

ABSTRACT Vaccination is the most effective and efficient public health effort in preventing several dangerous infectious diseases. History has recorded the large role of vaccination in saving the world community from illness, disability and even death due to Vaccination-Preventable Diseases (PD3). In an effort to overcome the COVID-19 pandemic, COVID-19 vaccination aims to reduce the transmission/transmission of COVID-19, reduce morbidity and mortality due to COVID-19, achieve herd immunity and protect the community from COVID-19 to stay healthy, productive socially and economically. This vaccination activity was carried out on 16-18 February 2022 in the working area of the Cukir Health Center, Jombang Regency. The implementation of Covid-19 vaccination activities is adjusted to the program from the Ministry of Health of the Republic of Indonesia which consists of registration/verification; Screening (anamnesis), physical examination and providing education, as well as approval of action; preparation and administration of the COVID-19 Vaccine; conducting post-COVID-19 Vaccination observations, giving signs of completion of COVID-19 Vaccinations, and issuing COVID-19 Vaccination certificates; recording and inputting data on COVID-19 vaccination results. The results of this vaccination activity were that almost all (88.5%) of the target for dose 1 vaccination in the working area of the Cukir Health Center were students/general public who had exceeded the target of achieving the vaccination implementation and almost all (88.5%) of the target for dose 1 vaccination did not experience any post-immunization follow-up events. From the results of community service in the working area of the Cukir Public Health Center, it can be concluded that the target of dose 1 vaccination is students/general public and has exceeded the target of achieving the implementation of vaccination, which is 70%, and the target of dose 1 vaccination in the working area of the Cukir Public Health Center did not experience any follow-up events after immunization.

INDEX TERMS: Vaccination, Covid-19, Pandemic, AEFI

I. INTRODUCTION

World Health Organization (WHO) has declared COVID-19 as a Global Pandemic and the Government has declared a public health emergency of Corona Virus Disease 2019 (COVID-19) in Indonesia through Presidential Decree No. 11 of 2020 concerning the Determination of the Public Health Emergency of Corona Virus Disease 2019 (COVID-19), -19 so that mitigation efforts must be carried out in accordance with the provisions of the legislation [1]. The determination of the COVID-19 public health emergency is carried out considering the extraordinary spread of COVID-19 marked by the number of cases and/or the number of deaths that have increased and spread across regions and across countries and have an impact on political, economic, social, cultural, defense and security aspects, as well as the welfare of the people in Indonesia. In addition, considering that the spread of COVID-19 has an impact on increasing the number of victims and loss of property, expanding the coverage of the affected area, as well as having implications for broad

Efforts to overcome COVID-19 must continue to be carried out massively with several strategies considering the prolonged COVID-19 pandemic has had a major impact on the economy and social life. The level of community vulnerability is also increasing due to a lack of public awareness of the implementation of health protocols. Therefore, intervention is needed not only in terms of implementing health protocols but also other effective interventions to break the chain of disease transmission through vaccination efforts [2][3].

Vaccination is the most effective and efficient public health effort in preventing several dangerous infectious diseases. History has recorded the large role of vaccination in saving the world community from illness, disability and even death due to Vaccination-Preventable Diseases (PD3I). In an effort to overcome the COVID-19 pandemic, COVID-19 vaccination aims to reduce the transmission/transmission of COVID-19, reduce morbidity and mortality due to COVID-19, achieve herd immunity and protect the community from COVID-19 to stay healthy, productive socially and economically [4].

Efforts to vaccinate COVID-19 have been carried out by various countries, including Indonesia. In implementing the vaccination, certainty is needed from the aspect of effectiveness and efficiency, so that efforts are made starting from research and development of vaccines, providing vaccines, and implementing vaccinations in accordance with the availability of vaccines. In addition, the existence of different vaccine characteristics is also a challenge in itself in the implementation of vaccination. In the process of developing an ideal vaccine for the prevention of SARS-CoV-2 infection, there are various platforms, namely inactivated virus vaccines, live attenuated virus vaccines, vector vaccines, viruses, nucleic acid vaccines, virus-like vaccines (virus-like vaccines), and protein subunit vaccines [5].

The implementation of the COVID-19 vaccination is an important matter that needs to be considered also regarding the scope of implementation, because the concept of herd immunity can be formed if immunization coverage is high and evenly distributed throughout the region, so that most of the targets will indirectly provide protection for the age group other. Based on the recommendations of the World Health Organization (WHO) and the Indonesian Technical Advisory Group on Immunization (ITAGI) that the formation of herd immunity can be achieved with a minimum vaccination target of 70% [6].

The implementation of the COVID-19 vaccination is carried out by the central government by involving the provincial and district/city governments as well as legal entities/business entities. The implementation of the COVID-19 vaccination is carried out through a vaccination program or mutual cooperation vaccination. Mutual cooperation vaccination is carried out in the context of accelerating the implementation of COVID-19 vaccination. In the implementation of COVID-19 vaccination, the provincial health office, district/city health office and Puskesmas must advocate to local policy makers, as well as coordinate with cross programs and related sectors, including professional organizations, community organizations, religious organizations, community leaders and all components of society in the implementation of COVID-19 vaccination service activities. Health workers are expected to be able to make communication, information and education (KIE) efforts to the community and monitor the vaccination status of each target in their work area to ensure that each target gets a complete COVID-19 vaccination as recommended [6].

