Training on Using and Making Cloth Masks for Housewives in Kerinjing Village

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Abstract: The spread of the Covid-19 outbreak is a serious problem that threatens the health and must be addressed immediately. People are required to comply with health protocols, one of which is by wearing a mask. The use of masks is an effort to minimize the transmission of the Covid-19 virus. The high demand for masks, especially medical masks, causes scarcity and high prices in the market. As an alternative, a cloth mask is needed that can be used daily for activities for the community during the Covid-19 pandemic. The purpose of this community service activity is to socialize the proper and correct use of cloth masks. This service activity also aims to provide training to housewives to make masks independently from cloth that can be used in daily activities. Besides functioning as a prevention for the Covid-19 virus, cloth masks can also be sold as an effort for housewives during the Covid-19 pandemic. Methods of activity and implementation are carried out through outreach, training, and mentoring approaches.

Keywords: Covid-19, Use of Cloth Masks, Making Cloth Masks

How to Cite:

1. INTRODUCTION

Currently, the world is being hit by a health crisis due to the transmission of Covid-19 (coronavirus disease) or better known as the coronavirus or Covid-19. This virus is a new type of coronavirus from Sars-CoV-2 which was found in Wuhan, the capital of China's Hubei province at the end of 2019 and was announced by WHO as a pandemic on March 11, 2020 (Friana, 2020; Armiani, etc., 2020). On December 7, 2020, South Sumatra Province, was ranked 14 nationally in the number of Covid-19 confirmed cases. The percentage of the number of cases in South Province to the number of national cases is 1.7 percent with the number of cases as much as 9,987 people. Some of the efforts of the South Sumatra Provincial government in breaking the chain of the spread of Covid-19 include calls for clean and healthy living habits, independent isolation, social distancing, and calls for mandatory use of masks, especially when out on the move (Budhyani, Angendari & Sila, 2020). Among these efforts that have experienced many obstacles is the use of masks, given that the availability of masks is very rare in the Covid-19 pandemic season and the price is relatively expensive (Daulay, Nasution, & Wahyuni, 2020). The scarcity of masks has made the government limit the use of medical masks and are intended for health workers while for the public it is enough to use cloth masks (Elfrida & Junaidya, 2020).
However, people are still not used to using cloth masks and don’t understand how to use cloth masks properly and correctly. The use of cloth masks needs to be considered to function properly to prevent the Covid-19 virus. In addition to the use of masks, it’s also necessary to pay attention to the correct process of washing cloth masks because cloth masks are used continuously so that washing masks cannot be arbitrary (Putraka & Anggaraeni, 2020; Ramadhanty, etc., 2020).

In Kerinjing Village, some housewives have activities and skills. So, it’s very necessary to train in making cloth masks for housewives in Kerinjing Village. Providing training in making cloth masks is a solution to assisting the village government in inviting people to use masks when on the move to reduce the spread of the virus, empower housewives to remain productive, and provide business ideas in helping the family economy amid the Covid-19 pandemic. The impact of Covid-19 is the weakening of the economy and has an impact on income. Meanwhile, the COVID-19 pandemic has also had a positive impact on the mask business opportunity, especially cloth masks. The need for cloth masks and large market demand can be an opportunity for housewives to open a cloth mask business. The cloth mask business is a solution to people's income problems during the COVID-19 pandemic (Ramadi etc., 2020; Sriarumtias, 2020).

2. LITERATURE REVIEW

The government has obliged the public to wear masks in their daily activities to prevent the spread of the Covid-19 virus. In the Circular of the Director-General of Public Health No. HK.02.02 / I / 385/200 of 2020 concerning the Use of Masks and Provision of Handwashing Facilities with Soap to Prevent the Transmission of Corona Virus Disease (Covid-19), Covid-19 by WHO has been declared a pandemic and on March 31, 2020, the President declared the Coronavirus Disease 2019 (Covid-19) Public Health Emergency in Indonesia through Presidential Decree Number 11 of 2020. Based on WHO recommendations and paying attention to disease developments in Indonesia, the Task Force for the Acceleration of Handling Covid-19 said that the foremost defenses in efforts to prevent the transmission of Covid-19 include wearing masks by everyone when they are outside the home and washing hands with soap. This Circular Letter is intended to convey to the Head of the Provincial Health Service and Head of the Regency / City Service to immediately implement the "All Wear Masks" movement and provide CTPS facilities to prevent Covid-19 transmission in their respective work areas.

Figure 1. Number of Daily Positive Cases and Development of Confirmed Cases in South Sumatra
Source: Covid19.go.id, 2020 (Processed)
2.1 Production Theory

Production is a process in which goods and services called inputs are converted into goods and services called output. The process of changing the form and the factors of production into production is called the production process. Production is the process of converting inputs into outputs. Production includes all activities to create or add value to a good / service. In simple terms, production is an effort made to create and improve the use of an item to meet needs. The production function is an interaction between input and output (Boediono, 2002).

