TRAINING FOR INCREASING COOKING OIL INTO AROMATHERAPY WAX FOR BEKASI JAYA INDAH HOUSEWIFE

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Abstract
There are many types of household waste. One of the wastes associated with cooking and trading activities is used cooking oil. Oil waste own impact bad for health body and environment. Therefore, that need done effort utilization oil waste become something useful for minimize waste oil waste as well as reduce pollution environment by converting into products that have added value. This is one of the goals from activity devotion this, incl increase knowledge public to impact use and disposal oil waste to health body and environment. The type of method used that is with give counseling in form socialization and description information about oil cooking. Participant looks enthusiastic with knowledge management of used cooking oil and motivate them to manage used cooking oil. Participants also add Skills in utilization oil waste become product that is candle aroma therapy as well as inspired For use it in life every day, even for help economy family.

Keywords: Candle Aromatherapy, Waste, Oil Cooking, Bekasi Jaya, Training

INTRODUCTION
Rubbish or waste House ladder is the garbage that comes from from activity at home every day stairs that don't including feces and trash specific. Impact waste House ladder can influence pollution environment like decline quality air, then will influence to level health for other people. Existence garbage /waste in the environment settlements, especially in the neighborhood increasingly society congested need handling and role active inhabitant society and government local. One of the household wastes from cooking activities is used cooking oil, leftover cooking oil.

One of the areas in Bekasi Jaya district is a densely populated area, namely Bekasi Jaya Indah. Bekasi Jaya Regency with a population density of 185.6 people/ha. Regency Bekasi Jaya is one the regency is located in West Java Province with an area of 348.22 Ha. Bekasi Jaya Regency is bordered by the following areas: to the east by Durenjaya Village, to the north by Karang Satria Village, to the south by Margahayu Village, and to the west by Marga Mulya Village.

Housewives (Housewives) in the RW 09 Bekasi Jaya Indah area often use cooking oil for cooking. The RW 09 area also has many sellers who use cooking oil. Cooking oil,
which is used as a medium for frying, requires a lot of oil in one cooking so that household households and many food vendors reuse cooking oil repeatedly. The repeated use of cooking oil causes the quality of cooking oil to decrease and is not good for health (Kusuma and Afrianisa, 2021). After being used for cooking repeatedly, the waste oil is usually just thrown away. The large number of residents in RW 09 will have an impact on the volume of cooking oil waste disposed of. Discarded used cooking oil can cause damage to the environmental ecosystem because it contains impurities (Aini et al. 2020).

There are efforts that can be made to utilize used cooking oil or used cooking oil into useful products such as dishwashing soap, transparent soap, solid soap, candles, and aromatherapy candles (Sindoro, Kusuma, and Auwalani 2020). This can be developed as a side business that generates profits. The people in RW 09 Bekasi Jaya Indah, especially housewives, are active at home so they are less productive, do not work, and most of the family income includes people with lower middle incomes. Therefore, training was conducted to recognize the dangers of used cooking oil and its use for aromatherapy candle products. This training is expected to be a means to increase the skills of housewives and help the economy of partner families in the area. The waste bank can also manage used cooking oil in the area to facilitate its collection and processing.

METHODS

The problem of women in RW 09 Bekasi Jaya Indah, using cooking oil repeatedly and throwing it away, can be overcome by training to process used cooking oil into aromatherapy candle products. Activity service to this community implemented in the RW 09 area, Bekasi Jaya Indah, Bekasi Jaya. Target participant is Housewife and culinary trader at RW 09 Bekasi Jaya Indah who do a lot of cooking using cooking oil. PKM activities go through the following stages:

1. Preparation activity includes :
   a. collect data, facts and related information with problem object devotion society.
   b. Prepare work plans, location searches and technical implementation plans
   c. Activity survey place devotion public and related discussions
   d. Application permission activity devotion public to RW 09 Bekasi Jaya Indah.
      Licensing needed related willingness partner For support and contribute direct in activity training.
   e. Management administration (correspondence)
   f. Preparation tools and materials ; accommodation as well as preparation place For activity training

2. Activities training includes :
   a. Carrying out outreach on the dangers of using used cooking oil repeatedly, the dangers of disposing of used cooking oil and motivating participants to process used cooking oil into useful products
   b. Carrying out training on making aromatherapy candles using used cooking oil as raw material with demonstrations and involving participants in a manner active in make fertilizer compost through training processing rubbish organic become fertilizer compost.
   c. Activity evaluation, evaluation aims to measure the level of understanding of the training participants before and after carrying out the training. Measurement achievement activity done through pretest and posttest.
Manufacturing method candle aromatherapy carried out during activities devotion
This are: 1) Heat 100 mL of used cooking oil, 2) Add 100 ml of paraffin little by little, 3) While hot, put the mixture of used cooking oil and paraffin into a glass bottle, 4) Add enough fragrance while stirring, 5) Add enough coloring while stirring. stir, 6) Insert the wick, 7) Wait until the wax hardens.

RESULTS AND DISCUSSION

Activity Service to this Community held on January 31 2023 at RW 09 Office, Bekasi Jaya Indah, Bekasi Jaya. The activity took place at Mr. RW 09 Bekasi Jaya Indah's house.

