

Community Empowerment for Self-sufficiency in Herbal Plants to Face The Covid-19 Pandemic

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Abstract

Indonesia is famous for its rich herbs. Typically, these herbs are used as flavored vegetables, medicinal plants, dried fruit and medicinal plants that are packed in the form of herbs. Some herbs are very good for curing and healing. During the COVID-19 pandemic, the need for spices is getting higher, but prices are also high. This has an impact on the cost of community needs. The aim of community service is to use herbs to improve immune system in the face of COVID-19. In addition, for the use of the house yard by planting herbs as traditional medicinal plants with community empowerment. The methods used were counseling about spice plants, dividing spice plant seeds, and practicing directly growing spices. The community service subjects were 41 residents Taman District on Provinsi of Sidoarjo, especially in community group on 25 in Citizens Association of 10 Bohar Village, Taman Sidoarjo District. According to the results of the evaluation of the participant's knowledge assessment, according to the results of the pre-test and post-test evaluations, it was found that most of the participants experienced an increase in knowledge of spices (56.1%). Most residents (85%) prefer the direct practice method of planting spices, because it is easier to understand right away. The conclusion indicated the effectiveness of the introduction and use of spices in increasing knowledge and direct cultivation practice. The next community service activity is to provide assistance and train residents in environmental cadre formation activities and the formation of TOGA plants. The output of this community service activity is a report that has been submitted in a journal and an increase in public understanding and awareness by planting spices.

Keywords; community empowerment;herbals;immune ;system,

Abstrak

Indonesia terkenal dengan jamu yang kaya. Biasanya jamu ini digunakan sebagai penyedap sayur, tumbuhan obat, buah kering dan tumbuhan obat yang dikemas dalam bentuk jamu. Beberapa tumbuhan sangat baik untuk penyembuhan dan penyembuhan. Saat pandemi COVID-19, kebutuhan akan rempah-rempah semakin tinggi, namun harga juga tinggi. Hal ini berdampak pada biaya kebutuhan masyarakat. Tujuan pengabdian kepada masyarakat adalah memanfaatkan tumbuhan untuk meningkatkan sistem kekebalan dalam menghadapi COVID-19. Selain itu juga untuk pemanfaatan pekarangan rumah dengan menanam jamu sebagai tanaman obat tradisional dengan pemberdayaan masyarakat. Metode yang digunakan adalah penyuluhan tentang tanaman rempah, pembagian bibit tanaman rempah, dan praktek menanam bumbu secara langsung. Subjek pengabdian masyarakat adalah 41 warga RT 25 RW 10 Desa Bohar, Kecamatan Taman Sidoarjo. Berdasarkan hasil evaluasi penilaian pengetahuan peserta, berdasarkan hasil evaluasi pre-test dan post-test ditemukan bahwa sebagian besar peserta mengalami peningkatan pengetahuan tentang rempah-rempah (56,1%). Sebagian besar warga (85%) lebih memilih cara praktek langsung menanam bumbu, karena lebih mudah langsung memahaminya. Kesimpulannya menunjukkan keefektifan pengenalan dan penggunaan rempah-rempah dalam meningkatkan pengetahuan dan praktek budidaya langsung. Kegiatan pengabdian masyarakat selanjutnya adalah memberikan pendampingan dan melatih warga dalam kegiatan pembentukan kader lingkungan dan pembentukan tanaman TOGA. Output dari kegiatan pengabdian masyarakat ini berupa laporan yang telah disampaikan dalam bentuk jurnal dan peningkatan pemahaman dan kesadaran masyarakat dengan menanam rempah-rempah.

Kata kunci; pemberdayaan masyarakat;herbal; sistem imun,

INTRODUCTION

Indonesia is famous for its abundant spice plants. Usually, these spices are used as flavored vegetables, medicinal plants, dried fruit and medicinal plants which are packaged in the form of herbs. Spices are parts of plants that come from the stems, leaves, bark, tubers, rhizomes (rhizomes), roots, seeds, flowers or other parts of the plant body. (E. D. Masita et al., 2019). These parts of the plant body contain phytochemical compounds that plants produce as part of the plant's metabolic process. Many spices are useful for healing and healing. The multi-function and role of spices are often found, especially in the empon-emponant and layered tuber groups. Ginger, turmeric and galangal are examples of multifunctional uses, both as useful spices in the culinary arts which also function as medicines (Akram et al., 2010).

