

Productive Economic Improvement in the time of COVID-19 Pandemic for the People of Kampung KB Gandul with Innovation of "Mi Jaren" (Palm Sugar Ginger Lemongrass Drink)

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Abstract

*Coronavirus disease originating from Wuhan, China, has spread throughout the world, including in Indonesia. Covid-19 patients were first detected in Depok, Cinere, West Java, and increased on June 20, 2020. There have been 45,029 positive cases of Covid-19 on June 2021. Gandul Cinere village is located bordered by South Jakarta. Jakarta has a relatively high number of Covid-19 positive patients. Many people lost their jobs during the pandemic, including in the Jakarta and surrounding areas. Anis Baswedan, the governor, expects the unemployment rate due to the Covid-19 Pandemic in the DKI Jakarta area will reach 10 percent in 2021. This shows that economic problems cannot be ruled out easily. Therefore, efforts are needed to improve the economy of UMKM (Usaha Mikro Kecil dan Menengah) to further strengthen Indonesia's economy, especially in the DKI Jakarta and surrounding areas. Red Ginger (*Zingiber officinale* var *Rubrum*) and lemongrass (*Cymbopogon citratus*) are easy to find in Indonesia. Palm Sugar Ginger Lemongrass (MI JAREN) instant drink is an excellent herbal product to be studied and marketed in the Gandul village community. This instant herbal drink-making training was provided online, along with how to package it. The activity results showed that society in Kampung KB Gandul has good knowledge, only still requires guidance for the marketing, especially online. It is hoped that this community service activity can improve the economy in Kampung KB Gandul while also keeping the people of Kampung KB Gandul to avoid COVID-19 infection.*

Keywords: Covid-19; ginger lemongrass drink; Kampung KB

Introduction

Coronavirus disease originating from Wuhan, China, has spread throughout the world, including in Indonesia (Wu, Yi-Chia; Chen, Ching-Sunga; Chan, Yu-Jiuna, b, 2020). The first Covid-19 patient in Indonesia was detected in Depok, Cinere, West Java. (Online, 2020a) On May 30, 2020, the Indonesian government announced the enactment of PSBB (Large-Scale Social Restrictions) contained in Government Regulation No.21 of 2020 (Kementerian Kesehatan RI, 2020; RI, 2020). Covid-19 cases continue to spread and increase to this day on June 20, 2020. There have been 45,029 positive cases of Covid-19 (Online, 2020) (Online, 2020b) Gandul Cinere village is located bordered by South Jakarta. Jakarta has a fairly high number of Covid-19 positive patients.

The Covid-19 pandemic has been going on for quite a long time and has impacted many sectors, especially the economic sector. Many people lost their jobs during the pandemic, including those in the Jakarta and surrounding areas. Anis Baswedan, the governor, expects the unemployment rate due to the Covid-19 Pandemic in the DKI Jakarta area will reach 10 percent in 2021 (CNN Indonesia, n.d.). This shows that economic problems cannot be ruled out quickly. High unemployment will trigger many social issues that will have a broad impact. Therefore, efforts are needed to improve the economy of UMKM (small and medium-sized enterprises) to further strengthen Indonesia's economy, especially in the DKI Jakarta and surrounding areas. Cinere subdistrict, Gandul village is directly adjacent to South Jakarta. This area is an urban area that many immigrants from areas outside Java inhabit. Many of them are also affected by economic problems due to the Covid-19 pandemic.