Companies to obtain finished goods or output for goods produced by these companies. Meanwhile, production theory cannot be separated from The Law of Diminishing Return or the law of decreasing yield increase. The law states that if the factor of production which can be changed in number is continuously increased by one unit, at first the total production will increase more, but after reaching a certain level the additional production will decrease and eventually reach a negative value and this causes an increase in total production. getting slower and finally reaching the maximum level and then decreasing (Sukirno, 2010).

The nature and factors of production are fixed and increased, and the time of use is short and long term, so there are 2 (two) production theories, namely the theory of production with increased variable input and the theory of production with two additional inputs. The theory of production with one incremental variable input states that the total product (TP) is the total amount produced over a certain period. If all inputs except one factor are kept constant (capital), the total product will change according to the number of factors (labor) used. The average product (AP) is the total product per unit of the production variable factor, namely labor. Marginal product (MP) is also called incremental product, or marginal physical product (MPP) is the change in the total product due to the additional use of 1 unit of variable production factors (labor), and the other (capital) is fixed (Hidayat et.al., 2021).

3. MATERIALS AND METHODS

The implementation of this community service activity was carried out for two months, namely October-November 2020 in Kerinjing Village, Tanjung Raja Selatan District, Ogan Ilir Regency, South Sumatra Province. Methods of activity and implementation are carried out through outreach, training, and mentoring approaches. The socialization approach is to provide an understanding of how to use masks properly and correctly and how to care for cloth masks. Then the training and mentoring approach is to provide ways to make cloth masks that are according to standards and the cloth mask business.

4. RESULTS

4.1. Use and Treatment of Masks

In general, this virus spreads through droplets or droplets from respiratory products such as snot, sneezing, and coughing, so people who are obliged to use masks are those who have a fever, people who have flu/cough/sneeze, and people who are obliged to use masks. is recovering from illness. This is because people who have a fever and who are recovering are in a state of poor immunity, so they must protect themselves from possible risks of exposure. It is necessary to pay attention to how to use a mask that is good and correct so that it can prevent the spread of the Covid-19 virus. As for how to use medical masks that are good and correct, namely as follows:

1. Make a habit of washing your hands first before using a mask, you can use running water with soap, you can also use an alcohol-based antiseptic solution.
2. Make sure that the nose, mouth, and chin are completely covered, the colored parts are in front, and the white parts are attached to the face.
3. Press the top of the mask with the wire to fit the nose
4. Change the mask if it is damaged, dirty, or wet. Furthermore, the way to open and dispose of the correct mask is to remove the mask from the ear or tie the mask, making sure not to hold the front of the mask.
5. Dispose of the mask properly in the trash.
6. Wash your hands properly and properly with soap or alcohol-based materials.

**Figure 2. How to Wear a Medical Mask Safely**

*Source: World Health Organization, 2021*
WHO recommends cloth masks for people younger than 60 years and those who do not have clinical symptoms of the coronavirus, such as cough and fever. Meanwhile, the proper and correct ways to use cloth masks are as follows:

1. Clean hands before wearing a mask.
2. Check the mask for tears or holes, do not use a mask that is damaged.
3. Adjust the mask to cover the mouth, nose, and chin, leaving no gaps on either side.
4. Avoid touching the mask when wearing it.
5. Change the mask if it gets dirty or wet.
6. Clean hands before removing the mask.
7. Remove the mask by removing it from the ear, without touching the front of the mask.
8. Clean hands after removing the mask.

In addition, WHO has made guidelines for the correct care for cloth masks, which are as follows:

1. If the cloth mask isn't dirty or wet and you plan to reuse it, place it in a clean, resealable plastic bag. If you need to use it again, hold the mask by the elastic knots as you remove it.
from the pouch.
2. Wash the cloth mask with soap or detergent and preferably hot water (at least 60 degrees Celsius) at least once a day.
3. If hot water is not available, wash the mask with soap or detergent and room temperature water, followed by boiling the mask for 1 minute. Or, by soaking the mask in 0.1% chlorine for 1 minute and rinsing the mask thoroughly with room temperature water (there should be no toxic chlorine residue on the mask).
4. Make sure you have your mask and don't share it with other people.

4.2. Procedures for Making Cloth Masks

The existence of the Covid-19 outbreak made the supply of medical masks dwindling and the relatively expensive prices made household expenses swell while income decreased due to the Covid-19 outbreak. Instead of buying medical masks whose supplies are running low and the price is relatively expensive, housewives should know how to make cloth masks by hand sewing. The government also recommends the use of cloth masks for residents who do not show dangerous symptoms. The government sets SNI for cloth masks, three types need to be considered by the public in making masks to meet the standards set by the government.

a) Mask Type A

This type of mask is used for general use. However, one must pay attention to the fabric used at least two layers. Then, it must have a limit of 15-65 cm³ / cm² / sec for its penetrating power. The absorption must also be ensured to be ≤ 60 seconds by having 75 mg/kg free formaldehyde levels. It is hoped that the color of the fabric will not fade when exposed to soap up to 75 mg/kg, and the absorption capacity is ≤ 60 seconds. Then, it doesn't fade easily due to exposure to liquid.

b) Mask Type B

Unlike the type A mask, the type B mask is used to filter out bacteria. The criteria are like the first type. The difference is that this type of mask must pass the accuracy-test for bacterial filtering. At least type B masks must be in the ≥ 60 percent limit. Then, have a quality mask cloth that is at ≤ 15 differential pressure.

c) Mask Type C

This type of mask is even more difficult to manufacture. This is because its function is to filter incoming particles from the air. You must cover it with two fabrics. Make sure you have up to 75 mg/kg for free formaldehyde levels. The absorption capacity should not be more than a minute. Make sure the color part does not bleed when exposed to liquid. Type C masks must also pass the particulate filtering precision test with a limit of ≥ 60 percent. Unlike type B, this type of mask must undergo a differential pressure mask quality measurement with a limit of ≤ 21.