Consumption of spices such as ginger and turmeric has become a tradition of Asian people, including Indonesia, which makes the body healthy. Strong immunity will help the body to fight germs and viruses that attack human cells. Strong immunity will reduce or eliminate the chance of the virus entering our body cells through any means. The work of the ingredients in spices such as ginger, turmeric, and ginger can increase immunity

These ingredients can even help overcome the transmission of COVID-19 by increasing human immunity, among others through antioxidant and anti-inflammatory activities, so that they are not susceptible to viral and bacterial infections (Wijayakusuma, 2008). Corona virus or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a virus that attacks the respiratory system. The disease due to this viral infection is called COVID-19 (Sambara et al., 2016). The Corona virus can cause minor disorders of the respiratory system, severe lung infections, and death. According to data released by the Task Force for the Acceleration of Handling of COVID-19 of the Republic of Indonesia, the number of confirmed positive cases as of June 8, 2020 is 31,186 people with a death toll of 1,851 people. Based on data from East Java Province in June 2020, there were 7857 patients under surveillance for COVID-19, of which 3648 (46.43%) were under surveillance, and 733 (9.33%) died. Various efforts were made to stop the spread of COVID-19, and many people consume spices as herbs.

Bohar Village, Taman District on Provinsi of Sidoarjo, especially in community group on 25 in Citizens Association of 10, there are many houses available for yards that are only for planting ornamental plants, while innovation moves people to plant spices and develop and utilize spice plants for their daily needs. Usually, the people buy directly in the traditional market without providing them directly in the garden. The land available at home is not yet planted with spices. Community empowerment is very important in an effort to deal with COVID-19, many people buy ginger, turmeric and ginger at high prices and many people buy in markets and supermarkets. This has an impact on the cost of community needs. Therefore it is necessary to take advantage of this spice plant in residential land and in village areas so as to reduce outside purchases because they are already available in their respective neighborhoods.

SITUATION ANALYSIS

General Description

From the situation analysis data that has been previously described, the problems that arise are more often caused because in RT 25 RW 10, Bohar Village, Taman Sidoarjo District is one of the villages located in Taman Sidoarjo District. Most of the people work as employees and entrepreneurs. Although the majority of the population works, many people are not familiar with spices or what are called family medicines. Even though spice plants (empon-empon) need to be developed because not only as ingredients for spices or in cooking but family medicinal plants can be used as an alternative to maintain and care for our health naturally without any side effects such as ginger, turmeric, kencur, and so on. –other (Ismoyowati et al., 2015).

Problems

Most of the housing plants and areas community group on 25 in Citizens Association of 10 Bohar Village, Taman Sidoarjo District are planted with ornamental plants so that they do not use the yard for planting spices to meet their daily needs. People buy ginger, turmeric, ginger and other empon-empon in markets and supermarkets at high prices amid the COVI-19 pandemic. Because the need for spices is high, the price is high, this causes greater expenditure, so it becomes a problem of spending in the household economy.

The solutions given in the face of the COVID-19 pandemic include holding outreach on spice plants, distributing spice plant seeds, utilizing house yards by planting spice plants as traditional medicinal plants. Apart from being a medicinal plant, this plant is also used to decorate the community's yard so that it is involved more beautifully.

METHOD

This community service is also an implementation of the research results of a plant that can be used under the research title The effect of red dragon fruit extract on MDA levels in mice exposed to cigarette smoke. The implementation methods used empowerment community aim to increase endurance in the face of COVID-19 are divided by session knowledge, counseling, training and mentoring. The core activity of this community service is to provide counseling / material exposure about spice plants, from the understanding to the benefits of each plant, which aims to make respondents understand that this is an important thing to increase knowledge, the benefits or properties of several spice plants and will be taught how to grow and use these spice plants. Counseling / material presentation will be delivered by the chairman and members of implementing community service activities using the lecture and question and answer method, of course, in the midst of the COVID-19 pandemic, paying attention to social distance. The instrument for the success of counseling was measured using a pre-test and post-test questionnaire, with the classification being able to answer posttest questions with 10 questions with a value of 100 increased knowledge, fixed knowledge if answered a value of 50-100, and knowledge decreased with a value of <50.