Red Ginger (*Zingiber officinale* var *Rubrum*) is a widely traded commodity in the world (Tanto Pratondo Utomo, Harun Al Rasyid, Erdi Suroso, 2017). Indonesian people generally have known and utilized ginger for various purposes, such as a mixture of food and beverage ingredients ranging from traditional to modern variants. Ginger has antiviral components and can be made for the prevention of Covid-19 infection. According to Tri Untarini et al. 2012, lemongrass (*Cymbopogon citratus*) also has a relatively high antiviral content (Chiamenti et al., 2019; Kim et al., 2017). The combination of ginger and lemongrass will be able to further increase the body's immunity during the COVID-19 pandemic, compared to using only one component (Asif, Saleem, Saadullah, Yaseen, & Al Zarzour, 2020; Tri Untari, Sitarina Widyarini, 2012) Palm sugar is good for health, especially for diabetics, to reduce sugar

consumption. The problem is, it takes time and effort to prepare a fresh ginger lemongrass drink every day. Ginger drinks those are sold in the market sometimes contain preservatives. To increase family resilience against Covid-19, it is necessary to teach them how to store such drink in powder form that is easily made by the local community, as well as being a source of additional family income. Palm Sugar Ginger Lemongrass (MI JAREN) instant drink is an excellent herbal product to be studied and marketed in the Gandul village community. Making this ginger drink into powder form can be used as a model for storing other herbal drinks with various herbal compositions according to the need to increase body immunity in the community of Kampung (village) KB Gandul. There are two types of drying techniques, which are direct and indirect drying. Direct drying contact is characterized by direct contact between the wet material and the heating medium while indirect drying is carried out by transferring heat to the barrier wall, thereby accelerating the rate at the contact between the wet material and heating field, or called conduction drying (Vivin Atika, 2019). In this community service, a direct (under the sun) and an indirect heating method with electric oven were implemented. Drying time ranges from 2 to 3 hours depending on the amount of ginger and lemongrass plants used. The innovation taught here is to make ginger and lemongrass drinks easily that can be stored for a long time, without preservatives. Training in making this instant herbal drink was given along with the know-how to perform the packaging. It is hoped that this community service activity can improve the economy in Kampung KB Gandul as well as improving the health of the community.

Methods

The community service was carried out in July-September 2021. All activities were carried out online by internet meeting due to the Covid-19 outbreak and the enactment of PPKM (Community Activity Restrictions) in Indonesia. Implementation activities were divided into three parts, namely:

1. Planning

At this stage, field observations were carried out to see the problems experienced by the people of Kampung KB Gandul. In addition, there was also an online interview with the people of Kampung KB before the implementation. Online interviews were carried out using WhatsApp calls and Zoom meetings to find community problems that were priority to be solved. The priority problems to be solved were health problems and economic problems. Many villagers in the Kampung KB lost their jobs because of the pandemic.

Similarly, no less important were health issues and the transmission of Covid-19. It was necessary to increase family resilience in terms of health as well as in terms of economy in Kampung KB.

2. Implementation

Participants were the people of Kampung KB Gandul, as many as 30 persons. The selection of respondents involved the Chairman and Manager of Kampung KB. At this stage, training and counseling were carried out to manufacture Palm Sugar Ginger Lemongrass Drink and about the use of ginger drink for body health, significantly to increase immunity and preceded by measurement of the participant's level of knowledge using Google form. Then, participants were given video training in making instant Mi Jaren (using a video uploaded on Youtube). After that, they were provided with supporting training materials online. This activity provides knowledge about the creation of instant Mi Jaren. The provision of material with lecture and Q&A methods was made via Zoom meetings. Participants who could ask questions were awarded with prizes. The prize packages for the winners who asked questions during meeting were given by regarding health protocol standards and by minimizing crowding. All of the participants were given basic necessities as a sign of gratitude for participating in this activity. Equipment for some participants to make MI JAREN was provided so that they could start their own business in a small scale. In groups, participants were asked to demonstrate the making of this instant palm sugar ginger lemongrass drink and recorded. The results of the activity were then compiled and incorporated into Youtube video. The manufacture of instant palm sugar ginger lemongrass drink can be done using kitchen tools such as blender, oven, and packaged in a clean plastic bottle.

3. Finalization

In the final stage, respondents were given a post-test via Google form to determine the existence of increased knowledge about making Palm Sugar Ginger Lemongrass drinks and about ginger drinks for body health, significantly to boost immunity.

