

Training of The Utilization of Medicinal Plants as Complementary Medicine Among Health Workers

Haerawati Idris^{1*}, Dian Safriantini², Tia Sabrina³

¹Department of Health Policy and Administration, Faculty of Public Health, Universitas Sriwijaya, Indonesia

²Department of Health Policy and Administration, Faculty of Public Health, Universitas Sriwijaya, Indonesia

³Department of Microbiology Clinic, Faculty of Medicine, Universitas Sriwijaya, Indonesia

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Abstract

The current community service focused on the use medicinal plants which seemed to increase among families. This program was supported by the 2018 Riskesdas report, which showed that 38.7% of Indonesia's population had used traditional medicine for treatments. This program sought to discover health workers' knowledge of family medicinal plant training. This community service was carried out through the mentoring method and involved 25 public health center employees representing each primary healthcare in Ogan Ilir Regency. We selected the sample using the total sampling method. The mentoring session was organized in the form of training related to the concepts of family medicinal plants and how to use them. This training involved a number of lectures and presentations of a model of family medicinal plants. The differences in knowledge of the training participants were measured using a pretest and posttest. The data were analyzed using the t-test. The results showed a difference in health workers' knowledge before and after the training ($p < 0.05$). There is an increase in the knowledge of primary healthcare workers regarding family medicinal plants.

1. INTRODUCTION

The use of medicinal plants is now increasing. It is supported by the 2018 Riskesdas report, which showed that 38.7% of Indonesia's population had used traditional medicine for treatments (Idris, 2019). The availability of medicinal plants is widespread in various regions in the country, and it is estimated that there are 13,000 plant species that can be used for traditional medicine (Savitri, 2016). Apart from functioning as medicine, medicinal plants can also be used to gain economic benefits, beauty, and satisfaction (Karo-Karo, 2010).

The first epidemiological transition in Indonesia faces

the challenge of both communicable and noncommunicable diseases. The noncommunicable diseases that the majority of Indonesians suffer are coronary heart disease, diabetes mellitus, and hypertension. The increase in degenerative and noncommunicable diseases is not only happening in Indonesia, but also in other countries across the world. This trend continues to develop in various countries.

Efforts to medicate diseases are made not only using the modern medicine but also traditional medicine. To cope with the development of the prevalence of these degenerative diseases, the Indonesian government has made

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*Corresponding author: Haerawati Idris

Department of Health Policy and Administration, Faculty of Public Health, Universitas Sriwijaya, Jl. Raya Palembang, KM. 32, Ogan Ilir, Indralaya, Indonesia
Email: haera@fkm.unsri.ac.id

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a policy through the ministry of health to promote the use of traditional medicine.

The use of traditional medicine is now a government program. It is stated in the Minister of Health Decree No.381/Menkes/SK/II/2007, one of the decrees regulating national health programs. This is a policy that functions as a guideline for the development and enhancement of clinical tests of plants that can be utilized for traditional medicine. This test is aimed at obtaining drugs that are high quality, safe, and have properties that meet clinical standards. In addition, there is another policy regulating the reviewing of medicine plants; this policy the minister of health's ruling number 9 year 2016. Specifically, this ruling governs the use of traditional medicine produced from medicine plants in relation to selfcare formal health institutions. The utilization of traditional medicine (herbs-produced from medicinal plants) for treating diseases is fairly common because it is considered less costly, such medicine is easy to obtain.

Rahmawati conducted a study and found that all types of medicinal plants containing chemical substances that are pharmacologically beneficial, and these plants have a great potential to be transformed into anti-degenerative agents (Rahmawati et al., 2012). WHO also has recommended medicinal herbs to maintain people's health as well as for the prevention and treatment of diseases, especially degenerative diseases and cancer (Setiawati et al., 2016). The use of medicinal plants also needs to be practiced by health workers in health service centers to complement the existing medicine and treatments.

Various information dissemination and education efforts related to the use of medicinal plants have been organized for numerous communities. However, such education for health workers, especially those working at the primary health care centers, has still been limited. Primary health care centers, which are the health service providers at the primary level, are required to provide complementary services related to the use of medicinal plants for members of their surrounding communities requiring health services. Therefore, we consider it essential to organize this training. We chose a primary health care center in Ogan Ilir regency as the target of this training. In this way, we expected that this program would directly benefit communities in the regency. Before this training was held, the health workers at the primary health care center had not attended any training related to this matter. Therefore, we were certain that this training was necessary, and it would benefit the workers in many ways. The purpose of the research cum community service program was to discover and increase the health workers' knowledge in utilizing medicinal plants at the primary health center level.

2. METHOD

Before this program, the authors had organized several training activities on the use of medicinal plants with various strategies such as involving cadres, traditional media, and simple messages (Susanto et al., 2017). In

conducting training similar to this, other researchers utilized other methods, such as information dissemination, outreach, pilot demonstrations, and mentoring (Nurjanah et al., 2019).