The main key in making an effective mask is the use of two layers of cloth. The materials that must be prepared are a needle, sewing thread, safety pins, scissors, 4 pieces of cloth of sufficient size (usually 50 x 50 cm), and rubber rope to attach the mask. How to make a cloth mask is as follows:

1. Double the fabric that you cut and then fold it in half.
2. Cut the fabric into a square shape of 25 x 15 cm.
3. Position the rope across (horizontally).
4. The rope or piece of fabric 45 × 2 cm is folded, the top point is facing downwards, and vice versa. Fold one more time in the middle, then sew to make it tidier.
5. Take the fabric that has been double-cut and cut, laying out the fabric you chose as the outer.
6. Place each string on the four corners of the fabric using pins. Each end of the rope is in the middle of the fabric.
7. Prepare another double cloth and line it with the previous one, stacking it on the straps.
8. Pin the fabric on top, bottom, left, and right.
9. Sew a straight line from the bottom center to the left corner. Extra stitches can be added to make the rope sewn tighter.
10. Sew around the fabric, safety pins or pins can be removed while removing.
11. Continue sewing to the starting point. Make a distance of 4 cm from that point. Then, the inside is flipped outwards, so that the rope is outside.
12. On the outside, the fabric is folded in three layers.
13. Pin or safety pin in each fold.
14. Sew around the mask and leave 5 cm from the edge of the fabric. The seams tend to be thicker, so be careful when sewing. Then, make a second stitch 5 cm from the first stitch.

4.3. Feedback

Table 1. Participants’ level of Understanding about The Use of Masks After Training

<table>
<thead>
<tr>
<th>Participants' level of understanding</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Understanding</td>
<td>30</td>
<td>100,00</td>
</tr>
<tr>
<td>Understood</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Enough</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Don't understand</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Very Unaware</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100,00</td>
</tr>
</tbody>
</table>

Source: Primary Data (processed)

Figure 4. Documentation of Training Activities in Kerinjing Village
Before this service activity, the community in Kerinjing Village did not understand the use of a good and correct mask to prevent the transmission of the Covid-19 virus. Most of the people are still foreign and are not used to wearing masks. After the delivery of material regarding the proper and correct procedures for using medical masks and cloth masks, the resource person gave an example and the participants practiced it directly. All participants understand the proper and correct use of masks after training. Not only the procedure for using masks, but participants also understand how to care for cloth masks properly and properly.

The Covid-19 pandemic has spread throughout the region to rural areas. The public is obliged by the government to always wear a mask, especially when outside the home. Ordinary people, especially rural communities who do not understand the use of masks, really need socialization activities about the use of masks that are good and correct so that people do not carelessly use masks. The use of masks must be good and correct so that they can protect and prevent transmission of the Covid-19 virus. Based on the evaluation of community service activities through a feedback questionnaire, all participants stated that this service activity was by the needs of the community in Kerinjing Village.

Table 2. Service Evaluation Regarding Community Needs Conformity to Community

<table>
<thead>
<tr>
<th>Needs</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Appropriate</td>
<td>30</td>
<td>100,00</td>
</tr>
<tr>
<td>Appropriate</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Enough</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unsuitable</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Very Unsuitable</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100,00</td>
</tr>
</tbody>
</table>

Source: Primary Data (processed)

Not only that, medical masks which tend to be expensive and rare are of course a problem. Disposable medical masks are of course wasteful and make household expenses swell while income decreases due to the impact of Covid-19. Participants needed training on making cloth masks to make masks independently to save money and to protect against the spread of Covid-19. Besides that, it can be a business opportunity for housewives to increase their income. Until now, it is not certain when the Covid-19 pandemic will end, it is hoped that the public will always maintain the good habit of wearing masks when doing daily activities outside the home.

5. CONCLUSIONS

This community dedication activity regarding the use of masks and the manufacture of cloth masks is very important and beneficial for the community in Kerinjing Village, especially housewives. This dedication activity provides an understanding of the proper and correct use of masks, as well as an understanding of making cloth masks by standards. Participants needed training on making cloth masks to make masks independently to monitor expenses and to protect against the spread of Covid-19. Besides that, it can be a business opportunity for housewives to increase their income. Until now, it is not certain when the Covid-19 pandemic will end, it is hoped that the public will always maintain the good habit of wearing masks when doing daily activities outside the home.

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