Results and Discussions

In this community service, 30 respondents who are residents of the Kampung KB Gandul Cinere community were involved. Implementation took place from July to August 2021. All respondents were housewives, females with a range of 20-45 years of age. Most of their husbands are casual workers who are most affected during the Covid-19 pandemic. Before

given the material, the respondents were asked to fill out a pre-test via a Google form. Pre- and post-test surveys followed applicable health protocol standards by performing social distancing (Figure 1). Measurements using pre- and post-tests to assess the success rate of providing training and counseling materials conducted online. (Damayanti, Pusparini, Djannatun, & Ferlianti, 2017).



Fig. 1. Pre and post test Google form at home of each respondent followed health protocols during the Covid-19 pandemic

After given a pre-test online, the respondents were given video material on how to make Mi Jaren posted on Youtube. The appearance of Mi Jaren video material can be seen on the <https://www.youtube.com/watch?v=kKgreIPnbuA> link. In addition, a captured view of Mi Jaren video can be seen in Figure 2.

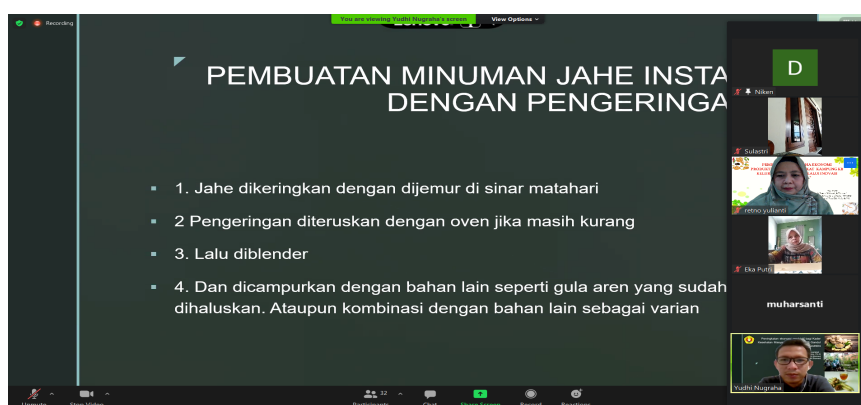


Fig. 2. Captured view of the video about Mi Jaren on Youtube, shown during an online Zoom meeting

After watching the video about Mi Jaren, then a discussion was held online using Zoom meeting. Discussion and training in the form of face-to-face were not possible because of the

PPKM, *Pemberlakuan Pembatasan Kegiatan Masyarakat* (Restriction of Community Activities) issued by the government. This was applied to avoid physical and crowd contact that could trigger the spread of Covid-19. Such counseling can be effective if accompanied by continuous, interactive, and broader collaboration (Silvia & Iryna, 2012).

Training materials on how to make Mi Jaren were given at the Zoom meeting. Some information about ginger lemongrass and its efficacy to increase immunity was also introduced, then the elaboration on how to select good raw materials for the manufacturing of Mi Jaren, where ginger itself has many kinds. Each type of ginger has a different composition for the body's immunity. Then a way to process ginger and lemongrass into powder using direct and indirect drying was also elaborated (Figure 3).

After the lecture, question and answer session about the training material was given. Participants seem enthusiastic to ask, especially questions leading to the commercialization of the product later (Figure 4). Then, to increase the participants' enthusiasm, prizes were offered for those who willing to ask question, thus increasing the participants' enthusiasm in giving questions to the speaker.

After the training sessions, the respondents were asked to fill out a post-test. The pre-test results showed that the knowledge of the Gandul community about making Mi Jaren was good. All participants already know the simple way to make Mi Jaren and the ingredients required. Understanding of the relationship of Covid-19 to the body's immunity was also greatly increased (Figure 5). This is likely that the people of Kampung KB have received counseling and training in making herbal medicine and packaging before (Nasrulloh, Pramono, Amar, & Yulianti, 2020). So that the respondents in Kampung KB were used to processing and preparing herbal medicine.