For this community service program, the education effort was implemented through training. This training method was also carried out by other researchers (Nugraha, 2015). This method gathers target participants to organize outreach activities in order to present materials related to the use of medicinal plants. This training was comprised of series of activities, the first of which was a number of lectures. These lectures were aimed at conveying the concepts relating to medicinal plants that are important to be fully understood by the participants of the training. During these lectures, materials presented in handouts were given to the health workers. In addition, the lecturers also used another medium, which was Microsoft PowerPoint, so that these lectures could be presented, in addition to training materials presented in dot points, pictures, animations, and other types of displays, making the presentation effective, efficient, and interesting. The second method in this training was discussion. This method was organized to complement the aforementioned lectures. After the lectures presented their materials, the participants were welcomed by a moderator to ask questions about medicinal plants. The lecturers or speakers gave detailed answers to these questions. The third method was a medicinal plant pilot model. The method seemed to significantly help the participants understand as they could observe how medicine was created from a medicinal plant and how the medicine was used or applied. Some medicines were brought to the training and presented in front of the participants. The final part of the training was the evaluation process (posttest). This evaluation was done by distributing questionnaires relating to the participants' knowledge of the medicinal plants, and they were asked to complete it. The pretest was conducted at the beginning of the training.

The data collection was done by asking the participants to fill out the two questionnaires which contained questions regarding the medicinal plants and how they were used. The number of samples was 25, and they were selected through the total sampling method. All of the participants were health workers at the primary health center level. The collected data was analyzed using the t-test.

3. RESULTS AND DISCUSSION

The training in the utilization of medicinal plants at the primary health care level was held at UNSRI's Faculty of Public Health on September 26, 2019 from 09.00 to 12.00 a.m. Western Indonesian Time. There was a total of 25 respondents who attended the training. Every primary health care center in Ogan Ilir Regency sent its representatives. The participants who attended the training were the clerks of traditional medical health centers that were located in the working area of Ogan Ilir Regency. The documentation of the training can be seen in Figure 1.

Two questionnaires were given to the training participants before and after the activity. The contents or

Table 1 . T-test scores from pretest and posttest conducted on the training participants

Knowledge Score	Average	Mean Difference	95% Confidence Interval	P-value
Before Training	6.9	-1.6	-2.257 -0.96	<0.05
After Training	8.5			



Figure 1 . Documentation of the training

questions of the questionnaires related to the understanding of the use of family medicinal plants (TOGA), the availability of family medicinal plants at the public health centers, the use of family medicinal plants, and the availability of funds at the public health center to support traditional health care programs.

In this training we found that most of the participants were women. The average age of the participants was 40 years old, and all of them lived in Ogan Ilir Regency. They were all the employees at public health centers in Ogan Ilir Regency, and their positions related to traditional medicine and how to use it. Some of the public health centers have planted medicinal plants in the area of the health centers.

Based on the discussion during the training, overall, all participants who attended the medicinal plants utilization training stated that this training was useful for them. This was discovered through the authors’ observation during each phase of the training. The participants did not hesitate to ask questions in relation to issues and challenges in using traditional medicine created from medicinal plants.

We evaluated this training using two questionnaires – pretest (before the training) and posttest (after the training). We found that the evaluation results indicated that the training participants had understood how to correctly use medicinal plants at their respective health centers. According to the participants, using medicinal plants was one of the attempts to implement Community Based Health Efforts Strengthening Initiative (UKBM) that was promoted and encouraged in their respective health centers. The use of medicinal plants could have a significant role because it could help community members to maintain their health using safe and affordable medicine. The use of medicinal plants should be supported by quality of human resources as well as adequate funding and infrastructure. On average, health centers in Ogan Ilir Regency do not facilitate the utilization of medicinal plants because they lack financial resources, the required facilities and infrastructure, and human resources. However, some other health centers have tried to facilitate the use of medicinal plants by planting several species of medicinal plants in the vicinity

of their health care centers. Health workers in most of the primary health care centers in Ogan Ilir Regency have not been trained to utilize medicinal plants. Interestingly enough, some of the training participants had attended such a training before participating in this training. The results of the data analysis showed differences in the knowledge of the health workers before and after the training. These findings are presented in Table 1.

Based on the pretest and posttest results, we found that the training was effective in improving the participants’ knowledge about the use of medicinal plants. In other words, the training had improved the knowledge about medicinal plants among the participants. This finding is in line with previous studies on the correlation between training of medicinal plants and the improved knowledge of the participants regarding the issue (Choironi et al., 2019; Genatrika et al., 2018; Sari & Rasyid, 2019). We suggest that for future community services, it is important to provide training in how to identify types or species of medicinal plants and how to plant them in the vicinity of people’s homes.

4. CONCLUSION

The purpose of this research cum community service was to train health workers in utilizing medicinal plants at the primary health care level. After the training, it was found that there was an increase in the participants’ knowledge regarding medicinal plants and how to use them to treat diseases. It is hoped that future community service programs will consider direct practice at each primary health care, so that health workers can directly plant medicinal plants in available space at the primary health care centers.

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CONFLICT OF INTERESTS

The authors state that there is no conflict of interests.

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