PKM activities This started with delivery material use Powerpoint. Material presented including regarding introduction to various types of household waste, dangers use oil waste cooking in a manner repetition and the dangers of disposing of used cooking oil into the environment (Figure 1). The negative impact of using used cooking oil is increasing cholesterol because it contains high saturated fatty acids from the heating process, the onset of heart disease due to high cholesterol which increases the risk of narrowing of blood vessels, and cancer because used cooking oil is a source of free radicals (Adhani & Fatmawati, 2017). Consequences of oil waste cooking which was thrown away through water channels will cause narrowing of the channel because it contains fat which can settle in the channel, pollution of the surrounding water because it floats on the surface, as well as soil contamination because oil tends to agglomerate and closes the pores of the soil (Ginting et al., 2020), (Afrozi et al., 2017). The presentation of this material is to provide understanding so that no Again use oil waste cooking in a manner repeated or not throw it away in a manner carelessly.

![Figure 1. Socialization danger use oil waste](image)

Activity furthermore next with demonstration and practice direct making candle aroma therapy from oil cooking. The participants who became target activity is housewives Because those who interact direct with use cooking oil. The presentation of the technique for making aromatherapy candles from used cooking oil begins with a demonstration. The companion explains the materials and tools used.

The next stage is practice Aromatherapy candle making done in a manner directly by the participants (Figure 2). The training was accompanied by 1 companion and 2 students. The participants shared become 2 group. Each group make with different doses of
aromatherapy. All of the dough has been cooked material mixed evenly distributed and the aromatherapy smell has appeared then it will then be put into the mold with the candle wick clamp in the middle of the mold. Activities while waiting for the dough to cool, a discussion session was held with the mothers who wanted to ask questions if there were things that were not clear. Next, we will give an example of 1 ready-made aromatherapy candle to be lit and the aroma will appear from the aromatherapy.

Figure 2. Demonstration and practice making candle aromatherapy from waste cooking oil

pre-test sheets before the activity begins and post-test sheets after the activity is completed. The distribution of the evaluation sheets aims to measure the level of understanding of the participants before and after conducting the training. Understanding of the dangers of using used cooking oil, the dangers of disposing of used cooking oil into the environment and the use of used cooking oil to make aromatherapy candles can reach the participants. The hope is that the participants can recreate it at home and can use it in their daily lives or even better to improve their family finances.
The demographics of the training participants can be seen in Figure 3. As many as 81% of the participants who took part in the training on making aromatherapy candles from used cooking oil were women. The majority criteria for age are more than 41 years and the rest are 21-40 years old. Level of education with the highest level of undergraduate education. As many as 44% of the participants’ occupations are housewives and 25% are entrepreneurs.

Table 1
Training Participants Evaluation Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Test Results</th>
<th>Post-test results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% yes</td>
<td>% no</td>
</tr>
<tr>
<td>Do you know about household waste management?</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>Do you know how to use used cooking oil?</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>Do you know the negative impact of used cooking oil on health?</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>Do you know the negative impact of used cooking oil on the environment?</td>
<td>89</td>
<td>11</td>
</tr>
<tr>
<td>Do you know how to manage used cooking oil?</td>
<td>26</td>
<td>74</td>
</tr>
<tr>
<td>Do you know how to use used cooking oil into goods that have sales value?</td>
<td>26</td>
<td>74</td>
</tr>
</tbody>
</table>
Do you know about processing used cooking oil into aromatherapy candles?  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>68</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Do you know that good waste management can produce something of value?  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>32</td>
<td>0</td>
<td>100</td>
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</table>

The pre-test results (Table 1) show that less than 68% of participants know about the use of used cooking oil, the negative impact of used cooking oil on health and good waste management can produce something of value. 89% of participants know the negative impact of used cooking oil on the environment but still dispose of used cooking oil directly into the environment. Less than 30% of participants knew about how to manage used cooking oil, the use of used cooking oil into products that have sales value and the management of used cooking oil into aromatherapy candles.

Table 1 also shows the results of the post-test after the activity was carried out, namely that all participants knew about the use of used cooking oil and the negative impact of used cooking oil on health, there was an increase in participants' understanding by 32% in this matter. All participants knew how to manage used cooking oil and understood the process of used cooking oil becoming aromatherapy candles, the increase in participants' understanding reached 70%. The training activities also increased the enthusiasm of the participants to manage the race well. The participants were also enthusiastic in participating in the training activities and were satisfied with the materials, explanations from the speakers and their implementation.

All participants will utilize used cooking oil into aromatherapy candles to be used in every day life. The participants also plan to manufacture and sell aromatherapy candles to benefit financially. In addition, this activity can increase economic income for traders.

CONCLUSION

Some of the participants were already aware of the dangers of used cooking oil for health and the environment. They are also aware that waste treatment can produce something of value. Training activities increase their awareness of the dangers of used cooking oil and choose to process used cooking oil. This training activity also gave them the understanding and ability to process used cooking oil into aromatherapy candles. Utilization of used cooking oil into aromatherapy candles can reduce pollution to the environment, utilize waste into high-value products, and can increase economic income if commercialized.
Training on Increasing the Use Value of Used Cooking Oil into Aromatherapy Candles for Bekasi Jaya Indah Housewives

BIBLIOGRAPHY


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