

Education of COVID-19 Vaccination for Pregnant Women

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Abstract Various preventive, promotive, and curative efforts have been made by the government to prevent the increase in COVID-19 cases in the community. The successful endeavor to halt the transmission of COVID-19 undeniably requires the active participation and collaboration of diverse parties, one of which is Dasawisma cadres. The role of Dasawisma cadres who serves the community directly makes them vulnerable to COVID-19 so it is necessary to be COVID-19 vaccinated. This community service aims to increase the knowledge of Dasawisma cadres about COVID-19 vaccination for pregnant women. The education was carried out online through zoom meetings attended by 437 participants. Based on the analysis, it is known that the p value is 0.000 (<0.05), which means that the education provided was useful to improve the knowledge of cadres about vaccination for pregnant women. Hopefully, the education will be continued especially regarding the importance of boosters that promote by the government.

1. INTRODUCTION

COVID-19 is a respiratory disease caused by a virus that spreads by droplets (WHO, 2021). On March 09th, 2020, the World Health Organization (WHO) officially declared the coronavirus (COVID-19) a pandemic, which means that the coronavirus has spread widely in the world (Risfianty & Indrawati, 2020). It is known that as of November 30, 2021, the number of cases that have spread throughout the world has exceeded the 262 million marked with the number of deaths of 5.21 million people. Meanwhile in Indonesia, the number of confirmed cases is 4.26 million cases with a total of 144 thousand people who have died (Satgas COVID-19, 2021). Various efforts from preventive, promotive, and curative have been attempted by the government to overcome and prevent the increase of COVID-19 cases in the community. These efforts start with protecting individual health such as wearing masks, washing hands with soap, avoiding crowds, doing physical activity for at least 30 minutes, and avoiding risk factors for disease (Fadilah et al., 2021). However, efforts to break the transmission of COVID-19 certainly require the involvement of various parties, starting from the general public, the government, the health offices, and agencies outside the relevant sector (Rohid, 2021). One of the parties that have made a real contribution to overcoming

this pandemic is the health cadres who are currently part of the Dasawisma as part of Family Welfare Movement (Pemberdayaan Kesejahteraan Keluarga/PKK) group.

As part of PKK, Dasawisma is a program consists of groups of mothers from 10 heads of families (Risfianty & Indrawati, 2020). Dasawisma, as a forum for community activities, play an important role at the district level and will influence PKK movement activities at the village level (Risfianty & Indrawati, 2020). It is known that according to East Jakarta Woman Empowerment and Child Protection data as of October 2021, the total number of Dasawisma cadres for the East Jakarta is 25,940 people spread across 10 sub-districts and 65 urban villages. Health cadres have an important role in supporting public health. Ideally, health cadres has deeper health knowledge than the general public (Wulandari et al., 2019). The role of Dasawisma cadres who work closely with the community makes Dasawisma cadres vulnerable to COVID-19. In this COVID-19 pandemic, a vaccine is one mode to prevent COVID-19 transmission in the community. The COVID-19 vaccine is useful in providing protection against serious infection or illness due to COVID-19 by generating physical immunity (Kementerian Kesehatan, 2021).

According to data from the East Jakarta Woman Empowerment and Child Protection as of August 2021, it is known that as many as 6,485 people or 25% of the total Dasawisma cadres in East Jakarta have not yet received the COVID-19 vaccination. A total of 619 people chose to delay vaccination because they were pregnant. Meanwhile, it is known that currently the COVID-19 vaccination is safe for pregnant and lactating women. This is stated in the Ministry of Health Republic of Indonesia Circular Letter number HK.02.02/I/2007/2021, concerning COVID-19 Vaccination for Pregnant Women and Screening Adjustments in the Implementation of COVID-19 Vaccination, pregnant women can be given the COVID-19 vaccination (Dinas Kesehatan Provinsi Bali, 2021). Vaccination for pregnant women uses three types of vaccines, according to availability. From mRNA platform COVID-19 vaccines there are Pfizer and Moderna, from virus inactivated platform vaccine there is Sinovac (Dinas Kesehatan Provinsi Bali, 2021).

There are many reasons people choose to postpone COVID-19 vaccination, one of them is because of the confusion of information about the vaccine (Sudayasa et al., 2021). One means to improve knowledge is through education, to provide information to increase knowledge and change behaviour. Based on conditions during a pandemic, it is necessary to avoid activities that gather masses or crowds, so education on how to prevent COVID-19 and implement health protocols should be carried out in other means. The results of several studies show that education through online media is effective in increasing public knowledge (Sudayasa et al., 2021).

