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Education and understanding of family medicinal plants as a means of empowering community health in Banglas Village, Tebing Tinggi District, Meranti Islands

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ABSTRACT ARTICLE INFO

In this real work lectures (RWL) service was carried out in Banglas Village, Tebing Tinggi District, Meranti Islands Regency, Riau Province. The high price of medicines, the distance, and incomplete health facilities make it difficult for people to seek treatment. The condition of Banglas Village that there are few medicinal plants makes the integrated RWL team of the Universitas Riau in 2022 to hold a service activity regarding the cultivation of family medicinal plants (FMP) as a supporter of the community health of Banglas Village. This FMP planting activity is supported by both the government and the people of the Banglas village.

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1. INTRODUCTION

Banglas Village is one of the villages in Tebing Tinggi District, Meranti Islands Regency, Riau Province [1, 2]. If we look at its geographical location, Banglas Village has a very wide area, namely 35.5 km2 with a population of 5773 people [3-5]. As the population increases and the available yard space becomes increasingly narrow, especially for those living in urban areas, this is an obstacle that needs to be overcome [6, 7]. The more the population increases, the lower the level of health. Disease prevention can be overcome through the use of family medicinal plants (FMP). Based on the results of the observations we have made, several things are problems in Banglas Village, including the minimal use of medicines derived from local plants such as ginger, galangal, turmeric, and others [8-10]. There are many empty yards in Banglas Village so they can be used as land for planting FMP.

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FMP was previously known as a living pharmacy. FMP consists of several types of selected medicinal plants that can be used as safe first-aid medicines such as for fever and coughs [11, 12]. The existence of FMP around the house is very important, especially if the distance between the resident's house and the health service center is quite far. This FMP can be grown in pots or planted directly on the available land around the yard [13-15].

Providing plants as medicines can overcome the problem of a lack of supporting infrastructure such as pharmacies, hospitals, and others. As an alternative to overcome people's weak purchasing power and high prices of medicines, the government and society find solutions to return to nature [16-18]. People like medicines that come from plants because they have low side effects, and are suitable for various metabolic and degenerative diseases [19-22]. There are still a few people in Banglas Village who plant this FMP around their yards. This is the opinion of Susanto (2017) who states that people using herbal medicines continue to increase, but this is inversely proportional to people's awareness of cultivating these medicinal plants [23]. This activity aims to increase knowledge and understanding about the use of local plants as medicines.

2. IMPLEMENTATION METHOD

Activities regarding the use of FMP carried out by the integrated real work lectures (RWL) team, Universitas Riau in 2022 were carried out in Banglas Village, Tebing Tinggi District, MerantiIslands Regency, Riau Province. Activities will be held on July 12 and July 13 2022 at the Banglas Village Office. The stages of this activity include discussions with the Banglas Village government, preparation of tools and materials, planting media, planting FMP, and naming and installing togabanners (see Figure 1).

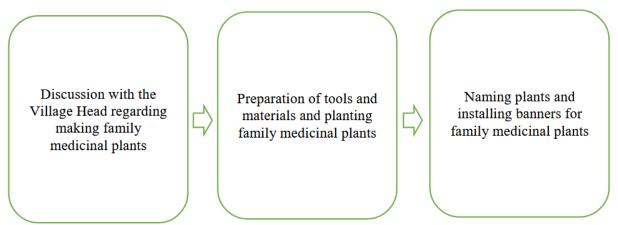


Figure 1. Flow of implementation of activities for making FMP.

3. RESULTS AND ACHIEVEMENT OF GOALS

FMP planting activities were carried out at the Banglas Village Office for 2 days. On the first day, July 12, 2022, tools and materials were prepared, and the TOGA planting process was carried out in polybags and pots. On July 13, 2022, plant names and Latin names were displayed and banners for FMP were installed. In carrying out this activity, the RWL team collaborated with the Head of Banglas Village along with the Banglas Village Apparatus and the Banglas Village community, remembering that to make this FMP there must be approval from the Banglas Village Government. So that with this approval, the FMP planting can run well and smoothly.

The first stage of the activity was carried out by preparing plant seeds consisting of red ginger, galangal, turmeric, galangal, citronella, bitter, red betel, cat's whiskers, aloe vera, and life-giving. Then take the soil from the burning and put it in a pot/polybag (see Figure 2). Next, TOGA seeds are planted and the pots/polybags are arranged neatly on the shelves provided. On the following day, the plants that have been planted are given the name of the plant and its Latin name (See Figure 3). Then the toga banner was also installed on the shelf where the TOGA was placed.



Figure 2. Implementation of FMP seed planting.



Figure 3. Naming plants and their natural names.

FMP that are ready to be planted have benefits as herbal medicines (1see Figure 4). Especially for plants that don't exist in Banglas Village, this is to complement the plants that already exist in Banglas Village. The planting of this plant is also seen from its benefits which are most widely used by the community, namely as a medicinal ingredient and kitchen spice (see Table 1).



Figure 4. Results of planting FMP.

Table 1. Types and benefits of plants planted.

Plant type	Benefit
Red ginger (Zingiber officinale)	Overcoming digestive system problems, especially reducing nausea, headaches, and weak nerves.
Aromatic ginger (<i>Kaempferia</i> galanga)	Lowers cholesterol in the blood, increases appetite, and cures cough.
Turmeric (Curcuma longa)	Cooking spices, and herbal ingredients.
Galangal (Alpinia galanga)	Cooking spices relieve joint pain, lowers blood sugar and cholesterol levels, kills and inhibits the development of viruses and bacteria, and reduces the risk of cancer.
Citronella grass (Cymbopogon nardus)	Treats coughs, rheumatism, irregular menstruation, high blood pressure, toothache and muscle aches, flu and nasal congestion, and others.
Sambiloto (Andrographis paniculata)	Medicine for insect or snake bites, fever, dysentery, rheumatism, tuberculosis, digestive infections, anti-inflammatory and others.
Red betel (Piper crocatum)	Treats coughs, diabetes, canker sores, cancer and tumors.
Cat's whiskers (Orthosiphon aristatus)	Overcoming respiratory problems.
Aloe vera (Aloe barbadensis Milleer)	Treats burn, irritation, and itching of the skin, frostbite, and can speed up wound healing.
Longevity spinach (Gynura procumbens)	It healing kidney disease, dysentery, and esophageal infections, and is used to stop bleeding, treat absent menstruation, and bite from venomous animals.

4. CONCLUSION

Based on the results of the implementation of FMP planting activities, the community and the Banglas Village Government fully support this activity because it can provide benefits to the community. The benefits that can be obtained are increasing public knowledge regarding the use of plants as ingredients for medicines that are easy and cheap to obtain.

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