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Training on Making Aromatherapy Candles for Body Health for Housewives in the Joso Triyagan Area RT 01 / RW 01, Mojolaban, Sukoharjo.

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Abstract

Mosquitoes are one of the causes of community problems because they can cause various diseases and interfere with comfort. Mosquitoes can be caused due to lack of environmental hygiene in the community. Nowadays, many people are afraid to use ready-made mosquito repellent products that have been made and issued by certain factories or industries. The chemical content contained in these preparations is the reason why people are looking for other alternatives to make mosquito repellents using natural ingredients that are safer. One of the efforts to prevent and control mosquito attacks is to use air fresheners in the form of aromatherapy gels and candles. Making aromatherapy candles is quite easy and the ingredients are very affordable so that people can make their own. The purpose of this activity is to increase public awareness of the importance of maintaining a clean environment to create health for the family as well as training in making aromatherapy candles with natural ingredients, producing products that can be used alone or developed into a home industry. This activity was carried out by providing environmental hygiene education and workshops on making aromatherapy candles as an alternative to mosquito repellent. The results obtained are an increase in people's understanding of environmental hygiene. In addition, aromatherapy has benefits for body health and then aromatherapy candles are produced as mosquito repellents whose production can be developed on a household industrial scale in the Joso Triyagan area RT 01 / RW 01, Mojolaban, Sukoharjo

Key words: Aromatherapy Candles, Body Health,

INTRODUCTION

Mosquitoes are very easy to breed in tropical countries, especially Indonesia. Mosquitoes cause many diseases. Mosquitoes transmit disease when they bite and suck blood. One of them is Dengue Hemorrhagic Fever (DHF), which is an endemic disease that can be found throughout the year and is still a major health problem in Indonesia. The incidence of DHF has increased 30 times over the last five decades and is increasing along with increasing mobility and population density (Ministry of Health, 2017). A total of 390 million new cases occur annually with 29,000 deaths due to dengue infection in more than 128 countries (WHO, 2016). Efforts must be made by the community is to overcome it. One way to do this is by using mosquito repellent containing insecticides (Ridha, 2013).

There are various types of drugs currently available, ranging from spray, burn, lotion, liquid, topical or electric (Waris, 2020). The circulating mosquito repellent contains chemical compounds that are harmful to the health of the human body, namely propoxur, tranflutrin, bioaleterin, dikiorvos, dalletherine, octachiorophil ether and additional harmful substances (Devi and Rianti, 2007).

Exposure that enters through breathing is very dangerous because the active ingredient particles can be quickly absorbed by the lungs and then into the blood circulation. So that it can cause serious damage to the nose, throat and lung tissue, and if inhaled in sufficient quantities and over a long period of time (Ustiawaty et al, 2020). Alternative control methods that are also widely developed, one of which is the use of natural insecticides such as lemongrass, cloves, tobacco, zodia, lavender. Lemongrass (Cymbopogon citratus) is one of the most commonly found plants in Indonesia and is widely used as a food ingredient. This plant contains compounds that have the potential as natural repellents such as geraniol, citronellol, citronellal,

and citral. These compounds bind and interact with insect olfactory receptors which then change insect activity (Boesri et al., 2015). This is supported by research showing that 100% dose of lemongrass leaf extract is able to resist 95.5% of Ae. aegypti for 1 hour. Lemongrass essential oil lotion is also known to have a repellent effect against Ae. aegypti and Culex quiquenfasciatus (Rodriguez et al., 2018).

The use of repellents aims to prevent transmission of pathogens from vectors to humans. The forms of repellent application that are widely used by the public are spray, cream, and patch. Repelent preparations in the form of aromatherapy candles have not been widely used by the public, even though these preparations actually have good potential to prevent contact between humans and mosquitoes. This is due to the absence of commercial anti-mosquito repellent products circulating in the community. Several studies have shown that the preparation of aromatherapy candles from Citronella from Cymbopogon spp. It can be used as a mosquito repellent. The practice of using candles by the community is more widely used as a fly and mite repellent (Soonwera et al., 2015; Moore et al., 2018; Diaz et al., 2016).

Aromatic candles are still very rarely used to repel insects. Most people only make aromatic candles as aesthetics. Even though in addition to its distinctive smell, this aromatic candle can also be easily made. Aromatic insect repellent candles can be made by using herbal plants that are not liked by insects, especially mosquitoes. Herbal plants in Indonesia are very abundant. Herbal plants that can be used as mosquito repellents are plants that contain essential oils (Fitriani, 2020). Some plants that contain essential oils, for example, are citronella. These plants are easy to find in the yard of the house. However, there are still many people who do not know for sure the benefits of these two plants as mosquito repellents (Devi and Rianti, 2017).

Air fresheners in the form of candle preparations have several advantages, including being more practical and easier to use compared to other forms of air freshener. In addition, air fresheners in the form of gel and wax preparations are easier in terms of storage and packaging. Candles have more benefits because apart from being used as lighting, they can also be used as air fresheners and mosquito repellents. The preparation of air fresheners is quite easy to make and the ingredients are also easy to obtain so that they can be made independently by the community. The advantage that people get by making air freshener candles independently is that the aroma can be adjusted to what they want. But here we use the citronella plant.