II. MATERIALS AND METHODS

This vaccination activity was carried out on 16-18 February 2022 in the working area of the Cukir Health Center, Jombang Regency. The implementation of Covid-19 vaccination activities is adjusted to the program from the Ministry of Health of the Republic of Indonesia which consists of registration/verification; Screening (anamnesis), physical examination and providing education, as well as approval of action; Preparation and administration of the COVID-19 Vaccine; Conducting post-COVID-19 Vaccination observations, giving signs of completion of COVID-19 Vaccinations, and issuing COVID-19 Vaccination certificates; Recording and inputting data on COVID-19 vaccination results; For more details, please refer to the information below:

Table 1 (Registration/verification clerk)

Service activities:
1. Officers call the recipients of vaccination program 1 according to the order of arrival
2. The officer ensures to show the electronic ticket number (e-ticket) and/or ID card for verification according to the specified service date.
3. Data verification is done by using the Pcare Vaccination application (on a computer/laptop/HP) or manually by using a list of target data obtained through the Pcare Vaccination application which has been prepared before the D day of service (target data in the Pcare application is downloaded and then printed/printed).
Table 1. Registration and verification

Table 2 (health worker)
1. Health workers take anamnesis to see health conditions and identify comorbid conditions and perform a simple physical examination. The examination includes body temperature and blood pressure.
2. COVID-19 vaccination is not given to targets who have a confirmed history of COVID-19, pregnant women, breastfeeding, under the age of 18 years and some comorbid conditions that have been mentioned in the screening format.
3. The screening data for each target is directly inputted into the Pcare Vaccination application by officers using a computer/laptop/HP. If it is not possible to input data directly into the application (eg internet access does not exist or facilities are not available), then the results of the screening are recorded in a screening format to be inputted into the application after an internet connection is available.
4. Based on the data entered by the officer, the application will issue recommendations on the results of the screening in the form of: the target is eligible to be vaccinated (continued), postponed or not given. If it is decided that the vaccination should be postponed, the officer will inform the target that there will be a re-notification via sms blast or through an application to re-register and determine a replacement schedule for vaccination.
5. Followed by filling in the decision on the results of the screening by the Officer in the Vaccination Pcare application.
6. When at the time of screening a non-communicable disease is detected or a COVID-19 infection is suspected, the patient is referred to the General Poly for further examination.
7. Targets who are declared healthy are requested for the specified vaccination service.
8. Data verification is done by using the Pcare Vaccination application (on a computer/laptop/HP) or manually by using a list of target data obtained through the Pcare Vaccination application which has been prepared before the D day of service (target data in the Pcare application is downloaded and then printed/printed).

Table 3 Vaccination
1. The goal of sitting in a comfortable position
2. For mutidosis vaccine, the officer writes the date and time the vaccine vial was opened with a pen/marker on the label on the vaccine vial
3. The officer gives the vaccination intra-muscularly according to the principle of safe injection
4. The officer writes the target name, NIK, vaccine name and vaccine batch number on a memo. The memo is given to the target to be handed over to the officer at Table 4.
5. After the injection, the officer asks and directs the target to Table 4 and waits for 30 minutes.

Table 4 Health Officer
1. The clerk receives the memo given by the desk clerk
2. The officer enters the results of the vaccination, namely the type of vaccine and the vaccine batch number received by each target into the Vaccination Pcare application.

3. If it is not possible to input data directly into the application (e.g., internet access is not available or facilities are not available), then the service results are recorded in a manual recording format that has been prepared before the D day of service to be inputted into the application after an internet connection is available.

4. Officers provide vaccination cards, manuals (Figure 8) and/or electronic, as well as markers to targets who have received vaccinations. Officers can print an electronic vaccination card through the Pcare Vaccination application. The card is signed and stamped and then given to the target as proof that the target has been vaccinated.

5. Officers invite vaccination recipients to wait for 30 minutes in the observation room and be given counseling and IEC media about COVID-19 prevention through 3M and COVID-19 vaccination

| Table 4. Recording and reporting |

### III. RESULTS AND DISCUSSION

#### General data

3.1.1 General Characteristics of Respondents

Table 2. Frequency distribution of respondents by age, gender, occupation and education

<table>
<thead>
<tr>
<th>No</th>
<th>Characteristics</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td>735</td>
</tr>
<tr>
<td>1</td>
<td>12-25</td>
<td>156</td>
</tr>
<tr>
<td>2</td>
<td>26-35</td>
<td>190</td>
</tr>
<tr>
<td>3</td>
<td>36-45</td>
<td>103</td>
</tr>
<tr>
<td>4</td>
<td>46-55</td>
<td>198</td>
</tr>
<tr>
<td>5</td>
<td>56-65</td>
<td>88</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Characteristics</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Man</td>
<td>435</td>
</tr>
<tr>
<td>2</td>
<td>Woman</td>
<td>300</td>
</tr>
</tbody>
</table>

Based on table 2 of 735 respondents, it was found that almost half (26%) of respondents were aged 26-35 years, by gender Most (59%) of respondents were male, based on occupation, Most of the respondents (69%) had a job as students/santri, based on education almost half (38%) of respondents have Diploma/Bachelor education.