Knowledge about the benefits of Mi Jaren and immunity was still not good enough, so it still needs to be improved (Figure 5). It is possibly caused of the provision of counseling that was less than optimal because lecturer used medical terms that was foreign to the nonexperts. The explanation given should be simpler and understandable by commoners. Eighty percent of respondents' education is elementary school. Henceforth it is better to be taught by using lots of pictures and simple terms. Also, some respondents thought that ginger cannot increase the body's immunity, so they must be given a deeper knowledge of how herbs, especially ginger,

can increase immunity. In addition to improving the body's immunity, ginger can also be commercialized for sale to earn additional income.

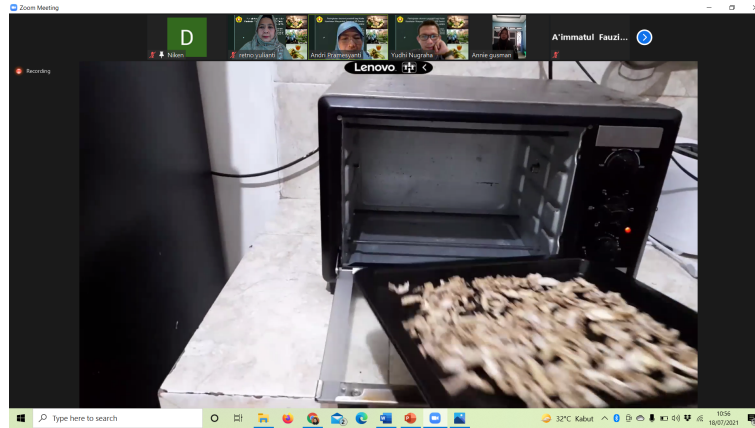


Fig. 3. Drying ginger and lemongrass in the oven

In addition, equipment for making Mi Jaren was also given to the groups of participants to make product at home (Figure 6). The prizes were given after the post-test.

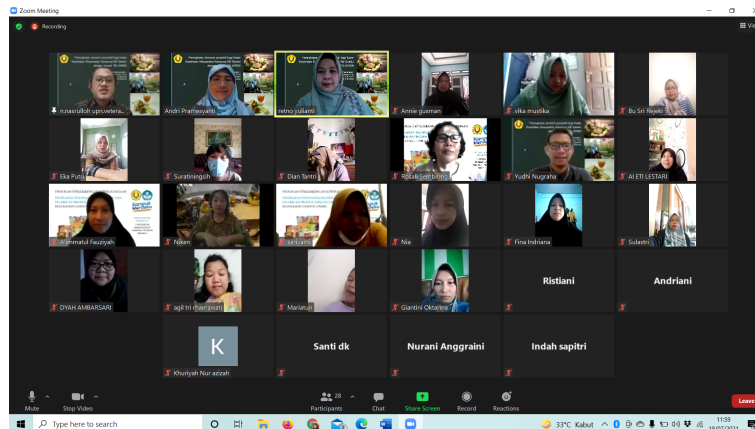


Fig. 4. Online discussions with respondents

The manufacture of Mi Jaren in each respondent's home was documented. Some participants who do not have an oven have to dry the ginger for a few days because they have to wait for the sun. It would be a hindrance if later it want to be mass-produced continuously. The drying process of ginger in the manufacture of Mi Jaren is essential. If ginger is not perfectly dried, then instant Mi Jaren does not last so long in storage.