Based on those facts, the authors took the initiative to conduct education related to COVID-19 vaccination for pregnant women. Thus, this education aimed at disseminating correct information about vaccination in pregnant women to increase the knowledge of Dasawisma Cadres with the hope that they will disseminate the information to the community.

2. METHOD

The implementation of this community service was held by the Department of Public Health, Faculty of Health Science UPN Veteran Jakarta in collaboration with the East Jakarta Woman Empowerment and Child Protection, the PKK Secretary for each sub-district and urban village, as well as the Dasawisma Cadres in the East Jakarta area. The method used in the activity is online education using a video conferencing platform. The first steps taken for this education were contacting the East Jakarta Woman Empowerment and Child Protection, continued with situation analysis. The results of the analysis showed that there were many Dasawisma Cadres who have not been vaccinated. Therefore, it was decided that vaccination against COVID-19 would be the theme for this educational activity.

Next, the permission letter was arranged to the East Jakarta Woman Empowerment and Child Protection, and consultation with the Head regarding the determination

of activity methods, days and dates of the webinars, topics to be presented, and media used for interventions. The invitation letter was distributed to the Dasawisma Cadres with the assistance of the City of East Jakarta Woman Empowerment and Child Protection, through the Dasawisma Cadre Group on the instant messaging application for the City of East Jakarta.

The education conducted on October 01st, 2021 at 09:00-11:00 WIB via the video conferencing platform. The activity began with an opening by the moderator, giving a pre-test to the audience, continued with presentation of material by the author, questions and answers session and post-test. The number of Dasawisma Cadres who took part in the educational activity was 437 people from every sub-district in the City of East Jakarta. The implementation of this intervention was carried out through online meeting platform. Materials presented referred to the Letter from Ministry of Health No.HK.02.02/I/2007/2021 regarding COVID-19 vaccination towards pregnant and lactating mother that are recommended to use mRNA vaccine and inactivated virus, subject to availability. There are some requirements for vaccination, including the pregnant and lactating mother should be healthy, confirmed by health provider. There is also prohibition to be vaccinated for those with blood pressure above 140/90 mmHg, swollen feet, headaches, heartburn and blurred vision. Those who have heart disease, asthma, diabetes mellitus, pulmonary disease, HIV, hyperthyroidism, autoimmune, chronic kidney disease and liver disease must be under control with doctor's approval.

The audience seriously paid attention to the material presented. During the questions and answers session, the audience asked many questions. The evaluation and monitoring phase were carried out by involving the staff of the East Jakarta Woman Empowerment and Child Protection. The webinar activities are evaluated using a questionnaire that was given during the pre-test and post-test. The questionnaire was made up of 5 multiple choice questions (true or false). This evaluation is given to measure the knowledge of Dasawisma Cadres before and after the education. Meanwhile, the monitoring is carried out by providing an online form to input screenshot evidence to observe whether the Dasawisma Cadre continues to use their social media to spread information.

3. RESULTS AND DISCUSSION

Implementation of education related to COVID-19 vaccination for pregnant women was carried out online. This video conference uses the video conferencing platform attended by 437 participants from every sub-district in the City of East Jakarta.

Table 1 shows the distribution of Dasawisma cadre who participated in educational activities. A total of 437 cadres who took part in the webinar and filled out questionnaires. Based on the distribution table, it can be seen that the most Dasawisma Cadre participants came from Cakung District (18.2%) and the least Dasawisma Cadre participants came from Cipayung District (3.2%). In East Jakarta, the largest

number of Dasawisma Cadres came from the Cakung

Table 1 . Distribution of Dasawisma Cadre Sub-districts, East Jakarta

Subdistrict	Total	
	N	%
Cakung	80	18.2
Kramat Jati	69	15.7
Ciracas	61	14.1
Makasar	52	12.1
Pulo Gadung	41	9.3
Duren Sawit	35	8.0
Pasar Rebo	31	7.1
Jatinegara	30	6.8
Matraman	24	5.5
Cipayung	14	3.2

District and the authors could not control the number of participants from each sub-district.

The purpose of this online training is to increase the knowledge of the Dasawisma Cadres, particularly in the East Jakarta City area. The use of online media is basically intended to help extension activities achieve goals more effectively and cost-efficiently (Prastyo, 2020). This online education conducted on October 01st, 2021 for 2 hours, 09:00-11:00 WIB. The educational media used in this online education activity are presentation slides and posters. The poster can be seen in Figure 1. After the webinar is completed, Dasawisma cadres distribute these through their respective social media.



Figure 1 . COVID-19 vaccination for pregnant women poster

A COVID-19 vaccination poster for Pregnant Women with the title "Pregnant Women Can Be Vaccinated!" contains conditions that need to be considered by pregnant

women if they want to vaccinate against COVID-19. This aims to inform Dasawisma cadres and the community that pregnant women can have the COVID-19 vaccination with several conditions.