RESULT AND DISCUSSION

The implementation of this community service activity has shown positive results. Activities packaged in the form of counseling on spice plants, distribution of spice plant seeds, and the practice of growing spices were able to attract residents to be directly involved in the process of introducing and planting spices. The following is an illustration of the results of this community service activity.

Overview of Respondents

The targets in this community service activity are all in community group on 25 in Citizens Association of 10 Bohar Village, Taman Sidoarjo District, namely 41 residents. The following is an overview of the participants in the extension and planting of spices.

1. Distribution of Participants by Age

Table 1. Distribution of Participants by Age

No	Age (year)	Frequency (n)	Percentage (%)
1	25	12	29,0
2	40	25	61,0
3	45	4	10,0
Total		41	100,0

Based on Table 1 above, information was obtained that the participants in the extension and training of making healthy lunches were mostly 40 years old (61.0%), while at least the participants were 45 years old (10.0%).

2. Distribution of Participants by Gender

Table 2. Distribution of Participants by Gender

No	Gender	Frequency (n)	Percentage (%)
1	Women	26	63,0
2	Man	15	37,0
Total		41	100,0

Based on Table 2, information is obtained that the number of participants in extension and planting of spices is mostly female (63%).

Respondents' Knowledge Level about Spice Plants.

Classification of Knowledge Level Assessment Change Evaluation

Table 3. Classification of Knowledge Level Assessment Change Evaluation

No.	Change of Assessment	Frequency (n)	Percentage (%)
1.	Knowledge goes down	0	0,0
2.	Fixed knowledge	18	43,9
3.	Knowledge goes up	23	56,1
Total		41	100,0

Based on Table 3 above, information is obtained that the results of the evaluation of the knowledge assessment of extension participants according to the results of the evaluation of the pre-test and post-test assessments, it is known that most residents have experienced an increase in knowledge of spices (56.1%). While the participants who had the same post test results as the pre test were 18 residents (43.9%). The permanent meaning in this case is that from the beginning the participant got a score of 100 and after completing the counseling they also got a score of 100. This indicates that there has been a better increase in knowledge after the implementation of counseling (Mindiharto et al., 2020).

Knowledge is the result of knowing and occurs after a person senses a certain object. In this community service activity, before the practice of planting spices, participants were given counseling on spice plants (Sari et al., 2015). The hope of providing this counseling is that residents can increase their insight and understanding of the importance of cultivating spices. In addition, this counseling is expected to form the attitude or awareness of citizens to provide information and knowledge about spices used as herbal plants in dealing with COVID-19 (Sastrahidayat, 2016). The change in knowledge for the better is inseparable from the factors that influence it, counseling about spices needs to be carried out regularly and there is also a need for the role of community leaders in running the peer education program, where residents are trained to become peer educators for other residents. According to (E. D. M. Masita & Amalia, 2018) that knowledge is influenced by the learning process (Masita, Elly Dwi, 2018)

The Effectiveness of the Practice of Planting Spices

The practice of planting spices shows the enthusiasm of the residents is very good. It can be seen that the residents involved are very enthusiastic about planting spices. Most of the residents (85%) like the direct practice method, because it is easier to understand right away and they are also very eager to try independently in their yard. After each resident has shared spice plant seeds and provided an explanation regarding the plants being distributed, then the practice of planting spices, residents can practice directly independently as shown below in Figure 1.



Figure 1 Residents Participating in Spice Crops

After practicing effective ways to grow spices, starting from using the community's yard to using polybags for people who do not have a large enough yard. This stage of community service activities was attended by many residents, ranging from women and men. In the final stage of the program, direct practice is being carried out in growing this spice plant. This hands-on practice was held in one of the community houses which had a yard that was not wide enough. So that the practice of planting this medicinal plant is carried out in a poly bag. The plants are placed in small pots and named according to the spices such as ginger, kencur, galangal, and turmeric as shown in Figure 2 below.



Figure 2 Spices Seedlings

CONCLUSIONS AND SUGGESTIONS

The independent practice of planting spices shows the enthusiasm of the residents is very good. It can be seen that the residents involved are very enthusiastic about this activity. Most residents (85%) like the hands-on method, because it is easier to understand right away and they are also very eager to try it independently at home.

Suggestions There is a need for training in the use of spices by health workers as well as cadres and community leaders to make spices into instant products that can be consumed and become additional livelihoods for the family. The family cares for the plants and conserves and cares for the spices that have been planted.

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