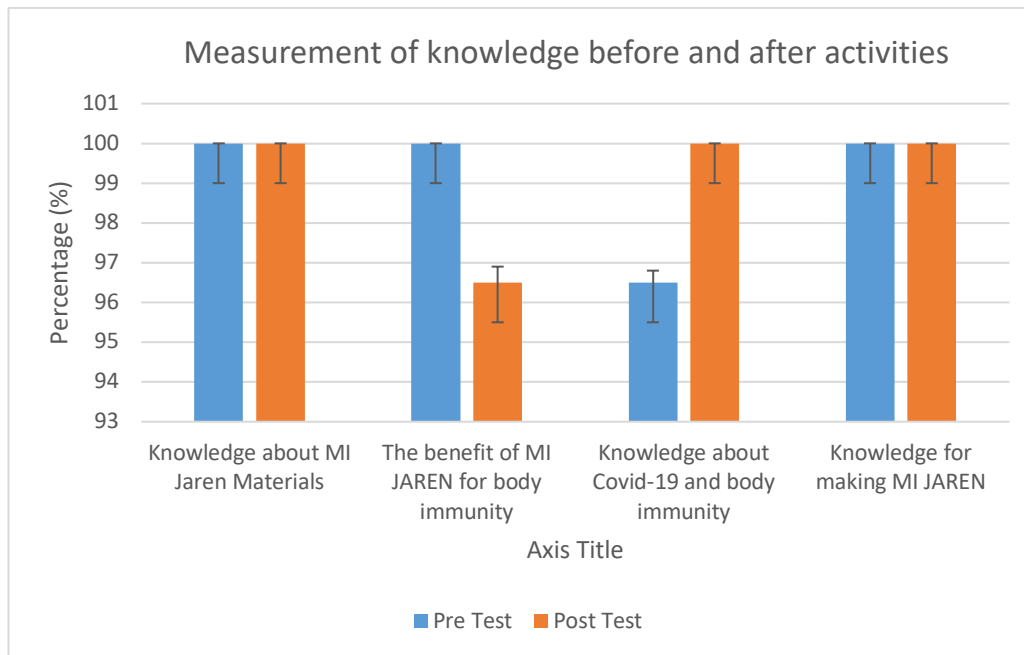


Fig. 5. Pre and post test results to measure respondents' knowledge

The finished product was then put in a plastic bottle and labeled (Figure 7). Another limitation was in product marketing. Most participants were not used to selling online, so they should be given regular and continuous guidance for marketing this product. So there was initiative to establish a small or medium enterprise (UMKM in Indonesian term) for Kampung KB Gandul Village to sell product online. In the future, it is planned to conduct regular coaching, especially regarding digital marketing, by involving youth groups in Kampung KB Village who are more aware of digital technology.



Fig. 6. The provision of staple food, raw materials for making Ginger Sugar Aren beverages, as well as gifts to the respondents of Kampung KB community, following health protocol standards



Fig. 7. The results of the manufacture of Ginger Gula Aren drink by the participant from the Kampung KB community

To increase online sales, Instagram was created to inform the activities of Kampung KB Gandul (Figure 8), especially its UMKM products periodically, making it easier later to be marketed.

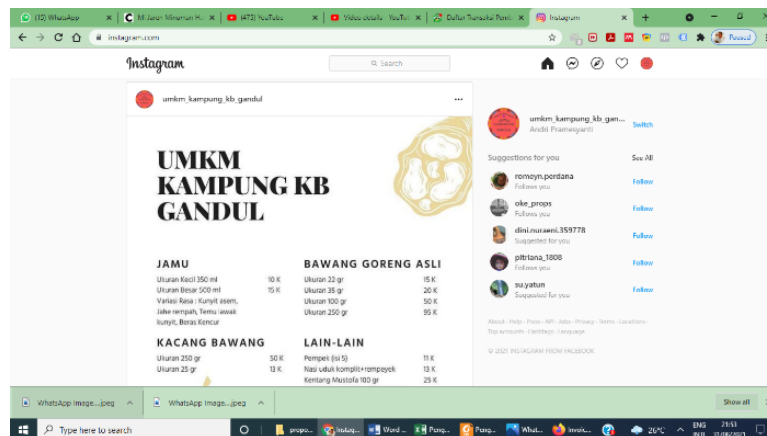


Fig. 8. Instagram UMKM Kampung KB Cinere Gandul

Conclusion

This community service activity have a positive impact on the people of Kampung KB. Knowledge about Covid-19 and the body's immunity has increased. Obstacles that still have to be followed up are product marketing and product packaging. The recommendation of the next activity is to provide assistance for product marketing and cooperate with other parties in increasing the empowerment of the people of Kampung KB Gandul Cinere.

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