In addition, aromatherapy candles are a form of alternative medicine using volatile plant materials, widely known in the form of essential oils and various other forms that aim to regulate cognitive function, mood, and health. Aromatherapy is formed from various types of plant extracts such as flowers, leaves, wood, plant roots, bark, and other parts of plants with different manufacturing methods with their respective uses and functions. So that it can improve body health for someone, the main thing is according to the target of this community service, namely in the Joso Triyagan Region RT 01 / RW 01, Mojolaban, Sukoharjo

METHOD

The solution to the problems faced by Partners is the need for training and motivation to create home-based business opportunities (home industry) with products that can be used to scent the room and as a mosquito repellent while increasing residents' income in the form of aromatherapy gels and candles. In the implementation of this community service, counseling, training and provision of production tools are carried out. The target partner is a group of housewives in the Joso Triyagan area RT 01 / RW 01, Mojolaban, Sukoharjo who acts as counseling and training participants, who are later expected to become groups of producers of air freshener candles as home industry-scale mosquito repellents. The steps taken are as follows:

- Housewives are given knowledge about the impact of low environmental hygiene.
- The group of housewives is given knowledge about diseases that have the potential to arise due to an unsanitary environment. Emphasis on mosquito-borne diseases.
- Introducing preparations that can be used to repel mosquitoes

- Introducing wax preparations that are used to scent the room as well as to repel mosquitoes.
- Conducted training on how to make air freshener candles as mosquito repellents whose active ingredient composition comes from plants. Making aromatherapy candles with the basic ingredients of paraffin wax and white oil is steamed until it melts by filling half of the water into the pot or adjusting it so it doesn't spill. Put a glass container containing paraffin. Then add the dye and if you want it smells good, you can add perfume and if you want to use it for aromatherapy, add aromatherapy essential oil, then pour it into a mold or glass. Leave it for a few hours before removing it from the mold (Minah et al., 2017)
- Provision of facilities for making air freshener candles as mosquito repellent in the form of gas stoves, pans, materials for making gels and candles, packaging of gels, and methods of making them. To see the success of this Community Service Program, periodic monitoring of results and collaboration between groups of housewives in the Joso Triyagan Region RT 01 / RW 01, Mojolaban, Sukoharjo and Sahid University Surakarta is carried out in terms of monitoring the quality of the products produced.

This community service activity was carried out by a Nursing lecturer at Sahid University Surakarta and was carried out on:

Table 1. The community service activity

Topic of Discussion	Aromatherapy Candle Making Training for Body Health for Housewives in the Joso Triyagan Area RT 01 / RW 01, Mojolaban, Sukoharjo
Target	Housewives in the Joso Triyagan Area RT 01 / RW 01, Mojolaban, Sukoharjo
Allocation	Day/Month Friday/17 and 24 June 2022
Time	09.00 WIB- selesai

RESULTS

Community service in the form of Aromatherapy Candle Making Training for Body Health for Housewives in the Joso Triyagan Area RT 01 / RW 01, Mojolaban, Sukoharjo, was held on 17 and 24 June 2022 at the house of the head of RT 01. very good by village officials, and local residents, which can be seen from the facilities that are sufficiently prepared so that the implementation of activities runs well and smoothly. The place that has been provided is in accordance with the agreement during the previous coordination, namely at the house of the head of RT 01 Desa. Villagers, especially women, sat in an orderly manner, which was then introduced by the service team so that an intimate and pleasant atmosphere was created. The implementation of training activities for making aromatherapy candles went well and smoothly. The readiness of the residents to take part in this activity can be seen from the presence of participants who are on time at the location.

DISCUSSION

The enthusiasm of the participants who took part in this activity indicated that the community positively welcomed the activities that had been carried out. In accordance with the expectations of the community, they really hope that there will be activities that refresh their knowledge and skills. In addition, there was a positive response from the community in paying attention to the material presented during the socialization activity, there were several questions that were also asked by the residents reflecting their curiosity to understand the benefits of aromatherapy candles so that there were good questions and answers and discussions between the resource persons and the socialization participants. This activity also ended with measuring blood pressure for the participants and also taking a group photo.

The Aromatherapy Candle making training was very fun and it was the first time it was held. This kind of activity is a new thing for the community. Aromatherapy candles are safe, effective and cost-effective repellants. Aromatherapy candles have potential as insect repellents, especially mosquitoes. Lemongrass is a plant that has the potential as a natural repellent against

the Aedes aegypti mosquito. In addition, aromatherapy candles can make the mind relaxed, cheerful and happy with aromatherapy, especially for housewives and this has an impact on improving the health of the body and mind (Moore et al., 2018).

The training carried out increased the curiosity of the residents to understand the benefits of aromatherapy candles for health and also increased the skills of the participating mothers to make aromatherapy candles which turned out to be fun, easy and inexpensive. In addition, there was also a socialization material that explained about other benefits of aromatherapy candles besides increasing relaxation and for body health, namely that aromatherapy candles can also be traded so that it will increase people's income. Thus the health education method is considered the right way as an effort to increase public understanding and awareness about improving their health. This activity is important to continue to provide education to the community to continue to improve their quality of life to stay healthy.

CONCLUSIONS AND RECOMMENDATIONS

The socialization of the training on Aromatherapy Candle Making for Body Health for Housewives in the Joso Triyagan Area RT 01 / RW 01, Mojolaban, Sukoharjo went well and smoothly. The positive response and enthusiasm of the residents in the implementation of the training reflected the desire to understand the manufacture of aromatherapy candles so as to increase public awareness about the importance of health. The training in making aromatherapy candles should continue to be developed using other variations of local plants to support the utilization of local natural resources and can be traded so that in addition to improving the quality of life of the community, it can also have high economic value.

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APPENDIX

Figure 1. Health education activities and blood pressure measurement

Figure 2. Results of making aromatherapy candles