

A Health Education of the Moderna COVID-19 Vaccine Systemic Reactions at University of Muhammadiyah Pekajangan Pekalongan

Dian Kartikasari*, Dafid Arifiyanto, Sugiharto & Jumaroh

Faculty of Health Sciences, University of Muhammadiyah Pekajangan Pekalongan, Indonesia.

ABSTRACT

This community service was carried out due to the skyrocketing cases of Covid-19 at the time, yet people kept reluctant to get vaccinated because of their insufficient understanding and doubt toward the vaccine. Hence, to alleviate this condition, health education about the systemic reactions of Covid-19 vaccine and how to handle them was essentially needed. The purpose of this activity was to assess the level of pre and post knowledge on the Covid-19 vaccine's Moderna. The activities started by doing preparation, and followed by delivering the health education and processing the collected data from the pretest and post-test as an evaluation. The data were analyzed by using a paired sample T-test. The results showed that before the health education, the average value of knowledge was 70.87 and increased to 95.70 after the activity with a p-value of 0.001. Thus, it is expected that the participants of this community service can socialize the knowledge they have gotten to the surrounding community so that people at large can take part in preventing wider transmission of Covid-19. To say the least, it can be concluded that this health education could increase people's knowledge about various systemic reactions of the Moderna Covid-19 vaccine and methods in overcoming the follow-up reactions.

Keywords: : Health Education; Knowledge Enhancement; COVID-19

INTRODUCTION

Covid-19 is a disease that previously could not be identified in human beings (1). The World Health Organization has called for a moratorium on boosters until at least the end of September, to enable a minimum of 10% of the population of every country to be vaccinated (2). Currently, Covid-19 still becomes a serious problem with a fluctuating number of cases every day around the world. According to data from WHO (2020) it was found that this global pandemic attacked the community regardless of age or sex (3). There were 148.3 million confirmed cases of COVID-19 in 223 countries, with 125.8 million cases ended to recovery, and 3.1 million cases resulted on death (Dharma et al., 2021). By the end of 2020, Indonesia

suffered a significantly increasing number of people affected by Covid-19. Becoming extremely contagious, this disease attacked human respiratory system and caused a great number of victims (1).

This situation becomes a noteworthy reason for the government to encourage people to live a healthier life and obey medical protocols (4). Indonesian government has classified Covid-19 as a non-natural disaster requiring great efforts to improve health status in Indonesia. The government has formulated some policies in order to limit the transmission of Covid-19, such as imposing large-scale social restriction and administering vaccines (5). Further, the government launched policies related to the implementation of new habits by forming Covid-19 Task Forces (6).

* Corresponding author:

Dian Kartikasari

Undergraduate Programme in Nursing,
Faculty of Health Sciences,
University of Muhammadiyah Pekajangan,
Pekalongan, Indonesia.

Email: dian.kartikasari1989@gmail.com

The multiple efforts and strategies had been carried out by the government not only to prevent the spread of Covid-19 but also to establish of a herd immunity (mass immunity) as the last alternative (7). When the government shared a plan to conduct COVID-19 vaccine, a number of false informations appeared in various online platforms. To prevent the possible negative effect of this situation, give an example socialization to

always apply health protocols by wearing masks, washing hands, maintaining distance, and avoiding crowds, it is necessary to carry out some socialization and education related to the Covid-19 vaccine, especially for the community (7).

To investigate people's understanding of Moderna vaccine, the service team from Nursing Department of UMPP conducted a survey to the community during the Covid-19 vaccination at UMPP. The survey was a basis to step further exploring the condition and problems faced by the community as well as any potential strength of the community in overcoming any possible systemic reaction of Moderna vaccine. The initial survey found that there were many people who did not know about those possible reactions and the way of handling them; for instance, they should avoid spicy and sour food, coffee, smoking, and alcoholic beverages when they suffer nausea and vomit.

Based on the findings, lecturers of Nursing Department UMPP conducted an indepth discussion to provide solutions to solve the existing problems. The expected target of this community service was to increase public knowledge about systemic reactions of Moderna vaccine and various techniques to overcome these problems. Sufficient knowledge will affect people's attitudes and behavior to face the vaccine systemic reactions. An awareness of the importance of implementing health protocols to improve health and prevent Covid-19 transmission begins with a sufficient knowledge. Healthy behavior will appear if it is based on personal motivation without any constraint from others (4).