Furthermore, the evaluation of educational activities is carried out by holding a pre-test before the presentation of the material begins and a post-test after the presentation. The pre-test and post-test were conducted to assess whether there was an increase in knowledge of Dasawisma Cadres before and after the intervention. The test given is in the form of choosing a right or wrong answer with a minimum score of 0 and a maximum score of 50.

Table 2 is the result of data analysis from the pre-test and post-test scores of participants who were tested using the Wilcoxon test based on audience knowledge regarding COVID-19 Vaccination for Pregnant Women. The number of questions in the pre-test and post-test is 5 questions with 10 points each. Based on the statistical test output, it is known that the p value is 0.000, which means that there is a real difference in the level of knowledge of the audience before and after the counselling is carried out. These results are in line with research conducted by Kharisma et al. (2020), that online education has a positive impact on knowledge and is highly recommended in efforts to prevent the spread of the COVID-19. An education regarding vaccination for pregnant and lactating mothers, conducted by Anggraeni & Maryuni (2023) also found that the level of good knowledge increased from 16.4% to 62.7%.

Based on Table 3, it can be concluded that most of the audience who answered correctly were in the question item "What are requirements that must be met if pregnant women want to be vaccinated?" responded by 434 people (99.2%), and question that mostly wrong answered by the respondent was "The first dose of vaccination was given in what trimester?" responded by as many as 185 people (42.4%).

Based on Table 4, it can be concluded that most of the audience who answered correctly were in the question item "Can pregnant women be vaccinated?" responded by 436 people (99.7%), and question that mostly wrong answered by the respondent was "The first dose of vaccination was given in what trimester?" responded by 71 people (16.4%).

Monitoring can be interpreted as an effort to collect, record and analyse data on a regular basis to find out how the program is doing and to ensure that the program is going well. Monitoring of this online education was carried out by providing an online form to input screenshot evidence whether the Dasawisma Cadres continue to disseminate information in the form of posters via social media.

This monitoring aims to ensure that Dasawisma cadres who have participated in online education continue to distribute posters and provide accurate information to the public. It is supported by Farokhah et al. (2021), there is relatively high level of access of the Indonesian to digital and online platforms. It is an exceptional fact that the total number of Dasawisma cadres who sent proof of poster distribution was 2,531 persons from all Dasawisma cadres in East Jakarta. It is hoped that this education will reach wider audiences through online media.

Table 2. Wilcoxon statistical test results of knowledge of vaccination

Variabel	Mean	Minimum	Maximum	P-value	N
Pre-test	31.03	10	50	0.000	437
Post-test	49.50	30	50		437

Table 3. Overview of audience knowledge related to vaccination in pregnant women based on pre-test

Question	True		False	
	N	%	N	%
Can pregnant women be vaccinated?	433	99.1	4	0.9
At what age can pregnant women be vaccinated?	347	79.5	90	20.5
The first dose of vaccination was given in what trimester?	252	57.6	185	42.4
What are requirements that must be met if pregnant women want to be vaccinated?	434	99.2	3	0.8
Which COVID-19 vaccine can be used by pregnant women?	420	96.1	17	3.9

Table 4. Overview of audience knowledge related to vaccination in pregnant women based on post-test

Question	True		False	
	N	%	N	%
Can pregnant women be vaccinated?	436	99.7	1	0.3
At what age can pregnant women be vaccinated?	393	89.7	44	10.3
The first dose of vaccination was given in what trimester?	366	83.6	71	16.4
What are requirements that must be met if pregnant women want to be vaccinated?	437	100	0	0
Which COVID-19 vaccine can be used by pregnant women?	432	98.6	5	14

Nowadays, COVID-19 cases have started showing a decline as compared to the first and second year of the pandemic. However, there is no apparent shift from the pandemic to the endemic stage. Thus, the health protocols should be continued, vaccination should be completed, diagnostic tests need to be carried out, and the most important step to be taken is to implement five strategies to build community health resilience for anticipating and successfully managing any such situation in the future (Hanifah & Siregar, 2022).

4. CONCLUSION

The results obtained from this activity indicated that there was an increase in knowledge before and after the Dasawisma cadres attended education. In addition, Dasawisma cadres actively participate in sharing the information they have obtained in the form of posters through their respective social media and make this an indicator of achieving the objectives of this activity. Therefore, to increase the knowledge of Dasawisma cadres regarding the COVID-19 vaccine, it can be delivered through measurable online education. The hope is that this program can be continued by themselves to improve community knowledge and avoid transmission of COVID-19 in the future.

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CONFLICT OF INTERESTS

The authors declare that there is no conflict of interest.

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