cinnamon, which is widely sold on the market, can be used as a raw material for making tea, so the speaker explains the types and standards of raw materials that are good to use.

The results of making this combination tea can be brewed directly by participants and the following are the results of making it.

In implementing this community service program, several factors support the implementation of this community service activity, namely: (1) The assistance provided by partners in providing facilities in the form of a place for implementation and participants who are residents belonging to the Dasawisma group to be directly involved in implementation and success of community service programs in the form of this training; (2) There is interest and enthusiasm of participants during the activity. What can be seen from the number of participants who have not experienced a reduction and the response of participants in carrying out the training? Apart from that, the level of interest can also be seen through questions and answers aimed at obtaining information from the implementation team during practice; (3) There are no other activities that interfere with the ongoing community service program. This is because, in the process, this service program has asked for permission first from the community leadership elements from the RT, RW level, and the security forces where this community service program is taking place.

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Apart from that, because the participants already know each other, there is no awkwardness between the participants, so communication is not awkward; (4) Availability of raw materials for making tea.



**Figure 7.** Hands-on tea-making practices

**Figure 8.** Results of making tea

In implementing this community service program, several inhibiting factors occur during the implementation of activities, namely: (1) Because the training is carried out in the form of direct training, there needs to be an explanation in the form of practice to participants at each meeting. This is based on the knowledge of the participants who are new to the existence of plants that can prevent degenerative diseases and their processing methods; (2) There is an obstacle in the form of the teaching implementation method of this training which focuses on practical methods and sometimes there are participants who still need help in the form of guidance to tell them about the steps that must be carried out; (3) The period is limited so there needs to be a clear division of time in implementing this community service program, as well as the lack of facilities for making tea such as tables to place ingredients and equipment for making tea, so participants still need to use the floor to place ingredients and tool. This is still within reasonable limits because the facilities used are facilities that are not facilities for training rooms for making food or medical products.

#### 4. CONCLUSION AND RECOMMENDATIONS

The lack of knowledge and skills of the Dasawisma group regarding degenerative diseases and the processing of herbal tea is a priority problem in this community service so this activity aims to provide training in new skills and knowledge to the participants who are Dasawisma in Teluk Pamedas sub-district regarding the use of local plants as herbal tea. The target to be achieved in this program is that participants can know about degenerative diseases, and the nutritional content of plants in the surrounding environment to be processed into the main ingredients for making herbal tea which can be

more beneficial. The implementation of this program is divided into 2 stages, namely the implementation stage and the evaluation stage. Equipment and supporting facilities, availability of space, and support from the community are the main factors in successfully achieving the goals of this program. The results achieved are the community's ability to process local food and make herbal tea which provides added value and selling value. It is hoped that this community activity will play a role in reducing degenerative diseases and utilizing food into useful products, as well as becoming more independent in earning an income.

There needs to be socialization and promotion regarding the existence of this program so that participants are not limited to the Dasawisma groups in the area. It is necessary to provide ongoing assistance and monitoring to the community so that this program can be continued periodically. It is best if the program can be followed up through collaboration with other parties outside the institution so that we can know the broader response to the implementation of a community service program that has been carried out.

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## Empowerment and training in making herbal tea to utilize herbal plants and prevent degenerative diseases

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