Based on this background, the service team identified the need for activities in terms of preventing Covid-19. The purpose of this activity was to assess the level of pre and post knowledge on the Covid-19 vaccine's Moderna. The community needs information about the importance of Moderna vaccine and various ways to overcome any possible systemic reactions of the vaccine. With appropriate understanding of the vaccine and their handling, the community would be able to carry out independent handling efforts if a follow-up reaction appeared after the vaccine. It was expected that after these service activities the community would possess good understanding about the Moderna vaccines.

METHODS

The community service started with a meeting conducted by lecturers of Nursing Department, Faculty of Health Sciences UMPP and Maternity Hospital (RSIA) Anugrah Pekajangan. Afterwards,

the service team conducted a survey to find out the occurring health problems in the society. The problems found during the survey were discussed in the service team meeting. The complete planning of this community service set up. Then, all participating parties set a commitment to reach the planning target.

This community service program was held on Thursday, September 2, 2021, from 11 to 12 am. The health education was carried out before and after the administration of Moderna vaccines. Community service activities by providing health education to the community about a health education of the Moderna Covid 19 vaccine systemic reactions. The material was given in the form of videos and leaflets. The video with a duration of approximately 15 minutes contains an explanation of the symptoms after modern vaccines, simple handling and drugs.

The participants of the activities were people who took Moderna vaccine, totaling 50 people. The inclusion criteria for this activity are people who are adults and already have the Moderna vaccine stage 1. The exclusion criteria for this activity are people who refuse to fill out the questionnaire.

Prior to the health education, a pretest was given and a post-test was also given after the health education. Those tests were given to evaluate the activities. People's knowledge about systemic reactions of Moderna vaccine and techniques to reduce them was measured by asking questions through the provided form. Questionnaire used from Moderna Inc containing symptoms, simple management, and medication. The pretest was not tested first to other similar targets, but the results of the pretest data collection carried out a validity reliability test. The results show Cronbach's Alpha of 0.802 with the r value of each question/statement item obtained $> r$ table 0.220 (df $n-2 = 80$). Thus the pretest meets the validity and reliability of the instrument.

In the implementation of the community service, several actions were carried out, including socializing health education activities to the community, preparing health education activities, carrying out health education activities, and evaluating the results of the activities. Data analysis was done by making use of statistical tests namely paired sample T-test. After the health education activities were finished, every single thing was reported through a formal document given to UMPP.

RESULTS AND DISCUSSION

This community service focused on increasing people's understanding of various systemic reactions and the ways to overcome them. The results of this series of activities are depicted by the following table.

Tabel 1. Results of Health Education about Systemic Reactions of Moderna Covid-19 Vaccine and the Handling Techniques at UMPP

Knowledge	Mean	SD	Minimum	Maximum	P Value
<i>Pretest</i>	70.87	14.02	40	80	0.001
<i>Post-test</i>	95.70	9.04	80	100	

From the table, we get a p value of 0.001 which can be concluded that there is a significant difference between the average value of people knowledge or understanding of systemic reactions of the vaccination and the handling to reduce them. These results met the expectation set up in the activity planning. The increase of knowledge through this health education was a result of the use of media that were easy to understand, precise and interesting. In this community service, counseling media were in the form of leaflets and videos (8). In addition, the material was provided with discussion. During the activities, the participants were encouraged to ask questions directly to the presenters. Such method seemed effective in increasing understanding (4).

Figure 1. Giving the Pretest



Figure 2. Delivering the Health Education about Systemic Reactions of the Moderna Covid-19 Vaccine



Figure 3. Giving the Post-Test



People taking part in the activities had increased their knowledge. Besides, those who attended the health education were no longer afraid of the Covid-19 vaccination an eager to share what they had gained from the activities to others so that the knowledge could be useful for the community. Health education can increase motivation to do what has been given (4). It is expected that the entire community could participate in preventing and breaking the transmission of Covid-19.

During the health education, the participants were active in asking questions, listening to the presentation of counseling materials, and answering questions. The follow-up plan that would be carried out was continuing to monitor the community and socialize further the material of this health education. The implementation of this community service met the expectation in the plan. It went smoothly because of the good coordination between RSIA Anugrah Pekajangan, UMPP, and Department of Research and Community Services (LPPM) UMPP. Moreover, the service team continuously reminded people, especially the participants, about the importance of the vaccine and shared any essential issue related to the topic.

CONCLUSION

Overall, the health education about systemic reactions of Moderna Covid-19 vaccine and the handling techniques ran smoothly. The statistical test showed an increase in people's understanding towards the given material. In addition, the participants were encouraged to implement health protocols continuously to prevent wider transmission of Covid-19.

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