#### Special Data

**Vaccination Achievement Target**

Table 3 Target achievement of covid 19 vaccination

<table>
<thead>
<tr>
<th>No</th>
<th>Target</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Santri/Student</td>
<td>650</td>
</tr>
<tr>
<td>2</td>
<td>General public</td>
<td>85</td>
</tr>
</tbody>
</table>

Based on table 3, it was found that almost all (88.5%) of the targets for dose 1 vaccination in the working area of the Cukir Health Center were students and the general public who had exceeded the achievement target of vaccination.

#### AEFI Incidents (After Immunization Adverse Events)

Table 4 Incidence of AEFI due to covid 19 vaccination

<table>
<thead>
<tr>
<th>No</th>
<th>Target</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Occur</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Not occur</td>
<td>735</td>
</tr>
</tbody>
</table>

Based on table 4, it was found that almost all (100%) of the targets for dose 1 vaccination had not experienced adverse events.
Based on table 4, it was found that almost all (88.5%) of the dose 1 vaccination targets at the Al Urwatul Wustqo Islamic boarding school did not experience post-immunization follow-up events.

Discussion

The target of achieving covid 19 vaccination in the Cukir Health Center Work Area

Based on table 3, it was found that almost entirely (88.5%) of the target for vaccination of dose 1 at the Al Urwatul Wustqo Islamic boarding school were students who had exceeded the target of achieving the vaccination implementation, which was 70%.

Public acceptance of the COVID-19 vaccine 70% of the public are aware of the government's discourse to carry out national vaccinations in an effort to reduce the rate of COVID-19 cases. The majority of the community (around 65%) are willing to accept the COVID-19 vaccine if it is provided by the government, while around 27% feel doubtful and a small proportion (8%) refuse. Aceh and West Sumatra are the provinces with the lowest revenues (below 50%). Meanwhile, the regions with the highest revenues are West Papua with 74% and the Nusa Tenggara Islands with 70% [7].

Vaccine information seeking behavior, the sources of information most chosen by respondents were health workers (57%) and family members (32%). The preferred media choices are through social media (54%), print/electronic media such as TV/newspapers (22%), and telecommunication channels (SMS/telephone) (13%). Searching for information through social media is preferred by the poor respondent groups; tends to decrease with increasing economic status. In contrast, the use of print and electronic media is more in the upper class and decreases as the economic level decreases [7].

Along with the rapid development of technology, communication media has changed its shape and characteristics. Two forms of media that are often used in various health communications are conventional media and information technology-based media (new media). In simple terms, conventional media refers to various forms of media that can send messages without the help of the internet. Message formats can be in electronic form such as TV and radio; and printed form such as newspapers, magazines, posters, leaflets, banners, billboards and the like.

4.2 AEFI Events

Based on table 4, it was found that all (88.5%) targets of dose 1 vaccination at the Al Urwatul Wustqo Islamic boarding school did not experience AEFI

Post-vaccination Adverse Events or commonly called AEFIs are medical events that are suspected to be related to vaccination. This event can be in the form of a vaccine reaction, procedural error, accident, anxiety reaction, or an undetermined causal relationship. Soul. The serious classification of AEFIs is not related to the severity (severe or mild) of the AEFI reaction that occurs [8].

Vaccines do not cause a reaction in the body, or when they do, only cause a mild reaction. Vaccination triggers immunity by causing the recipient's immune system to react to the antigens contained in the vaccine. Local and systemic reactions such as pain at the injection site or fever may occur as part of the immune response. Other vaccine components (eg adjuvants, stabilizers, and preservatives) may also trigger reactions. A quality vaccine is a vaccine that causes a minimum of mild reactions but still triggers the best immune response. The frequency of occurrence of mild reactions to vaccination is determined by the type of vaccine [8] [9]. The vaccine used in the COVID-19 vaccination program is still a new vaccine, so to assess its safety it is necessary to carry out passive surveillance of post-immunization Adverse Events (AEFI) and active surveillance of Adverse Events with Special Attention.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

1. The target of dose 1 vaccination at the Al Urwatul Wustqo Islamic boarding school is students who have exceeded the target of achieving the vaccination implementation, which is 70%.
2. The target of dose 1 vaccination at the Al Urwatul Wustqo Islamic boarding school does not experience AEFI

Suggestion

1. Health workers
Health workers are expected to increase public campaigns and advocacy related to the implementation of mass vaccinations as well as follow the technical guidelines that have been determined, monitor and monitor follow-up events after immunization to increase public trust.
2. Vaccine target communities
Increase knowledge and understanding of covid 19 vaccination and access information from health workers directly
3. For community leaders and health cadres
Community leaders and health cadres are expected to provide continuous information and education and be an example in changing behavior in receiving vaccines and understanding the risks and benefits of getting
REFERENCES


